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DIAGNOSES

PLANTARUM ORIENTALIVM NOVARVM

ADDITIS NONNULLIS EUROPAEIS, ET BOREALI-AFRICANIS

AUCTORE

**E BOISSIER**

SOC PHYS GENGV SODALI

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**Volumen tertium**

SISTENS SERIEM SECUNDAM -- FASCICULOS i-6

2917/6 V

02551

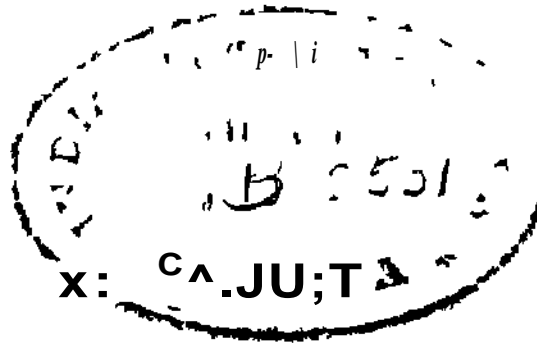
**DIAGNOSES**

**PLANTARUM ORIENTALIUM NOVARUM**

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GJNFVA — TYMS BAMIOZ FT SCIUCIUMii

**DIAGNOSES**

**PLANTAIUI OMTALIIIS IVARM.**



A-11

DIAGNOSES

PLANTARUM NOVARUM

PRÆSERTIM

ORIENTALIAM

NONnullis EUROPEIS ORIENTALI AFRICAMSQUE ADDITIS

SEQUEB. SEGUNDA

Nº 1

AUCTORE

*E BOISSIEU,*

Soc. Puv. GENEV. SODALI



NEOCOMI.

TYPIS HENRICI WOLPRATHII

1868

## DIAGNOSES

### PLAHTARUI HOVARUI PRJESERTIH ORENTALID1.

02557

#### KANUNCULACEJE

THALICIRUM OLYHPICUH BOISS et Heldr (Sect *EuthahUrum*)

Th. caule a basi foluifero flexuoso argutè sulcalo-stnalo, folus tcrnalitn sapradecomposilis, aunculis vaginarum brevibus rotundalis crenulatis, peliohs primarus el secundarus angulatis, foliolis glabns vel lente minutissimè puberulis pallide virenlibus parcè glanduloso-puncclalis conaceis subtiis nems et venis valdè elevatis percursis ro-lundatis ovatis vel ovato-cuneatis 3-b<sup>1</sup> lobis lobis breviter oralis obtu-sis ssp6 macronalis, pamculà ramosà ovalo-pyramidatà basi fohosS, pedicellis floribns stammibusque porrectis, anthens mucronalis, pe-dicellis fructifens divancalis

Hab in pinelis monlis *Olympi Thessalice* ad limites regionis al-pinae (Heldr Julio 1854)

Hxc species hie dubitanler in sectione difficillimA proposita habi-lum et folia *Th minorts* vel *Th majons* L habet sed ab eis dislm-guitur folus sublŪ9 multò elevatius nervosis, (lonbus non nutandbus et lioc caractere ad *Th medium* et species aiffines propius accedere videtur scd diflert foliolis rotundalis i& et brevissimè cuneatis obtusè lobalis sublus valde nervosis ngidisque Pedicelh fructifen valdè divancati etsi breves sint, fructus maturos non vidi T/ia(ic(n spe-cies ex raonle Alho a Roissiero ohm sab *Th elalo* et a (insebacbio sub T/t *nwdio* proposita a T/i *Ol)m\nto* diverba est cl simillima *Th nutfui* Jordan' Jdcquin ?

ANEMONE P VONMNA BOISS (Sect *A nemonantkea* DC )

A r ad ice cj Imdnòa, collo vngims fuscis veslilo, folus radicalibus secus pdiolos et infoinc SCCLK co>las pilis adressis sparsis hirsulis cxlcuüu glabiii toinalo-decomposilis lacmus memib arutis, involu-  
cratitit> confonnibus pctiolo \d<sup>f</sup>;iia:foimi b\o|| .ulpicessè hirsitto insi-  
denlibus bileni.ilis, scipis 1-5 flm<sup>^</sup>, prdunculis st emuljriis cum  
adsunt supra b.sin iivolucHddi involucns a florp romolissimis, se-  
palis 7-8 albis olli)tico-oJjlout>is oMusis cxliii adpicssù Im<sup>^</sup>iitis ca-  
pilulis cirpelloi inn en alo-rolnndiis, trnpidiis dense lanatis, sty I is  
glabns leuuibu-i oarpulio brn 10l ihüis extioi&uin cmvalis

Habui ex boij.li io Pavoniano tli>i // *alptna* inscnp.i Tnt el locus  
habilahoms onussii-, fnt sod ox scbaodnlh; naliira coinpaiationoque  
cum dliib ojusdciu berbani plaiitiiii lüiipanicam et r<sup>^</sup> jngii (\*oiid'ah-  
bus *Iberujc*, S< de *Guadarrama*, h<sup>a</sup> de *Gata*, onundam esse vald6  
suspicoi '

Ilabilus, (oi ma I.tcinurum, ma<sup>^</sup>nilndo florum omninò ul in *A Dal-*  
*densi* sod a> oA ilihnici&Minu fobis radicalibus ma<sup>^</sup>is dcomposilis  
amplionbus diarnclio 2-2 1/2 pollicaribus, scapo pluiidoro, capiluhs  
fructifens brev lonbu-., shbs nmllo magis cmvalis Ilabitu quoque  
refcit fojmas iniaiiUias *A alpince* cirpellis longe oaudalis dislmc-  
lissima; PlanlalO-1<sup>^</sup> pollicans

ADONIS SCUODICHLATA BOISS (Sect *Adonia*)

A annua practer pilos spaisos papillan-cnspos caulis glabra,  
caulo cicolo pjilo snpcnori sluctò ininoso, ranns tenuibiis an-  
gulalo-sulcalia, folioruin laiinulis confeilis acuminalis, flonbus par-  
vis, polalis pallulis sepala glabra vix siiporanlibus, carpellorum spied  
oblon{fo-c\lnuliic.i Lcnu, carpollis uudiquè rugosn-scrobiculalis me-  
dium voi\*iUi inaiyine JII<sup>^</sup>KLC inrnibranacco cnculan insliuclis la-  
lore supenon denlc ciasso triangulari sub rosiro nigncanli tenui  
inslruclis

Hab> in ililione *AfTghanwtan* (Guffilli N" 1379 in herb Lemann)

Species flonbus par vis, spicis elongatis el liabilu *A paTviflora*  
Fischier, BunytJ in Lclun afdnis sod liaic facile dislmguilur carpellis  
lrviusculis nurgine supenon subodonlulis rosiro nasso terminate

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margine circulari non leni uimbrato sed angulato circumdatis. Hic margo circulans ex compressione mutua partis mrefrons carpelorum onundus in quibusdam formis *A. cestivahs* et *microcarpae* etiam observatur et in lei characteres firmos non potest enutneran

RANUNCULUS SIDIHOPII BOISS (Sect *Hecatoma*)

R. rhizomate brevi lalere in Tenon Cbras radicales tenuiter cylindricas edenli, collo valde libuloso, foliis radicalibus petiolalis secus petiolum et costas spaiMin et itdpicse pilosus csteium gldbns ambitu ovalo-rotundia Lriteclia seamen Us petioluUlis cuncalis ad basin usque in lacunas linoares lobatas aculas nulliúJis leiminah saepè majou, caule umco unifloio 1-2 pliylo, folns caulmis subsessilibus in lacimas lineares eloiigala-> nulliudis, pedunculo tereli adressè puberulo, petalis fidVia sepala dorso parclaiidld nidi gme late niembranacea supeiailibu«, capitulo fniclilei'o sijlijenco, receptaculo piloso, calicellis rotundalis subcoinnressis ui rostrum teime lateraliter incurvum circinualum oia Inplò breviter abruple atenua is

*R. mvalit* Siblb et Sm V\ Gueca non L — *R. dissectus* var *glabrescens* Boiss Ann be Nat — *R. Ponticus* C Koch Linnsa — *R. Aucheri* dementi in Schod non Boi&s aim Sc Nat

Hab in parte superiori aioulis *Olympi Bitlyni* (Siblb , Boiss , Thirke, Clerne nil, Aucher)

Hæc species quain in opere citato pro vane tale *R. dissecti* M B habuerain mine comparalis specimibus plaiilac Tauncae ab anno Godetbenigùè coinniiniLaUs ab eà ceite differt *R. dissectio* est lhi-zoma abbi'evaluin nee ul in nostra diibloriAontale , tota planta pdis erecto-palulis vake lniNiila est, ejus foliorum lacinis conlei liouessunt et minime acutse, caulis crassiores ex codfin rhiwindle bsepè plures sropè pluiflon, flores majores, <alyx densi&snnè lanatus,, carpella jumoi'd compaiata in *R. dissectio* in rostrum lectum nee laleraliter deflexum sensim nee dbruple allcnuala sunt D' Thurcke bane planlam in Olympo Bithyno nee in Alpibus Ponticis legit unde nomen el G Koch ommno impropnum



**RANUNCULUS SAIUORIANUS Boiss et Heldr (Seel *Hecatoma*)**

II iln/umalt<sup>1</sup> hori/onljh superne dense fibuloso lalere nifnori libras radiales (cnuiler t)lindntas edente folnsradicalibuspeiolalis SOLUS pcliulob at sublùs ad noi vos pilis selulosis sparsis adpressis lurlis calcium ylabns palmatiparliLis p-a lilionibus divergenlibus cunealis m lacunas oblongo-liuuaics aculiusculas ad medium usque fissis, caulibus pilis uifcinc nurnciosis palulis vel doflexis superne rarusionibus adpressis liusulis l-% pliyllis 1-3 Rons, folus canlims sossilibiis in "2-|i Kuimas Imcares ad basin usquii fissis, podunculo Lerecli, scpAliscoldialii dur&o laualis, roceplaculo piluso, capitulo fructifero splkuiico, carpel I is ovalo lolundis subcompressis glabns la> vibus in IOSiLim cuivaluui cib qiudiuplo liicvius sensnm allonualis

Ilab in p.iscuis ioniums s}Ivalica' supenoris *Olympi Thehsah* (Heldr 18b1), in rc^ione alpina nionlis *Kyllene* Peloponncsi (Heldr 1848 forma minor, folus ad basin usque parliLis )

Afdnih speciei pr^Lcdenli a quà dillcr lrii/omalo pluricaull, caulibusque piocnonbub (btupc pedaNbus) basi palule lanalis saipè plunfloii<sup>1</sup>), fulus paulo aiuprioribus paimalipaililis nee Insectis inullifidis Car pel la icie cadoni sod lostium in *li Suilonano* minus ahrup-Lum recuivuiriqic LongiLiKlinc ro^tn nustra spccios cum *R montano*, *FULui* ->u el dldmbus non confundk polest — fl *demwbüs* DC cuiolim planlam ex *Kyllme* adscripsuiamtis diffeil caulibus decum-Leulibus carpellibque mullò bicvius loslialis Demque *R demissus* Orphan ides Fl Gr e|> N° 231 ex montibus Peloponnesi est /I. *oreophilus* AIB forsan vanelas *li Villarsw*

**RANUNCULUS GRANAT^SIS boisa (bed *Hecatonia*)**

11 rjdicc oblique bonzonlali sublus iibras cybridricas pdenli collo (ibnllis fcie deslilulo, caulibns procens foliosis superne ramosis pilis setosis adpressis pl<> minus ubsilis, folns radicalibus caillniisqie infenobus peholo longiusculo basi lale vaginanli insidcnlibus 3-pal-malipai'litis Inseclisve segmenlis cunealis oblongo-ovalis ileium profunde bi vel tnparhlis, srgmcnlis pai lihonibusque divergentibus in lobos oblongos aculos sx\*pc cuspidalos fissis, folus caulinis supenobus scssilibiis in %B lacuvas Imcares elongatas acuias uilegras fissis

omnibus >supia paice sublut> cupiosu pibs adpiessissimis obsitis, pedunculis terelibus sepalisque palenlibus adpressè seneeis, recclaculo glabro, spied, carpellorutn lotundà, carpellis glabris obovalis compressis angusle marginalia in roslrum subcui valum carpello diindidiù brevis allenualis

*Ranunculus aci* ts Boias Voy Esp non L

Hab in linmidis monlis *Santa Nevada* (Roiss lieu I)

Planta 2-5 podalib foliormn sublus scriccorum lacinus divaricate *U Cassium* Boiss referens A form is veluLims *R aens* quibus euin olim adjuueram ob caulis proccutalem, folia sublus valde sencea et coirn lacunas divancalas niagis acuininalas eerie differl et roslrum carpelh multo longius bunc a *R aoi*, *Botceano* el *Fneseano* recenlius dislinclis leniovonl *Ran lanugino&us* et species affines it *umbiotius* el *R Constantmopohtamis* caeteris neglectis a noslrA specie indmnenlu palulo carpollisquc roblro longo sed apice convolutu lei'iunaUs exutuU diffeunt

RANUNCULUS CADULICUS BOISS (Sect *EUnnella*)

K annuus glabci, caule ramuso, folus peliolalis ambitu rolundatijj palraalolnparLiti, parlitiombus basi anguslaLis in lobos oblongos aculiusculos ferè ad niedium fissis, folns supenonbua piofunditis in lacimas aculiores parlitia, flonbus medioenbus, calyce patente, pedunculis fruclifens homoillalihus axillanbus peholo brevionbus, carpellis oblongis inargmatis in roslrum ensiforme subcurvatum compressum utraqe facie cannalum eis dimidio brevis productis, caipelli tacie bus laBvissnnis

Hab in ditone *Jffghamstan* circi *Caboul* (Griffith N° 1396)

Valde affinis *R muncato* a quo carpellis lajvibus lanlum differl An ejus variolas' Inter species affines *R lomutocarpus* F et M differt folua nullò magis dissecchs, carpellis minonbus ovaj, is, hujus specimina ab am Ilolicnatker circà Lenkoran lecta carpella laivia liabent ethic soli nola abeis differ! simillimus *R rh\$nhocarpm* Doiss carpellis muncatis donatus

NIGELLA NOEANA Boiss (Seel *Ntqelkutmm*)

N aonua glabra, caule simplici QexuosD sulcato acule stnato breviler ramose, folus basi dilatatà vaginanli in Los'tas decuirentibu's

sessilibus bipinnalibus laevis anyu&le linealibus elongatis sinclius-  
 culis acudis margin\* pi ad iicuum \*cjlmdulis, «uinmis florem sessilem  
 iivulun.inlihi^ (•unique ^upt'ianubiis, petal is auiuuLiacis elliplico-  
 lmcant)Ui )i>i siilMIU'uidlia bicviiu M nimuaU-. ->lauuiu subacquan-  
 libiis., pctatoruui -dpile < i> IOHLJIOIC lineaii in liiiibiini miniiUirn bifi-  
 diiiii in l.tcuui.i-iliH'aici siainiii.i Mipi'iainc!fc.)i(KüiLliimseJiiLii] diUlalo,  
 IIIIIQ LUMIULS(III' )III^ IitIIIlo Sji.U-1- CIIuLIs dIIIK'HS UUIIICh, CdP-  
 pelshj jnnioi *ilni\** ad nicdiimi usque (OIIIKJXH apicc siiljilivciycnUbus  
 apico ex Ion on in (OIMUI (is LIICMOM abrnpu' **angustatus**

Ilab on1.1 *kaipuf A) memw* (Noc Tuiuu 1852)

Sperich iifjinii *V oryH'laft<sup>l</sup>* Jtoi-- a qua dilfert Licinus foliorum  
 mullo .in^iilionliiit, pelali> lon^c nec biiivissjnitslipilalis, liinbosti-  
 pilu vix lalion not d*istinctissimio*

#### AQUILGIA IliurLiti Hoiss

A lol.i lemiissime et palulo ylaiididoso-pnbescens, folns radica-  
 bus langu iH'liol.ili-. duitlcalo-lciii.itis ptholi- steinulaius elongalis,  
 sejjinoiiti-. Djoviler diihaiis ad inodidin UMIIC nuiso-lobatia iobis  
 ovaus obloiii,-^ i oblu^ii, < aulilxii »|. .itililxi^ 1 5 fluvii Mibiimhs, foliia  
 cauliu>> 1-5 IHIKIUIH tn la ini,^ liii.aii<sup>1</sup>.) 5-7 pnuidlini <UM\*O Sdep6  
 dcliuenli Mip(>ioiibu-< ex lacuna Inn an siinplu i iin^ii-ia con-tannbus,  
 flonbus iiiieliOLiibu-, LL'L duuii i>, ^-pali-. oblon^ia acuiiinais Jon-  
 giuscule iiiiguiLiilali^ jKUdd iippiiaUUbiii.idlraubut HHU>dpttevald6  
 cucinnaln liamah^ lamiiyu lOtnud.tlo <C(LIIIOH^E>, slaminibus laini-  
 n*an* UfjridiiUbi-, )i*id*> inunibn-> Nuhiniilici9

Hal) HI' Vlpibu^ inai itiuu-, in diiniosi-, lupt'^Uibus ad lalus australe  
 Jugl Col dt *Teuda m\|n\ udh m Tandu* (U*u*>> ! lieu I')

Plant.i pt dalia vol M^quipt d.dia, ftrioruhi te^itK nla n-> A *alpwoe*  
 paulò iijnioia iiiiinus pioliuulu el crebic muia, HUMS illis A *alpmae*  
 paulu miriorea Ab <i dix'isixaiaia taulibus subiuid^ *net* folia petio-  
 lata radicalibiix . onfoniu.i frinmbui, o.ikiii ibn^ UK.n*tn*.ti>> HOC rec-  
 liusculis, lanina peialorum noil Iruitaia ^ *Pyienaica* De vera e  
 Pyrenjeis dilleil st.iiuia lunnili flonhus pro longiludine lalionbus,  
 calcanbus <vc|u>, s>laimiilw> Idiwiua pcfdlurum I>rc\ionbu4 A Btn-  
*seleana* ScImU/ in Aicli Fl de Vi = A Pf/ienatca Gaud Koch  
 Aclib nonDc^1// P)<'Jiflicoppu\*HiaFisch Anun bol 18bO(qiid;  
 synonymina omnia ail eamdt'm bpciiuin bpecUut) spt'cici noslra habitu

magis affinis dilfert flonbus miiionibus, sepalis laming peialoium vtx lungiorihis angusUoiilui!-, calcaribus leolis (Suse A *Emseleanac* cl SchuIU tainuiam limit al.im Lntiitil sed in tpi cimnbiis d cl auctore in Flyia oall 11 Goi in <|-> N' 1005 diili ibulw cam lolundatam ul in pi an la Insnbiita (4 Carnica video J wstosa IVchb ri Uerm exs N° 1985 ei Ic («; 110 quoque ab t jusdum ^ Pyrejjoicd lab 117 non diftort Planlj Gonani OSL -.pccir^ divoi sissima ^ *tulgan* pvoxima) Tandem A *ni()ncans a A Hwuh'ana* Koch =^ A *Sternbergn* Rclib dElcric ne^luclii a nobli'\ ipd IP folns oanlinit radii dlibus confonmbus, foltoruin scgmcutis niullò uiiiiù» profunJe mcisis longiùs didciunt

AQUILEGIA. AMAUK Hcldr

A tola pube brevi glaiululosd obsila, folus radicaibus longe petiolalis diipliCdlo-tenialis, poliohs ^ocuniKimi<sup>1</sup>\* ^jcpiu^loii^i- palulepilosis scgmonli\*, poLioluKili- <iisMihu M; i:!.ibni sujna vindiliussnblu-glaucis cunealis .id in\* ilium usijiic lob.iiH lobis o^dlii oblusi-, canle llexuoso paire et ilitboluiYn i.uno^o )-ti fluio fulio^o loins nifenoi'i buy raduylibiH fonlonmlxi-. Tiumm sCi-ilihin m (n<sup>1</sup>- lacinid^ oblongas inlegras .tniui-. -«MIS sumni'i ad l.niitcin liixiolaUiii I'cducFo, floribus mediotnbU", ^pnli\*, pallide »acru(o-Vi»lasn niibus anguslfe obloni<j<, ^pxtilibu- jpm<sup>1</sup> neuchs \*.cpc biluhs dointum v.ddu patunlibus peldlis p,iulo lon^iojibn-, <.ilciid)iis pallide violates J||je subaicua-Us laminà albà suhjuquiloui^is, sLainiitibii- Ltiniiani »ubsiipt:idiilibus, para^leinonibii, itndnlalii jpico niuioiiiiLi-, caipi Ilijumoribusoblongt^ rcriii in s|\los vet los „beunlilni& gUadnloso-puboscenlibus transverse valde rugosis

Hab in rijjiihiis ejtccsis summae rpgionis *Olympi Thessali* ranus (Heldmcli Jul 13bI)

PU<sup>n</sup>U ljb<sup>2</sup>-l 1/3 peddh; Fulu t'adicalia ^cgnipnlorum magmtudine eos A *vuhjaun* antiundo a^qiuulu (.iitlcque non niullò brevioia S&p£ autem inuUù nnoia Floivs din A *ntlgaris* inuioies, coloratione suà noldbilea Nulii spccicriim Floiae Emoepae propiAs accedil

AQUILEGIA OTTOMS Orphanides

A palul6 et breviter glanduloso-puboscens, Tolns radicaibus longi<sup>u</sup>sculè petiolahs duplicato-lernalis sc^entis saepu'is pcliolulalis

cuneatis sublongis glaucis cuneatis in lacinas oblongo-hinc obtusas ultra medium incisib, caule sulcato dichotomo et subcorymboso 3-6 folio folioso, foliis inferioribus radicalibus conformibus sed brevibus petiolatis superioribus sessilibus in segmenta oblonga lobata vel indivisa parvulis, summis uniauribus acutis bracteiformibus, floribus mediocribus, sepalis oblongis sessilibus petala stipularibus obtusiusculis apice et secus lineam mediam virescentibus caulis caeruleis, calcaribus caeruleis apice subarcuatis laminae albse laevae truncatae subsquariformis, staminibus lamina longioribus, parastemibus platis latissimis apice mucronatis, carpellis induratis parce puberulis glabrescentibus apice divergentibus transverse et oblique nervosis, seminibus nigris tenuissimis iugulosis

[hab in monte *Chelmos* Peloponnesi inter *Paleomonastin* et *Castraki* (Orphandes), in regione abactidj faucibus *Dipotamo* dictis *Parnassi* (Heldreichi)

Foliatione et habitu affinis *A. alptnee* sed flores minore9 discoloribus, stamina lamina longiora, sepalia corollam multo minus excedentia. A praecedenti culmine florum, folium profundius incisum, forma petalorum, etc., egregie distincta

DELPHIMUM STOKSLAVNUM BOISS (Sect. *Consoida*)

D totum indumento adpresso bivi cinereum, caulibus erectis basi ramosis, foliis inferioribus longe petiolatis cuneatis tripartitis partitionibus angustis basi longe attenuatis lobis oblongo-hinc obtusiusculis plus minus profundius fissis, foliis intermediis breviter petiolatis sessilibusve partibus induratis hinc-spathulatis canaliculatis apice recurvis mucronatis, donbus in spicatum longam laxiuscuiam dispositis, pedicello subnullo basi minute bibracteolato, calcaribus recto verticali llore duplo longioribus a basi ad apicem sensim attenuatis, fructibus adpresse circis erectis brevibus cylindricis arcuatis stylo tenui eis triplo brevioribus superatis

Hab in regione *Deloutschislan* in campis *Artemisia* consitis (cl D<sup>r</sup> Stocks)

Planta 1-1 1/2 pediculis, folia inferiora cum petiolo sesquipedalica, folium cum calcaribus 10 lineas longum. Affine *D. Persico* et *D. Michen* Boiss in Ann St Nat d'Hertl ab ulroque indumento adpressissimo

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gnseo nee hirsute vel palulo velulino, a priori calcare minils attenuato, a posteriori calcare medium versus non angustalo

Var *glahre&cen\** — Indumentum ejusdem naturae sed rarscens, calcana acutiora subincurva

Hab in regione *Afghanistan* (Griffith N° 1376)

Ex unico mihi noto specimine specificè differre non videtur

DELPHINIUM VESTITUM DOISS (Sect *Dclphinastrum* )

D radice , caulibus rectis simplicibus vel basi ramo uno alterove auctis basi parcè fohosis supra folia in racemum longum rec-  
Luu laxiusculum abeuntibus pilis patulis glandulosis brevibus dense velulims, fohis peliolatis paimatiseclis, segmentis ferè ad basin usque in lacinias angustè lineares ssepè iterum dentatas fissis supenonbus ad laciniam linearem sessilem reductis, floralibus bracteaformibus pedicello brevionibus, flonbus cxrulescentibus pedicello calcare brevion suffultis extus velutino-hirtis, sepahs ellipticis Jpelalis subbrevionibus, calcare flon oequilongo horizontal! vel erectiusculocrasso apice subincurvo inflato obtasissimo, peUlis inferioribus longè unguiculalis oblongis ad medium usque bilobis fjcie exteriori longè setosis, superioribus glabns conaceis angulo recto truncalis, carpellis junionbus velulims axi adpressis

Hab in ditone *Belouchwtan* undè misit amicissimus D<sup>r</sup> Stocks

Folia in meis spcciininilins fere destrucula vix 1 K\% poll longa videntur Caules 1-1 i^2 pedales per 2/3 longitudinis floufen stncli Pedicelli sesquilineam longi Flores G-7 linoas tan turn longi E sectione *D tuperosi* Auchei , *penicillali* Boiss t>c a> omnibus indumento dense cl patulè velutino, flonbus subsossilibas distinctum

## FUMAR1ACE.\*.:

APLECTHOCAPHOS INTECRIFOLIA DOISS

A rlmomale crasso, folus glaucis longe petiolalis simplicibus ovalis vel rotundalis oblusis vel aculiuscuhs baai rotundatis. carnosis

landcin crassis fragilibus, florum rarcum eorymbosis folia subsuperanlibui>, scpalis ovalis aculiusciihs subdeniculalis basi appendiculalis, pclalis cxlcuoibua oblriangiilaribus traiiavcisc lalioribus la lore sunon subeuui ginalis basi aLteiualo-cuneaUs

*Apletroiapiioii Bieltea* B«ur»pi CKS 181\*1 nou D et R

Hab HI mposlultus nioulis *hagra de Haescar* legiu Granalensis orientalis (Bomgeau)

Mlu spocilicu ilislincla \nl^tur ab A /Jtcficr), fnjus folia semper Icrnla vel internal a segnimhs carnosis quulem <^/d nunquam utin *Smcocapno era^tfohA* in<r.i3satis viccis fere osscis Pudictilli insupci in A *Bwlica* nugis flongali rt pftala ctlenora CMdonliùs obcordata esse videntm UUEi'iu^ uiquircndum an suit transitus inter eas

SAUCOCVI'MOS SPECIOS\ BoiSb

S glauca, folns longo peliolalis hisecLis, divisiombus peliolalis lateralibus 2 scgoienla lerminali 1-5 {reienlibus, segmontis ovalo-rolundis sjepe liansvers^ lalioribus basi lotundalis vel sspius cordatis obtusis landem crassis frjyilibus, scpalis miniiiiis ovalis aculiusculis tiubinlegns, \irialoimn duuruin supenoruai liuibo maximo inlenonbus quadruplu Uilion Uansvvi^e oblongo ba^i rotundatu vel Iruncalo laloie sup't'non profuude eniarguiato-bilobo, calcare petalum dimidium x(luanli

*Sarcocapnos a asstfolia* Boiss Voy Bot Esp — Bourg pi exs ex regno Guiialen^i ct Valentino 1851 ct 1852 non DC

Hab in regno Gianaten=i S« *Nevada* (Boissi), *Cerro de Jabalcon* prope *Baza* iBomgeau forma inajoi\* ct flonhns intensiois roseis), regno *Jenen&i* ad *Torre de Aqua* (Blanco), reguo Valentino (Bourgeau 1852 ^d S\* de San Aotomo propc *Alcoy*)

Flares albo-carnei vel losei IMala exlenora saipc sex lineas lala Planla Atlanlica quam vore iW) loco flas^ico in panelibus rnpiumi suprâ Tlemsen legi abunde diftert flonbus albo-flavidis, pelalorum exlenorum limbo rotundato 2-2 1/2 lineas lato et sic defimatur

SAHCOCAPNOS CHASSIFOLIA DC

S glauca, folns peliolatis indivisis trisectisve segmenlis ovatisacutiuscuhs basi cunealis vel truncatts tandem crassis fragilibus, sepalis

oblongis acutis subdeiliculis, pulalorum duoium suppriorum limbo mtundalo obcoidalu b<isi runcato pclalis intenonbus dupl5 lation, calcaic ubUiso pclalmn dimidiuni |i\ aiquanli

Hab in nipibiii -Wantis pi ope Tlem&en (I)osf, Hoi&s )

Li>nv>\iis dniFfMTi\*!] Uoiss (Set I Lcontitoidei DC)

V. radice caulibiis simplicibus lenoris midi\* apice 2 folns oppositis instruclis, fulii-lailicalibus , cauluns apunclo insertionis lernalim ^cclis et idciWnLicilhini q^x folio ruin sumilanlibus, folioriini diVisionibi<> lunge p<liolahs Ijiiinnalipsecli^ Jinbilu oblongis inocqudlibus, (hvisionibua peliolulalii, scgnientis oMongrs basi alte-niidlis ssepe pcliuluiatii bilobis lusccti^vc 4M iiiiinalibiis iuillò majon-bus lobis obtusiiHCuhs, laceino laxo pauunom folu vix, sup^ranli, bracteis oblon^is hiearibu^qio .iltciinnto acuimnalis inlpgorrimispedicellos firecto-paluloa siibai(iiaui!>us, corollii liorizonlalibus incurvis in calcar opice oblu^iim |i\ alU iiiiatuin asomdens potalis Ion-gius akeunlibus, capsuld (jiinion ) pedicello creclo-palulo elongato brevion

Hab in ditione *dffghamitan* (cl (irifTnli in heib LemaunN°lftl9)

DIVISIO primana media fo'ioium cmn podolo tripollicaris et nllrà, laterales rumored Segmenla Imminalia polliccin longa bdsi vald6cu-neata, lateralia inuUò ininoia m<is abbreviata Tlorc> b-7 cis C *bulbosce* paulo minoi-es JuxU C w> *ticdlaretn* collocanda qua: folioriini lacinns hneaiibiis diffopt

MB C *rupesti is* Rotschj Boiss in *Diajfi* b ct 8 desenptee vera affimtaa est cum C *strict* A Slopb el C *Gortschakowu* Schrenk Prior d\siinguitur caule crassum sulcalo-sti ialo, foiiiorum lacmns niuUo minonbas conferlionbus Voslonor bvideis lobalis difieri

FUHAKIA THUHETI DOISS

F virenli glaucescens, caulibus ereclis vel proenmbentibus non scandentibus, foliorum lacinns hneanbus abbrevialis plants ranùs canaliculatis mucronulalis conferlis, racemis abbrevialis post anthesim Idxiusculis, bracleis oblongo-lineanbus acutis pedicello subbrevionbus, flonbus medioenbus intense roseis apice pnrpureis, sep.nhso\ahs circumcircà repando-dentatis obtnsiuscilia Lubo corolla? lationbus vnque dumdi6 brevionbus, pelalo supenon in calcai apice inflaliini



co p.uilo brevms abounli, infcnon linean longion tandem secedenli, pedicel Us pusl anlhcsim lecurvis nuciifa minula rcarmaU tenaiter (ubrcrculalâ ovalo-globosâ aculiuscula apicc bifovcolalâ subslipilalâ 2-2 ifiplò lonyionbus

Hab in iisulis *Pnnciptim* propc *Byzantium* (cl TliureL), in inonle *Lm)dalo Athuv*, (Heldicicli 181)2)

Floras iugmtudinis eoiom *F offitmalts*, fiuclus co *F failanlii* ffito IIIIII blipile inliib cavo coion.vformi insidens) Habitu et pedi- (cllis u'uiivij .illinis *F snalolicni* Boiss in pi Pinard qux pixter (loirs diimdiò minoros dilTcil pulalo infcnon non longion, pbdicellis nuciili globosa minus lubrcrciilolâ MSI sossili vix longionbus *F ca- ineolatu* longius dislal

FtMAHIt HEIDHtICHIII HOISS

F pallide virens, cnuhbus scandenlibus, foliis in lacmias planas lmcarci confcitas mucronulatas mulUparlilis, racemis densiQsculis, bratleis linciinbus peditellos oiquanlibus, flonbus mediocnbus palli- dissinic IOSCI) albiscv apice purpurcis, sepal is ovalis aculiuscillis re- pando-deni.Uis coroll.i; tul>o paulo lationbus eoquo dimidiu brevion- bus, pelalo suponon in calcai co dtmidii> brevms abcunti, pedicellis post anlbesni rcurvis nuculii minuLi ylobosâ tompresso-subcanna- U Icnuiler lubiTt ulal.\ oblusa` a pice bifuveolala basi vix slipilatâ vix longionbus

Hab in monk; *Hagioa Nicolaos* insulau *Salamidos Alticce* uhi in contorliu *F Analohcm* crescil (Heldrcich 1853).

Etiam ex grege *F Anatolic®* c( *Thai eli* ab ulràque caulibus scan- denlibus et colore dorum discedens A priori insupcr differt flonbus <luph inajonbus, a posteriori pedicellis fruclifens brevibus nuculis- <luc obtusis *Fwnanam capreolalam* colore Horum et raulibus scan- denlibus referl sed ¶C babel folia in lacmias multò laliores ob- longo-cunealas divisa, (lores majores, buclus Ixves majores valde cannatos longe pediccllalos

KIMARIA HEPIUM B et ft

F. pallide virens, caulibus elongate longè lalcque scandenlibus, loliorum infenorom so^mentis ambilu ovalo-rolundis m lacmias di-

vergentes oblongas oblusiusculas longiusculas uicronata<sup>9</sup> partilis, foliorum superiorum segmentis minimis ovato-rotundis subpalmatis, petalis, peliosis subcirrhosis, racemis brevibus paucifloris, bracteis linearibus - setaceis rectis pedicellos rectos simplicios tenuissimos subaequalibus, sepalis lanceolatis decimnatis canaliculatis basi subproducta argute laciniato-dentatis celeriter integris corollae aequilatis eaque impleto brevioribus corollam pallide roseam apice purpurascens angustissimam petalis omnibus aetate adkerentibus, nuculis pedicello stricto cis sesquialongiori suffragillis globosis carinatis subcompressis obovatis apice bifoveolatis indivisibus

Habitat ad oppidum *Algesiras* Beticarum ubi sepes circa ambulacrum ad septentrionem urbis silum elegantissime vesit (Majo 1849 Boissier et Reuter)

Species habitu et foliis in parte inferiori et superiorum radiorum magnitudine valde dissimilibus *F. Borei* Jordan Pugillus referens sed ab ea et affinis pedicellis tenuissimis strictis arrectisque, foliis angustis minoribus eos *F. muralis* Germanicus referentibus et in primis sepalis decimnatis et valde acuminatis, distincta. Habitat quoque *F. vagantem* Jordan refert sed hanc sepalis ovato-oblongis minime acuminatis, nuculis acutis, etc. differt. Flores serotini in nostra specie vel in *F. Borei* precocioribus conspicue minores sunt

Quidam ex Pugillo pro nov. pag. 6 sic mutanda *Fumaria Borei* Jordan = *F. muralis* Boreau non Sonder quam in Pugillo nostro pro *F. murali* Sonder habueramus nobis nunc quoque species propria videtur; hujus nuculis quas Ueberlaxeramus revera lubercula sunt praesertim canaliculatis versus vulgatissima est in omni Beticam australianam, *Gibraltar*, *Grazalema* in lapidosis, sepalibus et quoque in Mauritania prope Tingitana — *F. Gussonei* Boiss. ex Sicilia!, Corsica!, Algeriis, *Fumaria Borei* affinis eorum differt foliis in laciniis tenuiores divisas, caule vix scandente, sepalis rotundatis corollam non latioribus *F. confusa* tandem = *F. Bastardi* Boreau, ab ultima quoque floribus minoribus pallidis etc. differt; huic referenda est planta circa Pansios crescens. — *Fumaria Munbyi* B. et R. Pug. tandem nuper exemplana nuculis fere obovatis vidimus, nec species ideo a *F. Borei* forsitan non satis differt

## CIIUCJFEIlyE

(JIEIHAYHUS Conivriius Boiss (Sect *Client*)

Ci fi ulscens rarms parle mfc i on lignosis lorLuosib midis parle  
fnlufcrā mdumcnlo adpressisbiino nlbis, fohis oblongo-laiiceolalis  
inlegci'innis in poLioium .illoniihs ulrinque piibe cenlro affixA ad-  
pressissima subtiis copiosion glaucscentibits uilimis oblusuisculis  
cft'lens acuks summia scssihbus, flonbi9 in race mos lerminalis tan-  
dem laxos disposilis, pcdicellis erecto-patulis caljcebisacculo spar-  
sim el adpressissime liirlo angustf mcmbranacco-marginalo subbre-  
vionbus, pclalis oohrolcucis apice rolundalis, siliquis ereclis lato-li-  
neanbus plants slylo bruvi in stigma lulidurn aheunti lerminalia, val-  
vis plamusculis nervo mudio valido percursia eisdem pilis cenlro  
affixis fidpres3is9im6 cams, seinimbiis cumprossissimis marginemem-  
branaceo versus fumculi inserlionciu evanido circumdatis

Hab in fissuris rupiim vcrlicalium in monle *Acrocontho* ubi  
legi flonrerum pnmo vere {842

Habilns folia el flores Gt *Chein* pro quo liunc dn̄ habui sed ra-  
in i tcnuiores, pclala lulea nee in auranUaoum colorem vergentia,  
raccmus fruclifer Uxior semipedahs, siliquaj(1 1;2-2 poll longae 2  
lineas latoj) ob valvas plamusculas plans nee ut in *Ch Chein* qua-  
drangulsc, semina magis compressa marginata

CIEIRANTHUS P\RNAS5I DoiS9 Ct Held

Ch pcrennis bnsi sulTrutescen9 lotus pilis cenlro affixis adpressis-  
simè canescens, caulibus caespitosis pumilis ascendentibus ereclisve,  
folns infimis obovatis oblongisve spalhulatis pautis caeteris lincan-  
spalhulalis lineanbiisve basi longè atLenuatia omnibus integns vel  
ranùs parci el minutè lobalo-denticulalis denlictilis aculis, fionbus  
5-6 mediocnbus flavissuh anthesi capitatis pedicello calyce tnpl6 bre-  
vion suffullis, sepal is placpnlams breviter saccalis, giandulis placen-  
tarus brevibus bilobis, raccmo frnclifero laxiusculo, sihqis erectis  
pedicello earum lalitudine vix longion sufTullis adpressè cams qua-  
drangulo-compressis slylo Lcni carum lalitudme subdupl6 longion

terminalis, stigmatibus capillatis, scimibus oblongis compressis apice marginatis suboblique pleurorrtmeis

In regione alpina montis *Parnassi* rarus (Heldr 1832 N°2651)

Habilis omnino, florum magnitudo *Erysimi Boryani* Boiss et Spr  
Caulis 2-3 pollicares, fructibus semipedales, folia Jj2-1 1/2 pollicis longa 1-2 lineas lata, flores in magnitudinis eorum *E. canescentis*, siliquae 15-20 lineas longae. In meam latitudine Stylus sesquialtem circum longus tonuis. Semina immature pleurorrlnza mihi visa sunt et hoc character e quoniam cum sciminibus compressis, siliquis latis bene congruit planam *Cheirantho* potius quam *Erysimi* adnumeravi

CHEIRANTHUS STOCKSIANUS ROISS (Seel *Chein*)

Ch. peienns vel bicinnis, radios verticales collo densè fohoso, caule glabro musculo albido crasso plus minus angulato erecto a basi ex axillis ramoso, ramis tenuibus elongatis erectis paniculam hirsutissimam formantibus, folia pilis stellatis lepidosis cum radicalibus densè rosulatis elliptico-lanceolatis obtusis in petiolum longè attenuatis margine vel obsolete dentato-crenatis caulibus paucis sessilibus acutis flonibus secus ramos in racemos nudos laxos tandem laxissimos dispositis pedicello calyce dimidiò brevioribus suffultis, calyce breviter saccato stellatis inrisuto, petalis ochroleucis ellipticis obtusis, siquæ junion stellatis hirsute in stigma bilobum abeunt

Hab. in *Beloutchtstan* super non (D<sup>r</sup> Stocks), in regno *Cabulico* propè *Quettah* (cl. Griffith)

Folia radicalia rosulata cum petiolo 3-2 l. pollicana h-b lineas lata, caulis cum ramis pedalis et ultra, racemi simpliciter bipedales et ultra, flores magnitudinis eorum *Erysimi repandi* Valde affinis indumentis naturæ et characteribus *Cheir. crassicauli* Boiss Ann Sc Nat ex Persiâ sed in hoc pilis stellatis ramis longioribus præditi sunt inter se magis conligati nee sparsiusculi, caulis magis abbreviatus supernè lanuginosus, racemi minus laxi ad basin florum sæpè foliosi, flores saltern duplo majores illos *Ch. chein* subsequentes, stigma longius bilobum fere bifidum. Cum infriusque semina ignota sint ex habitu et pubescentie mole eos potius *Cheirantho* quam *Erysimi* adnumeravi

ARADIS pskunoTunniTis Boiss el Heldr (Sect *Alomahum*)

A Inennis folns radicalibus pdis brevibus ramosis scabndis hirlis lyralo-pinnatifidis lobis lalcralibua Inangularibus lerminali oblongo subrependo, folus cauhsis glabns oblongo-lanceolalis acutis integerrimis basi profunde cordato-sagittatá amplexicaubus, flonbus in racemum simplicum jam per unlhcsin la&uui dispositis, pedicellis erectis calycu vix longioiibus, sopalis glabns oblongis oblusis membranaceis rubellis, pclalis albis vcl pallidè ochroleucH, sihquis sine tissimis longis angublc lincanbus glabns slgmale sessili obluso lerminalis, valvulis iicivo valido percursis euidunlcr cannalis, senumbus minutis angustissime maigmalis

IljI) in rogioie sjlvalica monlib *Qlympt Thessahce* (Heldr *Jut* 18b2), liabco exemplar plunferurn ejusdem stirpib in ^Peloponneso loco nun indicalo a D<sup>r</sup> Fraas leclac quod miln communcavit amicias Spruner

Habitus *Turr glabrveelAr brassicafonnis* A pnon differl racemo sub anlliesi iiiiult6 laxion, nonbus brevius pedicellalis, pelahs sepahsque lalionbus, siliquarum valvis cannalis nervo medio crassion, scmimbus uniscrulis t, a posterloit qnoque flonbus sub anlliesi non conferlis, siliqms slnclis nee ereclo-palulis, fohia radicalibus pinnatifidis lurtis Species dislmclissima l\acemus florifer *U-6* pollicans Sihquae cue 9 1}2 pollicares

ARADIS LUSITANICA BOISS (Seel *Alomaimm*)

A perennis vel biennis ranlc credo folioso simplici pilis adpressissimis ramosis vel centro affims simplicibus Inrlo supernè glabrescenli, folus pube ramosá adspersis oblongis obtusè denticulalis oblusis radicalibus in petiolum altenualis caulims scssihbus bafii truncato-auriculalis, raccmo florum terminal! per anlhesin denso dein elongalo, sihquia slnclissimis longis hneanbus planissimia nitidis, Iorulosi9, valvularum nervis marginalibus validis inlcrmedio vems parallels stipato, seminibns angustissimè inargmalis

Hab in collims *Extremaduroe* propè *Cacem* (Welnsch), in agns incullis propè *Ohs&vponem* (G Hochslellcr coll N° 338 )

Affinis habitu el multis characlenbus *A sagittatce* Dc et *A hirsute* Scop Hsec differt mdumenlo longion palenti, ilia folus caulims basi

evidenter cordalis, florum racemis sub anthesi oblongis laxiusculis, utraque siliquis brevioribus angustioribus ob valvulas subcarinalas compresso-subtetragonis Siquae A *Luailamce* 1 1/2 polliceslongre lineae 3/4 Ulae

ARABIS OCHROLEUCA Boiss et Heldr (Sect *Alomatium*)

A. perennis canubus in femis pilis simplicibus patulis plus minusve hirsutis supernè glabris simplicibus vel parè ramosis, folia radicalibus pilis furcatis scabris oblongis obtusis dentatis sublyralis raris subintegris in petiolum attenuatis, caulinis paucis margine uliatis oblongis oblongo-linearibusve aculis basi sessilibus cordatis longè biannulatis, racemis paucifloris laxiusculis, petalia pallide ochroleucia sepala membranacea glabra obtusa duplè superantibus, siliquis (junioribus) longis stigmate sessilibus terminalibus

Hab. rara in regione alpina montis *Kyllena* Peloponnesi supra *Limdt BBOO* - 6500' (Heldr 'Orpliamdes')

Species forma foliorum et florum pallide ochroleucis distinctissima prope A *Creticam* Boiss et Heldr collocanda. Flores ferè majores eis A *stnetee* cui quoque folia dan la Us affinis est, caules semipedales, racemi lanium 3-4 flori, siliquae juniores bipollicares tenues

NASTURTIUM NOEANUM BOISS (Sect *Cochleandrum* Boiss)

N. annuum pubes ramosum, caule humili paulò supra basin ramoso parte flonferà valde flexuoso, foliis radicalibus oblongis sessilibus integris vel obsolete repando-dentatis caulinis linearibus obtusis basi acutè auriculatis, racemo fructifero elongato flexuosissimo, pedicellis silicula triplo longioribus, siliculis glabris ovato-ellipticis inflatis basi attenuatis aculis apice obtusiusculis stylo manifesto stigmateque minuto capitato terminalibus, valvularum nervo medio valido cum lateribus anastomosantibus

hab. in alpidibus *Armenicis* ad *Bakker Maden* ubi Maio 1882 legit clar. Noë"

Valdè affinis JV *flexicauli* B0199 Ann. Sc. Nat. ab eo 9at mihi differre visum est siliculis minoribus lineam aut vix sesquilineam longis non stigmate sessilibus sed stylo linearibus dimidiatis longo terminalibus N. *ellipticum* Boiss. siliquis ellipticis longis distalibus

B. 255

### STRIGOSELLA Boiss

Calyx tubulosus (ictus) lobis calycibus longioribus  
 exsertis in limbo oblongo lobis liberis. Glandulae  
 placentae annulares. Ovaria breviter lineata  
 bilobata. Siliqua (immatura) strigosa-hispidissima  
 linearis-conica, lobis linearibus glabris (antheris  
 5) septata bilobata. Septum membranaceum  
 Scinina hispidissima compressa (placenta?)—Herba  
 Cabulica annua tola pilis longis Impida facie *Matthiole*,  
 (tota vel *Lachnolomus* Uenus afdne *Morettia* a qua differt siliqua  
 non septata, seminibus biserialibus

#### STRIGOSELLA CADULICA BOLLSS

**Planta** tota pilis albis longis pilulis basi dilatatis simplicibus fur-  
 calisque strigosa-hispida. Caulis 8-6 pollicares parvis ramosi foliosi  
 Folia oblonga obtusa acute sinuato-dentata in petiolum attenuata  
 Flores in racemos terminales laxiusculos dispositi brevissime pedi-  
 cellatis. Sepala strigosa-hispida. Petalorum rostrum unguis plant  
 calyce sesquialongiores in lamina obovata sessile dilatata. Siliquae  
 (juniores) patulae; hae lineares circiter longae pilis strigosis deflexis albo-  
 hispidissimis elongato-conicis in siliam linearem glabram linearis  
 longius dehiscentibus. Valvulae convexae\* enerves vel in Nasturtio Semina  
 ferè horizontalia

Habitat in regno Cabulico prope Pushut (W Griffith N° 13)

Indigitatio, magnitudine florum, siliquis abbreviatis longehispidis  
 diacriter *Lachnolomus* Bunge simulans ut earn pro nova hujus  
 generis specie primum habuerunt

#### HESPEHIS HUPESTHIS DuRoi et TSoe (Seel *Deilosma* DC)

Herba perennis, caulibus crassisculis ascendentibus fobosis supernè  
 ex axillis ramosis indumento brevissimo viscidulo pilisque longis pa-  
 pillanibus patentibus albis obsitis, foliis eodem indumento brevi vis-  
 cidulo setisque sparsis praesertim ad nervos obsitis inferius  
 dilatato-pinnatis in petiolum alternis oblongo-lanceolatis, cau-

lims oblongis vel ovalis >icu>iiiiidtis sessilibus vel basi subcordatis, flonbus in racemos per anthesin densiusciolos dispositis, pedicellis hirsulis calyce dimidiato brevioribus, sepalis virentibus membranaceo-marginalis praeter apicem longe albo selosum glabrescentibus, petalorum laminae minulae ellipticae vix lutescenti, ovano glabro, siquidam

Hab ad *Bakker Maden Armenia*; mentionatur in hessensibus rupium ubi floriferam Maio 1862 legit cl Noe

Gaulis in specimine meo subpedalis, folia inferiora cum petiolo 4 pollices longa, petala eis // *secundiflora* Boiss et *glutinosa* Vis quibus affinis est minor. Ab eis praeterea differt folium caulinis superioribus ovato-oblongis basi cordatis, indumento magis scabundo

PACHYSTACHYA GIBBIFLORATA Boiss

Per annua vel biennis, caulis e collo saepe plures erectis lateribus a basi foliosis strobilisque racemosis, foliis inferioribus praesertim pilis sparsissimis furcatis ad nervos et margines instructis oblongis obtuse crenato-repandis in petiolum brevem attenuatis superioribus sessilibus lanceolato-linearibus acutis subintegris, racemis terminalibus densis post anthesin laxis, pedicellis calyci subsquillois tandem palulis deflexisve, sepalis glabris membranaceis albidis, petalis albis, ovano junctio lineari stylo brevi terminali, stigmate indistincto

Hab. in regno *Cabulico* (cl Gussone N° 173)

Planta sesquipedalis, folia inferiora 2-3 pollices longa pollicem laxe pubescentia pubem sparsam vel videtur viscidula, superiora pollicem longa 5-4 lineas laxe pubescentia pubem sparsam. Hacem post anthesin semipedales. Flores illis *Alhari* (*B officinalis* varietates). Fructus ignotus, ideo ex habitu solo, pedicellis palulis deflexis etc hanc plantam huic generi polius quam *Arabidi* adnumeravi. Affinis videtur *Part cordata* Boiss Ann Sc Nat quae differt foliis abbreviatis multo longius pedicellatis radicalibus basi subcordatis., flonbus minoribus etc

Sesuvium GIBBIFLORUM BOISS (Sect *Arabidopsis* DC)

Sesuvium annuum tomentosum pubescentia ramosum, caule cincto subflexuoso parce ramoso, foliis radicalibus oblongis obtusis



in pefolnmallesiualis plus nnnus\p dentahs, caulntis Lanceolalu \|-  
ncanbiisve acutis anplexicaulibus sagitalis submlegns, raceinis in  
anhesi conferlis landcm laxis, doribus pama, pelahs albis calycem  
hirsulo-slrigosum pa rum superanLibus, stliqms ramoso-pubenilis an-  
gustissime lncaribiis Icretiusculi\* pedicello brevissuno deflexo aul-  
fultis

**Hab** in regno Cabaheo circa Quettah (Griffith N<sup>o</sup> U81)

Specif s habilu S moUusmw C A M affinis ab eo siliquisbreuus  
wLiolatis deflexisque ncc crcchs bfaurn dignoacenda Flores illis S  
Thaham minores qua nolá a S totophylln C A M longius distat

**S>MBHm** LASIOLOBUM Roiss (Seel *Arabidopm* DC )

S bienno pallde viicns tolum jmbe ramosà substellalà brevissimà  
scabntimn, caulibua erectis pillule ramosissimis, foliis oblongis in-  
fenonbus 4inualo-denLalis in pcliolum attenuate supenonbus el-  
liptico-lanceolalis utnnque attenualis aculis sesailibus, racemis ter-  
mmalibus per antheain den sis dein lamusculis, pedicellis flores  
minimos subtequanlibus, petal is lmean-cuneaLis in unguem attenua-  
lis calyce stellato-hirsulo subbreuionbus.siliquis erecto-palulis pedi-  
cello subduplo longionbua angustC luieanbus leretibus pube brevis-  
simè ramoaA scabndis in sylum lenuem brevem abruptè abeuntibua,  
semimbus ohlongis mimmis iimscnalibus, septo foveolalo

**Hab** Probabihter ex Americà onundum

*Arabts lastoloba* Hort - *Hahmolobm patula* Tausch Flora 19  
el probab Hal stricta Tausch eodem loco

Planla per hortos botamcos jam per inultos annos vagans, ongmis  
dubias, et quae forsán jam sub alio nomine ex loco natali descnpta  
fmi quod Inmen non delegere polui Omnibus nolis certe s V w -  
*brium*

**SBYHBmH** GRAHAT>NSE BOISS (Seel *FeUxrum*)

S bicnne, caule lereli credo elato glabro pauld supri basin ramoso  
rarais ereclis, fol.is glabns ranua basin versiis raargine et ad loborum  
inferorum apicem ciliis sparais instructis mfenonbus runcmato-lo-  
balis peliolalis lobis Inangulanbus acuiis, caulims Inangulanbus  
acutis hasi breuiler allcnualis summu lanceolads, racemis flonferift  
abbreviate fructifcns lams^mis, s,l,quii longis ereciis slncliuscuHs

subconipressis in stylo breviter lignale crasso obscure bilobo terminalium abeunlibus, valvis 8 nervis nervis lateralibus inarginantibus

S *Arundanum* Bourgeau Fl. Hisp. exs. 1849 N° h%a non Boiss. Voy. Esp.

Hab. in montibus Sierra de las Pieves in sylvaticis (Bourgeau)

Hæc species inter *Arundanum* et *laxiflorum* intermedia habet flores majusculos subconfertos prorsus sed differt foliis minus acute lacinalibus et praesertim siliquis in racemos laxissimos dispositis brevibus sed fere duplici crassioribus lineis 5/4 latis subcompressis nec angulato-teretibus valvis 5 nec 3 nervis. S. *laxiflorum* magis affine differt floribus in omnibus etiam sub anthesi dissilis siliquis brevioribus sacutissimè angulatis.

Ensinu H. ATTICUM Heldr. et Sartoni Mss.

Er hienne vel perenne tolium pilis centro affixis canescens, collo fasciculos foliorum solum erigit, caule gracili erecto parte inferiori parvè ramoso, foliis radicalibus numerosis linearibus runcinatis pinnatispartitis lobis lateralibus parvis in angulis vel linearibus acutis remotis terminali lanceolato-linearibus, foliis fasciculorum et caulinis linearibus integris, floribus terminalibus paucis sub anthesi capitatis pedicello brevissimo suffultis, sepalis adpressè canescentibus lateralibus brevibus bimè saccatis, petalorum siccè ungue exserto laminam obovatam flavam longioribus glandulis placentalibus semicircularibus bifidis (ex Heldr. et Sartoni), racemo multifloro laxiusculo, siliquis (immaturo) teretibus adpressè canescentibus longis strobiliformibus in stylo glabrescentibus earum diametro plus duplo longiorem sensim attenuatis, stigmate minutè capitato subbilobo.

Hab. in faucebus *Hymetti* mendonensis et in monte *Corydalo Atticum* (Heldr. et Sartoni)

Folia radicalia 1 1/2-2 1/2 poll. longa 1-3 lineas lata. Caulis fere pedalis. Siliquæ 1 1/2-2 lineas longæ stylis fere 2 lineas longo terminate. Affinis habitu *Cheir Parnassi* (sed siliquis junioribus minus *Erysimum* esse videtur) et praesertim *ET Boryano* Boiss. et Spr. Diagn. I a quo differt caulibus ramosis non cespitosis procerioribus, petalorum limbo obovato nec ovato-oblongo, foliis magis pinnatisectis, siliquis in stylo longiusculum abeuntibus nec stigmate subsessili terminalibus. Ne minus fructus maturos vidi.

## ENVSIUUM PUHLJH DOI&gt;S

**E** perenne liasi suiTrutescens caudicibus cicalncosis tenuibus ligno-  
si3 ramos sunphciusculos tenues elongates foliosos erectos vel ascen-  
dentes edentibus ul tola planla pilis centro affixis adpressis obsitis,  
foliis pallid6 virentibus ereclib anguslè lineanbus basi allenualis acutis  
Infenonbus minule et acute denticulatis supenonbus integns, flon-  
bua ad apices ramorum congeslis mediocnbus pedicelhs calyce bre-  
vionbus siiffiillis, glanduhs placenlams valde' elongatis a pice subloba-  
lis, racean9 frnclifens dbbreviahs, sihquis (jumonbus) pihs adpressis  
simpliubus lurtis erecds longis stylo altenualo earum lalitudine dupl6  
laliori stigmatocue minule capilalo lerminalis

Hab in regno *A&twico* Hispanise, ad rupes apncas prope *Puente Gallego* (Duneu pi Ast ens K° 407)

Species suArulesceniã, caulibus subhgnosis tenuibus, folns 8-IS  
hneas longis hneam latis vel angustionbus aecùs ramos graciles cre-  
bns, siliquis longiusculè stylatis inter species Europaeas dislinclissima,  
nulli propids affims Flores magmludinis eorum *E Helvetici*

## EHSIMUM CnETcuH Boiss el Heldr

**E** bienne, ciule crasso sulcato-alnalo medium versùs ramis nu-  
merosis longis credo-palulis inslructo pilis sparsis centro affixis  
inslructo, foliis lato-lineanbus in petiolum attenuatis Bsep6 pticatis  
recurvisque inlegns rariùs minutè et remotè denliculalis pilis aliis  
centro affixis alus Iniidis versùs partein superiorem plants copio-  
sionbus inslruclis, flonbus mediocnbus per anlliesin congeslis pe-  
dicellis calyce brexionbus suffuUis, sepalis obsoletè saccalis, racemis  
rrucliferis clongahs, siliquis (Inimaluns) pilis tnúdis densè Inlerlextis  
scabridia pedicello crasso palulo suffultis longis terele-aubcoDipressis  
apice non allenuads sligmale sessili lerminalis truncalis, valvis obso-  
letè cannalis

Hab in Creta, in saxosis, *Contopoura* Eparchue *Jpocorona*, Heldr  
pi Cret exs sub £ *australi* (ubi mixtnai est cum specimimbus  
flonfens pube simplici disinctis qua; *E longifolium* Dc vel speciem  
affinem sislunl)

Ferè bipcdalo, iolia 9-2 I;2 polhcaria 'B lineas la la, flores magni-  
tudini!> *E Helvetici*, siliqux 2-2 t;2 pollicires cxlrncmilale non alte-

nualx abrtipleque truncates quA null inlcr speues pube trihdà do-  
na! as dislinclissiiiiium Habitus quodaimnodò *E calyctrit* Gnsebacli  
pube simplici diversi E grege *E odorati* el *crepidifoln*

ERYSIHUH GRIBan Boiss el Heldr

Er bienne lotum pilis centio affixis adpressissinus can urn, caule  
acule angulato recto supernè patulè ramosissimo infernè ex axillis  
foliornm ramos serolmos fasciculilbrnies edenti, folns omnibus linea-  
nbus inlegns acuhs saepe canahculalis recurvis, Qonbu9 mediocnbus  
pedicello calyce dimidiò brevion suffullis, sepalis albo-inembranacei&  
adpressissuu6 birlis laleralibus subsaccatis, petalorum croceorunrla-  
minà oboval4, racemis fruchfens elongahs, siliquis erecto-patulis  
reclis vel arcualis adpressissitnè pubescenlibus angusle linearlAus  
tereli -subcompressia stigmale subsessili obscure bilobo lerminalis,  
vaivulis anguslis obscure cannàlts, placentis (sepli margimbus exte-  
nonbtis) lalis, septo sennmbus oblongis immarginalis profundè ins-  
culpto

Hab circà *Athenas* vere copiosum (Boiss<sup>1</sup> Heldr exs IS<sup>0</sup> 1708)

Eandem speciem m fallor e By7anlio a cl Noè sub numero 90  
lectam habeo Pedale sesquipedaleve, folia inferiora sesquipollicana  
i i}2-2lineas lata, siliquis sesquipullicares, flores paul6 breviopes illis  
*E canescentis* Roth cm inter oinnes magia affine est et quod a nostro  
differt indumenlo minùs cano, caule supernè minùs ramoso, pedicellia  
calycem fffiquantibus,9siliqui8 exactè quadràiigulanbii9 ad angulos gla-  
bralis *Er auttrale* Gay longiùs differl radice perenni, seinmibua  
exactè quadrangulanbus semimbus a pice marginalia

EBYSIHUIT KUNZEANUH BOISS el Reut

Er annum vel bienne pilis centro affisis alusque Infidis prscer-  
lim ad foliorum extreuulalem Interniixlis cinereo-virens, caule angu-  
lato paul6 suprâ basin stnctè ramosissimo, folns linean-lanceolalis  
integns obsolete denliculalis ranùs pinnalifidis, flonbus minulis sub-  
sessilibus sub anlbesi capital is, calyce adpressè puberulo non saccato,  
petalorum Qavorutn unguibus in lammam oblongo-cuneatam calyci  
subsquilongam dilalalis, siliquis pilis ramosis adpressissimè hirtis  
rectis vel subarcuatis erechs eximtè et acutè quadrangulis stigmale

subses&ili liuncalo sequiUlo lormmalis secus facies subloruloso-punc-  
talis; valvuhs ad nervum acule carinalis, seniibibus obiungis lmmar-  
ginalis

*Eiysimum? mtanam* Kunze in Willkoinm pi cxs (forma muiitna  
vix cvoluU foliis pinnalindis)

Hab in *Hiapaniai* inonle Sierra *da las Nteves* ad *Pico Jarro* ("Will-  
Jtom), amsregm *Mar act* prope *Chinchilla, el coWihus* circa. *Hues-*  
*car*, (Dourg exs 1850 el 1891 N" 1019 sub *Er stncto*), in *Maurita-*  
*nia* ad plantids clalas *AI* inmidiuin urbis *Saida* (Balansa exs iBBS  
N° GS6 sub *E atrido*)

Longiludine a 2-5 pollicibus ad pedem el dimidium vanans, Does  
illisfir *cheirunthoidis* cliam minores ftacemi fructifensxp^pedales  
Siliguae ngidx durac lb-18 lineas longx lineam dimiduin latse regula-  
nssime quadrangular Species distincta ab *Er stncto* quod meo sensu  
ab *Er virgato* Rolli seungi nequit, hue habet folia integerna ut  
tola planla pilis lanlüm Infidis obbila, caules sunplices, floras Inpld  
majores, siliquas mullo longiores axi adpressas quadrangulo-com-  
piessaji sljlo lougion leiminalas, etc Ex specimine a bealo Kunze  
milli ohm misso tan (turn (lonfero novimus bane speciem ad suum *Er*  
*jncanuin* refrendam csse sed hoc nomea oimmo unpropnum ser-  
varc nequimns

EaYSIMUU GniFFITUIANUH BOISS

Er annum tolum pilis centro affixis alusque tnfidis adpressissime  
canescens, caule 1 vel plunhus erectis vel ascendentibus pumilis,  
folus oblongo-lanccolalis obtusis integns in petiolum altenuatis, flori-  
bui parvis paiicis axillanlms in capilula (errninalia folus inlrmixla  
superalaque conferlis stibsessilibus, sepalis adpressè lurlis non sac-  
catis, petalorum luleorum laminá ovalu-spalhulalà, racemis fructi-  
fens elongalis ad siliquarura inserlionem fohosis, siltquis slnclis  
adpressè hirlis longis lenitibus linean-cylindncis subsessilibus slylo  
brevis aeqmlalo stigmaleqne truncalo terminalis, valvuhs convexis  
uninerviis, semimbus oblongo-hneanbus

Hab in regno *Cabuhco* ad *Sinab, Quettah* (Griffith N° 300), \n di-  
tione *Belout&chistan* propè *JSichara* (Stocks N° 909)

Caules in meis sppriminibus 5-ft pollicares, flores illis *E repandi*  
subimnors, siliqiuc \*2-IK lineas longe (ennes Species flonhue  
axillanbus' siliquis Iercli-cyhndncis in genere dislinclissima

TETRACOHE SECUIDA Doiss

T annua tola palulè hispidula, ramis humis adprmis ilerùm dichotomis cum racemo sessih in diciolomiâ, folus oblongo-spalhulalis in petiolum attenuate subinlegns, flonbus . , raccmis fructifens densiusculis secundis subscorpioideis incurvatis, siliculis pedicello brevi crasso slnclo suffullis palulè hirsulis quadrangulis brevibus apice Iruncatis sligmate punctifbrmi apicutalis, valvarura angulis apice in cornua crassiuscula brevissima gibbiformia sligma vix excedentia productis

Hab in regno *Cabulico* (GnfGlh sub N° 1508)

Habitus *Notoceratis Cananensis* Kami 2-B pollicares, raceim pollicare9 vel pauld longiores. Siliculae secundse 3 lineas aul pauld ampliùs longae lines 3;& diametro la Ire Species siliculis cra'ssis brevibus secundis disinctissima

BRASSICA BLANCOANA BOISS (Sect. *Bras&icaria* Gr et Godr)

Br perenna cdiidice abbrevialo csspitoso, folus omnibus ad apicem caudicis divisionum congestis oblongis plis in mils profundè dentatolobalis pinnatifidisque lobis Inangulanbus aculis basi in peliolum allenuatis margine et seciis peliulos plus ininùsve pihs albis breviter setosia aoepe ummnò glabns, scapiselatis lerelibus glabns, flonbus sub antheai capilalo-congeslis mediocnbus, pelalis ellipticis deflexis in unguein altenuatis, calyce glabro, racemo fructifero laxo, siliquis pedicello eis mull6 lenuion erecto-palenli aliquand6 reflexo suffullis longè lineanbus quadrangulo-compreseis torulosis in ro9trum asperum earum laliludine pau!6 longius sensui altenuatis, valvarum nervo medio valido cum laterahbus inarginantibus nervubs obliqms seepe conjunclo

Uab in Sierra d'*Alfacar* prov Granatensis (cl Rauibur), *Cerro de San Vicente* regm *Jenensis* (cl Blanco), *Sierra de Segura* regm *Stvxcici* (Bourgeau pi exs 1850 N° »60)

Folia longitudme a 1-9 pollicibus ad B-6 pollices e loco plus minfts fertili elaloque variantia, scapi pedales longioresque, flores magnitudims ferè eorum *Dipt. tenuifottce*, siliquae 3-3 pollices longae sesquilineam latffi. Afflnis *Br. humili* pro cujua vanelate (siliquft Don notf) bane in Voy Bol Esp habueram differt tolius plantae magmludine,

forma foliorum, etc. A *Bi latifolia* & *Utqua* quoque *Coina* majoribus, scapis in mutationibus distinguitur potest praedictis siliquis duplo triploque longioribus pro longitudinali angustioribus a pice in rostrum minus abrupte attenuatis. Forsan utraque species melius secundum cl. Grenier et Godron designationem systematicam *Diplolaxidi* adnumerandae et sic *Diptalaxia* et *Dipt. Blancoana* nuncupandae.

DRAKISILYQUA UOISI (Seel. *Brassicata* Gr. et Godr.)

Dr. perennis caudice abbreviato squamoso cespitoso, foliis omnibus ad apicem divisionum caudicis dense congestis ovalis vel oblongis vel lanceolato-heterophyllis integris vel obsolete denlate-crenatis rarius basi pinnatis parvis in petiolo eis longiorem attenuatis pilis albis rigidis ciliatis, scapis erectis ascendentibusve nudis radiocibus, floribus paucis luteis ad scapitulum apicem congesta pedicello calyci aequilongo suffultis, calyce violascenti albo-marginali dorso pilis scissis paucis longis obsito raris glabro, racemofruiferolaxo, siliquis pedicello tandem reflexo pendulis laevibus compressis nitidis glaucis apice rotundatis rostro elongato-conico earum latitudine longioribus superis, valvarum convexarum nervo medio crasso cum lateralibus marginantibus recurvo obsolete venarum conjuncto, semibus ovalis brunneis.

*Br. humilis* Boiss. Voy. Bot. Esp. ex parte non L.

Habit in montibus Hispaniae australis, *S<sup>a</sup> Nevada* ad *Trewnque*, *Sierra Tejada*. (Boiss.)

Haec planta *Br. humili* Galliae meridionalis quae cum earn conjunxerim eorum affinis est sed laminae saepe distincta. Folia latiora sunt multo magis setosa integra vel obtuse denlate-crenata rarius et basin versus pinnatifida nec profunde pinnatisecta, scapi procumbens et pinnatis siliquae fere duplo magis compressae apice in rostrum non sensim attenuatae sed apice rotundatae in rostrum abrupte attenuatae, valvularum venae intermedia minus prominulae.

BRASSICA BRACHYLOBA BOISS. et Beauv. (Seel. *Eubrassica*)

Dr. biennis glabra caulibus teretibus erectis vel ascendentibus flosculis superne ramosis ramis erectis, foliis inferioribus pinnatifidis lyratis lobis lateralibus ulnatis 1-3 triangularibus obtusis terminali

oblongo integro vel obsolete repando, folus supenonbus lanceolalis acnlis basi atlenuatis obsolete repandiB, flonbus per anthesin corymboso-capitatis niediocnbus pedicello calyce longion sulTuUi9, petalis obovatis luteis^ racemis fruclifens longis laiis, siliquis pedicelhs paulo-subdeflejus eis vm brevioiibus insidenlibus cylindncis abbrevialis torulosis apice breviter attenuate stylo tenm earum diametrodupl6 longion terminate, valvis convuxis prater nervnm dorsale venulte flexuosis obsilis, seminibus sphaencis punctate

!?ab in montibus *Atlantis* supra *Tlem&ep*, ad basin rupium verlicahum in faucibus fluvii *Safsaf* septenlnonem versùs (Boiss et Reut)

Bi vel tnpcdalis, folia inferiora cam petiolo aemipedalia 1 lj2-8 poll lata, racemi rrnctiferi 8-10 pollicares, siliquis 7-9 lineas longis slylo 9 l)3 lineas longo terminate Affinis liabilu foliorumque formâ fir. GrauimcTcn pro quâ diù habuimus, hæc differl Indumento pilis spar sis aspens bulbosis conslanli, foliorum lobis lateralibus multò numerosionbus aculw, flonbus paul6 innoribus Sifiquoe matursfir *GravincB* nobis ignolas alios forsan suppeditarent characteres

BRASSICA COSSONBANA BOISS et Reut (Sect *Eubrassica*)

Br annua, caulibus ereclis vel ascendentibus terclibus ramosis foliosis mfernæ nt et pelioli pilis setulosis palentibus deQexisve brevibus densè hispiduhs, folns radicaibus lyrato-pinnatlpertitis lobis i lateralibus oblongis oblusiusculis denlalisvel integristerminalimultb inajon ova to saepè eubcordalo crenato-dentato, folns rameahbus hnearibua aculis subintegns, flonbus sub anlhesi capitato congestis pedicellls tenuissimia calyce subeequalibus suffbllis, sepahs undiqu6 patulè albo-hispiduhs, petalis obovatis intensè luleis, racemis fructifens elongatis laxissimis, siliquis pedicello ereclo-patiilo eis ferè dimidi6 brevion insidenlibus Imeanbus compressis torulosis in rostrum aspermum earum laliludine dupl6 longius compressum parallelè plurmervium abeuntibus, valvulis ad medium nninervhs, seminibus globosis impunctalis

*B fruticulosa* (Bourgeau pi eis 1853 non Cyr

Hab in regno Mncico ('Bourgeau 1882 N° 1878; *Sierra de las Cobras* (18U0 forma siliquis longionbns)



Affinis habitu et plurimis nolis *Br fruticulos* ab eâ presertim differunt indumento denso patulo perlim inferiorum plantis et calycis, petalis intensè nee pallidè luteis, semibus laevibus vel sub lente obsoletissimè punctatis nee eximie punctato-foveolatis) *Br fruticulosa* vera in regno Granatensi orientali crescit; *Br radicata* Desf hinc valdè affinis (amen specificè differre videtur sepe hinc longioribus violaceis, siliquis evidenter cannalis rostro longioribus monoapertis terminatis Hujus semina quoque punctata sunt

#### BHASSICA NIVALIS BOWS et Heldr

**B** perennis pallidè virens, foliis ad apicem caudicis subterraneis crassiusculis congestis ambulo oblongis petiolatis ad marginem presertim sedis albis adpressiusculis sparsis saepe evanescentibus obsitis sublyrato-pinnatifidis, partibus ovatis oblongisve rotundis obtusissimis basi angustatis terminali majon longioribus, caulibus glabris lenibus (erectis praeter folium prope basin situm angustius pinnatum nudis simplicibus vel ramo uno alterutrove aactis, floribus paucis mediocribus luteis per anthesin subcapitatis, calyce meqibranaceo glabro vel dorso setis 1-3 obsito, pelalorum laminâ oblongâ, racemis fructifens laxis, siliquis junonibus linearibus Lorulosis stylo tenui terminatis erecto-patulis

Hab in rupibus ad mves *Olympi Thessali* rara (Heldr Julio 48H4)

Folia cum petiolo bipollicana 6-7 lineas lata, scapi ferè pedale, (lores magnitudinis *Br chetranthi* vel fir *montanae*. Species fructo ignoto imperfectè nota foliorum laciniis obtusissimis basi angustatis caulibusque subnudis noliabilis, prope *Br Gravities* vel si valvis siliquarum dorso ternerviae ease observantur prope *Br montanam*, Vill collocanda

#### SINAPIS MESOPOTAMICA Spr ? Boiss (Sect *LeucoBivtpts*)

**S** annua, caule erecto sinulo corymbosè ramoso pilis deflexis strogoso, folio secis petiolos nervosque breviter setoao-birtis lyrato-pinnatifidis lobis lateralibus utnque 3-4 nervis ovatis obtongis & Yedentalia terminali nullis majon oblongo lobato dentatoque, folia supenonibus lanceolatis lacimalis, floribus mediocribus pedicello glabro vel setuloso calyce brevioribus suffullis, sepe ellipticis glabris, pe-

**F** alarum laminâ oblongâ intensè luleâ, racemis fructifens abbrevialis  
 Inxiusculis, siliquis pedicello crasso credo insidenlibus glabris sub-  
 (clragoms eximiè torulosis. valvis cannalis elevatim tnnervus nems  
 secundarus lotidem mlerposilis flexuosis anaslomosanhbus, roslro  
 conico-elongala\ subcompresso phincoslalo 1 vcl aspermo siliquam  
 dimidiam acquanh, semimbus globosis fuscis

Hab inter segeles *Mesopotamia* cirçâ *Mohammera*, *Aiabistan*  
 (cl Noè Fl Maio)

Folia infemora cum peliolo 3-4 pollicana Sihqua pedicello 3 lineas  
 longo sulTuila 8-9 lineas longa 1 ||h lineam crassa, rostrum li lineas  
 circ longum planla in seclione cum nullâ aliâ cunfundenda cl qüam  
 ex loco et diagnosi brevissimâ pro S *Mesopotatmcd* Spreng specie  
 mal^ nolâ non absque dubio agnovi

DHABA ATHOA BOISS (Sect *Aizopsis*)

**Dr** cacspitosa, foliis lancoolalo-oblongis lanceolatisve ohliiusculis  
 prseter margines longè el ngidè pectinalo-cilialos glabris, scapis ab-  
 breviatis crassiusculis glabris, flonbus magnis sub antliesi corymboso-  
 conferhs, sepalis prater 1-2 setas dorsales longas glabna oblongs  
 obtusis, pelahs inlens6 Davis calyce duplò longionbus, filainenlis  
 plants apice parùm angustatis calyce scsqulionbus curollâ paulo  
 brevionbus, raocmis fructifens saepiùs abbreviatis, pedtcellis patulia  
 vel erecto-patulis fruclu ssepiùs longionbus, siliculis erectis oblongis  
 vel elliplico-lanceolatis pilis basi incrassalis adpressis setosis stylo  
 earum latiludtnem super an li ssepe eis subsquilongo superalis

*Di aizoon* var *Athoa* Gnseb Spied

Hab in inonte *At ho* (Gnseb '\ monte *Pentelico* AIUGCB (Heldr '  
 Orph ') *Parties Aitecm* (Boiss t monle *Onion* BCBOUCCB (Heldr '))

Scapt eham fructifen vix bipollicares, flores eis *Dr aizoidu*, ferè  
 inajores, ab eâ differt folns ngidiùs et crassiùs pecttnato-cilialis, pedi-  
 celhs fructifens longionbus fere patenlibus, siliculâ adpressè getos&  
 stylo longion apiculalâ *Dr aizoon* Wahl longiAs differ! scapis elon-  
 gatis, Qorum pallidiorum muU6 ininorum stamimbus calycem paulò  
 excodenlibus

Dn\Dt LotsELtuau Boiss (Suet *Aizopsis*)

DP CEspilosa, folus oblongis obtusis dense rosulalis expansis margine breviter poctinalo-cilutis sublus nervo medio valido percursis, scapis brevibus breviter vchilino-liulis, racenns pauciflons per et post iinlicsin subcorynirosis, sepalis dorso breviter lurluhs, pelahs pallidis cal}ce sesquionibus, filamentis plains apice altenuatis corollà brevionibus, siliculis pedicello ceqmlongis ovatis ellipticisve compressis pilis adpressis nncinulalis brevibus scabns stylo earum lalitudinc dimidiò brevion leionnalis

*Dr ngida* Lois non Willd — *Dr Olympica* Gren et Godr Fl Fr non Siblh

Hab in etationbus monlibus *Cor&icae*

Planta caespites parvos formans, scapi 1-1 1/2 pollicares, flores tllis *Dr aizoidis* paulo` minores, siliculs pedicellis 2 lineas circ longis suffuKse eis *Dr aizoidis* pro lonyiludine latiores *Dr rtgtda* Willd est species Onenlalis diversissima *Dr Olympica* Onentalis quoque diflert cespitibus lalis, folus anguslionibus eximie incurvis, flonbus aureis, silicuhs dimidi6 minionibus paluleet longitls Inrsuhs

DRABA PARNASSICA BOISS el Heldr (Seel *Aizopsis*),

*Dr caespitosa*, folus plains densè rosulatis margine et sublU9 setis albis foln ldhludine longionibus bispidis oblongis oblusis nervo medio fere obsolete scapis punnlis pilis cnsphis lanatist, flonbus racemis fructifens abbreviate corymbosis, silicuhs pedicello lanato subbre-vionibus oblongis compressis palule velulino-liispidis stylo earum lalitudine brevion supcralis

Hab in summo cacumine montis *Parnassi* (Heldreich!)

AfGms *Dr Hispamce* el *Qlympicce* Prior differt folus lanlum pecdnato-cilialis cilus dbbreviatis sublùs valde nervosis, siliculis elongatis longe stylalis adpressè scabns Posterior dishnguilur folus angustionibus mcurvis sublùs sulcalis, silicuhs minionibus magis mflatis, etc *Dr Loiseleurn* folus breviter cihatis, siliculis majonibus adpressè scabns, *Dr Cretica* Indumenlo stellalo silicularuui longiùs distant

ALYSSUM CEPHALOTES BOISS

A annum totum pilis stellatis elongalis slngosum flavescens, caulibns plunbus ascendenlibus foliosis snuplicib,u\$, flonbus in capilula

terminalia foliis supremis involucrala dense congestis, calyce basi squall longè seloso, petalis pallidis calyce sesquolongionbus laminà ellipticà, Glamentis majonbus edenlulis, minonbiis basi squamâ lanceolatâ atictis, raemis fruclifens capilatis, biliculis (linnialuris) ovatis palulè densè et longè pilis aureis slngosis stylo seloso-hu to eis equi-longo lerminatis

Hab in pinguibus arenosis inonlis *Cadmi* Asia; minons, in jugo ad onentem urbis *Geyra* silo, el in cacumine ad oneotein urbis *Dentsleh* suprâ *Khonas* Legi fine Junu 1842

A *xanthocarp* Boiss Ann Sc Nat affine diflerl selis longionbus, raemis etiam fmctifens capitatis, filinentis majoribus edentulis, siliculâ longiùs setosâ

BBRTBH6A STHICTA BOISS el Heldr

B bienms, caule tereli elato virgato stnelo superne palulè ramoso pilis raoiosis brevibus alnsque longionbus simplicibus cnspulis patulis birlulo, foliis virenlibus pilis brevibus subsllellato-ramosis hirtulis subsessilibus oblongo-lanceolatis utnnquè altenuatis, axillis faaciculos foliorum minorum edenlibiis, ramis virgatis in racemos tandem laxiusculos abeunhbus, flonbus albis, sihculis pedicello eis subdupl6 longion axi adpresso vix incrassato insidenlibus parvis breviler ovatis subinQatis brevissimè birlis stylo eisdimidi6 brevion superatis, semimbus latè marginalia

Bab Trequens ad radices niontis *Olympi Tkessali* prope *Katarine* (Heldr Aug. 1851)

Bipedalis elaliorque, folia intermedia lSi-15 lin longa 5-ft lata, flores paul6 minores eis *B incomes* quæ differt sihculis ellipticis magis inflalis, caule ramosion *B orbiculata* longius distal siliculis dupld majonbua pedicellis ereclo-palulis suffullis orbiculalis — Sihculs circ 3 2 i/2 lineas longs

BBHTBBOA GaffCA Boiss et Heldr

B bienms vel perenms tola tomenlo brevi stellalo canescens, cau-hbus erectis foliosis supernè patulè camosis, folus sessilibus ereclis oblongo-linearibus uninervus inferioribus oblqsis supenonbus anguslioribns acutis, flonbue per anthesin corymbosis pedicello stnclQ

eispaulò langion suffulhs, calyce lomentoso, petal is albis dein roseis, stamimbiis brevionbus basi denle auclis, racemis fruclifens valdè clongalis, pedicellis slnclis siliculain subsequanlibus, siliculis plants oblongib vel ellipticia pilis slrllalis Ijrevissimis 9parsim obsids basi rolundalis vel cunoatis apice inucrone ssepe obliquo 1-3 lineas longo (emunalis, scinimbus laivibus urbicularis .ingusle membranaceis

Hab in Arcadia occidniali circa *Andiitzena*, prope *Pheneon* el *Kakivnjla Arcadive* boieahs (Heldr ) prope *Klakmes* Peloponnesi (Orj)hanid Fl Graica cxs N° 167)

PdnLd 1 vel 2 pedalis, folia mfeiora polhcana 3-tt lineas lata, racemi fiuchfcn semipedales longiorcsque, siliculs formâ plus minus ovali vel cllipicd vananlcs 5-6 lineas longae 2-3 lineas latae *B adscendens* C Koch cm ohm J nobi!> relala fuit ommn6 alien a est siliculis glabns, loco nalah diversissimo Noslra ob (lores mutabiles *B mulabili* Vent II Gels tab 9b valdè affinis videtur sed in liac folia palula vel deflexa sunl margine undulata, ovana el siliquoe gla-*hcrnmsD*, niucrOjIenmnalis non obliquus, *B obliqua* in yElolue mon-  
 losis obvia (Spruner<sup>1</sup>) babel (lores nun versicolored bed albos, folia subundulala Genus caelcrum difficile et ullenùs invesligandum

#### AUDHIETIA INTERMEDIA Heldr ol Orpliamdes

A cscspitosa, caulibus flexuo9is fragihbus albidis pilis albis patulia ramosis hirsulis, folus ellipticis obovalisvp in peliolum altenualis ob-  
 (usis acuhusculisve alns Inlcgns alns delloideis utnnquè medium versùs angulads vel denliculo aculo aucds omnibus vindibus pilis slellato-ramosis lurlis, racemis termmalibus brevibus pauciflons, pedicellis calycem xquantibus superanbbusve, calyce bigibbo ptlis stellatis hirlo, pelalis purpurcis, (ilamenlis majonbus alalis alâ infrâ filamenli apicem oblique Iruncata, filamentis minonbus sub apice denle hnean erecto lateraliter auctis, racemisfruolifens flexuoais stepè lalerahler inclinatis, siliculis pilis ramosis breviler Inrlo-scabridispe-  
 dicello saepius longioribiis breviler lineanbus basi apiceque allenua-  
 tis slylo filiformi earnm ladludine duplò vel tnplò longion superatis, valvis subcannatis, semimbus ovalis

Hab in monle *Kyliene* suprâ *Tnkala* (Cl Orpliamdes), in *Parna*\*-  
 sx regione alpinâ (Heldrcich<sup>1</sup>), in rupestnbue montis *Onii Basotice*  
 (Heldr ') el probabiliier in mullis alns loci9 Grscise cum *A. deltoideA*  
 connuxta

Folia eis *A. deltoidea* minor, c»9pi(es 3-4 polhcares^siliculae 6-7 lineas longis sesquialteum lalis stylo 3-4 lineas longo superalee *A. deltoidea* in Graecia vulgarissima et a qua *A. Greecam* Gussone jungeri nequeo diversa est foliis plerumque majoribus magisque dentalis, floribus majoribus, filamentis majoribus sensim apice attenuatis, minoribus in ipso apice dente auctis, siliculis brevioribus latioribusque oblongis praeter indumentum stellatum pilis simplicibus hirtis Hujus generis difficilis sedula observatio botanicis in Oriente degenibus valde commendanda

AUBRIETIA PIHARDI BOISS»

*A. caespitosa* caulibus debilibus flexuosis fragilibus pilis ramosis brevibus alisque simplicibus palulis hirsutis acutis, foliis pallide viridibus pilis brevibus ramosis scabundis oblongo-linearibus acutis integris vel utrinque 1-2 denticulatis in petiolum longe attenuatis, racemis terminalibus longe pedunculatis demum laxissimis flexuosis, floribus etiam per dorsum laminae pedicello stricto calyce brevioribus suffultis, calyce bisaccato cylindrico rufescente rubro pilis ramosis lomentello sepalis obtusis, petalis purpureis lamina obovata, filamentis majoribus apice sensim attenuatis minoribus versus 3/4 longioribus dentibus longo linearibus antheram attingentibus auctis, siliquis (junioribus) stellato-pubescentibus longe et anguste linearibus subcompressis stylo eorum latitudine triple longioribus terminatis incurvis

Hab. in Cand. (Pinard exs. 1843 sub *A. gracili*)

Planula 8-10 pollicans, racemi fructiferi cum pedunculatis semipedales et ultra, racemi 7-8 lineas longi, aequales pollicem longae vel breviores lineam vix laeae. *A. gracilis* siliquis longis affinis differt foliis integris, pedunculis racemorum folia vix superantibus, calyce 3 lineas nec 5-folias longo, filamentis majoribus sub apice latere interius alia obtusa auctis

IBEHIS OLYMPICA BOISS

*I. bienensis* nana, caulibus paucis fohosis, foliis inflatis ovato caespitosis oblongo vel lanceolato-linearibus obtusissimis integris parvis papilloso-pilosis glabrisve, umbellis florum post anthesin non elongatis contraclis pedicellis flore brevioribus valde papilloso, sepalis ru-

belhs glabris, pelalis albis vcl pallide carneis radianlibus, siliciilis pedicello slncto subsquilonis pnrvis ovatis alis supernè valvulse aequilatis angulmn ferè rectum apice formantibus, emarginalurse smu augulum aculiuscalum formanti, stylo 9inu longion

Hab in summisjugis *Olympi Bithym* (Boiss\* Noe! Clemenll')

Canles 1-1 1j2 polhcares, folia k-6 lineas tonga inferora 2 lm vix lala, pedicclh 2 hncas longi, sihcul<£ 2 lmea9 longae sesquilineain lalae

Afhrs / *Aurosicce, Candolleante* el prsesertim / *nanm HAH* quese folus glabns bubdentahs stylo simim non exccdenti aliisque difTert nolis

#### IBERIS JORDANI Hoiss

I bienms caule infernc tortuoso ramos patulos basilorluosos dein erectos pumilos foliosos simplices vel iterQin ramosos edenli, fohis ovato vel oblongo-spalhiiJalis in petiolum longiuscule altenualis integerrnnis parcèet adpressinscule papillan-setulosis, pedicellis vald6 papillosis stnctis umbellam majusculam planam foraianlibus, s t a lls dorso btspiduhs roseo-marginalis, pelalis roseis extenonbusvaldfe radiantibus, umbellâ fructiferft valdè contract\$ pedicellis incrassatis, siliciilis majusculis ovatis lalcre extenon convexis mlenon eoncavis, alis lolam sihculain cingenlibus apice lalionbus purpureis facie relicnlalis margine subundulalis apice oblusiusculis, emarginalurse smu angusto angulum aculissimum formanU, slylo sinu breviori, *seplo* inter valvulas iilrinque canaïiculalo

/ *Taunca* Boiss, Hcldr pi exs non MB — / *Attica* Jord Fragn

Hab in *A&im minorm* montosis, *Sipylo* suprâ *Magnesium* (Boiss), *Cadmo* suprâ *Geyra* (Bois\*), monte *Solyra Lyctce* (Heldr).

Caules, ramique laterales ssepe semipedales, uint^ells diametro saepè sesqmpollicares, flores marginales fere inagmtudinis eorum / *contractae* et *umbellatce* Silicula 3 1}2 lineas longa Species ab / *Taurica* veri flonbus et siliculis nullò majoribus, umbellâ fructiferA valdè contractâ alnsque nolis dislincla, magis affinis / *Prutti* cujus / *Sprunen* Jordan et / *Tenoreana* forsan lanlum vanetates sunt Hæc a noslrâ difTerl silinilis ellipticis ad alas superne non reliculalis slylo CMS longion 9iipi>ialis, &cpalis lolis. purpureis etc Spe-

cimina fructifera e quibus cl et armiciss Jordan suan) / *Attacam*  
 educavit ex Asia minoris nee ex Aucta oriunda sunt ideo ejus nomen  
 non servare polui

#### IBERIS WELWITSCHII BOISS

I biennis, caulis e collo plunbus icclis mediocribus foliosis bre-  
 viter pruinoso-papillobis superne breviter et corymbose ramosis, (o-  
 lus longe et anguste laevibus integerrimis obtusis inferne subat-  
 tennatis pilis brevibus crispulis plus minus lulis, umbellis parvis  
 densissimis, pedicellis papillosis lobisve rubellis late albo marginalis,  
 petalis albis parvis radiantibus, umbelli fructifera valde contracta,  
 siliculis oblongis superne sublobibus facie exteriori concavis ex-  
 tenon convexis, alis apice lobulo lobibus lobis ovalis acutis,  
 sinibus angulo acutiusculo, stylo e sinu exserto

/ *ciliata* Boiss in Welw pi exs non All — / *Umfolia* Hrol  
 ex Welw

Hab in pictis saulosis *Extamadw* <e *Tianslagawe* (WPIW pi  
 exs 1839 N° 83 et 1843 N° 23)

Caules 8-10 pollicares, folia pollicana apice hinc vel icsqui-  
 lineam lata Habitus el flores / *ciliata* All quo; differt folus magis  
 strobilis ciliatis, umbel 14 minus contractis, silicularum sinu apertis-  
 simo *I linifolia* Lalura elation, flonbus roaeis, siliculae lobis  
 acute Irianganbu!) sinuque rotundato longius distat

#### IBERIS BOURGAI BOISS

I. biennis tola pilis albis ensuibus papillosis dense obsita cinerascens,  
 caulis pumilis superne corymbose et breviter ramosis, folus  
 anguste laevibus acutiusculis magis longius ciliatis integris raris  
 superne denliculo auctis, umbellis densis, sepalis lobis virentibus  
 albomarginatis, petalis albis marginalibus valde radiantibus  
 oblongo-brevibus, umbellis fructifera densis, siliculis vesiculis pa-  
 pillosis albis parvis (junioribus) subquadratis basi subtrun-  
 catis, alarum lobis breviter triangulatis acutiusculis, sinibus angulo  
 obtuso, stylo lobis squamulatis

/ *pictintha* Bourg pi exs **IHbi** N° 1020 non Bwiss



Ilab iii arvis cnca Baza rugm Giaidlensis (Bourgcau), in salsuginosis regm Murcici circà 1851? (Punk)

Slaluia, florum magmludo el pclala ladinnlia / *pectmalve* a quâ caelermn longe distal indiimeUî naluiâ, folns fere semper mlegns rice pinnatifidis, siliculis vesiculosus nee glabno, lubis minùs aculatis & inû9-que angulo obtuso nee aculo Species formâ el indumento SIIICULIC notabilis

#### THIASPI GHANArEnsb Boiss el Heul

Til anrium glabrum, glaucescend-virens, caulibus c collo sxpius plunbus nanis, folns radicaibns inimis oblongis breviter peliolalis, canlmis oblongis acutiusculis hasi cordalo-sagitalâ amplexicaulibus omnibus inlcgermms, racemis folus supreinis suffuHis per anlheain nnibellifoiinibus, flonbus iuniinis, pelalis oblongo-linearibus albis calyco nibello sesquolongionbus, racemis fructifens oblongis, siliculis pedicclo palenli sublongionbus obcordads, alis nervo valido oiarginaUs versùs basin sihculde evanidis apice in lobos rolundalos seplo quadruplò bicM0ie& sinu daguali^sitno fissuraeforuu sejuiclosabeunlibus, iligin.ile sessili, seininibus in loculo 3-4 oblongis l^vibus.

*Thlaapi peifolmtuni* Bourg pi exs 1851 non L

Hab in regione alpinâ bupei 1011 inoiiis Sierra de Daza (Bourgeau loco dL N° 10'ib:

Planla 1-2 pollicaiib, folia caulina B-6 lineas longa, flores pau!6 minores èi> *Thl pcrfohali*, siliculoi aiilem paulò majores inagis plande\* time spcciei aflme distingiiilui laitien folus lulegcmims, racemis florum folna supremis involuciatit,, polalis anguslionbus brevionbuaque, SIIICUIEE alis nervo valido nervuhs radianlibus instructo marginalia, sum lissunefonni nee dilalato, bligmale aessili

#### CAHPOCERAS GIIFFITIIANIM Bols

C perenne? glabrum caule elalo fohoso snnplici, folns radicabbus confertis minonbub ovalis oblongisve obtusis longiuscule peliolatis, caulmis oblongis aculiusculis bavi profundè cordalo-sagitalâ ainplexicauhbus omnibus integermms, lacemis trminalibus per antliesin capitatis fructifens modicè elongatis, pedicelhs leiiuibus ereclis flore plnncs longionbus, pclalit. oblongis dlbib calyce plus dupl6 Ion-

gioribus, siliculis (junioribus) pedicello brevioribus obverse Inangulan-elongalis infemè longè allenuatis a pice lalioribus Lrunidlis valvis ulnque in cornu breve gibbiforme oblusiusculum productis, stylo cornubus valvarum squilongo

Hab in *Bliarowi*U regni *Cabulci* (cl Griffith pi exs N° 1473)

Fedale, folia caulina intermedia sesquipollicana, radicalia null6 mmora, flores magnitudinis eorum *Thl montani* ^Siliculae (nondum matures) 3 l9 hneas longè a pice seals lineam rectam ulnquè cornubus vaWarum lineam dimidiain longis terminalam Iruncala Species a quatuor generis Imctisque nolis distinctissima

#### MnRIERA CABULICA BOISS

M glabra fruticosa ramosissima, ramia terelibus, totus linearibus tereliusculis obtusis, flonibus breviter pedunculatis in racemos terminales paucifloros breves densiusculos post anthesin laxiusculos apice spinoscentes dispositis, siliculis subsessilibus alatis lalioribus quam longis basi relatis apice profunde emarginalis, alia loculo **Inpld** lalionibus transverse venulosis tandem saepe (issa apice utnquè in lobum ovatum oblusum abeunlibus, stigmale in smu sessili

Hab in monte *Erak* regni *Cabulici* alt 11000'(cl GnfBUi Journal N°HBi)

Caulea 6-8 pollicares parcissime foliosi, flores minuti e sicco rubelli, siliculae tres lineas circ latè septo lantdm 2 hneas longo Afflms *M Bpinosae* qua; differ! ramis magis ramulosis, siliculis dimidiò minoribus ovalia, alis loculo aequalatis.

#### BISCUTEIXA SCUTULATA BoibS pt R (Sect *ThlaBpidium*)

B annua caulibus numerosis a basi ramosis saepe decumbentibus ascendentibusve in femè selulis sparsis obsilis superne glabns, folis uadem selulis sparsis undique obsilis leniis inferioribus lyfalis in peliolum longè allenuatis, lobis lateralibus utnquè 2-6 Inangulanbus acutis super ion null5 majon oblongo denlato-lobato, folia caulinis linearibus serratis, racemis laxiusculis brevibus, pedicellis tenuissimis erecto-patulis flore sesqui vel duplo longioribus, petalis calycein duplo excedentibus, siliculis erectis pedicello subpalulo suffultis loculis minimis transverse sublalioribus centro scabendis margine subinflatis glabns vel papillosis, stylo sepio sublongior

Hab in ibspama ausiali *civck Gades* (ierh Pauclic), in monlibus  
suprà *Algcsirun* (Roiss el Heut )

Ganles pcdals et ullrA ssepe multo breviores, (lores iHis *B Co-*  
*lunned Ten* pailò minores, siliculae totius generis minimae loculis  
vix lineam diametro lalion lalis Species dmtinctissima foliorum lobo  
terminal! elongato oblongo nee ovalo-rolundo magisque lobalo, sili-  
cularum Iriplò minorum loculis margine inflalis ovalis nee orbimlatis  
a *B lyraXd L* cujus *B rapliamfolia* et *manttma* tantuin vanelales  
sunl slalnn dignoscenda 0 *microcarpa* Dc cm 0 *enocarpa* Dc ut  
forma siliculis longnis pilosis conjungenda est el quatr cl Dourgeau  
sub N° 28 ex vicinus urbis *Medina Sidonia* Anno 1849 misit, differt a  
noslrâ specie folus brevionbus oblongis aculiubculè dentato-crenalis;  
siliculae ejusdem fornue stint sed paulo majores

BISCUTELLA DOFTICA Boiss el Heul (beet *Thlaspidium*)

B annua, caulibus ererlia plcrumquè clatts subpalulè ramosis graci-  
libns lenmbus mfernd sellis patuli<r slngosis supernè glabnescentibus,  
folus ferè omnibus radicalibus dbbreviatoblongo-spalhulatis obtusis  
basi breviter allenualis circumcircà acute et regulariter denlalo-ser-  
ralis, caulims ad basin caul mm paucis in specimimbus majonbus lan-  
türn obvtis aubaunculatia omnibus densè et adpressiusculè setulosis,  
rameis minimis linean-siibulatis, r.imis filiformibus, racemis laxius-  
cuhs, pedicellis capillanbus erecto-paluhs flore pauld longioribus,  
pelalis calyce sesqinlongionbus, siliculis pedicello erecto-palnlo insi-  
denlibus lotis vel margme lantum papillan-hirLis, loculis mediocnbus  
praeler lalus intcnus rectum orbiculahs margme subinflalis, stylo  
seplo pau!6 breviorc

*B apulapmegacaipcea* Boiss Voy But Esp

Hab in stenhbus *BtBttce* circ& *Malaga, Cartagena,* etc etc  
(Boiss )

Caules sesquipedales sed eliam in stenlionbus semipedales, racemi  
fructifera circ. bipolltcares, flores magm eorum *B Colwmnce*, locuh  
siliculae diametro 2-3 1;2 hneas lad

*B ColumnoB Ten* cui ut forma\* fl *eiham* Dc et *depressant* Dc  
conjungendas esse censemus et qusc ex Italiâ et Onente usquè ad  
Persiam onunda esl, a specie suprâ dscriptA differt caulibus crassio-  
ribus minusi ramosis, folus sa?pius parciùs cl OIULSIO dentalis s<epe

repandis, praeitum ramis abbreviate, siliculis pedicellis sinclis insidenlibus et saepissimè confertionibus — *B Apulam* L Dc Rchb 1c 824 quam cullam tanliim vidimus el cm *B leiocarpam* ut vane-Uteiu conjungimus *Btscutelloe Columna* ob siliculas dupld minores non associare audemus — *B Bcetica* a *B microcarpd* loculis dupl6 majonbus orbiculatis, pedicellis erecto-patulis nee paluhs sat differre videlur

BISCUTELLA LAXA Boiss et Heul (Sect *Thlaspidium*)

*B* perennis, caudicibus procumbenlibus ssepè petiolis vetuslis veslitis, folus omiubus xadicalibus densè congestis breviter et densè velulmo - seabridis oblongo - lanceolalis lanceolalo-hneanbusve aculiusculia margine subrevolulis plùs minùs profundè dentalo-lobatis dentibas ascendentibus acuti9, canlibus nmerosis erectis tenuibus virgatis basi patule hirlis supernè glabns palulè el dicholomè ramo-9is, folns rameis filiformibus brevibus, pedicellis flore sublongionbus, racemis fructifens elongalis laxis sspè subsecundia, pedicellis erecte-palutis, siliculis rnediocnbus, loculis orbiculan-ovatis angustè marginatis glabns scabridisve, stylo septo sesquilongion

*Biscutella saxatilis* p angustifoha Boiss Voy Esp.

Hdb in regoo Granalensi circà Malaga (Boiss.), *Qrazalema* et Ronda (Boiss et Heul , Bourgeau), regno *Murctco* (Bonrgeau)

Var *lanata* — Folia pube longà palulà cinerea miniis et obtusiùs dentala

Hab- in andis montis Sierra *Tejeda* (Boiss )

Var *glaeialis* — Folia mmora abbreviala densissimè congesla sub-integra, caules abbreviali 3-4 pollicares saepe procumbentes ascendenlesve, siliculae minores magis scabridas

Hab in summis montis S" *Nevada* (Boiss ' Reut I Bourgeau).

Hanc speciem valde polymorpham sed tamen habilu propno dislmctam conjunxi in opere citato cum fornns folus denlato-lobalit) *B ambtguce* DC quae,per totam Galham australem et eliam Uispianiam centram frequenter occurrunt et quas Icon 858 pi Cnl Rclib (B lima Fl Germ exc ) bene exhibel Hsec *B. ambigucB* vanetas cm ut synonymon ex spec aulhenticis adjungenda esl fl *saxatilis* var *P* DC. ft nostrà *B laxA* ant et semper nobis distincta videtr indnmento slngoso aspernmo ncr molhuseulo velutino, folus profundius

intisis, caulibus crassionhiib , inflorescncnlià ob ramos abbreviatos pohus corymbosA, siliculis paulò majonbus in raemos breves magis congeslis *B stenophylla* L DM four eal synonymon nobis inceiLum nam propler bieivissimam descnplioncm nescimus an ad noslram speciein vel ad alum affinem referenda sit

DISCUTELLA wtACAiPFiA II el fl (SecI *Thlaaputtum*)

II percnms, caulibus crassis Leielibusinfernè foliosis parce scutosis ferè a basi lamosis, loins brevissitne scabridulo-velulims magna oblongis repindis vel obtuse dentatis i nil mis in petiolum alternalis suprnnonbus anguslionbiis basi aunculalo^ampleKicaulibus, pamcula coiymlosi, (loribus magnis lacerms fructifens abbrevialis conlerLib, pedicel I is cioclis, srliculis glabris lucidis ranus breviler papillosis, loculis inaximis ovato-orbiculatis anguste marginalia, stylo tenninah seplo loivgion

*B saxatilis vai megacarptEa* Boiss Voy Esp

Hab in incullis et sylvaticis dilioms *Honda, Ronda, Igualeja, De siertode las Nieves,eJ Dosqw* infia munlem Gerro de San Cristoval (Boiss )

Planta I 9aepe2 peddlis, caucis parle infenon ssepiùs foliosi ranùs in speciminibus solo <i rid ion nalis subnudi, (lores magnitudims pornm li *Icevtgatce* LOculi sihculae diametro 3 |firh lineas lali

Species a *B Icevigatft* Alpium ramositale cauhs et formâ fohorum, a *D ambigncn* DC form is majonbus indumento brevi subvelutmo nee longo slngoso, .tb ulràqiic siliculis majonbus dishncta

DisiurLLLA VAHIECATA R ct H (Sect *Thlasptdium*)

B percnms caulibus olalis in femè foliosis palulèque stngosulis supern^ ramosis rjmis elongalis, fohis suprâ glabrescenlibus sublùs praeserlmm ad nervum medium validmn album selo^n-hispidulis ob-ovalis oblongisve oblusè sinualo-denlahs vel repandis aliquandb mtegi'is infenonbus petiolahs caelens basi angustalâ subaunculato-amplexicautibus, racemis elongalis densiuscuhs, pedicelhs stnetis, siliculis mediocnbiis Ixvibua vel parcè scabndis, loculis suborbicula- (19 centro albidis margine virentibiis, stylo seplo subacquilongo

*B HtnatiltH miuocarpa* Boi9s Vov Hoi Esp

Hab in regione inferiori monliuiu S<sup>n</sup> Tejedo el S\* Weyada arci San Geronwno (Boiss)

Planla 1 lj2-9 pcdalis, folia et (lores magnitudinis speciei precedents a quâ differt racemis elongatis sihculisque minonbus qua rum locuh 2 1/3 3 lineas diametro lati margine vindi elegantler vanegali sunt, qui color elia in semimbus maluns quodaminod5 )>ersislit

HISCUTELLA ROUI ABIS B et K (Seel *Tlilaspidium*)

B perenms basi hgnosa folus omnibus radicalibus in rosulas regulariter congestis crassis dense velutiriis flavicanlibus ellipticis ultrinque attenuatis aculis margine subrevolutis regulariter sinuato-denticulatis denliculis ascendentibus, caulis scapiformibus prae folia squamiformi linoana glabris a pice breviter et conferm corymbosis, racemi9 valde abbrevialis subflexuosis, pedicellis leniibus subpalulis, siliculi scabridula, loculis ovalo-oblongangulis angualè marginalis, stylo lermmakrassiusculo seplio Lottgion

Hab in rupibus verticalibus manliis regni valentmUoco *Hifac* dicto ubi floT fruct que legit April 1837 Boiss

Folia subbipolhcana versus medium 6 lin lala pectinalo-dentata denlibus utnquè 6-8 Scapi 8-10 poll, lonjti Pauicula 3 plices longa lataque Loculi silicula? ferè 3 Itneas diametro lati subangulato-Inangulare9 Inanguh basi sylum spec tan U Species fl *monlanceCav* equid^m affims sed distincta fohfs angustis regulariter dentatis cras-819, panicula conferla, form4 <nlicularum

Numernm specierum in hoc genere difficili forsitan minis atiximus sed magis errabunt qui htuic mmis conlrahenl et naturae inagis conforme nobis visum est quod dissimilia nobis visa snnt seorsim exponere et sic ultenon proponere studio

LEPIDIUM SETOSUM BOISS (Sec *CardanionDC* ?)

L annum? to turn seeds caules et folia selis albis patulis longiusculis hispidum, caulibus e collo pluribus simplicibus fohosis, folia linearibus integris obtusis basi attenuatis, flonbgs in racemos terminates sub anthesi dense capitalos dein subelongatos dispositis parvis, pedicelli9 sinclia fiore brevionibus, pelahs albis oblongo-uneanibus Bepala lanceolata glabra subduplo superantibus, ovano (jutori) glabro stylo crassmscuio eo longion lermmato

Hab in regno *Cabulico* propè *Bydozyl* (cl *Gnffilb* pi exs N°1483)

Caales palmares herbacei, folia 8-6 lineas longa sesquilineam lata, (lores eis *L* sptnosi minores densè aggregali Fruclus ignotus ideò ad *L&pidium* ex habitu solo addun Planta indurneilo 6iio hirtello palulo albo \*alde insigms

ISATIS ~~VELERPEHA~~ Botss el Noe' (Sect *Glastum*)

I perennis, caudtce indurato subrepenti, caulibus erectis pumilia supernè breviler ramosis corymbosis ramisque palul6 et uiolJiler Juspidis, folns omnibus dense mollissime et adpressmsctilè ivelutino-seneeis radicaibus congeslis oblongis obtusis in petiolum altenualis, caulims lanceolalis vel angnste lmeanbus acutis sagiltatis, aunculis prsserlim supenorom longis angustè lñeanbua, racemis eliam per anthesin laxluaculis brevibus, pedicellis capillanbus palulis vel deflema sparsim et longè pilosis, sepahs oblongis vindi-lutescenlibus sparsiõ et longè aelosis, petalis oblongis luteis calycem dupl6 encedentibus, racemis froctiFeris unmulalis, siliquis patulis deflexisqae (junionbtts) oblongo-cuneatis apice trnncatis basi angustalis lanà denaiaBimâ albo-rufescenti longissimâ eas omnm6 occullanli obsids

Hab in */irmenid* meridional! ad *Bakker Muffden* ubi Junio 18bS delexit cl No6

Flohfera semipedalis, fruciifera pardm elongaU, foliaradicalia cum petiolo 1-1 Ij2 poll longa circ 5 hneas lata, racemi flonfen pollicem longi, pedicelli 5-fc hneas longi, (lores iqagmliidims eorum *Is rniei ocarpte*, siliculae jumores ob villtiui densum longumque subgloboss Species distinctissima

#### PYRASHDIUM Boiss

Flores Siliqua indelnsdens pyramidalo-quadrangularis rostra articulato linean-comco superato basi utnnquè aucla appendice bfeviter Inangulari lionzontali ex valvarum prodnctione onundâ, Inlùs spongioaa septata quadnloculans Locnli sihculte geimnathn ad ulrumque sepli latus superpositi monospermi Rostrum basi gemiialim biloculare loculis inanibus, yllero saepiis obliterate Semina

pendula obovala compressuiscula notorrbizea. Testa m<sup>^</sup>mbrauacea Colyledones plans incumbenles margmibus dissepimeitum et cornua ba&ilana sihquae specialties Radicula colyledombus paulò longior dot\*3o colyledonum oblique opposita — Herba annua Cabulica facie *Lachnolomatis*. — Genus inter Notorrluzeas Loraenlaceas inserendum sed ab earum genenbus siliquà non biarliculatà babiluque ahcnun, flonbus matliuiolwdeis ut et *Lonchophora* Duneu et *Lachnoloma* Bunge probabilissiuie donatuio et genen posteriori proxiraum quod differt siliquà basi non bicornula, bilooulan, col>ledombua ad basin transversioi plicatis *Lonchophora* »siliquà debiscenli polyspermà eroslrata, serainibus pleurorrlizera longtùs dtlat

PtRAHIDIVH GUIFFITBIAMUH QOIBS

Planta annua tola pilis brevibua ramosis tandem deciduis tomen lella Folia cauhna subssiha oblonga siimato-deulaU Racemi fructifen elongati laxi semipedales Siliquis Bubsessilcs erectae densè et breviter pilis ramosis panooss veJulmae 3 i|%-h lineas longis basi S lineas apioelineam late comceae pyraiuidatae quadrangulareş anguhs crassu obtusis faciebus excavatis Appendices basilares ex aogulorum productione ortse Uonaontales \el subdeflexae tngulares craasae 1 472 ligueam langffi basi siliquoę squilale apice aculap facie supenon **subconcavæ** inferion subcanoalae Ro&trum ailiquaà subbrevias 3-4 hoeas longum sublerea e basi laliori sensim atlenualum acutum cit6 deciduum.

Hab. in regno *Cabulico* circà *Dair Haj*, (W Gn/fith. Coll. N° JU9 et BBS Journal).

## CAPPARIDE^E

CLEOHB STOC\*SI40A BOIS. (Sect *Sitiquaria* DC )

Cl perennls, cauhbus herbaceis ascendentibus angnlosis simplid-bua vel basi rantoşis glandulis sesuhbus versus parlem supenorem planbe auclis verrucoso-aspens, folus carnosulis obscurè trinerrlfs



eisdem glandulis sessilibus exasperatis oblongo-ellipticis ulnque allenuatis aculiusculis petiolo eis dimidiò brevion suffullis, race mis florum terminalibus abbreviatis vade glandulosi, pedicels flon sub-xqmlongis bractas oblongas vel lineares subaequantibus, sepals oblongis aculis glandulosissimis, petalis violaceis oblongo - spallulatis in stipitem eis acuilongum atlcualis, siliquis pcnduhs brevissimè slipilatis la 16 lineanbas basi subaltenualis apice obtusis mucrofiads gtabrib vennlosis, seminibus lanâ pannosa rufescenti eorum diametro vix brevion veslilis

tlab in dilione Bfifout.se/iistan circa *Zakree* (Slocks)

Affinis *Cl tnnervicB* Fresenius *qvx* egregiè differt indumpnto VISCL do e glandnhs longi stipilatis constanti, folns acillionbos infenonbus peliolo eis longion suffultis, pedicellis brjeteas lineares 2-3pl6ve 311-peranlibus, petalis aurantiacis, siliqms munciilalis, semimbus breviter pannosis

CLEOME NOAANA Iloiss (Sect *Sthquana*)

*C* perennis tota lulescens, caulibus pilis basi dilalats apice glanduliferis aspens praetereaque Indumento glanduk>so quoque sed multd brevion tenuionque obBilis viscidis alternd ramosis foliosis, folns ut et petioli eudem duplici indumenta utnnquè obaitis aspens viscidisque rordalo-orbicalalis eximiè K-7 nervus ablusis vel acutiasculis nervis soblùs proininentibus aspens laleralibus curvatis, petiolis folium asqnanlibus aut (supernè) eo brevionbus, racemis terminlibus elongatis laxis bracleatis bracteis subsessilibus orbicylatis, pediceJbs luspudis bracleà paulò longioribus florpm vix excedenlibus, calycis glandulosi snbclausi lacinus lanceolato-lriangularibus, petdlis lanceulatis glanduloso-hu tis sessilibus calyce vix longionbus, filamentis exsertis, antbens lineanbus, siliquis glanduloso-aspens lato-lincanbus basi apiccque attenuatis breviter slipitatis, semimbus

Hab in subalpims *Kurdistanice Persicee* propè *Kirrlnd* ubi de(e)xit am Noe

Pedalis, folia inferiora diametro ferè pollicana, racemi semtpedales longiorcsque, bractae diametro 3 Uneas latae, calyx % *ifi* lineas longus, sihqua immatura pollicans sesquilineam lala Afhms formâ foliorum *G dToseTcefohm* Del. quae inflorescentia ommnò differ! et *Cl quinquenervwe* DC qu.T distingmlur indumento glandufoso nee pa-

pillan-aspero, folus infenonbus longissimè petiolalts, racemia abbrevutis, braclels oblongis squamsfonnibusminiim\*, capsulis oblongis semipollicem longis

## RESKOACE^E

RESEDA GUSSONII Boiss et Reut (Sect *Luteola*)

H biennis glabmisciila, caulibus elatis dense foliosis, folio stnelis lanceolala-lineanbus a pice altenuatis margine plus mmAsre ndolalis rt\*pando~denticutalis basi ulnnque glandulâ denticuliformi auclis, racenns terimnalibus demûui longissimis, pedicellis Dorum catycisubtequilongis, pelalis omnibus ochroleucis stamina eicedenlibus, sape nori spalhuUlo-cunuato cafyce tnplò longion ad lerliain parlem usque d-6fido, lateralibtis Infidis, infenonhus indivisis, capsulis transvers6 rugosissimis in denies Ires tenues earura Longitudioe dimidiA breviores abeuotibus

*Reseda crispata* Guss Í Bertol non Link

<sup>1</sup> Hab in Sict^id (Guss •) Afrîca borcali cirçâ *ilgeriam* (Bov^!), *Oran* (Reuterl) Saj'rfa^Balansa pi exs 1852 N°67ft), *Bone* (Steinheilt)

Cl. Gussone el flprlolom hanc speciem bene distinxerunt a *A. luteold*, L a qu4 differt petahs mnllo majoribus stamina longè excedenlibus nee ea aequanlibus, capsulrs raallo magis rugosis in cornua longiora abeunlibus, sed hanc erroneè ad *R. crispata* Link relulerunt quse nobis e specuninibus Lusitamcis et Hiapamcis nota folta equidem ufldulato-cnspata quoque habel sed flonbus *A. luteolce* simillima est cujus forsani soliim forma Hsc *A. crutpata* est planta bumilior 1-4;9 pedal is, nostram ssepè In- vel quadnpedalem observavimos

RESEDA OCHRAPENI BOISS

R gtabernroa caulibus dune virgatis ererlis crebrè rantosissimis praeter folia deQeva elliptica vel lineana oblusiuscula ad axillat sila omuloQ nudis scoparns, ramis stnelis nudis in racemos post anthcsin pergjsleirtes abeunlibus omnibus ceqiilongis, floribus . , calycis lacinus B-6 oblongis hirtulis, capsolis seals racemos breviler pedled-

latis erecto infert catycem subsilicalis ovalis inflalis magma lenuiler membranaccis asperulis breviter Indentalis, semibus albidis radiculâ prommulâ

Hub in regno *Maxcute* vel in *Persia* austrah (Aucher N° 4179)

Speci minis mei caulis pedalis valde el corymbose ramosus scoparius, ramoso terminatus laxè pinnatifidus 2-3 pollicares capsulis delapsis perstentibus induratis tenuibus Capsula immixta *R phyleumce* sed magis distincta Species ob specimen induratum incomplete descripta

#### OCHRADENUS AUCHERII DOISS

O glaber glaucescens fruticosus ramis crassis laticulis ramosis, ramulis consimilibus paulò lenuionibus prolixè folia subulata ad eorum basin et pariter inferius sparsa omnino nudis elongatis persistentibus induratis, foliis ad apices ramulorum paucis remotiusculis sulcatis, calycibus lacinis subsiculis Inangulan-lanceolatis carnosulis glandulis, nectario crenulato, pelalibus nullis, filamentis numerosis brevibus abbreviatis, jntiens oblongis aculeis, haccâ

Hdb ID ii'io *Mascatenis* (Aucher N° 4178).

Habitus O *baccati* sed videtur minus ramosus esse ramulis magis elongatis minus spinosissimis, flores duplè majores ad ramulorum pariter superiorum pauci subsessiles nec spicali distinctè pedicellati Calycis lacinae magis elongatae sunt minusque carnosae, staminum filamenta majora, filamenta breviora, antherae oblongae nec ovales DILUS planie fructum non vidi el tantùm ex deflexis petalorum et libilu *Ochradeno* adnumeravi

#### CISTINEE.

**HELIANTHEMUM LASIOGALYCNUM** H el Hcul (Seel *Hahndum*)

H fruticosum caulibus erectis raris ramis erectis corymboso pinnatifidis oppositis ramulosis foliosis ramisque pilis palenibus longis bispidis praetereque pilis adpressis stellatis aparsis obsillis, foliis ovalo-oblongis nuncquâ alluvialis ohluis subsessibus obscure

trinerviis prater indumentum stellatum minimum sparsum pilis longis albis adpressmaculis prsertim in parte superiori raro rui obsi-  
Us, folns supenoribas sensua angustionbus lanceolalis et lanceolato-  
lineanbus, flonbus ID racemulos laterales el terminates 3-ft- ms  
pedunculo propno calyci subdequilongo suffullis, calyee patulè et  
longè albo-Insipido, sepalia 2 exlerionbii9 hnearibus vix brevionbus  
nigncanli-rubellis, inlenonbus ovato-tnangulanbus breviter acurai-  
natis dorao prater indumentum hispidam pihs slellalis verrucafor-  
mibus llavidis leprosis, petal is aureis calyee Iripl6 loogionbus

Hab in fruticelis monlis Tmgilam *Djebel Kibir* (Boiss et Heuter  
Maio 18(9).

Affine liabitu Tolus cliacharacteribus *H halimifolio* quod in eiadem  
locis crescit et differ! mdumeoto sttllato densiBsimo incano, defectu  
induiuenti patuli hispidi, sepalis exlenonbus mtenoribus multd bre-  
vionbus, folus ramulorum Ooralium minonbus angustionbus *H*  
*multiflorum* Dun in eisdcem lucis quoque occurrens dilTert fuliis mi-  
nulis, indumenti patuli deficientiã, sepalis mtenoribus breviter tn-  
angulanbua

HELIANTHENUH CRISPATUH B el R (Sect *ffatimiwn*)

H fruticosum subpatulè ramosum lolum Indumento adpresso stei-  
lato-Jeproso cano-flavescens asperum, folus crassis õbovatis vel ob-  
longis secus nervum medium facie inlenon valdè prominulum sub-  
plicato-canalicularis apice aubrecurvis ID petioluin brevem atleoualis  
infimis oblusiA kupenoribus aeuliusculis omnibus margine enspato-  
denliculatis, floralibus hnearibus, flonbuB ad extremitalem ramu-  
lorum laterahum et lerminalium 2-3 ms sohlanisve, sepalis exterio-  
nbus vix brevionbus hnearibus revolulis, inlenonbus valdè leprosis  
Inangulan-lanceolalis acutis, petahs aureis basi intensè maculalis  
calyee plùs dii>16 longionbus.

flab in monlibus supr4 *Algesiras* (Boiss et Reut. Junlo in-  
eunte 18&9)

Ab affini *H halimifolio* differ! folns mirfbribus 4-6 hneas longis  
basi minùs aUenuatia subcanahculatis margine crispalis apice recur-  
vis, rauBH minùs slnclis, sepalis e&tenonbus inlenora subsquandbus  
inlerionbus magis acuminalis Nee liujus nêe pncedentis capsulu

vidimus *An H involuicratum* Pers ? Sed hoc ex specimine herb DC sat differre videtur indumenta Jepidolo scabro, calyces pilis brevionibus et minus copiosis, pedunculi etiam brevissimi sed forsitan (an turn quid in spew mi no flores nondum bene explicati sunt

HELUNTHEHUH HVMETTUM B et Heldr (Sect *Pseudocistus*)

H basi suffrutoscens, raulibus Lrevibus ascendenlibus infra rosulam centralem nascentibus parte in fen on parce ramosis simplicibusve adpressè cernis, folis indumento adpressissimo stellato-ramoso pilis simplicibus s<pc intormixto sublus onis paginà supenon sapè minus canis virentibus rosulae majonibus oblongis vel oblongo lanceolatis ncutis basi in petiolum aUenualis, caulinis minonibus ovato-oblongis ovatisve acutiutscilis omnibus seciis nervum medium supra Impresao-bulcalis, stipuhs oblongfolmeardiua petiolo subaequilongis, racpmis 2-3 lenninalibus oppositis lermisque, flonbus subconfertis minulis, pedicellis calyci eubxqiilongis deinuai refractis capsul4 orecla, calycibus prselpr indumentum stellatum breve patule Inrsulis, sepalis exferionibus oblongo-hneanbus paulò brevionibus, jnlenon-hii^ ovatis, petalis luteis basi maculalis calyce sesquilongionibus

Hab in monle *Hymello* prope *Jlhenas* (Doiss' Sprun' Heldr' Orphanides)

Species a nobis diu relata ad *H rubellum* Presl, a quo ul el ab affini *H rotundifolio* Dunal differt folus rosularuni majonibus non i oliindalo-ovalis sed oblongo-lanceolalis, habitu diverse Forsan tamen Itinluin vanetas

*H pamculatum* in Voy Bot Esp *H rubello* associatum bonam speciem silit *H polyantho* magis alfinem<

HELIAHTHEHUH GUJECUH DOISS et Heldr (Sect *Euhelanthemum.*)

H siiffrutescens vinde canlibus dccumbentibus jascendentibusve foliosis elongalis basi suffrulosia supernè herbaceis hirsutis simplicibus vel basi parcè ramosis, folus plams subills adpressè canescentibus siiperni pilis sparsis elongalis instruclis praetereaue sub lente liiberculalo-punctalis breviler peliolalis inferionibus mmonbusovalis supenonibus ellipticis acqliusculis. slipulis hneanbus aculis peliolo 'ongionibus, raceims simplicibus lamusculis, brarleislanceolatisacu-

Us pedicello roquiloogis vel brevionbus, 9epalis extenonbus ferè  
tnpld brevionbus, inlenonbus oblongis ad nervos rubellos pilis se-  
(osi9 basi ramosis hispidis praelereâ apicem versus breviler puberulis,  
pelalis flavis calyce sesquilonibus.

Hab in frulicetis montium *Gmezia*, mons *Onion Beotice* regio su-  
penor alt 4000' (Heldr') mons *Kyltene Arcadia* (Orphamdes I)  
*Taygetus* in regione mediâ (Heldr), *Parries Atticce* (Spran •).

Affine *H vulgari* a quo differt indumenti foliorum et calycis nalurd,  
foliis infenonbus magis rolunddd, forsan lamea potiils forma quam  
species propna. A. cl Hldreich relaturn ad *H Stabnum* Ten quod  
ei specimimbus e loco classico differt ramig abbreviate, fohislanceo-  
lalo-Jineanbus valdè discolonbus, indomento tohus plant\* adpresso  
el quod nobis lantum vanelas discolor videtur *B vulgarts*

HELIA^TIBHUX KOTSCHVAMM BOISS (Sect *Euhelanthemum*)

H perenne mullicaule, caulibus ereclis vel ascendenlibus simpli-  
cissimis foliosis in racemum erectum simplicem abeuntibus patule  
birsulis, folna omnibus breviter petiolatis slnclis angustè linean-  
lanoeolalis aculis basi altenualis margine subrevolutis paginginfenon  
pallidioribuB breviter stellato-pilosis superior) tuberculata-punctatis  
selis aparsis adpressis obsilis, stipulis oblongo-hneanbus petiolo lon-  
gionbus, pedicellis calyce subbrevionbus patulè hispidis tandem re-  
fracilis braceas lanceolalas superantibus, sepahs extenonbus oblon-  
gis virenibus lursulis, intenonbus tnplò longionbus ovato-oblongis  
ad et Inter nervos longè et adpressiusculè bispido>setosis, petalis 6a-  
vis calyce sesquilonibus

Hab inter *Meppum* et *Or fa Mesopotamia* id Kotschy 1843 pi.  
Herb Mus Vind N° il.)

Caules cum racerao 6-8 pollicares, folia 8-11 lmeas longa eesqul-  
lineam aut paulò amplius lata Floras magniludims eorum *H vul-*  
*garis* Speaes habitu et Indumento calycis distincta, afflnis *B ciliato*  
Pert ex Africâ boreali ofiundo quod differl a nostro caulibus minùs  
stricta adpressè nee patulè hirsuti9, foliis minùs angustls\* calyce ad  
nervos lantum et palulè setose, etc.

## VIOLARIEI.

VIOLA GRIFFITHII Boiss (Sect *Odorata*)

V parce slolomlera acauhs, folits peliolis ea plunes superanlibua pubcrulis insidenlibiis breviter ovato-reniformibus sinu lato cordatis basi utrinque rotundatis obtuse crenatis a pice aculis subacuminatis utrinque punctis papillosis papillisque brevibus scabundis glauco-virentibus, stipulis lanceolatis acuminatis fimbrialis fimbrius diametro stipule brevibus glanduliferis, pedunculis folia superantibus In«pidulis medium versus i-% bracteis selaceis parce fimbrialis obsiatis, floribus nudicribus e sicco albis vel pallide violaceis, sepalis oblongis obtusiusculis margine papillosum basi brevissime appendiculatis, petalis imberbibus, calcare redo petalum superius subwquantum, stigmate brevissime nacinale

Hab in dihone *Jffghanislan* circa *Puahut* (c\ Gnffith)

Pelioli 1 i?2-2 pollicares, folia sub anthesi 7-8 lineas longa lataque, (lores eis *V odoratae* paulo maiores Ab affinibus virore pallidissimo indumentoque e punctis ssepè papillosis constanti folisque abbreviatis dissimilis, prope *V Libanoticam* Boiss collocanda

VIOLA CUELHBA BOISS el Heidr (Sect *Odorata*)

V acaulis esolonosa, caudicibus incrassatis toberosis, foliis minutis petiolo deflexim papilloso apice dilatato eis sequilongo vel paulo longioribus suffulcatis sub lente utrinque papillan-punctatis et subtatis ad oervos papillanibus minutis infimis ovato-rotundis vel etiam reniformibus transverse lationibus coelens ovatis vel oblongis omnibus basi truncatis rotundatisve raris subcordatis obtusiusculis minutè et obtusè urentis, stipulis lanceolatis acuminatis brevissime fimbrialis glandulosis, pedunculis deflexim papillari-scabundis folia paulo superantibus medium versus 2 bracteis lineari-setaceis breviter et parce denticulato-glandulosis instructis, floribus minutis violaceis, sepalis oblongis acutiusculis glabris basi vix productis, petalis imberbibus, calcare obliquo petalo superiore dimidio brevioribus, calcare longiusculum uncinale

Hab in regione montis *Chelmos Peloponnesi* supra fontem *Slytjs* alt 7000' (cl *Heldreich* Fine Julii florifera)

Plantula habitu *V arenariam* vel *V cannam ericetorum* referens sed characteribus prope *V hirtam* et *ambiguam* collocanda, folia majora 8-6 lineas longa, pedunculi pollicares. Minutiae foliorum florumque affinis quoque *V Cretica* B et H quae differt stolibus, foliis cordatis, induratis papillosis defectu, etc

VIOLA CLEBERTIANA BOISS (Sect *Melanium*)

*V* perennis acaulis caudiculis repensibus. Glabris, foliis carnosis glabris vel hinc inde asperis ovatis vel oblongis obtusis integris vel obsolete crenatis in petiolo eis sequilongum vel longiorem attenuatis, stipulis oblongo-lanceolatis subsessilibus acutiusculis integris vel utrinque 1-2 denticulis auctis. pedunculo folia superantia supra medium 2 bracteolia squamiformibus aucto, sepalis ovatis vel ovalo-oblongis acutis membranaceo marginalis integris basi appendiculatis crenato-dentatis, petalis luteis, calcar cylindrico obtuso petalis paulo brevioribus

*Viola grandiflora* Gmel Spicil non L — *V calcarata* Sibth et Sie Prodr Fl Graecae non L?

Hab in cacuminibus *Olympi Bithyni* (Aucher<sup>1</sup> Boiss 'Clementi')

Plantula liabilis et colore florum *V calcarata* Zeyher optimè referens sed folia magis rotundata iniora A-S lineam tantum longa, stipulae non pinnatifidae; flores minores, sepalis ovato-oblonga nec lanceolata, calcar obtusum nec aculum petalisque manifesto brevius *V graecis* Sibth et Sm cujus varietas flaviflora quoque occurrit longius differens caulescentia, foliis linearibus acutis, alipulis partitis, sepalis linearibus lanceolatis valde acutis — *V grandiflora* L e loco et synonymis est forma abbreviata *V lutea*, ex herbano ejus autem videtur *V altaica* — Tandem *V oreades* MB cum primò fauce plantain adnata ex specimine Caucasico differt floribus duplè majoribus, sepalis triangularibus lanceolatis circumscissis denticulatis, calcar brevioribus crassis, stipulis angustioribus subpinnatifidis.

VIOLA OLYMPICA BOISS (Sect *Melanium*)

*V* annua subperennans tota pilis papillosis brevissimis secus petiolum deflexis asperula, caudiculis filiformibus plus minus oblongis, foliis longe petiolaribus ovatis oblongisve obtusis obtusissime pauci ere-



natis infimis ovalo-rotundis basi saepe subcoricis, stipulis multibus lacimis infenonibus hieanbus vel linear-oblongia terminali longiusculè pcholutati folio simili sed breviori, calycis segmenlis oblongo-lanceolali9 lanccolatisque aculis inlegris baseos appendicibus elongatis denticulatis, petalis violacois calyce duplo longionbus, calcare petalis paulò breviori recto apice subincurvo appendicibus calycis duplb longion

*Viola tricolor var Olympica* Gnsel Spicil e dscnptione el loco

Hab in regione abielinà supenon el plamlie inferiori *Olympi Bithyix* (Boiss ' Gnsel) < Clemenli •)

Plan (a afGnis *V Rolhomagensi* ul ea radice annui quidem sed qtw per ainos 2-3 perdurare polesl donala, mdumenlo quoque papillan sed breviori obsita, ab eà fohis minus crenalis, sepalis lalioribus basiquo longiAs produclis et pnesclim calcare plus dupld longion optimè dislincla

VIOLA MACEDONICA BOISS et Heldr (Seel *Melanium*)

V. annua subperennans tola pilis sparsis brevissioin papilUnbus obsila vindis, caulibus nuinerosis elongalis foliosis procuinbenlibus apice erectis ad geniculos plils mmi^sve infraclis, folus peliolo eis aequilongo vel breviori suffullis infenonbus ovalis Obtusis basi Iruncalo-snbcordalis supenonbus oblongo-lanceolalis basi allenuatis subsessilibns aculis omnibus profundiuscule crenulatis, stipulis mfenonbus pinnaliparlilis laciniâ terminali folio simili sed breviori peliolulala lateralibus liieanbus aculis supenonbusoblongo-lanceolatis basi pinnalifidis, pedunculis longissimis, sepalis (riangiilan-lanceobitis aculissimis appendicibus rolundatis integns petal 13 calyce sesqui-Jongionbus supenonbus oblongo-apalhulalis c«eru)eo-violaceis mferion obcordalo-truncato flavescenti, calcare obtuso sepalomm appendicibus plus dupl6 longion

Hab in lei Ptendes in raonle *Korthiali Chalctdices* alt 4000' (Julio 1851 cl. Heldr)

Caulea saepè 1-11/2 pedales, folia 6-9 tineas longa JMSlata, peduncub 3-5 et post antliesin sappè h pollicares, (Tores eis r, *Rothomagen-8i8* roinores pelalis supernè mull6 minus dilatatis Inter species aubperennantes hujos seclioms inpnmis affinis *V rivariensi* Jordan

Obs qujB oplimè dislingniture laciniâ supenon slipularuiq. ab infenonibus multò minùs dissimili, foliis eliam supremis peliolalis, petalis siipenonibus angustioribus valde dissilis

VIOLA HYMETTIA B el H (Sect *Melanium*)

V. annua indumento papilloso brevi palulo obsila acauli<sup>9</sup> vel brevissimè caulescens. foliis pctiolo cis aequilongo vel paulò longior suffullis infenonibus uvalorolundis superioribus oblongo - spatulalibus omnibus obtusis obtuse crenatis, stipulis multifidis laciniâ supenon folio simili Uleralibus linearis-selaceis, pedunculis elongatis, sepalis oblongo-lanceolatis acutis integris appendice subretusâ, pelalis calyce duplò longioribus omnibus apice valde dilatatis superioribus coruleo-virescentibus caeruleis lutescentibus, calice crasso obtuso appendicibus calycis paulò longioribus

*Viola Demetna* Spruner, Heldr, BOLSS Orphanides pi. eia non Prolongo.

Hab in *Taygett* regione intermediâ (Boiss Apr 1842), parte superioris montis *Hymettl Mticce* (Sprun, Heldr, Orph).

Elegans plantula quani diù habet pro formâ *V Demetna* Hispanie sed quæ certè differet foris paulò inaequalibus brevioribus peliolatis, stipulanim lacinis lateribus numerosioribus tenuioribus et in partibus floribus duplò majoribus amsimè coruleo-variegatis nec luteis

## POLYGALIA

POLYGALA ANATOLICA Bork el Heldr. (Sect *Polygala*)

P. perennis multicaulis, caulibus virgatis elongatis simplicibus erectis vel ascendentibus teretibus tenuiter puberulis in racemum simplicem laxiusculum abaxialibus, foliis glabris vel sparsim et brevissimè puberulis margine subrevolutis inferioribus elliptico-linearibus eatens linearibus strobilatis, bracteis lateralibus citissimè deciduis lanceolatis pedicello longioribus ad apicem racemi breviter exsertentibus, albis calycinibus corolla albo-roseis ellipticis basi apiceque aequalibus oculis capillatis inferioribus nervis lateralibus ramulosis inter-

ribus apice inter se semel anastomosantibus, ovano sub anthesi carpophoro longiore, capsula obcordato-cuneata angustissime marginali in carpophoro circa mil. 16 brevius sensim attenuata

*P. major* Boiss., Heldr. plan. Ica exsiccatae ex Asia communis non Jacq.

Hab. in *Cai* id. inter *Karadjasu* et *Geyra* (Boiss.), Lydia ad radices *Tmoh* prope *Mascher* (Boiss.), *Pihidia* circa, Bou/dour et *Egirdir* (Heldr.), Cappadocia ad *Euphratem* (Aucher N° 910), monte *Caasio* *Sirtob* (Boiss.)

Caules 1-1 1/2 pedales, racemi fructiferi 3-4 pollicares, flores pallide rosei vel albi paulo minoribus *P. majoris* Jacq. quaecumque die commiscuuntur et quae eximie differunt. In corolla alae calycinae excedentes, alae calycinae rubellae nec albo-virentibus magis elongatis nervulis saepius anastomosantibus, ovano sub anthesi carpophoro multo breviori, capsula magis abbreviata carpophoro eadem sublongioribus suffulta

POLYGALA PRUINOSA Boiss (Sect. *Polygalon* DC.)

Character speciei sic reformandus

*P.* tota pilis albis brevibus molliter cinerascens basi aeffrutescens caulibus abbreviatis prostratis subhirsuta, ramis ascenduntibus abbreviatis latis foliosis, folia inferioribus minoribus ovalibus ciliatis ellipticis imbricatisque obtusis crassiusculis racemis terminalibus laxis, bracteis linearibus pedicello brevioribus, alae calycinae oblongae obovatae obtusae capsula subangustioribus basi obliquis unaque alae gibbis internerviis nervis lateralibus ramulosis inter nervosque apice semel anastomosantibus, capsula obovato-obcordata irregulariter biloculata basi attenuata stipitata, alae loculos aequantibus

*P. pruinosa* Boiss. Diag. I, quoad plantam Asiaticam.

Hab. in *Cand*, (Boiss.), *Pamphj* *ltd* et *Pisidia* (Heldr.), *Armenia* (Aucher)

Species alae obliquae capsulisque irregularibus insignis. Planta Graeca quam hinc olim ob indumentum naturam subjunxeram omnino aliena est et a *P. Nicceensis* Risso pilis mollioribus totam plantam obtegentibus tantum differt nobis que nunc *P. Nicceensis* var. *tomentella*

POLYGALA SDBUNIFLOAA Boiss et Heldr (Sect *Polygaloides*)

P perennis minuta, caulibus filiformibus serpensibus basi nudis demum erectiusculis densiusculè foliosis glabris vel minutè puberulis subsimplicibus, foliis glabris viridibus obovatis obtusis basi breviter attenuatis subsessilibus inferius minores, floris ad axillas superiores 1-3 pedicello eis vix brevioribus suffultis folia vix excedentibus caeruleis, alia oblongis subincurvis basi attenuatis corollam breviter cernulam excedentibus medio univulvo nervo virenti ramuloso, ovario janone ovato sessili, capsula

Habitat in sive ad nives supra fontem (Mauroñeri) Stygis in monte Chelmo Armdxoi alt 7000' Heldr >

Caules 2-3 pollicares, folia 2-5 lineas longa, flores magnitudinis eorum *P. alpestris* Species caudiculis serpyllodeis, foliorum formis, ramis paucifloris insignia nulli propinqua accedens

POLYGALA STOGKSIANA Boiss (Sect *Polygalon* DC)

P perennis tota pilis curvulis adpressis cinerascens, radice verticali caules numerosos nanos foliosos in caespitem congestos ascendentes vel erectos edentes, foliis carnosulis inferius minimis orbiculatis, caulis ellipticis vel elliptico-linearibus obtusiusculis, racemis 1-2 axillaribus 5-7 floris densis, bracteis minutis ovalibus, alis calycibus ovato-orbicularibus obtusissimis basi obliquis univulvo nervis ramulosis non anastomosantibus capsula brevis raultique angustioribus, capsula subquadrato-orbiculari obcordata alba loculis sequentalibus marginata

Habitat ad Pasht Khana regionis Beloutschistan (cl D<sup>r</sup> Stocks 18B1)

Caules 1-11}2 pollicares, folia superiora 1-2 lineas longa 1-1 infima, alae sub anthesi roses fructiferae albae accrescentes albae, capsula 2}9 lineas lata Affinis habitu *P. Hohenackerianae* qua? staminibus dignoscitur alis ellipticis, capsula longitudine latitudine superante angustissime alba

POLYGALA DICTYOPIERA Boiss (Sect *Polygalon* DC)

P perennis? adpressè puberula glabrescens, caulibus erectis ascendentibusve pumilis foliosis simplicibus vel basi divaricatis raino-

sis, folns cdrnosulis infinite obuvatis exteris eihptico-hnearibus oblu-  
sis vel truncalis cum mucronulo basi atlemialis brevissimè peliolafis,  
flonbus in racemos laxiusculos axillares erccto-patenlescaiiilem sspè  
superantes tdisposilis, braclcis orbicularis tandom deciduis, pedicellis  
post anthesm deflexis. alia calycims suborbicularis rolundalis basi obli-  
qtus albo-membvanaceis n mis Inbus vindibns ramulosis apiceque  
inter se ronjiinclis elegantcr reticnlalis, capsulá glabrà alis siiblahon  
ovatà valde irregulari ueequahterque biloculan alá locnhs dimid6  
anguslion cmetft

Hab in ditione *Beloutbdustan* (cl Stocks )

Caule9 1-3 pollices 2-3 longi, folia intermedia 8-9 liaeas longa  
11/2 2 Jala, racemi florum t-11?2 pollicares Aflims *P. irregnan*  
Boiss qua; differt caule pedah, racemis pedem dimidmm demOm lon-  
gis, foliis mnlto longianbus

## FRANKENIACEJE

### FBANKENIA RBUTEHI BOISS

FT sufTrulicosa ramosissima glauca cautibus erecto-patulis lalere  
infenon nullas radículas superior! ramos nuinerossissimos temies  
erectos foliosos breviter velulmos simpli^es vel ramulosos edentibus,  
foliis parvis crassis ngidis tnangnan-oblongis obtusis basi ciliaia  
margine 9ublas latè revolutis inteniodiis subsequilongis, axillis fas-  
ciculifens, flonbus secus ramorum partem supenorem in axillis  
saepit8 plunbua spicas subinterruptas densiuscalas sabsecundas for-  
mantibus, folna floralibu9 alus con form i bus calyce terliA parte bre-  
vionbus, calycis tubo duro rubello parc6 papillan valide 8 costato  
profundè sulcalo dentibus tnangulanbus obtusis, petalorum laminis  
oblongo cunealis apice undulato-subdenticularis

*FT Ihymifolia* DC. Prodr quoad pi II i span team — boiss. Voy  
Esp non Desf

Hab in gypsaceis salsuginosis Interionbus *Hispance* in regno *Gra-*  
*natensi* (Boiss Bourgeau) *Murcico* (Bourgeau), *Castella* circà *Aran-*  
*juez* (Tlnbaut in Xc herb , Reuter)

Species hucusque confusa cum *Fr thy mi folia* Desf cujus ipsius  
speennina in herb DC contuli, qiam quoque e lacu salso *Cftotl el*

*Chergni Mauritania*: intenons sub Dalansa pi exs 1882 N° 555 acepi et quae caterum noslrx habitu sinullima differe (amen videtur cauibus elongatis prostralis lota longttudine sublus radicanlibus, folns crassioribus basique lationbus minus drclè revolulis inlernodio sferpius sublongionbua, flonbus solitarus nee sabfasciculalis spicas lenmores non mlermplas foruiiitibus, brdcteis calycem saepms squanlibus Calycis ttibus in ulrique demum spirahler lortus esl

PnANKBNIA PAXLIDA BuiSS til Reut

Fr pallid^ vireus suffrulescens a. basi ramosa cauiiDus ascenaenus bus parcf ramosis lenuissime puberuljs, folus lenmler lIneanbus convolutis oblusiusculis basi dilataia amplexicauli cilialis p<irc6 toberculalis, axillis fascicuhgens, flonbus ad exlremilalem caulium lax6 dicholomorum in fasciculos disposals corymbosis et sub corymbo terminal] in verticillastros plures rnmoliuseulos faaciculorum breviler pedunculalomm disposiUs, ealyce folia floralia non superanli sub lente brevissime puberulo ferè glabrescenli denlibus brevibus obtusis, limbo petajorum patlideroseo oblongo-lanceolalo, anlhens flavescenlibus oblongis

*Fr corymbosa* Jainin pi exs 18BS non Desf

Hab in humidis propè *Biskra* Algenae in tenons (Jamin)

Caules 6-8 pollicares Verlicillastn fe-5 sub corymbo terminall Folia eis *Fr corymbosa* mull6 tenuiora, inQoi escenlia mullò laxior, *Fr corymboscs* uisuper omnes fecè flores in coryinbis terminalibus conferti sunl, ñores intensè purpquei duplò majores, lirnbi petalorum obovalij aotherx purpures *Fr revoluta* Forsk folns lalis, flonbus muUb ma)oribus ob infloreacenliani plunès dichotomam spams nee fasciculatls, ealyce basi hirsute longius dislat

## SILENEiE.

**DIANTHUS GLUTINOSIA** Boiss et Heldr

D monocarpicus loins pube in parte infenori plantee abbreviate in supenorl copiosion vatdè viscidA obdoctus, caule unico Tel a basi plunbus erecds foiiosis tereii-subangnlalls ranuB simpltcibus ssptus

a medio dicTiolomè ramosis i amis patuli3 stnctisve, foliw hneanbus dcuminatis multinerviis vagina brevi suffillis radicalibus cdulinisque flexuosis, supenonbifs rameisque angustatis abbrevialis slnctis, flonbus ad ramulorum saepe'brevit»simorum apicem soli la t us squamis calycims binis slnalis valde vibtidis a basi oblongo-ovalâ in anslani apice selaceam dimidium caljcem sequantum abrapiè allenualis, calycis tenuiler stnali valde`viscid 1 denlibus slnctis longe atlenualo-subulalis, pelalorum laminâ sublûs flavescenti supcrne purpureâ basi albo-violaceoque maculâ obovalâ acute et grossè denlalâ pilis cns-pis longis sparsis obsiU

*D pubescens* Urv Scr in DC Prodr non Fl Grace

Hab in colhbus *Smyrna*; (Boiss ), *Byzanht* (Gastagne, Auclier N° S03), insula: *Tenedos* (Uiv )

Species a nobis quoque pnus confusa cum *D pubescenti* fl Grace. tab 397 qui diflert radice perenni lignosâ, squamis calycims quaternis, calycis lubo glabro denlibus aculis oec anslalis *D tenuiflorus* Gnseb cm cl auclor erronee *D pube&centem* Urv adscnpsil est lerlia species noslrac radice monocarpicâ et indumento affinis sed dislincla flonbus fn cymas corymbiformes fasciculatis, flonbus brevius puberulis minùs \iscidis, bracteis breviler el crassiiis arislalis, calyce anguslissune cylindriLo, pelalorum laminâ purpureâ con-colon

#### DUNTUUS GHISEBACHII BOISS

V perenms caudicibus brevissimis nudis surculos foliosos breves caulesquefornos breves simplices edeiibus, (bins ngidulis tenuiter hnean-subulatis Innervtis glanduloso-puberulis subincums, cauhnis abbrevialis vix lationbùs vaginâ earum latitudine vix longion guffullis, flonbus paucis ad apicem caulis fasciculatis breviler pedunculatis pedunculis glanduloso-hirlis, squamis calycims binis puberulis ovatis truncato-subobcordalis setaceo-anlalis calycem dimidium sequantibus, calycis puberulo-glandulosi lenuiter cyhdnci denlibus longis lanceolatis anlatis, petalorum laminâ purpureâ oblongâ parvi obtusè apicf denlatâ supernè pilosâ

*D paeudoarmena* var *viscidus* Gnseb Spicil Rumel p. 188, *D. Olympieus* ej opens Suppl pag S03

Hab in *Macedoniâ* boreali (Cinseb ' Fndenclit ex Gnseb )

Gaules in uaeo specimne semipedales, folia pollicem longa, calyces fere 8 lineas longi *D. Olymptcus* Boiss = I) Msctdua Bory foius latis umnervus, floribus capitatis, squainis in Qalis donalus millam arctam afOnilatam habet cum noslrft ptanla juxla *D. pubesceniam* Fl *Grate* collocanda qui differt surculorum slcnhum deficientia, flonbus saltern duplo majonbus ob pedunculos elongaLos solilams, sqiiamis quaterms in anslam sensim altenuatis, calyce glabro etc

DIANTHUS CYLLENEUS BOISS et Heldr

D. perenns a basi stiffuLescenti ramosus sarculis stenlibus nullis, caaUbus ascendenlibus ereclis\e glabns, folns plams abbrevialis tnervus nervis lateralibus iparginantibus infenonbus puberulis obtusiscuis supenonbuB slnclis glabns acutiusculis, flonbus 1-4 terminalibus breviter pedunculatis, squamis caiycims bims rubelhs ovatis supernè raargine membranaceo anguslo cilidlulo donalia ovatis in inucronein eis breviores abrupte altenuatis calycem dimidium vix aequatitibus, calycis gfabn tubo cyllndnco apice subconstriclo slnato dentibus lanceolatis anstalis margine cilialulis, pe4atorum lamina rosea concolon oblonga apice 4-tt dentata supernè parcè pilosa

Hab in pascuis elationibus *montis^Cyllenes Peloponnesi* supra Tnkala all &000' (Heldr )

Gaules in meis specnibus semipedales, folia semipollicem longa ferè lineam lata, calyces 6 lineas fere longi Affinis praecedenti differt foliis brevibus latis, parlium floralmm glabntie etc Hisce fiotis et floribus dlmidid minonbus a *D. pUbdseentis* foraus longius distat

DIADITHUS LILACINUS Boiss el Heldr

D. perennis caudicibus suffrulescentibus brevibus prostrate famosis folia rosulata caulcsque lenues glabroa quadrangulos humile> flexuosos edenlibus, foliis pallide virentibus liirean-aubulalis aculis tpinerviis nervis contiguis margine scabndulis ngidulis submcurris, foliis caulinis cenformibus carvalis vaginà earuin lalituditie 46pK> longiori suffallia, flonbus 9-3 lterminahbus capitatis, involucri scariosi flavidi pliyllis lanceotalo-lineanbus in anatañi subulalam eis wepè seqmlongam floreb sequanlem abruptè altenuatis, squamis calycims quatuor oblongis in anstam subulatam tubum calycis aequaan-



tern abrupt6 atlenualis, calycis rubenlis lubo a lerlia parle sursûm rienoso-slnalo denlibus bruibus tanccolalib mucronato - anslalis, peldloruin laminâ hlacinâ parvâ obovald denliculalâ supernè pared papillosA

Hab in rupibus regioms dlpinx monlis *Olenos Peloponnesi* loco *Oruonero* dicto all 6000' (Hrldrcich)

Caulcs floufcn B-7 pollicares, folia radicalia I i If2 pollicanalinese terliam pailcin lain, calyces 0-7 lineas longi Species *D Lydo* Boiss *el pint.folio* Sin intermedia Prior dishnguilor oaulibus procens, foluscaulinis radiralibus selaceis rnullo IdliorUjus, capilulis miiUiQoris, involucn phyllis lalionbtis marline undulalis apice saipè truncalis, calyce nullò longion Poslenoi dilTert folns radicalibtis selaceis, Involucn et squamnrurn anslis calycis lulio mullo brevionbus, calycis tubo anguslion

DIANTIUS PARNASSICUB BOISS et Heldr

D pcrenms rluzoinalc crassiusculo multicauli, cauibus aacendenlibus erclisve Lenuibus sunplicibus foliosis parle superiori praeserliin pubesctuii-viscidis, folus linranbus umnerviis surculorum slenhuin paucis lincaii-oblongis obtusiuscuhs glabns, caulims longionbus anguslionbus lineari-acuiiinatis scdbnduh\$ supcrionbus slnclis, flonbus in cyinas capiiuhformes pauci vel mulliQoras fasciculatis ranûs in formâ alpinâ solita^us, **phyllis** involiicralibus 1-2 scanosis o\atis obcoidilisvo m anslam setaccam brevem abruple atlenualis, squamis calycims *h* glabns incmbranacea Icnens calyci arclè adpressis ovalis in mucroncm setaceum Iriplb breviorcm abruple altefiualis calyce duplo brevionbus, calycis glabn angusti cylindrici apice subanguslali tubo slnalo denlibus lanceolalis in arista in brevem atlenualis, **pelalor^iin lamma purpureâ concolon oblon^o-cuneatâ apice paucidentata**

Hab in pascuis regioms abietinse montis *Parnassi* supr4 *Rachova* el suprâ *Delphos* In slenlionbus ejusdem monlis crescit forma nana csspitosa cauibus umfluna (Heldr )

Gaules ssepè pedales longioresque, folia caujina infenora pollicana basi lineam ferè lata, capilula raajora 8-10 Qora, calyces 7-8 lineas longi Valde affinis *D visado* Bory quod differ! squamis calycims lalionbus mflatis sub^palentibus in anstas calycem subsquantes pro-

ductis, lammi petalorum lalion supernè densiits papilloso-birtã D  
*tenuiflorua* Gnseb nostram calyce angusto quoque refert sed est mo-  
nocarpicus differlque flonbus cymosis nee capilalis, etc

DIANTHUS FRIWALDSKYANLB BOISS

D perennis basi suffrutescens inuKicaulis, caulibus omnibus flori-  
feris erectis leauibus foliosis sunplicibus sub lente parte inferiori te-  
nuisslmè puberulo-scabridis, folus glauccacnlibus hnean-subulalis  
stnctis ngiduhs mlernodio brevionbus acutis tnnervus nervo medio  
prominente subtnquetns margins srabndis, vaginâ folii latitudine  
dupl6 longion, flonbus 2-5 ad cauliuin apicem congeshs subsessili-  
bus, squamis calycims senis flavicantibus conaceis lasviusculis ova-  
tis apice rotundato-trnncatis in mucronem durum lanceolato-subu-  
laLum pungentem eis mull6 breviorẽ erecto-paluluuĩ abrupt abeun-  
tfbus, calycis squamis tnplo longions tubo glarucescenU cj lindnco  
apice subanguslatd denlibus lanceolate brevissimè mucronalis, pe-  
talorum laminA parv4 obovato-cunealã apice aciilè denttculatã basi  
obsoletè barbatã purpureã sublũs flavicanle

*D. diffusus* Gnseb Spicil Humel non Fl Græc

Hab in monte *memo Rumeliw* (Fnw sub *D rupestri*)

Canle S-7 pollicares, cahces 8 lineas longi Ex afQmtate J> *granite*  
Fl. Grsec differ! foliis abbrevialis, flonbus minonbus, squamis abbrev-  
vfalis in mucronem mull6 breviorẽ abruptlits altenualis *D diffluaus*  
Fl Grseca lab 306 cui cl Gnseb nostrain plantain rettilit recedit  
caulibus diffusis, foliis lalionbus non rigidia, caiyce longion bisqua-  
malo squamiB sensioi in mucronem 'attenualis, pelalorum lamin&  
muH6 majori, patnã remotlssimã *D campestrto* MB. in Spicil Rumel  
hte quoque ut forma uniflora relatus squamis lanceolatis membrana-  
ceis calyce tenui longo etc ommn6 differt

DIAATHOS HAHATOCaux Bolss et Heldr

D perennis basi suffrutescens ceespitosus, foliis linearibus obtu-  
siuscolu vel acalu Innervns nervis laleralibos marginantibus plants  
vel-snbcanaliculaUs margine sub lente scabndulia radicalibus confer-  
U» xaulmis vagmft earum latitudine vix longiort suffuUis, supremis

Pliul oilanl navir Ser ite u Noi

A

floies siibmvolucranlibus calyces sacpe ferè requanlibub, caulibus as-  
tendenlibus foliosis nmiulissiuie puberulis ad foliorum insertioneui  
nodosis infraclis supeinè angulatia dicholome el breviler ramosis co-  
lyinbuse 5-5 (Ions, squaims calycimsquaterms e basi oblongà rubellâ  
longe lanceolalo-acuniinalib lierbaceis erecto-palulis calycinum tu-  
bum osquanlibus vel eo brevionbus, calyci9 glabri venlncoosi apice  
anguslaU ru belli Lenuilei' slnali dentibus lanceolalis a pice subulada  
ngidulis, petalorum laminâ siiblua flavescenli supernfe intensfe pur-  
pureâ oblonKO-&pathulalâ acule denliculalâ basin vers&s purpureo-  
pilosâ

Hab. in saxoMs regionis sylvaliCBeOtympi *Thessalt* suprâ csnobium  
*Hayto Dionyst* (Heidi<sup>1</sup>)

Folia radica ha 1 1/2-2 poll ides longa lineam 1-1 I^lata, caules  
0-9 poJhcares, squamiE calycinae 7-8 lineas longa;

Var *p alpmus* — Folia intnora *k-%* lineas-longa, caules 2 1]2 pol-  
bcecs long! sxpiùs umflun, squamarum mucro ^nguslatus squamft  
ipsâ sacpiAs brevior, calyx abbrevialus, petala glabrescentia.

Hab in pascuis siccis sumiuis *Olympi ThessalU Parnassi* (Held-  
reich)

Pulcliemma slirps ex afGmlate *D cxnnabarmi* Spruner in Boiss  
Diagn folii\* Lenuibus elongalis longè vaginalis, caulibus longis roctis  
simplicibu9, squamis [runcalis subulato-anstatis, pelalorum colure  
dislinclissimi — i? *btfiorus* Fl Grsca lab 395 est nobis planta ambi-  
gua specumna mmora *D dnnabanni* qualm in regione superior! Par-  
nassi occurrunt optiniè referens praler colorum petalorum qui facie  
supenon rosei nec cinnabanm depicli sunl

#### DIANTHUS PETTERI BOISS

D perennis basi lignoso-suffrutescens mullicaulis, caulibus infernè  
pubenilis elatis foliosis superne parce ramosis simplicibusque ad  
nodos increaaaalis infraclisque angulalo-ancipitibus, folus ngidulis li-  
nean-subulahs plicatis margine scabns aculis surculorum radicaum  
elongatis anguslissirais flexuosis caulmis inleraodio uiultd brevmn-  
bus vaginâ longâ mflata insidenlibus sum mis ad vagmam lanceola-  
tam reductis, flonbus Ustrminalibus solilarns, squamis calycinis  
quaterms latis brevissimis ova to rolundis oblusissiniis inlenonbus

*Iruncalis omnibu9 in mucronem brevissimum abeuntibus, calyce bracteia quadruple longior glauco-virenti breviter cylindrico tenuiter apice subangulato denibus lanceolatis aculeis ciliatis, petalorum laminam obovato-cuneatam niveam inlegerrimam glabra*

*Hab in Dalmatia. (Pelter)*

Caulis in meo specimine pedales, squamee 2 lineas, calyces 8 lineas longi Species mihi ex unico specimine nota uHenus examinanda forma squamarum et tubo calycis brevi crassiusculo *D. virgata* formas referens sed praeter flores minores ab eo recedens petalis parvis niveis inlegerrimis omnino *D. integrifolia* Vis

DIANTHUS GADITANUS FOISS.

*D. perennis caudiculo denudato caulem erectum foliosum ad medium sesquipedale nodosum teretem glabrum apice simpliciter vel parvè et dichotomè ramosum densè, folia plerumque linearibus aculeis margine scaberrimis quibus inferioribus ad caudicis apicem confertè caulibus rigidioribus stictis, vagina brevissima brevissimis, foliis 1-5 corymbosis longiusculè pedunculatis crassiusculis rigidis, squamis calycis 4-6 densè scanosis flavicanalibus apice medium versus stictis e basi ovato-oblongam in mucronem e basi lanceolate subulatum rigidum abruptiusculè attenuatis, calycis bracteis plerumque duplè longioribus tubo oblongo-cylindrico supernè stictis lanceolatis breviter mucronatis, petalorum laminam roseam obovato-cuneatam acutè 7-8 dentatam basi parvè barbata.*

*Hab in Syriacis Chalcidica circa Gadea (herb Fauchè), prope Tingidem (Salzm sub nomine *D. Nornemanni*, forma foliis latioribus seplenerviis)*

Caulis 1½-1 pedales et ultra, folia inferiora «esquipollicem longa lineam ferè lata, rami vel pedunculi 1-3 pollicares, calyces 1-1½ lineas longi Caulis in hac specie solitariè saltem ad caudicis apicem vel lanium brevè videntur ferè ut in *D. multipunctato* atque, habita ad *D. Liboschttzianum* Ser. squamis tenuibus arisalia donatum accedit

DIANTHUS NOEANUS BOISF.

*D. perennis multicaulis caespitosus, folia tunonum caulibusque inferius densè congestis patulis linearibus lanceolatis acumi-*

natis rigidis subpungentibus facie inferior! basi 5 superne 3 nerviis pallide virentibus, caulibus tenuibus erectis foliosis angustioribus praeter inferiora stinctis internodiis brevioribus, floribus 5-B terminalibus fasciculato-corymbosis, perijunciis brevibus stinctis, squamis calycinis senis arcte adpressis albidis-flavescentibus substernatis oblongis in mucronem brevissimum album abruptiuscule abeuntibus, calyce longo tenem cyathum apice consueto bracteis ferè quadruplo longioribus supernè temerè siliis in densis longis lanceolatis aculeis abeuntibus, petalorum laminam uncinatam atque pinnato-multipartitam\* parvam

Hab. in *Rumelia* prope *Kashan* (Noe 18A6)

Folia radicalia 10-14 nervis tonga basi ferè hinc lala, caules 7-8 pollicares, calyces 12-lin nervis longi diametro hinc lali Species pulchra folis *D. petreum*, floribus *D. acicularem* referens ab utroque et affinis floribus [terminalibus fascicularibus discedetis

VACCAHIA OKYODONTA BOISS

V. annua glabra glaucescens, caule erecto folioso a medio vix jam ferè a basi stinctiusculis ramoso, foliis basi breviter connatis inferioribus oblongo-lanceolatis obtusiusculis superioribus lanceolatis linearibusve acutis, floribus in cymis terminatis corymbiformes dispositis longe pedunculatis, bracteis angustis linearibus setaceis acuminatis scarioso-marginalis, calyce glaberrimo florifero augustè cylindrico supernè subconstucto angulato-subulato dentibus lanceolatis valde canaliculatis margine angustè membranaceis membranam infra apicem acule acuminatum evanidam, petalorum unguibus inclusis laminam oblongo-linearibus breviter pandam, calyce fructifero ovato angulato-subulato saepissime parte infera ad utrumque latus angulorum transverse undulato-plicato, capsula ovali calyce paulo brevior, semibus sphaericis (oberculatis

Hab. in regno *Affghanistan* (cl. Griffith), in ditionibus *Scinde* et *Belouchistan* (cl. Stocks)

Valde affinis habitu et plurimis notis *V. vulgari* ab eà praeter folia angustiora sat differre videtur floribus paulo minoribus augustioribusque in partibus dentibus calycinis non in angulis ad apicem usque lalè scindosis sed lanceolatis apice nudis acuminatis; petalorum

lamina angustior, capsula minor minus alata, semina manifestius tuberculata

SAPOIMMA ACEROSA BOISS

S perennis aufferuticosa, densè dumosa, caulibus basi lignosis prostratis ramoaisissimis (0119) vetustis persistenlibus armatis ramos erectos breves puberulos densè foliosos in dumum densuui congeslos edentibus, (olns tenuiter subulatis acerosis erecto-paluIFs ngidis breviter et densè puberulis p̄sistenlibus, peduncuhs terminahbus tenuibus nudis folia vix excedenlibus Qorum cymas contractione capiluliformes gerentibus, pedicelhs bfeTissimis vel subnallis, bracteis minimis lanceolads acutis^ calyce oblongo membranaceo valdd glanduloso-birto-B nervi denlibus lanceolalis acutis, petalorum lamna oblong4 fntegrâ basr angustatâ in unguem eâ miilt6 longiorem secAs nervum medium subvittato-bialatum rarsAs dilatata, fauce nudS, stammibus 10, stylis duobus, capsulâ (junion) calyce brevion apice quadrangular!

Uab IQ jugo alpiuai regions *Afghanistan Ba&eeguk Past* dicto (cl Griffith )

Dunn d-6 pollicares, folia *h-fi* lineas longa tenuissima, capltula-10-SOfloza piso majora, calyces vix 9 lineas longi Species distinctissima habitii suo transitum a *Gypsophila* et *Saponaria* ad *Acanthophyllum* prsebens *Saponance* potius qaam *Gypsophilcd* ob calycis et petalorum formam adnumeravi.

SAPONAMA FILIPBB BOISB. (Sect. *ProtBinia*).

S. annua tola pilis brevissionis patulis apice glandulosis puberula, caulibus a basi dichotomè divancatimque ramosissimis ramisque filiformi-capillanbus, foliis infenoribus linearibus basi aUenuatis rameis abbrevialis linean-oblongis ( floribus e dichotQtniis terminahbu9que pedunculis filiformibus recks eis 1 f jS-Spldque longionbus suffiiltis, calyeibus brevTler viscido-puberulis oblongo-cylindnci^ apice subfttenuatis in denies triangulares acutiusculos abeuntibus, pelalis Uneanbus retusis calycera TIX excedentibus, capsulâ oblongo-cylindncA calycem sobexcedenli, semimbus tenbissime' jugalosis radicalft prommente roslellalis

**Hab** in ditione *Afghanistan* (cl Griffith coll N° 1645)

Plantula' a basi undiquè divancata, (lores 2 lineas circiter longi Characteribus exactè intermedia inter *S. Orientalem* qu\* idtiiset pedunculis multo brevioribus, flonbus conferioribus, capsulis duplò longioribus, seminum radioulà minus prommula differl et *S. flortbundam* Nab = *Gjptopfiulam flonbundam* Turcz in Ledeb. Fl Boiss Suppl qua? omnibus parti bus dimidiò minor est Utramque *Saponaria* potiu's quain *Gypsophilee* Sect *Dichoglottxdi* ob summam cum *S. Orientali* affinitalem el formam calycw oblongi nee breviter campanulali conjunKimus.

SAPONARIA OCYHOIDES L, var *conge&ta* B el R

Flores ad ramorum apicem in corymbos densiores congesli, calyces et pediuculi magis viscidi, calyx quarla parte brevior Ires lineas circiter bogus Gapsula brevior glabosa carpophoro se&tuplò longior

**Hab** in alpibus *Rftcceensibus*, in suenno cacumme *Col di Tenda* in apncis circa diveraonum *il Barracon* dielum, in valle fodinarum *TendtB* (Botss et Reut.).

SAPONARIA GRIBFITHSIANA BOISS (Seat *Proteinia*)

*S* perennis glabruscula glaucescens, caulibus elongatis ereclis (?) teretibus virgalis interne praeserlm foliis ad liodos incrassalis a medio dichotomis ramis abbrevi&lis bi9 lerve divartcalim dichotomis cum flonbus in dichotomiis, folm crassiasculis margine acabnusculis infimis oblongis in peliolum longè allenualis cslensoblongo-lineanbus aculis se9silibus utnnquè an^uslatis, bracteis parvis lanceolads margine ciliolatis, pedunculis calyce plurlea longioribus, calyce Tindi scabriusculo oblongo infernè nervuloso supernè in denies lanceolatos acutos abeuntl, pelalorum lainiud. oblongo-linean inlegr&, coronà e cornubus duobus brefibus constant], slylis duobos, capsulà oblongà calycem aiqaante eumque dislendente k deotali, semiaibuscompressiusculis tenuilcr tuberculalls

**Hab** in regno *Afghanistan* (cl Griffith coll N° 16b3)

Gatriis in meospecimine pedalis firmus diametro vu lineam crassus, folia inferiora cum petiolo bipollicana circ Ires lineae lala, raini

1 172-2 poll ices loitgi divancati divancatimque trichotomy Pedunculi 6-8 lineas longi, calyx 9 l;2 lineas vix longus Affinis prasei-tim *S cerastoidi* quae e&imie' differt folns ovatis, bracteis magnis oblongis, flonbus paul6 majonbus breviter pedunculatis, petal is fauce nudis, radice annu& elc

SILENE dHOUODONTA Boiss. et Reut (Sect *Heliosperfoa*)

S perennis tenera cxspitosa mullicaiilis lota Indumenjo viscido patulo oblecla, cauibus flliformibtis ad gemculos infraclis intncalis supernc oppositē ramosia ramis a pice divancatim Infloris, folns surculoruin slenhum infenoribusque cauljius oblongo spafhulatis obluisiiscnhs in peliolura eis long-iorem altenuatis, si^penonbus linean-ellipticis utrinque^ allenuahs aculis, peduneulis calyce ?-(fpM longionbus fructifens elongads, calyce viscido-lurlo flonfera obcomco ffuclifero lurbinalo denlibus tnbo quadruple brevioribua ovalia oblusis rubellis patuhs, petalornm alborum ungue glabro limbo oblongo cuneato retuso vet obsolelissim& h denlato, coronra biparlilie partitiombus obovalis inlegerrimis, capsula oblonga carpophora siihxquionga calyce subbrevum, seimmbus lenticulanbus nigris facie Isvibus dorso papillis brevibus cnslalH

Hab ad rupes in regione mvali monlis *Olympi Tfiessali* nbi anno 1851 detent cl D<sup>r</sup> Heldreich

Habilas el affinilas S *quadndentalm* qua&cum vivam earn vivam comparavimu9 Iia a nostrā differt mdumeplLViscidi in parte superiori plants defectn, folus angusMofibus longtonbua lineanbus, den-tibua calycims vindibus «lbo - margyialis, -petalorura limbo orato-spallhtlato aianifeslē k dentato, corona parUliontbus lanceolaUs denticulalis, eapsulā calyce longion avato-rotundā carpophoro duplō lonKion, semintbus **dnpld** majonbus longiAs cnstaha *S pudibunda* lisdem differl nolis, S *Tommasinii* flonbus majoribus clavalia breviler pedancnlatis semimbusqiie facie eclnnaUs, S *pustila*W K. tandem quee quoque pubescenli-viscida eat ean^uiā el ealvce S *quadndentatcB*

SILENE BABYLONIGA BOISS et Nog (Seel *Eu&iletve*),

S annua pal lidō virens tota sub lente pilis minulis sspē recurvis papillaribus hirta, cauibus prectis vel ascendntibus a collo palule



ramosis ad nodos incrassatis, folio oblongo-spaliulalis obliuiscuhs  
 nervo validiusculo pareè ramoso percursis, ramis oblongo-  
 lineanbus aculis, ramis bis vel ter dichotomis cum flonbus pe-  
 duculatis in dichotomis cymas corymbosas pi As minus confertas  
 formantibus, calyce palido concolori sob lenle brevi&Bimè et adpres-  
 sursculè luto 10 nervi basi truncato sub antliesi angustè oblongo-  
 cylindrico denlibus ovatis obliuis margine anguste scanosis, fructi-  
 fero oblongo-clavato, pelalorum limbo tinnulo roseo hnean-cunealo  
 retuso, coronre bipartilae squamis oblongis, filamenlisglabns, cap-  
 sul4 conaceâ oblongâ thecaphoro 3 4/9pl6 longion, seminibti9 nign-  
 cantibus minutissimè corrugatis dorso profuitdfe canaliculatis facie-  
 bus depressions aunculaeformi notalis

Hab in collis et fossis prop& *Bagdad* (Noe Maio el Junio 1881)

Valdè affinis *S rubella* a qua sat differre videtur inQorescentia  
 magis compoBila multiflora plerumque laxior, calyculbus angustioribus  
 pallid^ virentibus nee rubellis, eapauhl multo angustiori oblongo-  
 cylindricâ nee ovata, pelalis angustioribus Semina ulnnsque simi-  
 lia sunt

SILEISE AFFINIS Boiss (Sect *Eusilene*)

S annua tota pilis conspulis patulis brevibus glanduloso-Tiscida a  
 collo esepiùs pluricaulia, caulibus lennibus erectis inclinatisve simpli-  
 cibus vel paulò supra, basim ramis paucis erecto-patulis auclis, folus  
 angustè lanceolato-lineanbus acudis, flonbus aJteris racemos laxissi-  
 mos subseciendos lenninales formantibus, pedunculis gracilibus flo-  
 nferi9 erectis calyci squilongis vel brevioribus fructifens calyce lon-  
 gioribus demùm patulis vel patulo-deflexis, bracteis lineanbus calyce  
 3S-3pl6 breuibus, calyce sparsim glanduloso-'papiUari albido-mem-  
 branaceo palidè vindi-sfriato denlibus triangulati-elongatisobtusuiB-  
 culis ciliatis flonfero oblongo-cylindrico basi truncato, fructifero  
 breviter clavato, pelalorum unguibus longiusculè exsertis, Imminis  
 ultra ruediam partem bifidis, squamâ exsertâbi(id4, capsula ovalâ  
 carpophoro tertiâ parte longior, seminibus reniformibus vultu com-  
 pressis facie excavatis dorso latè et partim profundè canaliculatis  
 tenuiter rugulosis

Hab in arenosi9 vallium *Smaitarum* (Boiss , Schimper N° ftH  
 sub *S vdlo8d*)

Planta 2-B pollicans Folia inferiors fere pollicana i<sup>^</sup>i 1}9 lin  
lata Calyces sub anthesi 5 lineas longi Habitu valdè affirm formis  
minonbus pedunculis solilanis nee fasciculatis donatia S *NiccBemis*  
quae differunt folns magis carnosls, pedunculis eliam fructifens erec-  
lis, calycis dentibua longionBus, capsulâ carpophorum xquante, se-  
mimbus dorso anguslè et profundè canaliculalis compressis Speci-  
mtna am vel pauclQora cum umflons S *villosaB* Forsk pnm6 aspectu  
confundi possent sed haec folus lalis, bracleis lalis peduncalos squan-  
tibuSj pedunculis incrassatis, caiyce capsulâque inultò longignbus,  
semimbiis minonbus facie' planis rugulosis alusque notis longè dif-  
fert S *Olivertana* pedunculis brevissimis erectis, calycis denlibus  
elongabs statim dignoscitur.

SILENE DELPHICA floiss et Heldr (Sect *Eusilene*)

S perennis, rhizomate sulTrutescentt crasso multicauli, folus ad  
basin caillium et ad caudicolos stenles breves conferlis pube brevi  
velutmâ undiqiè gnseo-flavescentibua spathulato-lanceolatis infernè  
longè attenuatis acutinscuhs vel obtusis, cauibus ascenderllibus ela-  
lis ranàs simplicibus ssepiùs a raedio opposite ramosis ramis brevibas  
vel elongahs panicularp laxam elongatam formantibus, folns caolinis  
sectis parlem infenorem caulium approximatès Iraean-spatbulatis su-  
pernè remoUs aogustè lineanbus brevissimis, paniculâ glabrescenlf  
vlscidâ, flonbus ad apicem ramulorum 5-8 congeslis brevissimè pe-  
dtcellatis, bracteis subrotundls htitis-Tatè scanosis, calyce flonfero  
breviler obconico hirto viscido viridi-stnato denhbus brevibas sub-  
rotunda fer6 omnm6 albo-sCariosisfciiitis, petalorum Tiridi-fla?eacen-  
tium nudorum ungue cillato, laminâ ad 3j4 usquè bifidâ lacintis  
oblongu-spathulalis, calyce'fpuclifero clavato, capsolâ ovafo-rotundâ  
carpophoro dupl6 longion, semimbus dorso rotundatis tPnuissimè  
ragatosis.

Bab. in montosis Grtcciee, *Parnassus* ad rapes *drckArachova* et  
*DeljthoA* (Eeldreich I), m *Peioponnesi* montibiiB circfl hionasterfum  
*Megaspoleon AchaHs* (forma df pauperala Heldr).

Caulea 1-i \)1 (Msdales rarais infernorfbu9 in quiBufflam forrin? pe-  
dem diraidium longis in aliis ad ramulos 1-2 polhcares reductiis, ca-  
lyces h lineas longi Capsula matura feri magitudine pisi Ex affim-

tale *S. Nimtvickh* Friv quam cl Grisebach pro *S. congesta* Smilli liabet, ab ea egregiè dislinguilur cauibus ramosis infernè valdè fo-hosis, floribus plus dupl6 majonibus, bracteis rotundis nee subulatis, capsula subrolunda nee oblong etc Quid sit vera *S. congesta* Smith ex mondbus propè Athenas adhuc ignoramus, ejus descnptio mmis brevis *S. Nentwickii* ob (lores *S. congests* magnitudine *S. gigante* dictos nosrosensu non cõvenit, an esset species hie desenpta etsi folia in noslrA plan LA non «omnia ferè radicaba • ut in desenphone et flores illis *S. gigantece* conspicuè breviores sint ?

SILENE THESSALOPICA BOISS et Heldr (Sect *Eusilene*)

*S. perennis* mullicaulis tota indumento velutine-hirto cano-flavescenti veslita, cauibus ascendentibus gracilibus infernè foliosis supernè nuduiscuhs viscidis simplicibus vel supernè breviter ramosis ramis opposids altero semper abortivo apice confertim 5-B flons, foliis inferonibus et rosalarura slenlium oblongo-spalulatis obtusis mucronulatis in petiolum longe altenuaits supenonbus remotis angus(6 et breviter linearibus, bracteis lanceulalis, peduncuhs calyce brevionibus, calyce glanduloso-hirto vindi-stnato florifero angustè elliptico-cylindrico denlibus breviter Inangulanbus aculis cilialis, petalorum ungue glahro, coronà parvA bipartite lobis oblongis, lamfnft anguslá ad medium bifldà lobis linearibus, calyce fructifero c[avato, capsula oblongo-cylindncA calycem superanti carpophore triplft longion, semimbus .

Hab in rupibus monlis *Korthiati* propè *Thessalonicam* all fKOO' (Heldr)

Caules pedales, folia inferora 5-4 lineas lata cum petiolo bipollicana, calyx flonfer 3-ij2ũneas longos Species indumento et liabitu *S. Delfhicce* a quã egregiè diflert calycis, capsulD bractearumque formã Magis accedit characlenbus ad *S. flavescentem* rujus aulera caules vel uniflori vel parcè ramou sunl floribus ad apicem raioinim solitarns longè pedunculalts, In *S. flamc&nti* praetereã denies calyeini lanceolati sunl, capsula carpophoro quinluplò longior etc Noslra species quoque ad *S. griseam* B et Heldr. capsulis brevionbu9 cernui9 dislmclalh valdè accedit.

**SILENE OLIGANTIBA** Boiss. et Heldr. (Sect. *Eusilene*)

S. perennis mullicauhs rlnzomate rosulas el caules tnfrarosulares basi ascendenles gemculatos parce foliosos supernè nudoa virgatos siinpllices edenli, folns rusulamm ovalo vel oblongo-spalhulahs mucronalia in petiolum eis rcquiiongum vel brevioiem alteriualis breviter pubescenh-velutinis, cauhs paucis remotis angustè Imeanbus aculis stnclis abbreviate, ramulis seciis partem superiopejii eaulis opposilis remolis allero aborhvo brevibus slnclis umflons çanus 9-3 Qoris, braceis e basi connate lanceolato-linearibus acutis, peduneuhs calyci aequiloigis vel brevioribus per anlbesin cernOis dein erectis, calyce conaceo flonfero obcomco-pyriformi glabro albo^vireni nervoso-subeoslato basi «ubumbiUoalo denUbus triangularibus-acu> liusçulis oiargine scanosis ciliatulis, petalorum flavescenfium uogu'e glabro, coronâ bipartitâ lobis brevUer ovajo- Inangulanbiia, lamind ad 2j3 bipartite, calyce fraclifero brevller clavato, capsulâ ovalA calycem excedenle carpophoro 9 i;3 pl6 longion.

Hab. in sa&osis region is sylvaticie *Olympi Thessalice* (He)dreich).

Folia radicalia b-6 hneas lata> 1-1 \fl pollicem longa, caoles pedaleaenl(r&, calyces ferè 4 lineas longi Affinis babitu et charafctenbus *S. radicoao* B B el Heldr ' que differ! **foliis** radicalibus-anguatioTibus longifis mucronatis.flonbuaerecUs,' calyce flonfero subcylmdnco sei hneas longo in denies palenli-recurvos al>eonU, capsulâ oblongâ calyce inclusa

Var *ptenophylla* — Fohaangyslalalmean-spathulalalineanave

Hab in monte *Malevo* seu *Parnon Lacniw* (Orphanides Fl. Greca eu N° 178, in regione abietinf montls *Parnassi* sopra *Delphos et Arachora* (Heldroich)

**SILENE HOHENACKEHI** BOISS. (Sect. *Rwil&M*)

S. perennis tota pube brevissim4 palulâ vel subrelrorsâ velutiDO-scabndula, cauhs veluslte frulicQsis erectra dumulosis caules sle-nles fohosoa flonferosque longiores rectos parce fohosos nmplices edentibus, foliis caulium stenlium-'obloiigo-linearibas rigidulis basi in piiliolum longè attenualis acuminatis, caulims minôribtts e basi **sessili** obiongQ-lanceolatâ acuminalis, caule apice dicbotomè tnQoro,

bracteis florum lateralium linearibus, calyce glanduloso-kirlo jam flonfekt c̄yhndnco-clavalo apice rursiis angustalo denlibus oblongis obtusis margine scanosis, pelalorum ungue glabro, coroni. bipartite lobis oblongis, hmbo ad medium bifidolobis oblongo-hneanbus, (capsule carpophoro subsesquilongion ex Ledeb Fl Ross )

*Silene supina* var *latifolia* Hohenacker Enum Talusch, p 163, Ledeb Fl Ross. I, p 522

Hab in ditionē *Swant Georgice Caucasine* in and is ad 4000'-SS00, altitudims (Hohen)

Hæc planta ut jam suapicalus esl cl Ledeb. valdoperè differ! a *S mpinti* cauibus ascendentibus filiformibus inracto-fle&uosis insignitâ et qua? prater folra miritd anguslora a noslrft specie calycibus longionbus Qonferis cylmdncis capsulAque carpophorum subsequan h quoqtie dlfferl Nostrae plantse caules jnfernè verè lignosi sunt, ramiflorifef-i semipedales, folia iafenora sesquilineam lata pollicenl aut amp)l6s longa, calyces 6 lirteas lortgi

SILENE GnimTHsu Boiss (Seel *Eusilene*)

S perenms tota pilis crispnlia pubescenti-tomentella superne TIS-cidula cauhibiis terelibus elatis remote foliosis partesupenon oppositè ramosis ad ramificaliones nodosis, rarais abbreviati9 erecto-patalfs apice 3-9 Dons pamculam elongatam formantibus, folus radicalibus infenoribusque oblongo-lanceolatis apice altenualia acutis basi in petiolum attenualis supenonbus e basi lation cordatâ oblongis lougè acuminatis, peduncuhs crassis calyce 2-5pl6 brevionbus, bracteis lanceolatis brevibus, calyce vwcidobasi Iruncalo per anthesin longè cylindnco costato-plicalo concolon d«ntibus lanceolalis acutis, petalorum laoiims elongalis oblongo-spatbalatis h partitis, fauce nudft, stylis tnbus, capsule oblongo-cylindncâ durâ B dentibus subpatulis hiantè carpophoro qaadruplò longion, semmibua ..

Hab in regione *Affgham&tan* ubi detexit cl W Gnffith coll N° 1641

Pedalis et ultrâ, pamcula 8-9 pollicans ramis inferionbus **trfpolil-** canbus cjeleris brevionbus, calyces 9 lineas longi Habitus *S velutinve* cum infloresceniâ lamori longionque, sed aptids ob petalorum divisionem *Ju%th S suaveolentem* Kar el Kir caeterum diversissimam collocanda

SILENE ROESERI Boiss et Heldr (Sect *Eusilene*)

S perennis tola pilis papillanbus deors&m curvatis ^Ibis brevissimis scçus parteu lfenorem folioruin longlonbus septalis talrta, loliis radicaibus Infimuqne confertis lineanbus internè subaltenuatis acutis, cauibus ascendentibos mediocnbus simpfcibus ranùs medium versùs ramo auctis, folns caulims binis qualermsve angustè hnearibus abbreviatis stnctis, racemo termali secando brevi 2H floro, braceis lineanbtfs pedicelloi brevissimum aequanlibus euperantibusT«, calyce flonfero longiuscuie obconico dens6 papilloso-hirto albido venis fuscta dentibus ovatis oblimssimis margine membranaeis, petaiis (e sicco) purpitreis ungue glabro lamina paul6 ultra terham parlem bifida, coronà biparhla brevissima parlitiombus fruncatis, capsula

Hab in pascms regions alpinae *Olympi Tkessali* obi detexit anno 1881 c). Hldreich

Gaules semipedales, folia 1-1 1;2 pollicana 1 I;9 S lmeas lata, calyces sex lmeas longi, Affinis *S. ciliatce* et 5 *Grcefferi* Prior differ! folus sspfikis anguslioribas, caudice raagis caespitoso caulibus glabrescentibus calyceque ad nervos tantùm Inrto Posterior habet folia latoria, caules procenores, calycesque basi longitis atlenualoa lerliã parte longiores

SILENE SHITHU BOISS et Hëldr (Sect *Eusilerie*)

& pereoms praeter fqliorurp margined saepè scabridos glabra totè viros cicspitosa, caudiculis ^lifformibus procumbentibus surculos falioBos Bteriles caulesque pumilos tenuiter finformes infernè fdiosos suppbces unifloros vel semel bisre dicbotomos edentibus, folus ngidiuscuhs obloogo vel lineari-apatnllalis obtusis vel acutiusculis m peboUim attenaatiB sapononbus brëvionbus anguslionbus, peduncalls calyce multothes longionbus ngiduhs, braceis minutissjmu linearibus slrictis, calyce membranaceo albido concolon flonfero cUvato deotibus ovatis obtusis membranaceo'-mar.gipatis, petaloram e sicco albidorniQ limbo glabro, laminà ciinealã i>reviter apice bifidã, coronã e duobus pactibojiibus brevissimis obtusis constant!, slamujibas 10, antbëns purpureis, stylip 5 vel 2, o w i a oarpophora subequilongo suffulto, capsulã

*Saptynarta cccsptosa* fl Grseca tab 389 non DC — Sop *Smilhi*  
Ser in DO Prodr

Hab in rpeestnbus regions superioris mantis *Delphi Eubece* ubi  
post SibUiofpium legit Heldreich sest 1808

Planta 4-B pollicans, folia lafenora apice 1 i;2-2 lineas lata, pe-  
dunculi sæpè i-i 1/2 pollicares, calyces 5 Ijneas longi E grege S  
*saxifivujce* a quâ egregiè differt folns firoiionbus brevionbus lation-  
bus spalbulatis, bracleis mimmis, flonbus lertiâ parte saltern brevio-  
nbas, laminâ petalorum muU5 brevion Auclores Flora Graces hanc  
speciem stylis duobus dunatam obaervaverunt et propterhancnolam  
*SaponartcB* adnumeraverunt sed omnibus charactenbusgenenSffene  
adsocianda est, nuaierus slylorum vanabilis, nos semper tres vi-  
diuios.

Obs I *S Nevaden&is* Boiss in Suppl ad Voy Bot Esp forims  
mtermediis in *S melhferam* Boiss el Rent transit *H* ul clap. Soyer  
Willemet et Godron in Monog Sil Alger pnmi obserrarerunt cum  
hâc specie oonjongenda est

Obs II 9 *CeccaftanaB* etHeldr pi exs Hss , Flora Græcæ ico-  
mbiis mine inspectis esl *S Hmfolia VI* Greca = *S linoides* Bth in  
DC Prodr

#### MELANDRIUM ERIOCALYCIUHU BOISS

M pcrene cauhbus ereclis ramosis pilis patulis enspuhs brevibas  
obsitia, folns oblongis obtusisnadempilisbrevibusbasituberculalis  
obsitis inferioribus in peliokmi brevem alienuatiS cselens sessilibus,  
floralibus angustionbus lanceolalis, floribas dioicis, pedunculis patulè  
hispidissimis pilis brevionbus viscidis tntermix(i9, calyce pilis palulis,  
rurescenlibus densè pannoso denlibus Inangulan-lanceolatis acutis,  
tnbo florura maseuVofum oblongo-6ylinAnco fsemineorum ovato, pe-  
talorum albidorum laonnft ad tertiara partem bifidâ, coronae sqiiamis  
denticulalis, capsulâ ovalâ sessili calycem excedenli apice in collum  
allenuala denlibus ereclis, semimbus nigria acutè luberculalis.

Hab circâ *Byzantium* (cl Cadet de Fontenay), circâ *Therapia* ad  
*Bosphorum* (cl Thuret)

Characteres ft aspectus *M pratensis* quod differt caly«lfaas minùs  
inflatia parcè et breviter crispo-hirlw, petalis ad medium usquè bl-  
fidis, capsulâ apice in collum non angustalâ, semlmbus obtusè tuber'

culatis Ad nostram speciera probabihter pertinent specimina ID Persiã boreali a cl Kotschy N° 291 lecta. *M macrocarpum* B. et Reut. (sub *Lychmde*) cujus oapsula quoque apice atenuafa esl longè differt fohis acuinatis, calycis parcè Inrsuli dentibus longissimis, petalorum ungmibus longè exserhs etc

MBLANDICUM CABUUCUM BOISS (Sect *JFahlbergella*)

M caale puaulo suuplia infernè folioso sapernè prseter foliorum brevissunorum par uncum nudo pilis brevibus nigncantibus glandulosts patulis densè hirlo, folna subpapilloais margine scabris lineanbus obtusis basi allenualis seeds nervum medium plicalis, flonbus 5 lenmnaibus nutantibus, pedunculis calyce Inpl& brevionbus, bracteis lanceolalo-lineanbus viscoso-hirtia, calyce ovato membranaceo nigro-lineafo pills mgrescenlihai apwe glandulosis brevibus ob9i, to dentibus oTato-tnaogulanbus obtusiusculis, pelalorura unguibu9 exserds, lamirfae sicco rub^A .. ..

Hab in *Afghanistan* (cl Griffith N° WO)

Caulis speciraims mei semipedaiis, folia bipollicana 5-3 Ij2 Imeas lata, calyx flonfer eo *M ttpetali* vis major Petalorum uogutbus eisertis prster alias nutas-a speciebus Indicts affinUius dnttinctain.

VISCABIA SAETORH BOISS

V. perenna caule erecto glabro superni visudulo infernè remotè folioso, folus glabna ba9i margine crispo-lanatis lanceolatis longè acaminati9 infenonbua et eia sarcalorym stériliim infernè longè attenuate, pamculâ elongatâ pauciflorâ e ramis oppositis remotis cy-mas tnfloras apice gerentibus constant!, bracleis laaceolalis scariosis rubellis, flonbus subsessilibus lateraHbns ramnlo eis longlon insidentibus, calyce ovalo membranaceo rubello dentibus suprâ basin oratam conslnclis apice membranaceo - marginalia obtusis, petalorum laminâ oblongo-spathulatâ obtusâ, coronâ in lacimas lanceolatas laminâ dimidi6 breviores `biparlitA, capsulâ oblongâ (jamori) carpo-phoro dupl6 longion

Hab in castanetis propè *Hagios Petros Peloponneai* ubl legit cl. Sarton fine Han 1837,

Folia surcalorum semipedalia medium versùs S4 Uneas lata calyces circiter *k* lineas longi A V *purpureA Q%* specimine quod vifli



unico sat<sup>^</sup>differre videtur ranns paniculae pauciflons longionbus, calyce brevion ovalo nee oblongo-clavato denhbus medium versus subangustalis. *V alropurpurea* Gnseb calyce clavato et pcesertim carpophoro brevissimo longius differt

AGROSTEMMA GRACILS BOISS

A annuum tolum praeter glandulas papillosas lente solūm perspicuas pihs longis adpressissums obsituin retrorsūm<sup>1</sup> scabrum, caule tenui Virgalo supernē semel bisve dichotomo, folns a basi connatā lalion plunnervi anguslē Uhean-filiformibus acūminalis facie supenon plicalis stnclis, flonbus terminahbus soliLani9, calycis 4ubo cylmdrico basi in pedunculum angustato adpressissimē<sup>1</sup> seluloso nervis b vahdis latis prominēlibus inter eos profundē<sup>1</sup> sulcalo, denlibus e basi lalion subitd contraclis linean-setaccis acutis tubo pauld brevionbus vel cum xquanlibus corollamquenon sequanlibuSj petalorum laminā cuneato-obcordalā roseā basi secAs nervos nlgro-punclatā

Hab in collibus montaois *AnalOltCB*, in *Lydid* sup<sup>ra</sup> *Magnesium Sipyli* et in montibus propē *Smyrnam* (fioiss ) in *Cilicid* (Th KotschyN<sup>0</sup>65)

Planta i-1 i}2 pedalis, folia intermedia 11;2-8 pollices longa basi lineam lala Calycis tubus B 6 hneas longūs via 2 hneas diametro lalus, denies 4-5 lineas longi infernē lineam dimidiam lati. *A githago* differt mdumento adpresso quideiu sed longion non relrorsūm scabro, folns multo lalionbus, calycis densē et longē birsuti lubo inflato oblongo, dentibus lalis longis petala superantibus

PETBOCOPTIS GLAUCIFOLIA BOISS

P perennis glābra glaucescens, caulibus tenuibus basi prucūmbentibus vel ascendentibus dein infraclis erecUs raraosis foliosis, **folns** carnosulis infenonbua oblongo-spathulališ aculiūsculw in petiolum attenuatis caulims supenonBus ovalo-oblongis sessihbus acutis, cymis terminalibus pedunculalis, dichotomis 3-7 flons, bracieis ovatis acutis membranaceis rubellis, peduncuhs vel calyce brevionbos vel sspiūs eo longionbus, calyce elongato clavato membranaceo glabernmo oōscurē nervoso basi truncatQ apice breviter et oblusissimē **denlato, pelalorum limbo oblongo-spathulatoreto, coronas 9 partibus**

lineari-spatulatis oblongis limbo inpl<sup>o</sup> brevioribus, capsula obconico-globosa carpophoro squilongo suffulta. S denibus A aide revolutis profunde dehiscente, semibus mgns mtidis subcompressis ultraque facie subconvexis umbilico albo barbato

*Silene glaucifolia* Lag — *Silenopsis Lagascae* Willk Bot Zeit - 1847? *Petrocoptis Lagascae* Willk Flora ISSi ?

Hab ID inonlibus Asluncis al Puerto del Aramo (Herb Pavon), propè *Penafurada* (Lagasca)

Affirm habitu et charactenbus *P pyrenaeae*, base differt folus caulinis magis rotundatis oblongibus, bracteis herbaceis, calyce conico campanulato basi multo minus attenuato 3 nec k i<sup>^</sup>-B lineas longo, coroniffi lobis acutis, capsula carpophoro abbreviato dupl<sup>o</sup> longior; seinina paulo majora sunt factibus nun coacava Nunc huc spectet *P Lagascae* Willk loco citato ob calycem 2-4 lineas tantum longiorem dici non incertum est

ACANTHOPHYLLUM STOBILIAE Boiss

A glabrum dumosum ramosissimum, ramis erectis reinoliusculè foliosis, folus longissimis acerosia Inque lobis bilatis rigide palmatis, cymis densiusculè corymboso-fasciculatae in internodiis summis breviter pedunculatis, bracteis glabris subulatis acerosis reclis calyces subaequantibus, calycibus sessilibus cylindricis nervosis glabris denibus lanceolatis acerosis rubellis, petalorum laetibus albis vel pallide roseis oblongo-lanceolatis utrinque atenuatis acutis, capsula

Hab In ditione *Beloutchi & Tanubi* deteul cl et araiciss Dr Slocks

Folia pollicaria vel sesquipedalica, cymarum pedunculata 6-8 lineas longi, calyces 3 1/3 lineas longi Ab *A sponso* Florae Aegyptiae cum magis affine differt glaberrime, folus longioribus crassioribus, bracteis non squarrosis recurvis, denibus calycibus a basi sensim attenuatis nec e basi ovali anatis, petalis acutis nec obtusis

ACANTHOPHYLLUM SQUARROSUM Boiss

A lotum indumentis brevi cespulo pubescens ramosissimum ramis approximatis foliosis internodiis, Joints acerosia triquetris-subulatis rigidè patentibus, cymis pluribus dense fasciculatis breviter pedun-

culalis corymbos termmales formantibus, bracteis Inquetro~subulatis acerosis squarrose recurvis calyci subsequilongis, calyce sessili breviter el dense pnberulo cyhndnco apice conslucto denlibus lanceolatis a basi sen si m attenuatis aceroso-pungenhbus, petal orum tauce roseâ laminâ albidâ efliphcâ aculiusculâ

Hab in *Per&id* australi (Auchei N° 4268),, m andis prope *Schiraz* (Kotschy coll 1842 N° 440 sub *A spmoso*), in dilione *Beloutcfaatan* (cl *Stocks*)

Ab *A spmoso* Florae AUaice distinclam folu\* crassionbus, bracteis longionbus validionbus, m florescentia^ tola^den si As pubescenli, denlibus calycinis magis conslncUs lanceolatts aceroais nee e basi ovalâ acununahs Petala aliter colorala acutiora *A Stocksianum* differt glabntie, cymis minus densis, bracleis rectis, calyci9apice vix consti ictiSdenlibus longionbus, etc

#### ANTHOPUYLLUM LAXIFLOHUM BOISS

A densissimè dumulosum ennaceum rarais brevibus intncatis inlernodus brevibus, folus acerosis tnquetro-subulaliserecto-palulis glabns sub lenle parcè puslulalis, asillis folia paulò breviora edenlibus, cymis breviter pedunculalis folia irix superanUbus laiè corymbosis, bracleis subulalis a flonbus remotis, flonbus pedunculis puberùlis calyce saepiùs longionbus msideniibus, calyce breviter veluno oblongo basi apiceque attenuato nervis crassis promiDentibus penlagono in dentes lanceolatos acerosos abeunti, pelalorum laminâ albâ oblongo-iinean oblusâ vel subretusâ

Hab in regno *Cabuhco* propè *Khuggah* (cl *Griffith*).

Suflmlex densissimè ennaceus 4K polhcans, folia eis *A spinosi* lenmora 6-8 lineas longa Calyces ferè tees lineas loogi Species in^ sigms habitu *Alatnem juniperinam* quòdam modò referens flonbus laxis longè pedunculalis nee sessilibus basi bracteatatis a reliqms generis distinctissima

#### ALSINEJE

##### SAGINA REUTERI BOISS (Sect *Saginella*)

S annua parcè glanduloso-puberula nana letramera, cauiibus nmerosis ereclo-palulis ferè a basi dichotome ramosis nodis appro-

iimalis, fohis brevibus anstaUs basi cilialuhs, pedicellis setaceis glanduloso-hirtis calyce nullò longionbus fruclifens erectia vel inclinatis, sepalis. ovato-oblongisglabns muticis apice subincurvia fructifens capsul® applicahs eâque brevionbus, pelalis nulli9.

Hab circa *Matrilum* ubi legit vere 18&1 antic Reuter

Plantula *i-l* If2 pollicans, folia caulina vix lineam longa, floras el capsuls eis *S proeumbentts* dimidid minores, ab eâ pedunculis fructifens rectls, sepalis capsulae"applicalis distiocta *S apetalceel S patuke* Jordan propiûs accedit, pnor differt folus elongatis, sepalis9 in crucem expansis, posterior prseter habiium procerum laxum capsuld calycein noa excedenti

SAGINA FASCICULATA Doiss (Spcl *Spergelkt*)

*S. perennis* glabra pentamera, caulibus basi densè foliosis prostratis filiformibus ev. aiillis approximatis ramulos brevissnnos densè foliosos ssepiûs subfalcatis incurvos edentibus, folus basi longiusculè connabs subulalis slnclis nervo crasao percursis longiusculè anslalis, pedunculis (erminalibus solitarus erectis glabris reelis calyce muUo-dês longtonbus, sepalis oblongis oblusis muticis capsulâ pauM brevionbua, petalis albis oblongis calycerasubaequântibas, seminibuB remformibus Is^vibas

Hab in montibu^JVaf*OTTOB Gallicce* in raonte OH dicto et in syWâ *Irati* (Fèrat in herb Fauchè nunc meo sub nomine Sp *saginoidls*)

Planta habitn formas laxas *Jls ncArr>iB* quodammodò referens sed folus mult6 brevionbus minõnbusque donata taudicuUproslrati teoues 9-3 polhcõs longi,foha atncta lineam ant paulò ampliftfl longa, flo'res et capsuln eis *S saxatilis* pauld minores a qu4 folus parvis strictis ex axillis crebrè ramulifens longè anstatis nee muticis discedit *S g|ribrâ W* et *S pilifera* ca^ens negleclis corollâ calycem longè supejanh statim distinguuntur

BUCFONIA WILLKOWLIANA BOISS.

*B. perennis* basi suffrutesceos multicauhs cauhbua erectistenuibas glabns sgperné dichotomé et breviter ramosis, folus IUiean-aubulalis margine cihalo-scabns acutis infenoribus erecto-patulis caeterIB stnet» internodio 3-3pl6 brevionbu&, flonbus ad ramorum extrerailalem

uymas irregulares 1-3 floras formanLibu> eiibsessilibus, sepalis sub-  
 iBquilongfs lanceolalis acutis obsolete et obtuse trinervus lat6 niem-  
 branacco-margmalis, petalis oblongo-spathuialis calyce tnenlc bre-  
 vionbus, filamenlis pelala aequanlibus qualerms, stylis ova no plus  
 dupI5 longionbus, capsula

Hab in slenlibus moilis S'' *Moreno*, ad viam regiam inter *Venta*  
*de Cardenas* et fauces *Despenaperros* (Willkomm ineunteSept \*84B  
 sub *B perenn*)

Habitus et eaules basi suffrutescentes *B perennis* qua? longè distal  
 flortbus pedunculatis, sepals K nerviis, stauimbiis 8 filamenlis ab-  
 brevialis, slylis brevissimis *B macropetala* Willkomm e descnp-  
 tione flonbns magma pedunculalis, sepalis qumquenervns \aldè in-  
 fequalibus, petalis calyccm subaequanlibus a noslrà longius differl

JJUFFOMIA KOTSCHYANA BOISS.

n perennis basi suffrulicosa mullicanlis, caulibus ereclis slriclis  
 glabris apice stridè ct dichotomè ramosis, folns lineanbus mncro-  
 nahs stricdssimis in dm is margine basi ciliatis, cynnilarum 1-S! flora-  
 rum flenbus pediinculo tenui calyce mUllò longiorl suffultis, calycis  
 glnbn sepalis lanceolahs acuminatis qiiinquenrvus latè sub apicem  
 iisqu^ al bo marginalia, petal is albis lanceolatis aculis quaterms ca-  
 lyce irientP longioribus, filamenlis senis petala subaequanlibus, stylis  
 ovario sabajqmfontis, cap&ult calyce brevion, seminibus oblongis  
 compressi!) dorao Ienuissim6 tuberculatis

*B macrocarpa* var *grandiflora* Fenzl ii> Kotschy pi Pers  
 bor exs

Hab in monle *Elbrus Persia* propè *Derbend* (Kolschy loc cit  
 N° 411)

Cauies pedales, folia inlernodus inult6 breviora 5-7 Imeas longa,  
 calyces 2 \\k lineas longi *B macrocarpa* Ser nullis notis a noSlrA  
 plants recedit, mfloresceniâ ramosissimâ, flonbus ferè dimidid mi-  
 nonl us octandns, capsula sepala obtnsa t'xcedenti, semimbus mi-  
 noribus etc

LEPVUODICLIS TEWERA BOISS.

L. perennis? lenernma, caulibns lenuibus elongatlsfohoaisvaldè  
 inlnctis glabris, fblns petiolis eis, tongionbus puberulis patulis suf-

fultis tenens subeiiervus pellucidis utrinque altenuatis acatiusculis, floribus peduncuhs solitanis axillanbus longiasimis fleiuosis pubescentibus suffulhs, sepalis 5 vindibus auguste albo-marginatissubenervus extus puberuhs lanceolahs aculiusculis, pelalis quinque hneanbus calyce subduplò longionbus, slamuubus decem, slylis cihssiihè deciduis 3? 8?, capsulà bivalvi lenuiler membraiiceà calyce subbreuion, scmimbiis duobu9 angulato reiiiformibus seriatim el acutè ecbmalo-tuberculjtis

Hab in raontibns *Pushut* ditionis *AffghSnistan*, (cl W Gnffth sub N° 1669 e\ herb Lemann)

Planta tenemma cauhbns inlncalissimis habitu *Sullarias* quasdam aul formas laxas *Jrenanoe pybe&cenhs* poliu^qnam alias spècies genera referens Folia peliolis poUicanbus longtonbusque suffulta 6-7 lineaa longa circ 3 laid, pedunculi pollfcares longioresque, pelala angusla e sicco fere %\}% lineas longa Habitu, flonbusquè sparsis axillanbus nee cymoso-pamculaUs a reliquia generis aliena serf foruii capsule et seminum cum eis optimè congruens

STELLARU PERSICA BOISS (Sect *Ev&tellaria*)

St. perenms glabernma, cauhbus diffusis tenulbus quadfanguhiribus nitidis ramosis, fo|ns sessihbus lanceolaltHineanbus acutiosculis uninerviis glaberntnis, pallidè virentibus, flenbus alartbus-ad partera supenorem ramoruqi dichotomorum paucis 2-3 longè pedunculâlis, bracteis lierbaceis, sepalis lariceolalis aculis trinervus, pctalis biparlitis calycis longitudine

H<b. In monte *Ellwind* Persia;</Vuclier-Eloy M° 610),

Folia intermedia 5-7 lineas longa lineam lata, pedunenb poUicaresi flores magRiliidinis eorum *St gmminece* quce differ! inflorescentià corymbosè multiflorà, bracleis scanosis Affinis quoque *St cra&si-folia* qua bracleas quoque herbaceas habet sed sepalis enervns corollà superatis dtfferl.

ALBINE MONDYI BUISS (Sect *Sabuhnece* Fenzl)

A annna tola partem supenorem verstis pihs tenuibas palulis glandnlosis hispidula, caulibqs erectis filforiDlbus parcfè et slrtctè ramosis, foliis palhd6 virentibus liipari-snbulnlis'acuUasciiliS'^lrtcLis parle

inferior! trinervns, pedunculis stnctis calyce dupld longioribus, ee-  
 palis> lanceolatis glanduloso-pubescentibus setaceo-acuimnals Iriner-  
 ms angustè albo-marginalis, petahs oblongis calyce subduplb bre-  
 vionbus, stanunibus quinque, capsulâ calyce subbrezion

Hab in *Africd boreali*, *Ain Teukna* prop6 Tenfet *el had* (cl  
 Afunby)

Planta ex raeis specimibus 2-3 poHicana. flores et capsuloe eia *A*  
*tenuifohcB* Wahl Jordan cui valdè affinis cst paul6 majores Ab eâ  
 differ! stnclitie ramomm pedunculonimqne, petahs calycis propor-  
 tione brevionbu3, sepalis setaceo-acuminalis, glandulositate Inter  
 species a Mines *A hybrida* VH Jordan quae quoque glandulosa est  
 pedunculis erecto-palulis, pelalis ealycem subsquantibus et *A vis-*  
*cosa* quoque slncta flonbus saltern dimidiî) minonbus sepaliaque  
 mu](6 minus acuaunatis differunt

ALSIRE LVDIA BOISB (Sect *SabulinecB* Fenzl)

*A* annua nana praeler ealycem glabra, caulibus a basi patentim ra-  
 iDOsisBimis ramis lateralibus ^aepe` recur vis omnibus plunès et diva-  
 ncatim dicholomis, folnsa basi latiori linean-setaceis mucrone plûs  
 minûs recurvo ternunatis, peduncuhs setacels calyce 2-3pl6 longion-  
 bus palentibus, Nepali? glabns vel glanduloso-prlosis lanceolahs acu-  
 minatis trinervns membranaceo-marginatis, pelalis obovatis calyce  
 siibbrezionbus, slamimbus quinque, capsulâ oblongâ calycis longi-  
 tudme

Hab in regione mediA montium *A sice minoris*, monies suprâ  
*Bournabat* propè *Smyrnam* (Botss Maio 18ft9>, monB Callmujs suprâ  
*Dentsleh* (Boias), .raons *Solgma Lycim* (Heldr)

Planta 2-3 pollicans, flores ferè minores BIS *A viacosce* quseprsCer  
 slnchtiem omnium parlmm pelalis calycem medium vix sequantibus  
 glandulositaleque differt *A Lydia* habUu divancalo *A Mesogtta-*  
*nam* Doiss quoque refert quae slalim distinguitur glandulositale,  
 anthens violascenlibus nee pallidè luteis et pr^tereâ decandra est  
 et omnibus partihus 4upl6 major *A &ubtili&* Fen%l in Kotschy pi.  
 Pers bor affinis quoque sepalis oblusiiisculis obsoletè nerrosiss pe-  
 tallsque calyce brevior'ibus differt

Var p *Kotachyana*. Elatior ramosior, flores paul6' minores, sepals  
 brwiora minûs cfcuminata

R 218

*A. tmuiifolia* Fend. in Kolschy pi Taun non Wabl  
 Hab. in Tauro Cilicice (Kolschy N\* »7)

ALSINE CAUCASICA Boiss. (Sect. *Mtnuarttete*)

*A.* annua nana, caulibus rigidis villosis a basi ramosis, (bins glabris puberulisve tinnervis a basi lalio linean-subulalis cauknia augustissimis floribus multo lalio apice valde alte Huatis patentirecurv., flonibus subaessibus in cyma capitulifloras densas foibus bractealibus aquarose patenlibus cas longe superanibus involurra- (as ad ramorum brevium extremitatem aggregatis, calycis glabro conici lacinis msqualibus lanceolatis albido-tinnervis in mucronem plils mm As recurvum abeuntibus, pelalis nullis, 9tamimbu 8-10 pennynia brevissimis basi membranaceis subcoatis, capsula cylindrico-comata calyce dimidio breviori, seminibus reniformibus laeviusculis

*Als campestris* Fenzl in Ledeb. F) Alt non Boiss nee Loeffl

Hab. in desertis diliois *Elisabethpot Georgia: Caucasina* (Hohen 1854 coll. Unilin sub *M. montana*)

Species valde affinis *babilu* et characteribus *A. montana* Boiss = *Mtnuarttete montana* Linn. quae Hispaniae et Africae borealis indigena manifeste tamen differt (bins floralibus lalioribus patulis nee squarrosorecurvis, flonibus in cyma paulo diutius contractis dispositis nonnullis pedunculo puberulo calycem dimidiatum sequantibus, sepalis apice rectis nee nucatis, aemibus distincte (uberculis *A. sclerantha* et *M.* inter alias notas calyce basi gibboso *A. chotoma* Fenzl in Hispania bucisque tamen obvia folis omnibus strictis basi lanatis, sepalis asquilongis etc. differunt

ALSINE TAICHOALYCA Heldr. et Sartori (Sect. *Minuartieoc*)

*A.* pevennu mutticaulis, caulibus prostratis nadiisculis ramosis, ramis brevibus breviter tuberis cyma denatis corymbosas ferentibus, folis e basi latius trinervi subulatis brevibus unimerviis oblongis basi ciliatis caeterum glabris videntibus, floribus brevioribus basi scarioso-marginatis, surculis stenilibus axillaribus brevibus dense et stridè foliosis, pediculis calyce brevioribus braeas summas ibquantibus, calycis basi truncati glabro post anthesin clausi cyndrici sepalis angustè linearilanceolatis sequantibus acuminatis fasciis vident



nervo albo bipartitè margimbiis albo-scanosis angustion percursis ,  
 pofalis obovato oblongis oblusia calyce quadruplò brevioribus , sta-  
 in inibus deocm pelala paulo superaiilibu9 capsulà calyce quarA  
 parte brevion, semuubtis oblongis subcompiessis parallele bicruri-  
 bns oculo armato leviler luberculatis

*Aienaria trichocalycina* Ten et Guss Viag in Abrozz = *A lime  
 confusa* H el S mss

Hab in cacuminc monlis *Parnassi* (Sarlori' Heldreicli!)

Pianla lialntu el folua ad *A rostratam* H. K. valdè accedens  
 sed cyma& densiores ramis brevissimis insidentes, calyces longiores  
 (2-9 ljh lineas longi), sepala pro longitudine angustioraaculiora, pe-  
 tala brevissima nee calyci suba?quilonga, semina vix nee senalim et  
 acufe tubercuTatri Ex auctonlalc cl Gussone, qui specimina Grseca  
 Itahcis comparavileas species quarum Neapohtana nobis etiam quoad  
 ilpsrnplionem plane ignota conjiuiximns-

AisiNt SCLEHANTHOIDES Boiss et Noe (Seel *Minuartiew*)

A peienms mullicaulis, caulibus puimlis ereclis vel ascendenUbus  
 basi ramosis simphcibusve breviter puberulis slnctè et densiusculè  
 feliosis in cymas corymbosas parvas densiusculas abeun,ltbus, folns  
 e basi paulò latiori Irinervu subulalis brevibus in mucronem oblu-  
 siusculum abeunlibus, floralibus triaogulanhiis aculis basi latè mem-  
 branaceis, peditnculia calyce brevioribus bracteea superantibus pu-  
 berulis, flonbus parvis, calycis basi rotundati glabn post anthesin  
 plus mintsvè clau^i sepalis lanceolalis acutis fnsçãvindi nervo .an-  
 gusto albo bipartila margimbus albo-membranaceis aequilald. percur-  
 sis, pelalis oblongo oblusis calyce tnente bievionbus, capsuU caly-  
 ce m suhaequanli, semimbus

Hab in subalpmis *Anatolm* onenlalis (Nod Jun 19K3)

Canles 2-S 1;3 pollicares, folia 2-3 lineas longa, ^ymdersubcapitatae  
 10-iS flora:, (lores e minimis affimum panl6 ultrá hneam longi quâ  
 notâ et flonibus confcrLis nee laxis ab 4 setuceft et *AnatolicA* facile  
 dignoscilur

ALSINE CIJPPADQCICA BOISS (Seel *Mtnuartiew*)

A ptTennis basi sufTrulescens, ramis lenuibus infineinè infraclisdem  
 f roods bieviter puheriilis ba<i densiusculè supernè remote fohosis

cymas parvas paucifloras ferentibus, foliis brevibus lanceolato-subulatis trinervis obtusis breviter puberulis strictis, floralibus triangularibus praeter nervum medium scanosis, flonibus laxiusculè aggregate, pedunculis pubescentibus calyci xqmlongis longioribusve bracteis superantibus, calycis basi subtruncati brevissimè glanduloso-puberuli lacimis lanceolatis acutis fascià vindi nervo albo saepe obsoleto bipartite marginibus albo membranaceis sublatione percursis, petalis oblongis obtusis calycem paulò superantibus, capsula

Hab. in *Cappadocia ad Euphratem* (Aucher Herb. d'Or. N° 597)

Valdè affinis plunni notis *A. setacete* cujus vanelales foliis pubescentibus quoque occurrunt ab ea saltem differre videtur foliis paulò crassioribus vix 2 lineas longis, calyce parce et breviter birlo-scabundo *A. granuliflora* Fenzl. cujus descriptio cum nostrâ specie sat congruit sepalis ovatis oblongiusculis differre

ARENARUM GIBBITUSII BOISS (Sect. *Euthalia*)

A. perennis caulis suffruticosus ramosus nudus ramos abbreviatis rectis densè foliosus edentibus, foliis parce et brevissimè puberulo-viscidulis tenuiter subulatis rariè raris pallidè virentibus subincurvis ramos detersis resticentibus, ramis floriferis terminalibus viscidulis remotè foliosis apice ilichotomè 2-8 donis, braeis triangularibus acuminatis, pedunculis sifidis calyce 2-3 longioribus, calycis breviter ovatis viscidulis sepalis orbiculis oblongis breviter acuminatis mucronatis basi obscure trinervis margine acinoso, petalorum calycis sesquialongiorum lamina bivalvè integrâ, capsula calyce subbrevis

Hab. in monte *Koh-i-Baba* districtus *Afghanistan* ad alt. 15-15500 pedum (rel. Gniffilh)

Suffrutex ul videtur semipedalis vel procumbens ramosissimus, folia lennissima nigrescentia sed non pungentia dicenda 4-8 lineas longa, rami floriferi 1-3-2 pollicares, flores in genere nudiusculi, sepalis circiter 5 lineas longa. Affinis *A. Lesterhana* Fenzl. et *A. Persiana* Bam (qua varietas ponsis ex cl. Penz) quae ab *A. Griffithsii* differant ramis foliferis breviter rosuliformibus, foliis mirè raris longioribusque acerosis saepe pollicem cl. amplius longis.

ARENA m A VALENTIISA DOISS (Sect *Euthalta*)

A perennis, rlmomate cylwdrico suffrutescenti caules numerosissimos diffusos saepè mtncalos filiformes retrorsùm brevissimè. papilloso-velutinos flexuosos ramosos vel simplices a pice tncbotome subtnfloros edenli, loins lmeari-subulatis mucronalis uninervus margmibus revolulis sub lente areolalo-punctatis basi papillan-ciliolalis raeterùm glabns patuhs internodio subbrevionbus ob aullas fasciculigeras primâ fronte verlicillatis, flonbus peduneulis eis ty-6pl6 longioribus ad medium articulatis bibraeteolalia retrorsùm birtulis suffullis, bracteolis mimmis tnangularibus aculis, sepalis ovatis glabns sub lenle areolalts niliduliş uninervus «annalis aculis vel carinâ productâ breviter mucronallB margine anguslè membranaceis, petahs ublongo-spalliulalis calyce duplò longionbus, capsulâ calycem pauld superanti ovalo-rolundâ valvis subrevolutis profundè dehiscenti, seminibus remformi-compressis obscurè tuberculatis

Hab in regno *Valentino*, mona *Segarria* suprâ urbera *Ondatra*, monies saxosi *Mongb* versus *Fanum Diance* (*Denia*) Herb Pavon)

Habitus *Mcehringia*, <jaules 2-8 pollicares, folia majora 3-4 lineas longa, flores pauliilùm majores eis *AT hispidw* cm afbms esl sed que facilè disdngritur mdumento longo patulocrispulo, follis non margine revolütis nee areolato-punclatis, sepalia acutionbus lat6 membranaceis non cannatis, petalis calycem parùm superantibus, semibus dimidi6 minonbus tuberculatis *A etnerea* sepalis cannatis qjuoque donala longius diJfert caulibus robstis ereclis, foliis oblongo-lanceolalis nunimè areolatis, etc

ARENARIA NEVADENSIS BOISS. et Reut (Sect *Buthalia*)

A annua multicaulis obscurè vircnli-rubella tota mdumento brevissimo viscido obsita, caulibus erectis pumilis slnctè raroajs, folds prieter indumentum viscidulum baai ciliatis infenonbus ovatis obtusis in petioliuin brevem anguslatis caetens lanceolato-hneanbus sessilibus canaliculats oblusiusculis intermediis recurvis soperienbus slnctis omnibus internodio brevionbus, florum cymis lermnalibus corymbosis ramis pedunculisque slnctis his calyce 1-9pld longionbus, calyce brevissime puberulo vix viscido fructifero oblongo-cylindnco,

sepalre lanceolatis obtasis margine scanoso inlerioxum parte. herbaceâ muUò angusliore, petalis oblongis oblusis calyce Iriente bcevisionbus, capsulâ ovato-oblongâ calyce Inenle brevion, senunibus reniformibus sub lenle minute punctatis

Hab in rpgione nivali supenon montis *Mulahacen* (Bourg pi exs 18S1 N° 1521 sub *Ar serpyllifolia* var)

Ab *A serpyllifolia* L — *sphcerocarpd* Ten distincta indumento, caulibus abbrevialis ramisque slnclis, folus caullms auguslalis, calyce longior! (3 lineas longo) fructifero ut et capsula attenuato nee venlncoso, sepalis angustis angustè membranaceis, capsulâ calyce brevion *A Marschnaii* Koch et *A conferta* Boiss magis affines indumenlo differunt **folns** ova'tis, pedunculis abbreviatis, calyce brevion

Obs. I *Aren. Stygifi* BoiSs et HehJr pi exs e monlibus *GroecicB* ex plunum speciminum compafatiohe es monte *CheJmo* ad fonteoi *Stygis* (Heldr), *Cyllenes* (Orph), *Olympi Thessalice etParnassi* (Heldr) est nobis nunc *A Cretica* var *Slygiu* indumento densè velulino subpanoso, sepalis paulb lalionbus dislincla

Obs. II *Aren filicaulis* Fendl ex specimibus cl et am Grisebach et comparatia **alus** Auchenams ejusdem loci (montis *Atho&%* miñi videtur forma polymorphae *A pube&centis* Urv .

SICNCHU GBACA Boiss et Heldr

H annua glabra glauca mullicaalis rann's simplex, caulibus pumilis foliosia arcuatis rubellis apke dicbotomè et corymbosè 3-ttflons, folliB oblongo-lanceolalis crasaiusculifaculluscalis unmervils infimis basiatteiuatis, supenonbus ad caulisdivisionemovaloblongis lalè albo-margmatis, peduticulis arcuatis vel flekuosis crassiusculis apice mcrassatis catyce 2-& pl6"lopgiOr>bus, sepalis tflongo-lanceolatis glauco-virenlibus acutis nervp medio crasso basin Tersus cannanti pareursis latè albo-marginatif, petalis ut et capsola calyce tnenle brevionbus, gtaminibus 6- eqoaiibus, styhs apice recurralis sub anthesi ovano subsquilonis

Hab. in montosis *Gr<jscim,* in arenosis *C/ynwrias* propè *Arachova* fBoiss. AprU 1«48), in cacumine mentis *Pentelici*{He\dr) in *Groecid* loqo non notato CAucher N<sup>B</sup> 685)

Caules specimenum majorum (nollicares, Qores paululum majores  
 cis *M octandrcB* cui sol urn affims est et qiue facile dignoscitur laeto  
 virore, caulibus et pedunculis graalionbus procerionbus, folns lon-  
 gionbus atlenualo-acuminalis ew dichotomise inferions nuuquam  
 rmembranaceo-marguialis, sepalis anguste marginatis, stylis brevis-  
 sunis, capsula Cdlycem sutaequanli

CERASTIUM OYANUM BOISS (Seel *Orthodon annua*)

C annumm toluin patule glanduloso-visciduin obscure virens cau-  
 libiia creclis fragilibus divancatun diciolomis ramosissians, folns  
 infenonbiis oliovatis obtusis supenonbus lanceolato-lineanbus acu-  
 liusculis summis bracleisque brevibus ooinino herbaceie, pedanculis  
 lenuibus longionbus calyce 1 1<sup>^</sup>-2 plo longionbus post anltesin re-  
 frachs frucLifens erectis capsulam erectam sustinenlibus, sepalis pa-  
 Inlc liispiduis lanceolatis acutis angusl6 albo-uiargtnalis, pclaliŝ ca-  
 l>ce subbreuiunbus, capsuia caiycc subduplo longion manifesto cur-  
 vala, semimbus minunis dislinde el aculiuscul<sup>^</sup> luberculahs

Hab in monlanis *Hispanice*, Sierra de *Carascoy* prope *Murcia*  
 (Bourg pi. Hisp exs 18b2 sub *Q pumilo*), in *Arragonid.* circfi  
*Alcaniz* (am prof Col metro)

Cum G *pumtlo* habel quidera notas communes bractearum her-  
 Jiacearmn, peduncilique brevis fructifen erecli capsulam reclam  
 sustentis sed ab eo dislinguitur pedunculis fionfens multo tenuion-  
 busferé capijlanbus brcvioribus, capsule non rect4 vel rectiuaculi  
 sed parle exserU valde ciirvaU, semimbus acutè nee obtusè luber-  
 culahs, stalio insuper monlanv nee manlima Charactere capsuls  
 curvatse magjs accedit ad G *fragilhmum* Doiss. quod omnibus par-  
 lilibus robustius et crassuis, ppdunculis fructifera deQexis vel ereclis  
 capsulam inchnatam ferentibus, semimbus tnplò majohbus obtusè  
 tubercgialis ^alusque diffcrt notis

In cl Desmoulins Suppl ad Cat pi Dord. descnbilur p H6. forma  
*C pumili* sub nomine *C pumih 3 tncurvt* Desin Si hajc varietas  
 spectat ad specmuna Aslurica in monte *Pico de Tozaq\ie* lecla (Du-  
 neu pi aslur N° 89S) quod ex verbis cl autloris ^qui (atnen huoc  
 numerom collections non cifal) mtellcxi, haec plan la raep sensu ob  
 rapsulam super pediinciilm inclmatain el apice ourvalulain *Q glu-*  
*ttoso* Fries jiolnm quam *C pmmlu* adnumcranda en I

GERASTIUM ATTICUM BOISS et Heldr. (Sect *Orthodon annua*)

C. annuum totum pilis mollibus pilulis non glulmosis velulino-bispidum, caulibus erectis pumilis dichotome et strictiuscule ramosis, folis ovalis oblongisque obtusis, bracteis herbaceis villosis, pedunculis calyce 1 1/2-2 pl6 longioribus post anthesin refractis laeviter erectis capsula inclinata, sepalis hirsutis lanceolatis vix margine scanosis, petalis calycem quartam parte superantibus acutiuscule bifidis basi ciliolatis, filamentis glabris, capsula calyce paulo longior

Hab in cacunioibus montis *Partes Attice* vulgarissimum (Boiss Mam *mV*)

Plumis nolia indumentis et habitu *G brachypetalo* affinis sed humilior, ramis magis strictis brevioribus, floribus magis confertis, ab eo prater petala calycem superantia qua: nota in genere vanabilis esse videtur differre basi petalorum cilia nec glabra, filamentis glabris nec pilosis

CEBASTIDIUM ROBSEI BOISS. et Heldr (Sect *Orthodon annua*)

C annuum totum pilis patula obsitum Insuper-viscosissimum, caulibus a radio subdivacatim pinnatis dichotomis, folis ovatis oblongisque obtusis, bracteis oblongis acutis herbaceis, pedunculis crassis post anthesin patulis demum erectis capsulam lacteam ferentibus calyce 2-3 pl6 longioribus, sepalis lanceolatis acutiuscule scanosis, petalis calyce paulo brevioribus basi ciliatis, filamentis obovatis glabris, capsula calyce sesquialongior recta, seminibus acutiuscule tuberculatis.

Hab in lapidosis regionibus alpinae *Parnassi* (Heldr )

A *C brachypetalo* ex parte distinctum viscositate, caule jam infra median) subdivacatim ramoso, pedunculis crassioribus, petalis basi confertis.

## PARONYCHIA

## SPHAGNUM PENTANDRUM Linn

Var *intermedia* Boiss — Ala seminis ejus diametro fere dimidio angustior Disci tuberculi evidetiores acutiores Inter *S arvensem*

et *S pmtandram* quasi intermedia sed pelala acuta el characteres hujus speciei

Hab in dilione *Affghamstan* (cl Griffith N° 1629), *Belout&chistan* (cl Stocks), in insults *Canariensibus* (Bourgeau exs 1848 N° 410)

SPERGULAHIA FINBMATA BOISS et Reut

Sp perenrus rhizomale incrasaalo caules numerosos basi suffrute9-centes ramosos proslralos dein ascendenles ramosos edenti, ramis tuberculati9, stipulis scariosis argenteu e basi ovalâ longè acuminatis acutissimis foln terliam \el dimidiaui partem aequanbbus, folus glabris carnosis angustè linean-subcylindricis saepe flexuoso-curvalis in mucronem acerosiim tenuissimum folu diamelrum saepè aequantem abruphusculè abeunhbus, a\*illis fasciu9culos foliorum stipularumque ininorumedentibus, racematerminalibus tandem laxiusculis brevibus infra basin (anturn foliatis ad basin pedunculorum stipulas e basi ovata longe et lenuissime selaceas gerenlibus, pedunculis glanduloso-puberulis tandem patulo-subdeflexis calyce 2-Spl6 longionbus, sepal is hirsuto-glanduiosis oblongo-lanceolatis obtusiusculis albo-marginatis (in sicco) basi elevalim trinervns, petalis roseis ranus albidis oblongo-lanceolatis aculis calycem superantibus, stamibus decem, capsula calyce paulo brevion, semimbus paucissimis aptens exceplis compressis planis Ixvibus ala circulan eis subsqmiata pròfunde firabnato-multifida circumdatis

*Armana flmbriata* Salzmann pi exs Mss.

Hab in arenosis manlimis cm 4 *Gibaltariam* (Salzm), *Gades herb Fauchè<sup>f</sup> Ball'*)» *Tingidem* (Boiss et Reut), et msulas *Canarienses* (Bourgeau ad *Teneriffam* N° 6 et *Lcmcerottam* i\° 303).

Caules B-16 pollicares, folia 7-9 lineas longa, in specuninibus Cananenslbas etiam longiora el tenuiora Flores el capsulse'magnitudims eorum Sp *mediae* et *marginatm* qulbos af^nis est sed'a quibus cximiè differt cauhbus infemè magis sulTrutescenlibus, folus tenUionbus longè mucronalo-acerosis nee muticis submudcisve, stipuliselongalis acuoiinatis, 9epalis birsutis trinervns nee subeoerviis, petalis aculionbus elongalo calycem superantibus plerumque roseis, alis semmum non tan ùrn denticulatis sed profundi fimbriatis

## HEUNIARIA BOBTICA Boiss et Reut

*H. perennis*, caudicibus suffrutescentibus filiformibus flexuosis fragilibus prostratis saepe elongatis ramos ascendentes erectosque fragiles articulatos circumcirca dense brevissimè palulèque albo-velutinos edentibus, nodis subincrassatis, foliis ovato-oblongis ovatiaculiusculis basi brevissimè attenuatis utrumque brevissimè cinerascens-velutinis, internodis inaequalibus foliis paulo longioribus, stipulis (nangulatis aculis, foliis breviter pedunculatis glomeratis paniculae angustae pyramidales terminales formantibus, ramis paucis a basi densiuscule foliosis inferius longioribus, foliis ad ramorum paniculae basin ovato-subrotundis parvis glomerulos floribus non excedentibus, foliis ovato-oblongis, calycis laciniis ovatis cucullatis obtusis sequalibus brevissimè et brevissimè albo-velutinis, antheris parvis ovatis cernis stigmatibus duobus subsessilibus divergentibus

*H. incana* Boiss Voy Esp non Lamark.

Habit in umbrosis montanis Hispaniae australis in regno Granatensi, Sierra Bermeja, Sierra Tejeda, alt 2000-3000' (Boiss)

Caules 5-8 pollicares prostrati, rari hinc pollicares erecti, paniculae I-9 pollicares ramis inferius 6-7 lineas longis Flores eis H. m. cence subminora. *E. incana* Lam quae sola cum nostris comparari potest valde differt caudicibus minus fragilibus, indumento totius plantae longo aspero, foliis lanceolato-oblongis basi longe angustatis floralibus glomerulos floribus longe excedentibus, foliis dispersis, calycis laciniis sparsis et longe setosis apice glabrescentibus.

## HEMIARIX PAIWAMICA Heldr et Sartori

*H.*, perennis multicaulis, caudicibus filiformibus quibusdam expansis et ramis vix vel rubellis glabris rariis si bene minus puberulis, foliis mihi carnosis glabris ovalibus vel ovato-rotundatis breviter attenuatis, stipulis niveis ovato-triangularibus circaracis longe ciliatis-fimbriatis, glomeratis 7-13 floris sessilibus oppositifoliae racemos. tenues laeva subramososternales formantibus, foliis floralibus glomerulos subpedunculatis, foliis subpedunculatis ovalibus calycis laciniis quinque



aequalibus elbplico-linearibus obtusis cucullatis extus bicviler el adpressiusculè ciliaris hirtuhsque pilis terminalibus non longioribus, anlliens minutis ovalis flavis, stigmalibus sessilibus raris in unum conntvenibus.

Hab inter fissuras rupmin in cacumme montis *Parnassi*, (Sarlon, Heldreich), in pascuis cacumus montis *Olympt Thessali* (Heldr ), *Crete* in monte *Ida* et montibus *Lassili* (Heldr pi exa 1846 sub // *glabrid* var)

Planula habitu // *glabrid* donata quae a nostrâ egregie differit folis oblongis, stipulis ininonibus sordide albis breviter ciliatis nec ciliato-fimbrialis, ramis ramosionibus magis multifloris, floribus fere dimidiò minoribus glabris In specimimbus cretae calceis nonnunquid glabrescunt

## LINEÆ

LINEÆ AHUANIUS BOISS el Ophi (Sect *Eulinum Protolinum* Planch.) ,

L perennans glauco-virens basi saffrulescens multicaule caulibus parte-suffrulescenti nudâ procumbentibus ascendentibusve deinde erectis elongatis (cnuilior virgatis strpernè paniculato-corymbostis infernè breviter pilosis supernè glaberrimis-, fulis inferioribus imbricatis conferlis minoribus ovalo-oblatis breviter mucronatis margine sub lente basin versus parce denticulato-glandulosis praeterea utraque facie breviter pilosis glabrisve, folis superioribus glabris remota lineari-lanceolatis sensim longioribus acumbentibus omnibus strictis rigidulis uninerviis circumcircâ nervo utriusque basi sub attenuatis, bracteis a basi laxis angustis, floribus ad ramorum apicem paucis pedunculis calyci equifloris vel breviter suffultis, sepalis glabris vix oblongo-lanceolatis internerviis valde inaequaliter acutiusculatis membranâ delticulata antheris marginalis, petalis caeruleis calyce (rupto longioribus, stamibus oblongo-clavatis, capsula ovali mucronata calyceni paulo superantibus).

Hab in monte *Kyllene* Peiopeae prope *Tambouritza*, in monte *Chelmos* prope *PUUBO monasterii* (Prof Orphandes) VI Junio.

Caulea |·| |fi pedales a'quando' etiam minores Folia infima 2 lineas caetera sensim aucta 8-10 lineaa longa Florea magnit eorum *h angusttfohi* E grege *L nervosi* quod flonbus majonbus, foliis plunnerviis differt, *L Tmolei* radice annufl, foliis basi subcordatis, sepalis lanceolato-linearibus glanduloso-dentalis capsulaa supcran- tibus distmcli et *L Narbonensts* quod liabet caules a·basi glaber- nmos, folia acuminata nee mucronafa, cory.mbos contractos^ (lores dupl6 majore9, sepaia laid membranaceo-marginata inlegerrlma cap- soiam goperanha, ungues petalorum exserloa

LINUM HENAGREAI Boiss (Sect *Eulinum Protolinum* Planch)

L annum glabernmumflaescena, caule prater raraulum-e collo asp6 orlitn\ breygf|teni patificlorum solitarto erecto dens6 folioao supernd stnctuiscliTeWryinboso-panicilato, folus stnctis angnste linearibus mtegemmis aculis margine subevolulia tnnervus, florali- bus angnstionbus, peduncuhs gracilibas stnctis Undent calyce plu- riis longionbus, 9epalisovato-oblongis abrupt^ acuminatis tfinervua nervo medio basi valdfc prominent mernbranaceo-marginatfs mem- branft interiorum denliculatà, petalis violacets calyce aiibdupld lon- gionbus, stigmatibus lipean-clavalis, capsulae ovals acaminats calyci sabajquilongar septis inlùs pilosis

*I usitatissimum* Boiss in Kolschy pi Pers austr N° 364 nun *I* Hab ad radices montis *Sabst Buschom* prope *Schiraz* (Kolschy)

Caules circiter pedale9, folia 8-9 lineas longa lineara late vel an- gustiora. Flores«t capsulaA rix minores els *h usitutfssimi* quotf fo- liis laliohbas sepUsqae capsulafum glabns díffert. *L humile* Mill, cujus sepia qioque pilosa habet fplià dnplò vel Iripld latiora cap- sulasqtie majores. *L. cmgustifolwm* demque' habitu et foHla magi& affine radice perenni caifles floriferofl auroulosque anno sequenfi flonluos edenti flonbus capsulisque paul6 minortbua dwlfnqitur

LINUM PYGNOPHYLLUM Boiss et Hpldr (Seel *Eutirium Jdenolinum* Planch)

L. perenne glabrum rhizomale suffrulescend raroosissuno, caull- bus tenuibus flifonnibus- procuinbenhbus tnferaè nndis dem den-

sc̄ foliosis simplicibus, folis nunuLis carnosulis pallid̄ virentibus uninerviis **ellipticis** vel elliptico-Uneanbus oblongis mucronulatis infenonbus patulis brevionbus confertissimis supenonbus paulo longionbus erecto-patulis, flonbus 2-3 terminibus pedunculis capillanbus reclis calyce multo longionbus suffultis, sepalis carnosulis punctulatis basi presertim Irinerviis ovalo-oblongis margine raenibranceo inlegerrime) insinichs apice rotundalis oblongis mtenonbus sub apice obsolete mucronulatis, petalis violaceis calyce 2 ifi pl6 longionbus, «Lylis stamina long6 superanlibus, stigmalibus ovato-capitalis, capsule

Hab in lapidosis regionis alpinac montis *Kyllenes Peloponnesi* rarum alt 6500' (Heldr Jul 1848)

Caules *U-b* pollicares tenues prostrati, folia 1 1/2-2 i; 2 lineas longa lineam dim id ram la la, pedunculi anthesi **p<sup>r</sup>fMt<sup>6-8</sup>** lineas longi, flores liagmudinis eorum *L angustifolii* >^»ecies elegans **folis** confertis minutis *L punctatum* Presl. referensquod differet caulibus firmi9 erectis, folis punctatis rigidis aculis, sepalis acummalis *L cai nosulum* Doiss Diagn **VIII** affine quoque habet caudiculos tenuiores basi oon suffrutescentes, folia glauca majora, sepala multo lalius marginata

LINUM STOCKSIANUM DOISS kSec(. *Eulinum Adenolinum* Planch)

*h* pcrenne glaucum caulibus e rhizomale suffruticoso numerosissimis erectis simplicibus raris apice dicto locis tenuibus virgatis foliosis, folis crassiusculis longis hneanbus basi non attenuatis apice aculis subpellucido-punctatis uniuersis stictis inter se conformibus secus caules sparsis, flonbus 1/2 in parte super ion caulis remotis pedunculis erectis calyce **1 if2-3p]6** longionbus suffultis, sepalis ova(o-oblong) oblongis mucronulatis anguste membranaceo-marginatis inlegerrime basi Irinerviis lenuissimieareo-lato-reticulatis, petalis violaceo-rubellis calyce 2 ijspl6 longionbus, stigmalibus capitalis, capsulis ovatis aculis calyce duplo longionbus oblongis marginatis

**Hab in ditionis Beloutschistan montibus alt. 8000'-8000' (cl Stocks).**

Caules pedales, folia 8-6 lineas longa lineam lata flores etcapsulae magnitudinis eorum *L. ustulissimi*, E seclione *L perennis*

ct affinium a qtibus omnibus rimomate valde mullicauli, *cailore* glaudio-cinereo, sepalis pellucidè reliculatis, capsulâ aculâ eximiè differt

LINUX ELBGAISS Spruner (Seel *SyUtnum* Gnseb)

L basi suffrutescens glaberrimuni vinde caudiculis lenuibus nudis proslralis abeunlibus in caules ascendentes simplices nervi inedi et marginum foliorum decurrenliA angulalos, folus anguslè membrana ceo-marginalis infimis conferlis ovato vel oblongo-spalbulaUa in petiolum breviter altenuatis tnnervus aculiusculis caulims oblongo-hneanbus lineanbusqae mfinus tnnervus supenorjbus uninervns omnibus acutis sessilibiTS, glandulis stipalarlbn bims, cym ram,^ 3-5 subsequajibna valde divancalfs sparsifloris, folus florabbus •iti-gustè Imean-acuminatis demiiim palulis sobrecurvis, sepalis anguslissimè bjnceolato-lineanbus acuminalis demum recurvis margme membranaceo denticulatis corollâ flavâ subtnplò brevionbus capsulâ ovalâ aculâ longionbus

Hab in monte *Parnasso* suprâ *Arachova* (Spruner 184-2), in regione sylvaticâ *Otympi Thesli* (Heldr 18S1).

Caules 6-10 pollicares Folia inferiora cum petiolo poHicana 4-B lineas lata caulina null6 angusliora Flores raagaituduiis L. *flwi*. Sepala h Ij2-B lineas lotiga Inler h *flavum* et *campanulattun* ferè medium, pnus differl cauhbus crassioribus, cymis contractis, sepalis multd brevius acummads, postenus aiiem ciijus sepala qiiioqae loiiigè aeura|nata fólna infims nubonbus tminerrns, cymae rams stnclis necr divancalis, coroHâ ampliori calyoe quadrupl6 long^on.

LINUX FLAVUM L

Var *Oriente* Boiss el Heldr

Mullicaulè caulibus slnctis, folds ommibus conformibus strietis uninervus elliptico-lanceolatis basi et apice attenuate acutis, cym ramis brevibus demuin drvancalis

Hab. in *JudceA* cirçâ *Hierosolymam*, (*Rotes.l* propè *Aleppum* (KoUchy pi Ale pp. N° 98), cirçâ *Karput* et *Diarbeku Mesopotamia!* (Noè)

A *L flavo* Europxo dislinguilur cauibus abbrevialis, folns minoribus magis sinclis basi alien ualis omnibus conformibus, cymse ram is magis palulis A *L flavo* var *Pamphylico* H et II folus intuiuis non ovalo - spalliulatis differt

## MALVACEAE

### MALOPE HISPIDA DOISS el Reit

M annua caulibus creclis parce ramosis pedolisque selis e luberculo orlis longis patulis vcl reflexis slngosis, folns suprâ giabm subtilis ad venas cl nervos lupidis infcnonbus longè peliolalis e basi rotundalâ s#pe subobliqu^ ovalis oblongisvc obtusi9 vcl acuhuscillis crebrè denliculalis indivisis vel irregulanler smuato-sublobalis, m-Icimedus brevius peliolalis acutionbus indivisis vel plus minus profunde trilobis inpiLiLisvu parlilionibus lanceolalis^ 3lipulis c basi subcordalii ovalis lanceolatisve naacronatp-acuminatis, pedunculis folia suproma vix superanlibus patule vel relrorsuro Inspidlssimis, involucris pliyllis longe acuininalis sepalisque ad nervos et margines slngoso-setosis lusce terlii parle longionbus, petahs calyce (nplb longionbus cuneato-obcordatls basi longè alteuuatis

Hab circâ *Algenam* copiosa (Bove'I Boisa et Reut t, Jamin pi exs N° 155 sub *St stypulaceti*,)

Species urdumenlo slngoso folusque polymorphic uisigms a qua\ *M Blipulacea* Gav Dcelicse incola diflerl pilis seciis caules el folia paucis vel nullis, folus minonbus indivisis obtuse crenabs, sepalis involucro duplò longionbus, petalorum formâ — Planla 8-10 pollicans, flores magm ferè 3 pollices longi

### MALOPE STBLLIFILIS BOISS et Reul

M annua, cauibusq; ascendentibus simpliciusculis prlis e lliberculo orlis stellato-ramosis adpressiusculis in parle supenoñ coplosionibus obsilis, folus ohlongis vel rliomboideisiodivisis veHrregulanlersiaualo-subtobatis basi cunealis rotundalis vel ranùs truncato-subcordatls oblusè circumcircâ crenalis sublùs ad nervos et margines lnrlis ij»-

fenonbus longè supenoribus breviter peliolatis, peliolis ramoso-pilosis, slipulis infenonbus hnean-lanceolaUs superioribus semiovalis acummatis, pedunculis brevibus apice densissimè pilis ramosis flavescenlibus obsilis, involucris pliyllis rordalo-ovahs breviter acuminatis sepalisque tertii4 parte longioribus pilis simplicibus ramosisve ad nervos et marginea obsilis, pelalis cunealis Iruncatis calyce 2 1?2 plò longioribus

Hab. circà *Constantino* (Sejournè in herb. Fauchè) in plamtiibus excelsis ad mendiem *Saida* (Balansa pi eis 1852 N° 408)

Pulchra species caulibus ascendèntibus 8-19 pollicaribus, indumplis adpressiusculis stellatis a *M. hispida* et *stipulacea*, facijè distinguenda. Corolla sesquipollicem longi<sup>a</sup>

MALOPE TRIPARTITA, BOISS. et Reut

*M. perennis?* ratlice horizontah prsemorsà fibras longas cylindricas edentii, caulis rubellis erectis glabrusculis vel pilis simplicibus vel e tuberculo plunibus sparsis obsilis, foliis inferioribus oblongis basi rotundatis vel iruocato-sinibcordatis obtusè crenatis superioribus breviter petiolatis infidia vel ferè ad basin usquè inpartitis lanceolatis crenatis subdivergentibus latermedio longioribus, stipulis e basi cordatis breviter decurrentibus oblongis vel semiovalis acutis, pediculis patulè hispidis. involucris sepalisque margine et ad nervos longè setosis hisce (Juplò longioribus, corollà calyce duplò longioribus).

Hab. propfe Mtsergatm et in via mler *Oran* et *Tlemsen* (Boiss. et Reut Flor. Alg.) /

Var. *p.* Caules et calyces hirsutiores, folia radicalia, folia intermedia inpartita lacinis lateribus lanceolatis basi saepè lacinulà hneari divancatà auctis, flores paulò majores, calyx micro plus duplò longior. An species propria?

Hab. circà *Ghelma* (herb. Fauchè).

A doobus precedentibus corollà ni non t5 lineas non excedent magnitudinis illius *M. m«riacoidi*, slipulis evidentiùs cordatis, sepalis ia> olucris propdrlione idhgioribus distincta, if *stipulaceos* slipulis accedens sed ab eà foliis inpartitis diversissima

Species hujus generis ex specimenibus locis paucioribus allicudum noise illorum botanicorum quibus eas in loco natali obser-

vare fae ent ultenon examim coramendandae sun I. Jam pi u rib us  
abbmc anms eas in herbano dishn xeratnas sed evulgare canctabamur  
sperantes quemdam amplionbus nolis inslruclum bujus generis stu-  
dium suscepturum fuisse

ALT»£A KOTSCHYI BOISS (Seel *Althaastrum*)

A caulibus tenuibus virgalis parce' ramosis indumenta Stella to ad-  
pressiusculo in jumonbus palulo bbsilis virentibus, foil is peliolo gra-  
eili cia subseqmlongo suffuUia uiGinifi cordatis caelens ad 3]b longiln-  
dinis vel ferè ad basin usquè quinque parlilis lacinnis oblongw vel  
oblongo-lanceolais serrato-dcntati9 intermediâ longion basi saepe  
anguslali j omnibus vindibus sublus palhdionbus pagmâ supenon  
pilis simplicibus sparsis inferior! slellalia simplicibuaque intermixes  
obsitis, stipulis iniminia lanceolatis hispidis deciduis , racemo termi-  
nali paucifloro laxa subcorymboso, foil is floralihus parvls lineanbus  
crenatis basi lacinulft auchs saepè deficientibus ad slipulas suas basi-  
lares reduclis, pedunculis ngidis (iliformibus erecto-patulis flore 4-8  
plò longionbus, involucro 6-7 lobo lobis tnangulanbus aculispilis  
stellatis leproso, calycis leproso-stellati involucro subdupld longions  
lobid ova119 breviter acuminatis, eorollâ\ roseâ calyce dup!6 longion,  
carpellis (jumonbus) dorso convexis glabrls laavibua paucis 10-19,  
receptaculo in mucronem comcum ekongato

Hab in regione inferiori *Tauri Cilici* (Kotschy N° 98 sub A can-  
nabinâ).

Ab affinis *A cannabid* dtstinclui caulibus nullò tenuionbus  
pared ramosis indumenlo minùs pulverulento obsilis, folns subslan-  
tne tenmons minùs disseclis, laeiuis minùs elongalis basi minâg at-  
tenuads, peduncults gracihord)Ufi 2-3 poihcarrbus, carpellis Isevibus  
dorso converts nee rugosis dorso canahculatis

ALTHI^A HUPESCEWS BOISS. (Sect *Aleea*)

A tota Induimento slellato rufescenti-flavido breviter et adpressis-  
sime canescens, caule crasso lereti simplici vel in femè ex axillis ra-  
moso, folns peliolo eis longion suffullis subscabndo-tomentelhs sub-  
ÛB pallidionj^us ambitu orbicolalu basi cordalis plus minis profundè  
tt-7 lobis lobis obtusissimis crenulalis sacpd tanlùm subloballs, florali-





5-Hfidis lobis oblongis oblusis denlicutalis lerminali longion sjjpe ilerum''<sub>a</sub> obsoletè lobalo, slipulis oblongis acununalis infenonbus ab-brevialis latis secus caulem decurrentibus, flonbus racemum laxissimum usquè ad apicem folialum formanlibua, pedunculis axillanbus solilams brevissimis palulè lursutis, involucn pilis slellalis dense hispidi calyce parlc terliâ brevions lobis 8-10 Inangulan lanceolalis acutis, calycis dense et adpresse tomenlosi lobis oblongis obtusis, corrolli roseA calyce 3-4plò longion, fniclu .

Hab in *Mgypto* (\ucber N° 847)

Species ex specimine mcompleto adlmc incompletè nola florum magnitudine et divisione foliorum *affimsj. diyitatce* aquasatdifferre videluf glabnlie cauhs et fohorum, an lamem si fortnae inlremedisc occurrant hnjus vanclas ?

## HYPERIGAGE^E

HYPERICUM ~~PERUGINENSIS~~ Boiss et Heldr (Sect *Drosocarpium*)

H perenne, oaulibus plunbus ascendentibus leretibus sapernd subancipitibus virgalia duris simplicibus fobosis apice breviter corymhoso-paniculatis, foliis oblongo-4anccolalis ngidis erecto-patulis conaceis opacis eponctatis pagmâ supenon glaucis nitidis inferiori cinnamomeo - ferrugiheis obtusiusculis sessilibus infenonbus bast rolundatis supenoi'ibus subcordato-ampleKicaaUbus, raoeaiis sub & oppositis cam flore in diciotomla, bracteis lanceolatis acuminaiis slrictis giandulis basin versiig long£ slipitalis obsitis, calycis partillonibus lanoeolalis acuti9 elevatini 5-5 nervus panctis nigns magnis sparsim obsilis glandnhs breviter slipitatis asceodenlihus denticalatis, peialls calyce triplò longionbus punctis nigns adspersis margine parcè stlpitalo-glandulosis, capsulâ iricarpeUan glandulis pellucida splisncis prominentibus adpersâ.

*H spigeltcefolium* olim in hit

Hab in pinetis regions infenons montis *Olympi Thessali* saprft *Metochi* (Heldr Julio 1651)

Caules vix pedales. folia mterntpdia 1\*1-16 lineas longa, tres aut paulò ainpllus lata, mflorescenlis racemi anlliesi peractâ 2-3 polli-

cares E seclione *tt. barbato* el *dentah* full is conaceis qpunclads  
sublu? ferruginei) **insigne**

**HYPEMCUM TRICUANIKUM** Boiss el Spruner (Seel. ***Drosocarpium***)

H glabrum caudiculis horizontalibus duns, cauibus ascendealibus abbreviate dense folio9is leredbus nevis 4 vix proianiulis, folus minulis sessilibus basi rolundalis vel subcordatis obtusis vel aculiusculis conaceis impunclalis utnnquè glaucis, pamculâ terminalibrevi cymos^ e ram is 2-U opposilis dicholomis cum flore in dichotomiâ constanti, braceis lanceolalis calycisque parliliombus oblongis mgro-punclatis margiue cihis lenmssimis ftexuosis eglandulosis earum diametro longionbus copioaissuu^ obsilw, pelalis nigro-punclalis calyce plils dup!6 longionbu9 margine fimbnato-cilialis

Hab. in monte *Felugo JStolios* (Tymphreslo veterum) ubi delexit anna 1842 amicissimus Spruner

Caules cum inflorescentiâ 3-4 polhcares Folia majora 6 lineas longa duo lala, rami breves, flores eis *H barbati* subraajores Affine *B bmbato* el *Bithynico* ab eis caulibus pumilis Tolnsque minutis discedens,a priori iterum bracteis mult6 longiils fimbnalis ramisque pamculs divancatim dicholomis, a posteriori cilns eglandulosis dlstmctum

**HYPEHICUH APOLLIHIS** Boiss et Heldr (Sect ***Drosocarpium***)

H gtabrum basi lignosum multicaule, caulibus basi prostralls vel ascendentibus densè foliosis leretibus tenmssim^ k nervus, folus sessilibus ovatis oblongisve obtusis basi subcordatis infèrionbus minibus basi attenuatis omnibus glaiicescenlibus punctis pellucidis crassis pauefs apicem versùs obsitis prsctereâ secùs marginem punctis mgris adpersis, flonbua lerminalibus 3-5 in rymam dichotomam dispositis aliquandò solitariis, bracteis oblongo-lineanbus slipitaloglandulosis, calycis protundè partili parliliombus oblongis aculis plurinervns punctis mgris elongalis adpersis margine glandulis slipitalis slriclis earum dimidiâ laliludine brevionbus obsilis, petal is obloogo-spalliulatis caly:c tnplò longionbus puqetis nigns aspersis, capsulâ Incarpellari glandulis crassis prominentibus sparsis obsilâ

flab Hī rupestribus regionis inferens el alpinaa uionlis *Parnassia* ubi detexit cl de Heldreich aet 1882

Sufruticulus caulibus 5-5 pollices longis Folia majora 6-7 lineas longa 4 lata Flores vix terliA parte immores eis *H. Olympici* cujus nostra planta faciem paululum refert sed quod longè distal sepalis aequalibus eglandulosis, capsuli longitudinaliter vittatà etc Vera affinitas nostrae speciei est juxta // *umflorum* B el Heldr ex Asia minor quod differ! folns Irregularibus margine papilloso scabundis, calycis parvifloribus lanceolatis glandulis sessilibus inargmatis, floribus semper solilams

HYPERICUS DELPHICUS BOISS et Heldr. (Sect *Teniocarpium*)

H caulibus ascendentibus erectis foliis pilis patulis molliter lomentosis, foliis sessilibus ovalis obtusissimis basi cordata mernodioaequilongis vel brevioribus vix paginâ superioribus parvissimè inferioribus copiosius pilis patulis lulis crebre et minutè pellucido-punctatis nervis subtus prominulis, panicula terminali pyramidata vel corymbosa ramis glabris glandulosis, bracteis oblongis longè stipitata-glandulosis, calycis glabri profundè partim parvifloribus lanceolatis Us parallele plunnervis facie non nigro - punctatis margine glandulis breviter stipitatis ascendentibus crebre denudatis, petalis oblongis calyce impleto longioribus impunctatis vel punctis iugiter paucissimis obsilis, capsula longitudinaliter vittatà

Hab in faucibus umbrosis propè *Bteni* ad radices montis *Delphi Eubeon* alt I BOISS (cl Heldr Aug 1848)

Caulis 1-1 1/2 pedales, folia majora pollicem vel sesquipolliceni longa 9-10 lineas lata Habitus *H. capnifolii* Boiss. quod longè caeterum differt folus connatis, sepalis longè acuminatis Magis affine *H. atomarum* Boiss quod in Graecia quoque crescit et differt indumento multò brevior papillan-tomentello, folns oblongis, calycis partibus oblongis valdè nigro-punctatis

HYPERICUM USIVACHIOIDES Boiss. et Noë (Sect *Teniocarpium*)

H glabrum caudiculis repentibus, caulibus erectis foliosis simplicibus obscure bimeis in panicula in brevera pyramidatam abeuntes, folus pallide glauco-virentibus parvissime pellucido el nigro-punctatis

sessilibus basi attenuate margibus ulmq̄ inter se conjunctis subamplexicaulibus Infinitis oblongis sup̄nonbus linean-lanceolatis longioribus angustioribusque aculis margine subrevolutis, paniculae ramis subunifloris, bracteis 1 medianis, calycis profunde parvifloris glandulis crassis sessilibus margine crebre denticulatis, petalis obovalis calyce quintuplo majoribus versus patera sup̄onem nigro-margatis

Hab in subalpinis *Kurdistanice Persice* versus *Mendeti* (Legit c) Nod Medio 1851 Fl. MJO)

Pedale, folia intermedia 12-15 lineas longa 5-4-lata, panicula 4 pollicans. Affinis *H. helianthemoidi* Boiss Diagn 11. quod differt foliorum angustioribus magis revolutis crebre punctatis, floribus et praesertim petalis minoribus, calycis parvifloribus ovalis vel ovato-oblongis

HYPERICUM SEBASTIUM BOISS et Noe (Sect. *Teniocarpium*)

H. glabrum glaucum caulis ascendentibus simplicibus vel ramis teretibus obscure & nervis valde foliosis, (his median-subulatis revolutis sessilibus erectis obtusiusculis, punctis glandulosis adspersis, axillis fasciculos foliorum edentibus, paniculae terminalis angusta) ramis abbreviatis subunifloris, bracteis triangularibus margis, calycis profunde parviflori parvifloribus oblongis-longitudinaliter 3 nervis trifloribus percursis margine denticulis triangularibus latitudine sua dimidia brevioribus apice glanduliferis crebre obsitis, petalis calyce quadruplo longioribus obovalis apice glanduloso-denticulatis.

Hab in subalpinis *Anatolia* prope *Sivas* (Legit cl Noe Junto 1882).

Valde affine *H. pinnato* Boiss = *Drosanthe fimbriata* J. et Spach ill. lab. 54 quod differt floribus calycis valde alternatim inaequalibus longioribus latitudine lacinae vix brevioribus *H. helianthemoides* glandulis calycinis sessilibus spatim dignoscitur

HYPERICUM THYMBAFOLIUM BOISS et Nod (Sect. *Teniocarpium*)

H. glabrum subpapillare basi suffruticosum multicaule caulis basi ascendentibus densiuscule foliosis loricibus glandulis rubris sparsis

**asperis, foliis** linearibus abbreviatis arde-revolulismucronalis-punc-  
(19 glandulosis asperulis, axillis valde fasciculigens, paniculae termi-  
nans angustis ramis abbreviate paucifloris, bracteis triangulari-lan-  
ceolatis glandulis nigrescentibus paucis marginatis, calycis profunde  
partiti lacinis lanceolatis acutis longitudinaliter nervoso-villatis glandu-  
lis nigrescentibus crebris marginalibus, petalis calyce triplo longio-  
ribus apice glanduloso-denticulatis

Hab in subalpinis *Cappadociae* prope *Kharput* ubi legit Juno  
1852 cl Nou

Caulis semipedales, folia 8-6 lineas longa Ab *H fimbriato* et  
*Inrtello* glandulis ealycis sessilibus atalim dignoscitur Ab *H heli-*  
*anthemauh* et *lysimachioh* foliis lenuissimis arcte revolulia mu-  
cronalis, floribus multo minoribus differit

HYPERICUM FRAGILE Heldreichii et Sartoni (Sect *Tribnicarpium*)

Hololum graecum minutissime papilloso-leprosum caudice hgnoso  
crasso caules numerosos nanos filiformes exspitoso flexuosos  
simplices fragillimos obsolete tetragonos edenti, foliis minimis sub-  
sessilibus approximatis bifarie subimbricatis ovatis obtusis basi ro-  
tundatis vel subcordatis carnosius subnerviis pellucido-punctatis  
marginibus praeter punctis nigrescentibus marginatis Inferioribus  
diminutis remotis, floribus 3-5 in cymam terminalem conferentibus pe-  
dunculo calyce aequilongo suffultis, bracteis ovato-triangulatis  
marginibus breviter stipitato-glandulosis, calyce fere ad basin usque in  
lacunas linear-lanceolatas acutas valide innervias partito, glandulis  
ad utrumque marginem laciniarum 3-4 renotis slipite crassiusculo  
laciniis dimidiis parte brevioribus suffultis, petalis linear-oblongis eglan-  
dulosis calyce plus duplo longioribus, capsula coriacea tricarpellata  
longitudinaliter crebre vitulata

Hab in fissuris rupium faucibus *Steni mentis Delphi Eubeae* alt.\*  
1800' (Detexit Oct 1848 cl Sartoni)

Gaulis 1-2 pollicares, folia majora 2 lineas longa 1J/21ala Species  
distinctissima nihil propius affinis non procul ab // *cuneato* lam en  
cnlloc.inda

**HYPERICIUM SCABRUM** Linn var *lane* Boiss. et Noë'

Planta humilior, caules lolA longitudine lamssimi caelerum omma speciei Galycis partiones in hie specie lad ant ovals vcl oblongo-lanceolatae denticulate cum vel absque glandulis nigns,

Bab in Mesopotamiã inler Suet et: et *Diarbekir* (Kotscliy N° ibl), in vmeis *Cappadociw* prope *Karput* (cl Nod)

**HYPERICUM THYMOPSIS** DOISS (Sect *Tosniocarpium*)

H basi suffrutescen9, caulibus tenuibus efectis simplieibus numerosis foliosis glandulis papillosis apicc saepi ramosis aspens, /bins sessilibus linearibus tnarguie revolults obtusis glandulis subprooiinibus aspersis, axillis infenonbus fasciculq9 foliorum junionim eOentibus, flonbua paucis in cymas diciotomas Itirminales disposes, bracteis linearibus abbreviate, calyce carnosula glabro ad 2]3 usquè in lacimas tnangulares obtusas margine incrassatas nervo crasso percursas parlito, pelalis calyce Iripl6 longionbus oblongo-spathulalis margine glandulis paucissuni9 sessilibus obsilis, ovano Incarpellari vitlis longitudinalibus percurso, slylis elongalis

*Thymopsis aspera* Jaub et Spacli III pi Or. tab 37 ibona exceptis petalis qiaie nimis brevia eilnbenlur el calyce qui ad lerliaai partera usquè fissus depiclus fuit)

Hab in *Cappadocid* ad *Euphratem* (Aucher)

Species raoe sensu ab *Hypertcis* non separanda cliainsi numerus ovulorum paululum diminutus sit et prope *H scabrum* L cm nolis gravloribus accedit collocanda

## **ACERINEÆ.**

**ACER** BEGIN\* AHALLE Orphan

A. arborea> ramulis densis abbrevialis apice crebrè toliosis corhec albo-gnseã ad ramos vetustiores s«epè fusco-iugncante veslilis, folus parvis^labnş pallidè virenlibus subtùs pallidionbus suprã vix nilidis peliolo gxpifts eis panl6 lanlum brevion suffultis circumscriptione

orbiculanbru basi truncalis rotundatis subcordatisve ultra Tertiam parlein usque in lobis lobis breviter ovalis obliquisculè dentatis aliquandò subtruncalis subjequilongis lateribus lateribus extensum basin veisus saepe lobo auctis et tunc folium subquinquelobum, corymbis (terminalibus creclis, pedunculo communi peliolis subbrevion, bracteis lineari-setaceis deciduis, sepalis elliptico-linearibus glabris flavidis, floribus, pedicellis fructiferis alas subaequantibus incurvii, fructibus (junioribus) roseis, ovario pilis raris sparsis obsitis alis apice sese invicem oblegentibus

hab in monte *Gymnouvouno* prope *Tnkala* alt 5000', in parte superiori montis *Chelmos* prope *Stygem* fine Jumi jam fructiferum (Orpambdes)

Arbor mediocnis (ructibus roseis speciosa Serenissimae Reginae Graccorum Amaliae dicata *Habitus A. Cretici* Folia majora ferè pollicom longiora et paulò amplius lala. Alse fructus parte inferiori (antrum discretae dem incurvatae et parte superiorum convenies *A. Creticum* affini<sup>1</sup> differt foliorum lobis integerrimis, fructibus alis apice divergentibus *A. obtusifolium* Fl. Graeca tab 561 valde affine est nostrae speciei quae Imjus forsitan lanium vanelas est lamen in eo folia huius rotundata nunquam cordata, lobi laterales nunquam lobulo aucti et lduum folium semper inlobum nec quinquelobum multò minus denticulatum est

## GERANIACEAE

GERANIUM PELOPONESIACUM BOISS (Sect *Petenma*)

*G. rhizomate* crasso cylindrico subhorizontali, foliis radicalibus longè petiolatis breviter et adpressiusculè hirsutis cordato orbiculis 5 parvis parviliombus subrotundis subtrilobis iterum 2-5 obtuse dentatis, caules ut et petioli palulè vel retrorsum hirsuto erecto usque ad ramificationem nudo, folium caulium oppositis breviter petiolatis impariis, stipulis scanosis lanceolatis hirsutis, pedunculis longissimis subbifloris praeter pilos palulos sparsos indumento brevion denso glanduloso obsitis, sepalis eodem indumento duplici obsitis oblongo-ellipticis longè mucronatis, petalis pallidè purpureis velis calyce subduplo longioribus, capsulis

*G. asphodeloides* P. d. Morée ex spec. authentic\*) in herb. Fauche non Willd.

Hab. in sylvis circâ Ictnplurn *Phigalee* in *Peloponneso* (herb. Fauchè)

Pulchra species habitu, foliis, flori magitudme nulli magi9 quam *G. Ibeneo* affinis quod differt pihis caulis et petiolorum longioribus copiosionibusque, foliorum S-7 parhlorum lacinus profundionibus aculis, pedunculis plunflons calycibusque prorsuseglandulosis *G. glandulosum* pube glandulosA quoque donalum longius differl foliis mullo-majoribuspalmatilidis *G. asphodeloidesestp\anl&* dirersissima caule diffuso etc etc

EHODIUM JECYPTIAGLM BOISS,

E annuum toluin pilis papillanbus conicis albia copiosis secùs caules ramos et peliolos deflexis secis folia adpressis canescens, caulibus numerosis ereclis vel subdifTusis, (olus InTerionbus longissimè peliolalis oblongis basi cordali3 tnlobis vel tripartite parliliombus oblongis profund6 denliculatis sxpgque ilerum lobatis lateralibus angulo recto saepè palentibus interinedio ahquand6 peliolulalo, foliis supenonbus subsessilibus sessilibusque, pedunculis B-8 flons folia mullb superanlibus, braceis ovatis obtusis, sepalis hirsutis vindihnoatis oblongis oblusis mucrone brevi ahrnptè tenmatis, petalis roseis calycem parùm superantibus, filamenlis omnibus glabns, valvulis fructùs hirsulis depressione apicali circular! subtusque sulco semilunan anctis, semine laevi.

Hab. in cullis *jEgypti* superions circâ *Girgek* et jnfenons propè *Cahtram* Martio et April 1 (cl Kralik sub *E. Chio*)

Planta *E. Chio* plurimis nolis et formâ foliorum accedens ab eo facilè di&lmcta induinenio denso papillan secùs caules el petiolos retrorsn, pelalis multò brevionbus, filamenlis slenlibus non cilialis, spsalorum mucrone eis aextuplò nec Inpl6 brevion.

## ZYGOPHYLLE^

TRIBOLUS KOTSCHYANUS Doiss. (Sect. *Inemnas* Kralik)

T caulibus procumbenlibus ramosis praeter pubescenliam brevissimam pilis longfonbus papillosis sparsis obsilis, foliis ferè a basi



pinnjliim6 jugis foholis obliquis elhpticis utnnque adpressè ranescendbus, stipulis hnean-lanccolalis, flonbus minulis pedunculo eis sublongion suffTulds, scpalis adpresse senceis oblongis aculis, pelalis alhis oblongo-cnnealis oalycem jpquanlibus, atarainibus decem, ovano aLo-hirsuto ^Ugmalibua sessihbus coronato, pedicelha frucliferis deflxcis curvatisve, carpelhs liermibus albidis subcannatis undiquè sed dorso praiserlini lubercuha comcis oblusis sac pi us setigcns ob-  
sitis inter eos depresso-cxcavalis

Hab in collibus prop6 pagum *CoTdofanum Abu-Gerad* (Kolschy pt Nubicae IS° 58 p)

A *Tr merml* Kralik qu^cum comparandus esl differl flonbus decandns nee penlandiis, sligmatibus sessihbus nee slylo eisdup!6 lonpion suffullis, carpellis luberculahs nee rugulosis

#### TmiJLUS HOBØIUS Boiss el NoB (Sect *Avmalt* Krdlik)

Tr totus pilis adprei9is densus sencuns, caulibus proslralis ramosis ramisque crassis prsclci indumentum adpressum pilis spares longionbus obsilis, folus a basi pinnalim 5-6 jugis foholis oblongo-elliplicis aculis, slipulis inangularNanceolatis, flonbiib pedunculo sub anthesi hrevissimo suffullis, sepalis lanccolalis densè el longèvillosis, pelaha oblongis calyci jjquilongis, stnmimbus decem ovano spicà carpellorum breviler cylindncà spssm corona to pilis albis longis eliam sligmala occuUanlibus densissimè obsito, pedicellis fruebfens incrassalis reeds fruclu longionbus, carpelhs crassis quadncornulis cornubus supenonbus longionbuo dorso subcarmalis luberculahs undiquè breviter lomenlellis selis longis papillanbu.s mtermixtis.

Hab in cullis circà *Bagdad* (cl Hoc)

A vanctahbus incaniia *T terrestris* an sal distinctly cauibus mllò crassionbus, shgmatum spicà longion cylindncà nee corneà, fruclibus inajonbus? Ilabilus diversissimus

*Tr spuriisK\smk* Ann Sc Nat osL Tr SmatcusBoiss Diagn 8

#### FAGONIV DIVERSIFOLIA BOISS

P parlibus jumoribus pube glandulos^ mmutà sub lente adsptrsa cdBlerum glabra, cauibus proslralia divancatim ramosisstmis quadr.ingulis sulcalis, spims qiialerms apice acerosiB caulis elongalis de-

flesiB ramorum brevissimis folia vn excedenlibus, folifo mmutis mfenonbus tnfoliolatis breviler petiolahs foliohs ellipticis apice tuberculo aceroso terminalis in termed 10 majon, folus supenonbus simplicibus ovatis sessilibus, flonbus minimis in dichotomus et avillis aupenonbua pedunculo eis brevion suffuUis, sepalia puberulis lanceolatis longè atlenuato-acuminatis, pelalis albidis cuneahs calyce subduplò longionbus, capsulis pedicellis palulis vel defleais eis longionbus suffuUis breviler puberulis ovalo-turbinatis acutè penlagonis profundè sulcatis in sylum eis breviorè abeunlibus

Hab in lapidosis propè *Dalechi* in Persid austrah (Kotachy pi. Pers austr N° 198)

Hæc planta quam olim pro formà *F Bruguien* DC, habueram ab eâ non tanlùm differt folus infenoribus tnfoliolalis sed caulibus elongalis humilalè expansis nee ereclis dumulosis, mternodiis nullò miniis abbreviatis Magis affinis *F myriacanthoB* et *echinellm* ab eis differl quoque caulibus magis expansis, spims rameahbus brevissimis

#### BEHEHIENU ORPHANIDIS BOISS (Sect *JchiUecefolia* Spach)

D rhizomate crasso mono vel pleiocephalo, collo petiolorum reliquans et slipuhs foliorum emarcidorum longis scanosis imbricatts densè vestito, caulibus crassis sulcalis simplicibus a basi densè fohosis tolâ longitndinc glandnlosis viscidisque, folus mfenonbus longissimis ambitu lanceolatis Inpinnatisectis petiolo (coslâmediâ) crassissimo basi decarrenli glanduloso, divisiombus pnmanis a parte supenon folii deorsùm flecreacentibua remotisqiè lacinulls acutis breviter lmeanbus hirtulw prsetereâque glandulia sessilibas obsilis, folus supenonbus abbrevialis sessilibus, slipulis basi petiolo adnatis ab eo divancatim divergentibus elongatis lanceolatis tenerè metnbranchaceis parallelè mullinervus apice lacero-fimbnatis, flonbus ad caulis apicem in spicam (pamcalam contractam) densissimam oblongam simplicem (rariùs basi fasciculo paucifloro breviter pedunculalo auctam) congestia brevissimè pedicellatis per 2-3 fasciculatis, braceis communibus fasciculi monno-villosis ovatis acutia mfenonbns palmifidis supremis indivisis calyce brevioribus, partiahbus cujiisqiè flons bjniis brevloribus villosis tngulanbua mlegns, sepalis ovalis acutis intègris, pilw papillanbus apice glandulosis dense obsilis pilis

sunplicifrus mlermixlis post antliesin valdè accrescenlibus membra-  
nacciB Intenonbus anguslionbus, glandulis liypogyms inter petala  
truncalis relusis, pelalis caljcc eliam (lonfero inultd brevionbus  
porsistentibus limbo obovato roseo apice denticulate--fimbnato in  
unguem album xqnilongum vel sublongiorem allenualo, filamenlis  
persistenlibus basi dilalalâ ad qiunlam parlem usquè inonadelplus  
in urcoolum membranaccum breviter lobalum oiarginc ciliatum parte  
liberA abrupte anguslalis glabns, slylorum fasciculo glabro, theca-  
phoro breviter columnar! penlagono ad facies excavalo, nuculis crassis  
calyce 2-3plove superalia nigris tnquetris subcurvalis dorso convexis  
subcannalis obsolete reUculato-excavalis lalenbus profit tidè sulcalis

Hab in regione supenori inonlis *Kyllenes* Peloponnesi ad 5500'-  
fiOOO' alli(udinis\*in vallecni sicâ ad meridiem speclanli loco OTQŮ  
TIOU^OC ó 'jySn^v dicto (Maio-Jumo Oorenlem detexit cl Prof Or-  
phanides)

Inslgne Florae Graecje decus Unica ul videtur species Europaca  
generis hucusque mer6 Orientalis Tola planla parle supprion praespr-  
lim viscida odorem resinorum spirans Gaules pedales vel sesquipe-  
dales, folia mfima saepè pedalia el ultra 2 3 polhces Ian tûrn lata Spica  
%-b polhces longa Calyces fructilieri 8-10 lineas longi, fructuse quin-  
que nuculis oonstans magmludine pisi Species a rehquis sectionis  
distinclissima caule a basi folioso, mflorescenliâ spicalâ nee cylin-  
dncâ, pelalis unguiculahs nec ad liinbum scssilem reduclis, Glamen-  
lis suprà urceoluin abrupte nec sensim anguslalis

Ornncs species liujus serlioms a cl Jaubert et Spach in Illustr pi  
Or proposilseo speciminiim comparatione cbaractenbus nimis incerlis  
vananlibusque mihi distinct&C videntur et eas omnes praeter *B leio-  
sepalam* qusc specilice dislincta videtur sub *B multifidfs* nomine  
iterùm in herbano conjunxi Hsec crescere videtur in Orienlis par-  
tibus distanlissimis, *Libanus* in monte *Gebel Sannin* (Pestalozza ')  
lalus Onentule mans Caspii (Karelin<sup>1</sup>) *Persia* (Auclierl Kotschy'  
Micbaux' Bulisc')

## RUTACEJE

HAPLOPIIVILUM ERYTHR^UH DOISS (Spach *Dtv I*)

H basi suffruttcosuim glaucuin multicaule, caulibuâ sunphcibus  
ferè lotâ longitudme glabns foliosis apice glandulosis brevissimè et

subcorymbosè bis terve dichotomis ram is divaricatis, flore jn dicbotomiâ aubsessili, folns glabrusculis carnosulu glanduloso-punctatis sessilibos oblongis lineanbusque utrinque aManualis acutiusculis uninervis erectis omnibus simplicibus, flonbus magms subsessihbus, calyce ferè ad basin usquè in parlilioncs breviter ovdtas ublusaa partito furfmuceo, pelalis ovatis cucullalis subcannalis basi abrupteet breviter stipitato-unguiculatis exlùs pulvcrulento-lurfuraceis sordide flavescenlibus lnliis rubcllis, filamenlis rubellis glaberrnnis a basi sensiio attenuatis, ovaru glandulosi lobis apice in gibbum oblusum abeuntibus, stylo glabro, capsula

Hab in ditione *Afghanistan* (cl Griffith pi exu N° 1962), in ditione *Belouischistan* prope *Doobknd* (cl Slocks p] exs NM138)

Gaulcs nuraerosi inferni rubelli 10-13 polhces longi Folia densa 8-11 lmeas longa, 3 et soepius 3 el 1 lala , inflorescentue rami 6-10 lineas longi Flores e majonbus gencns Species ex affinilale *H h-nifohi*, *suaveolenhs* et *sylvatici* sed mflorescenlii magis paificiflBri donata ; calyce valdè parlilo, pelalis dislinclè slipilalis subcannalisque, flamenlis glbbernmis clc Insignis

#### HAPLOPHYLLUM GmpIHIANUH BOISS (Spach *Dw HI*)

H glabrum caulibus lenuibus virgabs reclis simplicibus fohosis supernè nudls breviter ramoso-pamculalis subcoryrabosis, folns simplicibus lineari-fihformibus canaliculalu-convolihs basi allenualts carnosulis sub lente glanduloso-punctalis, flonbus in cymas contractas ad apicem ramorum dispositis mediocnbua, dalycis profundè partiti glabn lobis ovato-tñangulanbus, petalis flavis glabna ellipticis concaviB obtusis basi altenuatis, flamenlis parle dimidiA loferfuri dilatatis densè lanalis parle supenori glabris, ovano pilusulo lobis apice in gibbum inlnutam oblusum abeuntibus, stylo glabro, capsula mlnutâ depressâ glabrâ tuberculalo-glandulosâ coccis dorso ad dehiscenlraB onginem gibbo minulo auctis, semimbus transverse densè corrngatis.

Bab. prope urbem *Caboul*, in colhbus prope monumentum prtncipis Sultan *Baber* (cl Griffith pi exs, N° 1257)

Aflne folns angustis *U filifolio* Spach Illuslr tab 96S sed in hoc foliâ trisecta, flores laxiis eymosi cl praeserlun *H canalieulalo* Boiss Spach Illuslr lab 369 sed in hoc folia longiora el erassiora

Ab ulroque insuper longius differl ovano et capsulâ non egibbosis sed praeler glandulositatem gibbo manifesto nt in *U ptilostylo* et *fruticuloso* donatis

HAPLOPHYLLQH CORYMDULOSUH BOISS (Spach *Div III*)

H glaucum pluncaule, caulibus piimilis simplicibus fohosis apice corymbosis ramia divancatis plunes dichotomy subdissiliflons, (olns sunpbcibus carnosulis uninervus ciliatis oblongo-spatbulalis superioribus lineanbus acutis basi in pelioium longiuscule attenuate, bracteisliacan-selaceis mininns, flonbus mediocnbus breviterpedicellatis, calycis minuti glabn partiliombus Inangulanbus, pelalis oblongis oblusis glabns basi altenualis subunguiculalis, filamenlis libens ad 2/3 longitudims usqufe dilatatis ad apicem partis dilalatae ciliato-lanatis superne abruptè altenualis glabns, ovano glanduloso styloque glabns.

Hab prop& fotitem *Aim Sultan* in valle *Jordani* non procul a *Jericho* (Boiss Verc 18&6)

Gaules semipedales, folia cam petiolo 8-10hneaslongalatoria 3 lineas lala, flores et ovana ferè dunidiò minora eis *H. Buxbaumn* cai valdè accedit sed a quo raihi dislmctum videtur hac notâ, corymbo rainoTi brevion divancato, bracteis setaceis nee foliaceis, petalis minus elongahs et inpnmis fi la men Us non nt in ep-basi dense albo-lanalis Plan La attamen ulteniis exploranda

HAIOPUVLLUM MESOPOTAMICUM DOISS (Spach *Dip. III.*)

H caulibus ascendentibua albidis nitidis glabnuscus foliosi9 apice subtlexuoae pamculato-corymbosis, ramis divaricatis dicbotomis pubescentibus,folus pallidè virentibus pellucidis parcèglanduloso<punctatis puberuhis nervo medio albo nervisque laterahbus percursis ovatis vel oblongo-ellipicis eblusmscus basi allenualis peliolatis omnibiis simplicibus, bracleis oblongis lineanbus, flonbusinediocribus pallidè sulpliuereis pedicello pubscenli eis ajquilongo Tel longion suffullis, calyce flavo fere ad basin usquè in parlitionea ovatas ciliatasdiviso, petahs ovato-oblongis oblusis glabns, filamenlis ad 3/4 longitudims dilalalis ad apicem parlis dilalat\* lanatis parte supe non abruptè atlenualis glabns, ovano styloque glabns

Hab in *Mesopotamia* inter *Diurbekii* et *Merdin* (Kotschy pi exs N° 311 Herb Mus Pal Vindob )

Hoc etiam habilit mlflorescentiã et foliis *H Buxbaumit* forsan m-  
mis affine est sed in *H Buxbaumii* Mia crassiora mini mē pellncida  
nervis laterahbus obsolelis, bracleae numcrosae inult6 longiores, flo-  
res intense et ferē aurantiaco-lulei, pelala linean-elliptica, Glamenta  
muU6 deimũs barbala

HAPLOPHYLLUM STOCKSIANUM BOISS (Spach *Dw III*).

H glaucum basi suifrutescens cauhbus ascendentibus elongalis fo-  
liosis a basi ramosis sparsim glanduloso-asperuhs puberulisque, fo-  
lus carnosus umnervus oblongo-lanceolatus lineanbusque acutis baai  
longē allenualis margine subundulatis glabns poberuhsve subtiis  
glandulis sparsis niagms patellanbus vel semicircularibus obsilis,  
ramis terminalibus Qonfens plunēs dichotomi3 tenuibus ramuhsque  
stnctis ferē ebracteat9, flonbus medioenbus, calycis ad basin ferē  
usque partili minimi parlitiombus oblongo tnangulanbus brevissimē  
**ciliolatis**, petalis glabns flavis ellipticis basi alteoualis, filamenlis  
inter se iibens a baai lalion ad medium usquē dilatalis apice partis  
dilatare parcē cihalis, parte supenon glabns, ovano tuberculato  
parcē puberuJu

Hab in diluene *Beloutchistan* circa *Zuhree* (Gl. Stocks legit ann  
**18K0** et 1851)

Caulei **1-1 ijs** pedales. Folia majora cum pētiolo pollicana 11/9-4  
lineas lata Flores pauld majores eis *B tuberculati* cm habilu et cha-  
raclenbuB accedit Bed in hoc folia mult6 crebnfis titberculala, mflo-  
rescentis **rami** divancati, filamenta breviora basi monadelphica paKe  
dilatalã mlũs densē villosã, pelala ovala *H propinquum* Spacli af-  
fine et quoque lilamentis iibens donalum differl folas obovalis alus-  
que nobis

HAPLOPHYLLUM CHENULATUM BOISS. (Spach *Div III*)

H basisuffrutescensglabrum caulibus ascendentibus simplicibus vel  
basi ramosis subflexuosis ngidis glandulis spaMfS aspens aptce brevi-  
ter et dichotom6 ramosis confertim pauciflons, folns ngidulis carno-  
sis glaucis oblongo vel lanccolãlo-ellipticis nlnnqii6 allonualis bre-

viler pelrolalis sublùs glandulis oculo nudo perspicuis obsilis margine sursùm subconvoluto glanduloso-marginatis crenulalis, (lonbus magnis longiusculè petiolalis, caiyic fere ad basin usquè in partitio-nea subscanosas ovalo rotundas glabras parlito, petalis flavis glabns oblongo-cuncalis basi longiusculè el modicè altcualis, filamenlis h-bt'ris a basi ad mediũ dilatalis parcissimè ciliatis parte supenon angushs glabns, ovano glandulis crassis jequalibus loto obsjlo, slylo glabro

Hab in dilione *Beloutschistan* cirri *Kalat* (Gl D<sup>r</sup> Slocks legit anno 1851)

Caulcs ferè peddles, folia 8-10 lincas longa medium versùs circ 3 Itita, lainorum inferoruin stcilmn breviora oblongo-cuneata oblusa Mores ti-7 terminalcs illis // *linifohi* el *suaveolentis* vix minores Species insijjim juxl'a// *vet sicolorcm* Dungein pi Lebm collocanda

HAFLOPILLDM FLEXUOSUH BOISS (Spacii *Div III*)

H. glabnim, caulibus loretibus foliosis valde (lexuosis supernè ramosissimis, rainis foliosis flexuosis pluriès dicbotomis pamculam latam corymbosam formantibus, foliis pctiolalis conaceis nervo medio valido lateralibusque percursis mlidis sub lenlc exirai6 celtuloso-puncticulalis prjclerc&que ut et caules glandulis nigris punctiforoiiibus oculo nudo perspicuis adspersis ovalis oblongisvc aculiuscuha basi altcualis ramorum floralium mullum diminulis peliolatis rans, (lonbns nunulib pediceilo eis scqudongo vol longion suffullis, calycis glabn persiscnhs ad 2/3 qsque partili partilionibus breviter ovalis crassis cxlùs glandulis crassis obsilis, pclahs glabns (exsiccalione urcnlibus) oblongis basi in unguem longiusculum contraclis, filamenlis libens hnt^rnè dilalalis intlùs parle dilatala ciliatis, ovano slyloque glabns

Hab in dilione *Affifhunistan* pi ope *Mookloot* (cl Griffith pi oxs N° 807)

Caulcs pedales sesquipcdalcsque, folia majors cum petiolo 1 lj3-2 polhces longa 6 iincas lata, panicula ramosissima, flores e minonbus generis Insignis pelahs in unguem longiusotilujn altenuatis, affim- talis dubise, forsan gregcin *II Stewrsh* cum eà *II mrsicolortu* et *lobustt* conjungens

## RHAMNACEAE.

RHAMNUS LIBANOTICA Boiss (Sect *Eurhamnus*)

Herb fruticosa inermis, ramis cortice albicanli veslilis junonibus brevissimis flavido-tomentosis, foliis ad apicem ramulorum conseratis ulnque breviter flavido tomentosis breviter petiolaris ovatis oblongisve penninervis nervis facie superioribus impressis inferioribus leviter pronatis basi rotundatis obtusis mucicibus vel subinde breviter acuminatis circumscissis minute crenatis denliculatis, floribus dioicis in fasciculis infra folia dispositis pedicellis lomentosis eis subaequilongis suffultis, calycis basi flavi in lobis divisionibus glabris oblongo-angularibus acutis, staminibus calycem aequantibus, antheris oblongis subexsertis, fructu

Hab in Libano supra Eden (Aucher N° 2055 bis, Boiss •), in saxosis Tauri in monte Ghetdagh supra Maya (H. Dreich •)

Species affinis *cornifolia* et *Rh. pubescenti* = *Sibthorpii* var. quibus omnino esse consociari ab utroque differt foliis crebriter denliculatis nec integerrimis; prior inaequaliter habet indumentum parvissimum non flavidum, posterior aequaliter indumentum canescens pedunculosis calyce duplo longiores, antheras rotundas sinus loborum calycis tamen aequales Rami in femore rupibus apphcati, folia 1 1/5-2 1/2 pollices longa polliceni aut amplius longa

RHAMNUS PALJESIIHA Boiss (Sect *Cercis* Witt)

Herb fruticosa, ramis lortuosis cortice fusciscenti veslilis apice demum breviter spinescentibus, foliis ad apicem ramulorum gemmiformium lateralium crebrorum dispositis oblongo-cuneatis subspathulatis basi longe in petiolum breviter attenuatis apice rotundatis truncatis retusisve concavis nitidis glabris pellucido-punctatis veis lateralibus reticulatis vix pellucidis margine remote et obsolete repando-crenatis crenis glanduliferis, floribus . . . , drapis pedunculo glabro eis breviter sulcatis calycis basi persistenti plano-convexiusculis ciliatis insidentibus compressis didymis, seminibus rariis subclausis in argenteo carilagineo cinclis.



Itali in rupestribus *Galileos* in vallibus calidis circa *Banias* (*Casaream Philippi*) (Boiss acst 1847)

Aliis *R. oleoth* et *Rh Græco* Boiss et Reul Goram. ad Florau Græcain, ab utroque folns repando-crenatis nee integerrimis, pellucido-punctatis, inullò magis uifein^allenuatis, pedunculis abbrevialis, seminibus longioribus sulco margine cartilagineo distincta Folia 6-7 lineas longa apice 3-4 lina, drupa: panse piso Inplò minores obtusissimæ relusæ

**RHAMMUS ILLDREUM** Boiss. (Sect *Cervispina*)

Rh. fruticosus ramis erectis cortice fusciscescentibus velut pilis glandulis parvis ramosissimis ramulis rigidis apice demum in spinas validas abscunclibus, folns in gemmas laeviales brevissimas dispositis oblongis vel oblongo-cuneatis basi in petiolo brevem longe attenuatis margine prius ciliatis\* dein glabris conacuis pellucido-venulosis margine subrevolutis remote et obsolete repando-crenatis, pedunculibus glabris capillanibus flore longioribus, calycis gubri lacinus flans Inangularibus aculis, antheris breviter ovalis e fauce subexsertis calyce brevioribus, drupis

Hdb in montibus in Lycia iuris *Perge Pamphylicæ* (Heldr Floret Mdiæ)

Species etiam a nobis confusa cum *Rh oleoide* a qua foliis non integerrimis differt Hac nota accedit ad præcedentem a qua ramis preclis nec lorulosus patule ramosissimis, Quibus crebrioribus longioribus pedunculatis certe differt; hujus fructus illius flores adhuc desiderantur

**DIAGNOSES**

**PLANTARUH ORIENTALIUUM NOYARUM**

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**GENEVA — TYPIS HAIBOZ ET SCDUCIAHDF**

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DIAGNOSES  
**PLANTARUM NOVARUM**

PRIGSERTIM

**OBIEMTAUUII**

HONNULLIS EUROPÆIS BOREALI-AFRICANISQUE ADDITIS

SERIES SECUNDA

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AUCTORE

£ **BOISSIEB**

SM PFIIT. GINBV SODALI

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L1PSLE

AFUD B. HEBRAtANN

1856

## DIAGNOSES

### PLANTARUM NOVARUM PRÆSBRTM ORIENTALIUM

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## LEGUMINOSÆ

CYTISUS MICROPHYLLUS BOISB (Sect *Tubocytisus*)

G. caulibus lignosis prostratis, ramis junonibus erectis pilis brevibus adpressis hirtis, foliis minutis foliolis oblongis vel oblongo-ellipticis obtusis vel acutiusculis adpressis flavescentibus hirtis, foliolis omnibus in capitula ternaria multiflora foliis supremis eis multò brevioribus involucreta congestis, calycis pilis erecto-patentibus hirsuti tubo limbo duplò longioribus, labio superioribus deuto- & erecto-patentibus obtusis, labio inferiori indiviso obtuso, corolla pallida, legaminibus hirsutis subcarvatis pilis rulis adpressiusculis densè hispidis calyce plus duplò longioribus

Hab in *monte Pehone Thessaliæ*\* Aucher N° 1109

Foliola majora 4 lineas longa Affinis colore florum et characteribus *Cleucantho*, qui foliis triplid vel quadruple majoribus, caulibus erectis, calycis tubo longioribus dentibus acutis differt *C. Australiacus* colore florum magis distat

ADENOGARPUS ANISOCULUS BOISS

A caulibus erectis parte superioribus alternatim ramosissimis, ramis vix sub lentebrevissimis hirtis brevibus simplicibus valde fofohis erecto-patentibus foliis intensè vix sub breviori suffaltis, foliolis obtusis obovatis vel superioribus angustioribus ellipticis planis carnosulis facie superioribus pilis brevissimis lucidis sparsum obsitis inferioribus glabris punctis crebrius glandulosis adpressis, foliolis adramorum apicem 4-7 congestis in caute pain-

culas Ion gap lax& thyrsoideas formantibus, pedicellis patulis calyce brevioribus patulfe hispidulis, stipulis lanceolato-lineanbus citd deciduis pedicelli longitudine, calyce basi subgibbo viscido-lucido prater glandulas nigras stipitatas crebras pilis albis sparsis hirto bilabiate labio supenon ad basin usque in dentes semiovatos extremitate attenuate sursum subrecurvos partito, inferiori dupld longiori hneari ad tertiam partem usque in dentes angustelinean-lanceolatos quorum Intermedius sublongior diviso, vexillo rotundato extus adpressè hirto alas cannamque longè superanti, alis oblongo-Imeanbus apice rotundatis, cannâ subtus rotundatâ in rostrum verlicale acutiusculum alas excedens attenuate, legumimbus latè lineanbus obtusis viscidis nigro-glandulosis subincurvis rectis vel inter semina substrangulatis

Hab in sylvis propè *Monchiqm* Algarbiae frequens Bourgeau plantaexs 4853 N° 1803

Frutex pulcherrimus flonbus magnitudinis eorum *A grandiflon* Boiss, paniculis saepè sesquipedalibus, foliola majora tres lines longa in specinibus fructifera aucta Legumen sesquipedalcare supernè 4 lines la tum Ab *A complicate, commutato* et affinis flonbus dupld majonbus ad ramorum apicem magis congestis et praesertim calycis lab us valdè nee parum inaequalibus, superioribus dentibus non longè attenuate distinctus, habitu et inflorescentia potius *A grandiflonm* referens cujus calyx diversissimus,

#### SAROTHAMNUS BOURGAI Boiss

S prater partes juniores pilosulas demùm glabratas glaber siccitate nigrescens ramis obsolete angulato-striatis erecto-patentibus virgatis alus stenibus aliis flonfens, foliis ramorum stenium inferioribus trifoliatis petiolo foliolis aequilongo vel sublongior foliolis obovatis obtusis vel ellipticis acutis, superioribus simplicibus elliptico-lanceolatis acutis, folis ramorum flonferorum 3-5 fasciculatis simplicibus subsessilibus ovato-spathulatis vel obovatis obtusissimis, flonbas soli ternis vel 2-3nis, pedunculis folia aequantibus vel superantibus, calyce albo-scarioso glabrolabris rotundatis obsolete denticulatis, petalis glabris, vexillo obovato aUs oblongo-hnearibus vix longior cannâ partes superiorilation apice breviter incurvd attenuate obtusiusculâ alis aequilongâ, ovano medium

versus glabrescenti utroque margine dense et longe afro-barbato, stylo glaberrano, legumine nigro nitido glabro utroque margine albo-ciliato late hinc valde irregulariter utroque margine sed praesertim superne sinuato-strangulato

Hab in sylvis ad *Monchique* Algarbiae Bourgeau exs 4853 N°  
**1812**

*Scopanus* a nostra\* specie cui affinis est facile distinguitur ramis acute quadrangulis, foliis floralibus minoribus, alis canna brevioribus, stylo longe hispido, legumine angustiori caesio *S. affinis* Boiss longius distat legumine angustiori Don strangulate toto dense albobuloso

SAROTHAMNUS OXYPHYLLUS BOISS

S praeter partes novellas sparsissime puberulus glaber siccitate nigrescens rarus virgatis acute quadrangulis, foliis ramorum stemmatis alis breviter petiolatis infolioratis alis terminatis simplicibus, ramorum floriferorum simplicibus sessilibus fasciculatis omnibus ellipticis elliptico-lanceolatisve acutissimis, foliis subtentibus 2-3nervi pedunculis folia longe superantibus suffultis, calycis glabris scariosi dentibus rotundatis minute denticulatis, vexillo glabro obovato carinae brevissime apice falcate incurvae obtusis squilongo, alis oblongo-linearibus obtusis canis acuilongis pauloque angustioribus, ovano ad medium glabro utrinque longe et dense albo-barbato, stylo undique longe et patule hirsuto, legumine late linearibus glabro utroque margine albociliato margine superne saepe irregulariter sinuato

Hab in sylvis prope *Monchique* Algarbiae Bourgeau pi exs 1853 N° 1813.

A specie praecedenti ramis acute angulatis, foliis omnibus acutissimis, stylo hirsuto differt. Cum *S. scopano* stylo hirsute et ramis acute angulatis congruit sed hic specificè differre videtur foliis floralibus saepe obtusissimis, omnibus, fructu breviori angustiori. Legumina nostra specimina 2 pollicana et ultra, 6 Uneas lata

SAROTHAMNUS BALANSAE BOISS

S fruticosus ramis rigidis numerosissimis intricatis reotis viri-

dibussinaMs sub lente brevissimè hirtis apice spinosentibus novèlus folia minata simplicia hnean-oblonga obtusa ferentibus flonfens aphyllis, flonbus ad partem supenorem ramorum solitams paucis laxè et breviter racemosis pedunculo tomentoso calyce longion suffultis, calyce brevi adpressè hirtulo ad medium bilabiato dentibus obtusis obsoletè denticulatus, vexillo glabro oblongo alas et cannam superanti, aliB glabris lineanbusj cannfl hnean apice uicurvo-falcata obtusa, stylo apice non incrassato, legnmimbuscompressis hnean-rhombeis pilis longis gnseis adpressiuscuhs hirsutis margine inferiori crassion

Hab in lalere mendionali montium *Djebel Aurte* Mauritania orientalise] Balansa pi exs 1853 N° 918

Aij affini *S purganti* differl ramis magis divancatis pubernlis nee glanduloso-punctatis, floribus saltern tertiâ parte majoribus, vexillo alas superanti nee eis brevion, cannâ apice mltò evidentiùs curvatd, legumine brevion densitùs piloso

#### GENISTA SYRIACA BOISS et Blanche (Sect *Tehne*)

G ramis ramuhsque erectis virgatis stnctiusculis stnatis pilis rafescentibus patulis molliter villosis, folns prater infenora brevissimè petiolata subsessilibus trifoholatis utnnquè adpressè hirsutis oblongis breviter attenuato-acuminatis, floribus ad ramulorum partem supenorem ID racemos breves ssepè corymbiformes dispositis, pedicellis calyce brevionbub basi bracteolâ linean apiceque duabus alns brevionbus suSultis, calycis hireuti ultrâ tertiam partem bilabiati labio supenori ad basin usquæ in dentes triangulares diviso, labio inferion sublongion lanceolato-hnean obtuso subintegro, vexillo oblongo obtuso alis cannfique sublongion, alls spathulatcHoblongis cariDam rectam obtusam inargme infenon ciliatam asquantibus, leguminibus (juoionbus) Uneanbus incurvis hirsutis

Hab in Libano propè *Solvum* Julio 1841 legit cl Blanche

*G candicantt* proximo affims sat diiferre videtur Indumento patulo cauhs et ramorum, hisce magis virgatis, foliolis acuminatis rec oblusii.



**GENISTA TOMENTELLA Boiss et Noe**

G canibus lignosis procumbentibus, ramis brevissimis ut et tota planta breviter tomentello-cinereis, folus simplicibus immutis subsessilibus elliptico-hincanbus acutiusculis, Oonbus ad apicem ramorum subcapitato-congestis folus summis calyci subaequilongis involucriatis, pedicellis calyci aequilongis, calycis tomentello ad tertiam partem bilabiati lobis superne bipartito dentibus breviter triangularibus acutis inferne sublongioribus denticulato dentibus breviter hincanbus, vexillo senceo oblongo-linearibus obtuso, alis glabris canni senceo linearibus obtusis brevioribus

Hab in subalpinis Anatoliae orientalis cl Noe Junio 1852

Rami annotini 1-2 pollicares, folia 1 1/2-2 hincas longa, calyx sesquilineam, corolla 4 lincas circiter longa Ex affinitate *G albidula* MB quae differt folus lanceolato-linearibus duplo longioribus angustioribusque, calyce duplo majori, vexillo ovato *G Armeniaca* Spach differt quoque e descriptione pedicellis calyce brevioribus, flonibus eos *G albidula* sequantibus, vexillo ovato, indumento totius plantae senceo

**ULEX BRACHYACANTHIUS BOISS**

Uennaceo-dumosus laevigatus ramis ramulisque densissimis internodiis abbreviatis junioribus densis et patulis puberulis, ramulis confertissimis brevissimis tenuibus glabris angulo recto patentibus rectis vel subrecurvis acerosis simplicibus vel parte inferne ramellosis, phyllodis linearibus lanceolatis setosis longe acuminatis ramulo dimidio brevioribus, flonibus subterminalibus pedicellis filiformibus calyce parvis brevioribus, bracteolis ad calycis basin minutissimis oblongis pedicello squilatis, calycis breviter et adpressis lobis sequilongis lanceolatis acutis et breviter superne bidentatis, vexillo oblongo calyci aequilongo, alis linearibus filiformibus canni quartae parte brevioribus, canna lanceolata calyci aequilonga, stigmatibus antrorsum dechvis

Hab, in parte superne montis *Sien a de Mijas* provincial Malacitanae

Suffrutex densissimus 3-4 pedalis, ramuli laterales 2-3 lincas

longi lermmfihis paul6 longior Calyces circiter 4 lineas longi **Ra-**  
 mulis brevissimis tanuibus confer tissimis pa Uihisque msigms praeter  
 ha nc notara iib *U Bcetico* (cuj us *U Bourgeanus* Webb mihi tan tũrn  
 vanctas ramis supcrnẽ hirto-Innatis) bracteis minutis&imis, ab *U*  
*amtrah* cMcm ramulorum brovitac et tenuilale stigmatcquc non  
 rvtrorsim dcchvi distmctus *U scabei* Kun/o ramulos habet lon-  
 piores piulo cras«»iores et minũs conferlos, flores seeds ramos se-  
 cundaiins ot pnmanos et ideo non utnostra species ad penphse-  
 nam sudrulicis confertos, bracteolas pedicello latiores, caljces  
 mollilor villosos

*U mnthocUulmyirbb* mojudicc ab V **Welwitschiano Planchon**  
**specifice** non difli'rl

**MEDICAGO NOEANA BOISS**

M annua tola pihs rufescentibus mo I liter hirsuta, caulibus erects  
 vrl ascendontibus, stipulis somiovatis acutis integris, foliolis oblon-  
 go-cunoiformibus supernẽ rotundatis aculfe donticulalis, peduncuhs  
 1-2 flons anslatis folio longionbus, florc legumine laxẽ et bre-  
 viler ovato-globo anfractibus 3 1/a dextrorsum circumvoliitifi  
 subdisUinabuts, faciclms radialim costato-nervosis, margine pla-  
 nmsculo plicis rlcvaLis obliquis ad nervum extramargmalem ferẽ  
 obsoletum products ulnnquẽ margmato el mdẽ bisenalim fo-  
 veolato

Hab *m* cultis *Kurdi&tamw* Noe 1840

Species formã lpguminib di^tinctissima inter *M reticulatam* B<sup>lir</sup>  
 ot *M rotatam* floi^s collocanda Ila pnmo aspectu differt faciebus  
 leguminis rcticulalim necradiatim costatis, phcis margims multd  
 ranonbiis basi sua scciis lineammediam margims ut mil/ *NoSana*  
 non products *M rntata* distinguitur legumine piano majon mar-  
 pine cannato in spinas horizontals producto, etc

TRIGONELLA BEII^TILA BOISS et Blanche (*Fcmim Grwcum*)

Tr annua pilis albis subpatulis sparsis ad ramos et petiolos prae\*  
 serhm supern6 hirta, caulibus erectisvel ascendentibus parcẽ ra-  
 mosis, stipulu, ovatis brevissime acummatis parte media Inferion  
 pctiolo adnatis, ppliolo fokoli\* aoquilongo vel longion, foliolisobo-

vatis basi cuneatis latere supenon obtuMssraio tantum obsoletè denticulatis, calycis tubulosi cylindnci dentibus lanceolato-sululatis tubo subaeqmlongis, corolla calyce subduplò longiore, legummibus rctis hncanbub subcomplanatis longitudinahter adpres>è parallele et elevatim rugulosis in rostrum eis dimidiò breviu-> abruptiusculè abeuntibus

*Tr arcuata* Boiss et Blanche in htl non Thunberg

Hab ad promontionum *Baz Beyroul* propè *Beyroul* et in collibus ad radices *Libam* suprS *Saida* Blanche Aphn 1850 et 1843

Species valdc aflinis *Tr f&nogrmco* et a nobis non absque dubio proposita *Tt fcenumgrwcum* a nostrà plantd discedit stipulis angustionbus longiùs acuminatis, foholis oblongo-spathulatis circumcirca denticulatis, legumine magis compresso ad suturam superiorem lat6 nee obsoletissim6 nervoso-marginato secus facies nervis parum prominulis distantibus anastomosanti-reticulatis percur&o

TRIGONELLA NOEANA BOISS (Sect. *Buceras*)

T annua pliincauhs caulibus erectis patulisve parcè hirtis, stipuhs angustè hneanbus brevibus mlegris, petiolo foholis eequilongo vel breviorè, foholis oblongo-spathulatis basi longè cuneatis circumcircl inciso-dentatis pinDatilidisve, flonbus axillanbus solitanis ranùs geminis subsessilibus, calycis hirti dentibus lanceolatis acutis tubo subaequilongih, corolU calyce subduplo lougiore, legumimbus angustè hneanbus tcreti-subcompressis sursum arcuatis apice mucronato-subhamatis adressè hirtis oervisque anastomosantibus reticulatis, semmibus breviter cylindnco-subcompressis truncatis tuberculatis

Hdb in herbidis Babylomse ad *Kult* Noe Maio 1851

Gaules in meis specimimbus semipedales tenues, foliola 4-5 hneas longa, legumina sesquipollicana lines •/, lata, flores 2 lineas circiter longi Afilnis *Tr gerimnflone* Bunge qu& diiTert stipulis semisagittatis dentatis, foholis obovato-obcordatis latere supenon denticulatis, legumimbus longionbus lationbusmagis complanatis validiùs reticulatis, semmibus Isevibus *Tr monantha*C A M ha bet quoque legumina apice hamata sed dupl6 longiora et longiùs diflert caulibus brevissimis, etc

TMUONELLA UNCATA Uos\* > el **Noe (Sect *Buceras*)**

Tr annua cauibus erectis patulitsYe parcfi ramosia supernè pu-  
beruUs c<Btrfũm glabns, slipuUh angustissimis seimsagitttdtis linea-  
n-sclaccis basi argulè 2-4 iidis, dmitaU&ve, pcliolo foliola subte-  
quauli, foliok-j ohcordati^i vt'l olilongo-cunealis apicc truncalis  
superntš brcvilcr (JentiLiilatis, pcdunculis folia aequaiitifous vel sub-  
longioribus, ilonbufc capilati^ pedicellis calyci aquiloiigis suffultii  
nutantibus, calycis adprcbsõ lurti deutibus a bat>i Inangulari lan-  
ccoldtis lubo jjqmlojigis, corollâ iiallidi lutcâ calyce sublnplõ lon-  
gion, legumimbus ad apicem pcdunculi 5-10 congestis lineanbus  
comprebsis deile\is arcuaLis pedunculo brevionbus glabnuscuhs  
eximiõ reticulato-rugosis

ilab in herbidis Babylon iae ubi circã A'u^Majo 1851 detexit cl  
Noe

Scmipcdahs pedalisque, foliola majora sex hneas louga apice 4  
Jala, pedunculi fruclifcri vix pollicares, legumina semipollicana  
lineaj <sup>a</sup>/<sub>a</sub> lala sinu valdõ aperto arcuata Gollocanda propfe *Tr ha-*  
*mosam* cui aflims est et quae differt foliohs elongatis, deutibus ca-  
lycinis brovissimè Inangulanbus tubo tnplõ breviorihus, legumi-  
nibus hneam latis aded curvalis ut eorum extremitates inter se  
**parallelae** evadant

**TRIFOLIUM** DESVAUXII BOISS et Bl (Sect *Lagopus*)

Tr annum a basi pluncaule cauibus erectis vel ascendentibus  
bimphcibus vel ramosis u t et petioli pilis albis patuhs moUiter hirlis,  
btipuhs hcrbaceo-subscanosis hirsulis longitudmaliter nervosis in  
caudas a bat>i sublation lineari-setaceas eis paulõ breviores abeun-  
tibus Infcrioribus oblongo-hnearibus supreims ovato-ventncosis  
caudâ lation brevion, foliohs adpressiubculfe hirtis hDean-elhpticis  
acutis, capitulis terminahbus suprâ folium supremum bretiter pe-  
dunculatis scBpè eo involucratis ilorifens breviter ovatis frucUfena  
oblongis densiflons, calycispilis albis tandem rufis ngidulishispi-  
dissimi tubo intus apice calloso-velutino dentibus 4 tubo subbre-  
vionbus quinto alns subdupld longiori omnibus truncatis angustè  
Uneari-setaceis strigoso-pilosis, corollas palhdè roses calyce duplõ

longions vGXillo-superno longt attenuate\* retuso alas Carinâ paulo longiores multum superanti

Hab circâ Beyrout ad promontionum *Raz Beyrout*, in collibus ad radices Libani circâ *Magdouhd* et *Sawta* cl *Blanche* Fl Maio et Aprili

Afline *Tr purpureo* abeo di-»lingmtur capituhis etiam fructifens ovatis 7-9 hneas tantum longis, flonbus dimidid rainonbus, vexillo brevion, corolla pallidion An lamem in eum formis mtermediis transeat ultenus observandum Planta omnibus parlibus gracior *Tr Pamphyhcum* ailine quoque denlibus calycims asquahbus dis-Unguitur

#### TRIFOLIUM LAXIUSCULUM Doiss et Blanche (Sect *Lagopwt*)

Tr. multicaule caulibus basi procumbentibus ascendentibus remotis sparsim hirtis, stipulis parvis scano^iis longitudinahter nervosis oblongis in caudas setaccas eis dimidi6 breviores abcuulibns, foliolis elUptico-hneanbus acutis, capituhis supra folium supremum tandem longè pedunculatis ovatis fructifens cylindncis laxmsculiSj calycis pihs albo-griseis submuni tubo fauce calloso 5cabnusculo dentibus quatuor setaceis hirsutis tubo longionbus infenon pauld lorigion, corolla palhd6 rosea calyce plus\* dupld longiorr, vevillo apice hnean-attcnuato obtuso alas ahsque cannam manifestò superantibus

Hab in cultis propè *Beyrout* *Blanche* Maio 1853

Caules sesquipedales, foliola 6-7 lmeas longa 2 lata, capitula fructifera sesquipolhcana Afline speciei praecedenti distmguitur caulibus longionbus basi magis ditfuis, capilulis flonfens longè pedunculatis laxiusculis, proportionc calycis cju.s dentium et corollae diversa, species tamcn ultenus observanda Habeo eandem plantam exsemmibus ab HortoLipsicnsianno 1847 vel 1818 missis cultam absque nomine

#### TRIFOLIUM BIANGIIEANUM BOISS (Sect *Lagopus*)

Tr annuum a basipluncaule, caulibus ascendentibus procumbentibusque abbreviatis simplicibus ngiduis adpress6 hirtis stipulis fohorum ferè subcontinufe vctitis, stipulis oblongis vix liiflatis sub-

btanosh. c os tato-nervo sis apicc longe ahat is in caudas a basi lan-  
 ccolald sensim attcnualas setaceas lorigè setosas eis dimidid bre-  
 vioros> abcuntibus, poliolo parlc UberA in folus mfenonbub fohohs  
 dequulongo in supenonbus brevion, foliohs oblongo-elhpLicis ob-  
 lubis adpressfc Inrtis, cdpituLis. folio supremo mvolucratis tlonfens  
 globosis dcnsiiloris, calycis pilis longis adpressmscuhs rufis densè  
 busuli lubo faucc calloso rufo-velulmo, dentibus aelaceis tubo  
 paul(i longionbus infenon sublongion, corolld palhdi caBralescenti  
 roseâ calycc subdupld longion, vexillo a basi lation sensim atte-  
 nuaLo obtuso alaseisque canriam excedentibus

*Trifohum cwrule&cens* E Dcsvaux in litt non MB

Ilab in arcuosib ad viai> circâ Deyroul, detexit Apnh 1850 clar  
 Blanclio

Caules pro longitudine crassmscuh (lonferi 2-3 pollicares, fo-  
 hola4-5 hncas longa 2-2'/i lata, capitula magnitudims nucis avel-  
 lana) Ea fructifera non vidi Flores arc 5 lineas longi Species  
 dislinclissirna m scctionc inter gregem *Tr purpurei, angmtifolu,*  
*Pamphyha,;*, etc , et cam TV *Lagopi* et *Smyrnwi* collocanda ab utrfl-  
 quefdihlinctissima

THIFOLIUM CONSTANTINOPOLITANUM Ser in DC Prodr (Sect  
*Lagopus*)

Speciei malè not® et cum alus sequontibus comparandae dia-  
 gnosis sic cnuntianda

Tr annuiim cauibus crectis patulive ramosis pube brevi pa-  
 tulâ molhter lurlis, stipuhs submembranaceis nervoso-stnatis U-  
 nearibus apice in caudas lanceolatas linearesveeisaequilongaslon-  
 gioresve abcuntibus, pedunculis stipulismultòlongioribus, fohohs  
 oblongo-lanceolatis obsolete denticulatis acutis vel acutiusculis  
 adprcj>siuscul6 Inrsulis, capituhs per anthesin ovato-globosis, fruc-  
 tiferis elongdtis cylmdnco-conicis dcmumlongè pedunculatis, ca-  
 lycis flonforo pilis adpressis brevibus rufescentibus hirto dentibus  
 angustè laiicolato-subulatis umnemis nervo valido albo percursis  
 acnrosis lubo subiuqmlongis inferior! dupld longion, corollâ ochro-  
 lcvicl wlycc 2 '/iPlò longion, vexillo lineari obtuso vel retusoalas  
 superanli pis carinas subasquilongis calycis fructifen tubo rufes-

centi-hirsuto oblongo intus callo breviter fimbriato subclauso ad basin usque stinato dentibus rectis inferius subdeflexo

Hab circa *Byzantium* Caslagne 1 Noë t in Palaestina Boiss I in Mesopotamia inter *Orfa* et *Suerek* Kotschy Herb Mus Palat Vind n°78

Var *Q phleoides* — Fohola abbreviata ovata vel oblongo-ovata, calycis fructiferi lobus abbreviatus glabrescens dentesque subabbreviati, idem spica fructifera angustior eam *Tr phleoidis* formam et magnitudinem referens

Hab cum priori circa *Byzantium*, Castagne! Noë!

Caules saepe pedales fohola in specie saepe 9-40 lineas longa in varietate breviora, flores circiter 5 lineas longi, capitula fructifera 8-12 lineas longa, species sub anthesi facile confundenda cum *Tr fupino* Savi quod tamen corollis palidius roscis distinguitur Hoc fructifera longe distat capitulis ovato-rotundis, calycis valde persistentis tubo callo brevi obconico glabrato nervi, dentibus expansis Propter *Tr Latvnum* et praesertim *Tr Alexandrinum* collocandum huic praesertim valde affine et ab eo foliis minoribus angustioribus calycibusque dimidio minoribus dentibus subulatis nec lanceolatis tantum distinctum Cum *Tr Alexandrinum* spontaneum ignotum sit et in Aegypto non nisi cultum occurrat, lubenter suspicari *Tr Constantmopolitanum* ejus typum spontaneum esse

TRIFOLIUM BERYTICUM BOISS et Blanche (Sect *Lagopus*)

Tr annum a basi pluncaule caulis elongatis ramosissimis ramis puberulis, stipulis oblongo-linearibus membranaceis adpressis nigro-costatis in caudas lanceolato-subulatas eis breviores abeuntibus, foholis elliptico-linearibus ramis oblongis acutius obsolete denudatis adpressis et longiusculis hirtis, capitulis terminalibus foliis summis ea superantibus involucratis cisque superatis ovato-rotundis, fructifera ova to-oblongis albo-hirsutis semper valde compactis, calycis tubo 10 stinato glabrescenti apice ut et dentes pilis albis densis et longis pericillato, dentibus inaequalibus hinc subulatis inferius tubo duplo longioribus, corollas ochroleucas vexillo calyce duplo longioribus apice attenuato hinc obtubo alas canaliculatas subaequilongas longe superanti, calyce fructifero incrassato obconico-turbinato tubo stinato parvis tuberculato-hirto intus callo ru-

bello piloso clauso dentibus c basi laU tnangulan lanceolatis rec-  
liuscuhs vix maequahbus corona to, seminibus rubelhs oblique  
ovatis subcompressis

Hab circi *Dm ythum* cl Blanche, prop6 *Satda* in ams tnticeis  
ad oslium flavu *Samib* ? cl Blanche Aprih ct Maio

Caulcs bipedaleslongioresve, foliola infenora ferèpollicana tres  
hnoas lala Capitula magmtudmo inter pisura et avellanam media  
Species (listinctbsima nulli arctc affirm propc' *Tr Boctom* et pras-  
sertim propo *Ti Tmmeanum* Doiss collocanda quod dillert capi-  
tulis non omnibus termmalibus scd etiam axillanbus, mayis elon-  
gaLiSj cdlyce a basi adprcsbG ct dens6 hirsuto, fructifero immutato,  
etc Habitus etiam quodammodd *Tr flavescens* Tineo quod caly-  
cis immiitaLi dentibus longèstaccismagis dislat

#### TRIFOLIUM CAMHELI Boiss

Tr annum caulo erccto fisuloso jam infernè et ssepè a basi ra-  
moso ramis creclis subdivancatis patulè hirtis, stipulis abbreviatis  
latè linean-oblongis nigrescenti-stnatis in caudas longè lanceo-  
lato-lineares herbaccas cis multO longiores in folns supreme pe-  
tiolum squantob abcuntibus^ foholis adpressehirsutisoblongis vel  
clbpticis obtusis acuLiuscuhsquo utnnquc'attenuatis obsolete den-  
ticul.itis, capitulis tandem longti pedunculatis floriferis ovato-ro-  
tundis Tructiferis oblongis, calycis llonfen tubo 10 stnato apice  
pracsertim priis patulih hispidissimo dentibus longè et palule his-  
pidissimis linean-lanceolatis valdc msequahbus lnlenon tubo ter  
longion, corollD ochroleucae vexillo calyce dupld longion apice  
attenuate) Unean obtuso vel retuso alas longè excedenti, eis can-  
nam paul6 snperantibus, calycis fructifen tubo glabrato obcomco  
calloso-incrassato subonervi intus clauso dentibus basi tnnervus  
plu^ minus expaiibi^, semimbu^ albo-badus subcompressis ovato-  
irjanganbus ad hilum subclclusis

Hab in herbidis Palestinae, mons *Wwbuns* in latere scptentno-  
nah, fauces *Cwrmeh* Boiss Aphn 1846

Podale vel bipedale, foliola pollicara longioraque, corolla 6-T  
lineas longa, capitula fructifera 9-121meas longa dentibus ngidis  
elongahs rufescenti-plumosis calycims undique echinata Charac-  
(enbns formàque pt naluri calyus fructifen afflne T *suptno* Savi



quod eximiè differt caulibus numerosis prostratis, foliis dimidiis  
minibus, stipulis brevibus, corollâ palidè roseâ, capitulis  
fructifera dimidiis minibus magis rotundatis, dentibus calycis  
brevibus sparsim ciliatis, seminibus magnis ad hilum non  
retusis *Tr squarrosus* MB non auctorum foliis magis habitu-  
que quodammodo affinis ob calycem fructiferum striatum non cal-  
losum in aliâ grege militat

TRIFOLIUM NEVADENSE Boiss (Sect *Tnfoastrum* )

Tr perenne caulibus prostratis glabris radican-  
tibus, stipulis breviter cum petiolo coalitis in lobos nigricantes e basi  
ovato-triangularibus sensim attenuatis acutis apicibus, petiolo  
longo, foliis minibus glabrescentibus vel parvis et adpressis hirsutis  
cuneato-obcordatis obtusissimis eximie nervosis nervis in denti-  
culos breves minutos margine productis, capitulis axillaribus  
longe pedunculatis folia superantibus, pedicellis glabris defloratis  
deflexis minoribus calycem subaequantibus, calycis glabra fauce  
denudati corolla alba triple brevibus tubo apice ad sinus magis  
maculato dentibus triangularibus lanceolatis acutis longioribus, dentibus  
bimissis superioribus sublongioribus, legumine

TV *pallescens* Voy Bot Esp non Schreb—*Tr glutinosum* Add  
ad Voy Bot Esp non Schl — *Tr repens* Bourgeau pi Esp  
exs 4854

Hab in humidis glacialibus *S Nevada*, ad prata *Borregwle\**  
**dicta, ad Corral de Veleta**

Ex synonymis citatis patet ejus affinitas, hanc plantam pluribus  
speciminibus confertis nunc pro distincta specie agnosco A *Tr*  
*repente* cui caulibus radican-  
tibus congruit calycis diametro minoribus  
cum corolla proportione differt A *Tr glareoso* caulibus radican-  
tibus, ab utroque foliis minoribus *eximie* obcordatis apiceque  
valde latioribus distinguitur

TRIFOLIUM ORPHANIDEUM BOISS (Sect *Tnfoastrum* )

Tr perenne glabrusculum caulibus prostratis latericeis  
radican-  
tibus superioribus dense foliosis, stipularium membranacearum  
parte liberâ triangularibus in mucronem selacum abruptiusculè

abnini, iicUolis \A\ii miusve clongatis, foliohs parvis cuneato-  
 obovalis oblusissimis sacpiùs obcordaUs exirniè subtùs costato-ner-  
 vosis norvis in donUculos approximates acutos excurrentibus, pc-  
 dunculis longis folia superanlibus, pedicellis drmiim deflexis mte-  
 noribus cal>ci submqmlongis, calycis glabn corollam dimidiam  
 fOqjtiLis dotiLilms lanceolalis albo-marginatis aculis supcnonbus  
 fiibo subairiulongis cdDlcrin subbrevioribus, corollU pallidb rosed,  
 VCMIO apicc oblusato imbricato alas snpcr.mU<sub>3</sub> legumino

ILJII HI monlc *Kylltme* Poloponnesi snprfl *Trikala* cl Prof Or-  
 pbanidos

Ciuclos brovos, foliola *i* \*/<-2 hncas longa, capilula ct flores cis  
*Ti irpentis* dimidifl mmorps a quo form<\ olmirmtic foboram,  
 donlibus calycemis proporlione lubi lonyionl)is, corollac colorc  
*oic* diir^rt FormA folioruin spocu'm pr.cccdfcnlcm refertquae au-  
 lom r.ilycis cnm coroll.1 proporlionn alusq; differt notis

Tiiit'ni.iiiM iivGnormi-UM Iloiss (Sect *Tnfohastrum*)

Ti ftimuuin gl.ibrum A bnsi mullicanlc caulibus erectis patubs-  
 que glabiis, slipulis mombranjoK. basi broviter vaginantibus m  
 cniirlasf<sup>1</sup> basi tri<iiiigulan lancpoldlo-solaceas nigricantes abeunti-  
 bus, fains supcnonbus lirevissimfe pctiolalis, foliohs e basi elon-  
 G[rilo-cun(<ilA oliovatis obLusii supeme praesertim argute denticu-  
 lilis pjrallcl6 norvosis s,ttp6 nigro-maculatis, pedunculis folia  
 mull(i supci.inlibus, c,ipiLuli<? spha;ricis, pedicollis demiiim deflexw  
 intoj IOIIIIS cahcis Liibo frquilonis, calycis glabn lubo 10 nervi  
 apico ad sinuss.vpc nigro-maculato, denlibusuinnprviislanceolatis  
 .nig-iisu'; tilbo-maiKiii.ilis supcnonbus tubo pauld longioribus cae-  
 tons paulo brovionbus, corolla roseA, vesillo calycovix sesqui-  
 longion curvaLo apicc atlenualo oblusato alas superanli, legumine  
 diipermo oblongo mtor somina snbslrangnlalo, seminilms rcnifor-  
 mibus liftus

Tlib in humidis Lydiae, *Smyrna* ad mare, regio montosa inter  
*Ephesimi* ct *Magnesium* ad *Mmndium* Maio 1842 (Boiss)

Aflinc *Tr nujrcscenli* Viv quod differt capituis dupl6 majonbus,  
 Honbus majonbus albs, corollft calycc dupld vel plùs duplò lon-  
 gion, deniibus calycims tubo brevionbus, leguminemagisclongato  
 A *Ti eleqanh* el sjtccicbus ailiribus radice annu3 longiùs distal

TMFOLIUI JAMINIANUM Doiss (Sect *Tufolstrum* )

Tr annuum glabrum a basi pluncaule caubbus erccLis ascen-  
dentibusvc, slipuhs membranaceis albidis longmscuhs in caudas  
a basi laliuscuU<sup>1</sup> Lnaugulan long\* sctacco-acuminatas abounlibus,  
foliolis obovatis obtusiuscuhs mucronulalis minul6 et argutē den-  
ticularis parallel multincrvuloMs, capitulis terminabus breviu;-  
cule pedunculalis folia suprcma pariim superanlibus<sub>3</sub> capitulis  
globosis, pedicelhs tubo cal^cino multo lprevionbus 11011 defle\is,  
calycis glaberrirni albidilabo norvoso-slnalo dentibus uninerviis  
subulatis subpatcnli-rccurvis paululūm lnatqualibus tubo sublon-  
gionbus, corollā albâ, vaxiUo apice altenuato calyce sesquilongion  
alas valdē supcranli, leguminc

Hab in cultis ad *Ilammah les Platanes* prop6 *Algenam* Jamin pi  
exs 1851 N° UO

Valdē afline *Tr uihmocarpo* Crot sed hoc e specimimbusLusi-  
tanicis, Hispanicis et Allanlicis collatum differt stipulis mult6  
breviūs caudatis, foliolib magis rotundatis, prEesertim calycis den-  
tibus ffiquilibus Idtiusculē lanceolatis albo-marginatis rectis tubo  
brevionbus, corolU roseft calyce duplō longion Ex descriptione  
cl Gussone suspicor *Tr i&thmocarpum* Flora SICUIBB potitus ad no&-  
tram specim referendum csse

## DOHYCNium LIDANOTICUM BoiSS

D perennc basi hgnosum proslratum tolum pilis adpressis longis  
flavescenti-gnscum, ramis abbrevialis ascendentibus oligocephalis,  
folns minutis foliolis oblongo-lineanbus acutmsculis basi attenua-  
tis, capitulis 5-8 flons suprâ fohola suprcma pedunculis ea squan-  
tibus vel brevionbus suffultis, pedicellis calycinum tubum aequan-  
tibus, calycis adpressmsculē sctosi dentibus tubo % \*/apl6 brevio-  
nbus ifquē latis ac longis triangulanbus acutis, vexillo supra  
medium contracto apice rotunda to basi cuneato, alis cannam  
tegentibus, legumine oblongo acutiusculo calyce 2<sup>4</sup>/«pld longion

Hab in siccis partis supenoris *Ltbam* 'supra *Zachle* Legi Julio  
**1846**

Sufrutex prostratus intricatus ramis 2-3 pollices longis quern

1  
priinum pro JO *mfiutuo*so peconba\*, dep*ci*!sio habm sed quod ab  
eo cxmn6 differl dcentibus calycinis breviter et late tnangularibus  
ncc lanccolatis elongalis, pedicellis lubo calycino dimidid brevio-  
nbus, legammc ovato brevi obtu^o Locus magisOientalisex quo  
*D suffrulttom* novi esl Carnia circd Tergc&tum *D herbaceum*  
Vill in Onento vulgalissimum caBtens neglectis vexillo ad medium  
noil coiislricto, indumcnLo patulo cum noslri specie non confundi  
potrst

#### TETIACIONOLOLOIIS PALJESTINUS BOISS el Blanche

T animus lolus pilis albis vel flavidis ad ramos et petiolos  
patulis ad folia adpressiu^cuhs plus minus hirsutus, caulibus de-  
cumbenlibus, stipule ovalis acuUs, pctiolo stipuld brevion, foholis  
ovatis vcl ovato-subrliombeis acutis, flonbus solitarns axillaribus  
raniis gemmis, pedunculo folio brevion, flore folio trifoliolato  
brevionbasi bracteato, calycis patulè ctlongfe Inrsuti dentibus lubo  
sesqmlongionbus hncanbus basi vix lalionbus submictjuahbus,  
corolla purpurea calycem quarLâ parte excedenti, vexilh laming  
buborbiculaU rclubd alis carinâque paulò longion, leguminibus  
lercti-subqiiadrangulis alatis alis leguimms diametro multd an-  
gustionbus

Hab m S>riL circA *Beyrou*t et circâ *Smda* in cultis el Blanche,  
*in* montibus Palcblinae inter *limnla* el *Hterosohj*mam (Doiss )

Habitus, folia et characteres *Tetr purpurei* a quo differt flonbus  
dimidió minonbus, laciniis calycmis hncanbus nec e basi lation  
lanceolate Ala logiiminum angustior esse videtur *T conjugatus*  
Ser quoque parviflorus leguminibus aptens multó tenmonbus  
lccedit

#### LOTUS AWIHSLLOIDLS lloi&s et Noc

L pcrennib palhdu glauco-virent, mferiie glabrescens supernè  
adpre&siusculè hir'sutus e basi ramosus mullicauhs caulibus ascen-  
dentibus ereclisqumibis, folns brevissimè petiolalis foholis  
oblongo-spathulatis basi scs>sili attenuatis acutiuscuUs, stipuhs  
petiolulatis obhquis bubscmiovallS obtusis vcl acutis, capituh 4-5  
lions 1-3 axillanbus terminahbusquo approximatis subsessilibus

basi tolas calyco brevionbus bracteatis, calycis densè albo-hirsuti dentibus tubo pauld longionbus lanteolatis acutis, corolla" purpurea", ve\illo supernè concavo curvato obtuso cannam breviter rostratam obtusara sublūs angulo obtuso rolundalo curvatam paululum excedenti, ahs obbquis oblongo-spathulatis apice rotundatis canna subbrevionbus, legumine

Hab in vineis circfi *Karput* Armenia? ubi flonferum Junio 1852 logit cl Noe

Semipedalis, foliola majora 3-3 1/4 lineas longa, flores magnitudnus Illorum *L comiculati*, afflnis *L Mtckauxumo*, *Aleppico* et *lanuginoso* Prior diffort foholk majonbus, caulibus supcrnA vald6 flexuosis ramosiscpie, capilulis longiusculo pedunculatis *L Aleppicus* mdumento patul6 hispido, dipitulis pedunculatis dentibusque calycims apice s>elacois distinguitur Poslenor landem habet caules longissimos prot>tratos, capitula long6 pedunculata, denies calyciios longos incurvos apice betaceo-altenuatos

LOTUS GORNICULATUS L var *stmodon* Boiss et Heldr

Lacmiae calycinse supernè demùm angustissimsB setaceae tubo sesquolongiores, caetorum omnia speciei

Hab in rupestnbus regions alpmai moutium Graciae, *Parnassus* (Heldr), *Chelmus* (Orphanid6s)

LOTUS CORNICULATUS L var *brachyodon*

Rhizomate sulTrutescenti multicauh, cauhbns decumbentibus tenuibus brevibus, folns minutit, dentibus calycmis lanceolato-hneanbus obtu^iusculis tubo sequilongis Totus pihs patuhs plus minùs hirtus

Hab in monlibus calcareis Libani supri *Eden*

Habitus *h c&numlati* var *alpmi* sed basi magis hgnosus Pro specie novfl forsán proposuissem ni vanationes in forma" dentium calycinorum obberavissem

LOTUS NOEANUS BOISS

L glabemmus glaucescens basi sutTrutescens sa3pe hguosus,

mullicauli/ caubus decumbentibus creclisque elongatis plus minus  
 jggulatis, folns brevissimè petiolalis foholis mferiorum oblongis  
 oblusis basi cunealis supenorū elliptico-hnearibus acutis, sti-  
 puhs loliohb conformibus, peduncuhs axillanbus folio multoties  
 longionbus apicc 2-3 lions, ioholis lmcnbus 2-3 vel bractean-  
 tibus vel a lloibus remotis, calyti^ obconici glabernmi dcnlibus  
 lanccolatis subincurvib lubum basi valdè alLeuualum acquantibus  
 vel tō Mibbreuionbus, flonbus flavis exsicjLis vircnlibus, vexillo  
 lalere carinali curvato breviter ovalo subrhomboideo, alls latere  
 inforion valdè curvatis, carinA angulo redo rotundato curvati m-  
 fernō alls non Lecfaj legumimbus rcllis tercti-planiuscuhs hnea-  
 nbus non torulosis

Ilab in fossis humidis Babylonia; ad *Mohammera* Martio et Apnli  
 1851 legit cl Noe

Rhizomata hgnosa sacp6 pennā anserind crassiora ssep6 tenuiora  
 Caules pedales, foliola intermedia 0-7 hneas longa 2 lata Flores  
 eis *L cornwalati ctenuifoln mmores* AJfimsL *decumbmti* a cujus  
 formis glabris diflert rhi<somate lignoso, caubus crectis, calycis  
 dentibus tubo non longionbus, vexilh formd, ahs marginc inferion  
 curvatis Legumen longms, angustius 12-14 lmeas longum hneam  
 latum

#### GIACYTHUZA PALLIDA BOLSS et NOC

Gl caubus basi procumbentibus denudatis ramosis dein erectis  
 angulato-stnatis jam a parte inferiori flonfens pilis flavidis adpres-  
 biusculis bubcrispis velulino-birlis, foliis 4-5 jugib cum lmpn, foho-  
 lispetiolulatis elliptico-oblongis obtusmsculis acutisve mucronulatis  
 Infimis a caule parūm distantibus omnibus utnquē subtts copio-  
 siūs pihs adpre&smcuhs hirtis subtiis parcè glandulosis, racbide  
 tomentello-hirtā, stipuhs setaceis brevibus citō deciduis, florum  
 racemis axillaribus a quarlā parte mferion flonfens foha supe-  
 rantibus pedunculo communi tomentello, floribus subsessihbus,  
 calycis basi latere supenon subgibbi tomentelh glanduhs sessih-  
 bus adspersi ad <sup>s/\*</sup> usquē bilabiati lacinus a basi lanceolate longè  
 hnean-setaceis labio supenon ultra medium inferion ad <sup>a/4</sup> usquē  
 fisso, petahs albido-rubellis attenuate, vexillo acuto alas eisque  
 cannam excedentibus, ovano junion glanduhs sessihbus consperso,  
 legumine

Hab circa *Dtarbekir* ubi Maio 1852 legit cl Noe

Ex affinitate *G glandulifera* a quo sat distinctam autumamus indumenti naturâ, foliis pncsertim in parte superion plantae attenuato-acuminatis, racemis elongatis folia superantibus, colore florum, calycinis dentibus valdè elongatis

GLYCYRRHIZA VIOLACEA Boiss et Noe

Gl caulis ascendentibus erectisve sparsim et adpressiuscule hirtis angulato-striatis ut pectus pedunculique glandulis sessilibus plus minus adspersis, folis 5 jugis cum impari foliis pedicellatis elongatis ellipticis obtusis utrinque glanduloso-punctatis subtus ad nervos parvis et breviter hirtis, stipulis parvis citè deciduis lanceolato-subulatis, racemum axillarem folio brevioribus pedunculis planiusculis hirtulis, florum pedicellatis, calycis subincurvi adpressè hirti glandulosique dentibus subacqualibus tubo subbrevioribus breviter triangulari-lanceolatis corolla intensè violacea, vexillo acutiusculo alas eisque cannam superantibus, leguminibus reclis hinc 4-7 spermiis fuscis glabris obliquè mucronatis

**Hab prope Mohammera et ad ripas Euphratis Tigridis et alibi in Babylonia** frequentissimè cl Noe anno 4852

Habitu refertur *Gl glandulifera* var *lemcarpam* quae differt foliis latioribus superionibus acutioribus, florum minoribus palidè hincis, dentibus calycinis subulato-attenuatis tubo multo longioribus, leguminibus curvatis margine incrassatis *Gl glabra* eisdem notis calycis et leguminum distinguitur

ASTRAGALUS PARNASSI BOISS var *Cylleneus* Boiss et Heldr

Folia utriusque pagini plus minusve adpressè hirta Flores paulo majores Calycinae lacinae corollae proportionè paulo longiores Vexillum et saepe alae parte superion cruento-purpurea

*A Cylleneus* Boiss et Heldr in Schedul

Hab in saxosis regionibus superionibus montis *Kyllme (Zina)* Peloponnesi usque ad cacumina, Heldr et Orphandesi

Specimenibus pluribus observatis ab *A Parnam* specificè distinguere non audeamus

ASTRAGALUS NOEANUS BOISS (Sect *Ti agacanthed Sesnles*)

A nan us, cauhbu-\* brevibus spinas vctustas paucas sparsas breves forcnUhuii nudiusculis, ramisnovclbs abbreviate stipuhs membr. maccis ciliatis obtusmscu)6 triangularibiis foliorum tcclis, folns brevibus ddpresō lurtis gnseis, potiolo mfernē denudato suprē modinm approximativm tnjugo, spinā terminali tenm foliohs brevion, foliohs subsess\hbus elliptic^ plicatis basi et apice acutis mucronulaLis facie supenon glabrnisuhsuifcrion adpress»6 hirtis, Qonbus in axilh\* Iriferionbus 2-3 glomcratis, bracteis ovatis membranaccis ciliaLis sLipulis simihbus sed latioribus ovatis breviter mucronalis calycis <sup>a</sup>/s ajquantibus, calycis tubo obconico-turbinate mfern6 glabro supernē lotigō albo-lanatoJ lacirim tubo brevioribus a basi lancoolaU long6 lanatft subulato-attenuatis apice glabns spmulusis, corollā glabrifi e siccopalhdfe rose& calyce 2 \*/jpld longion, vexillo a basi sensim ad apicem dilatato oblougo-spathulato cxaunculato obtuso vel rectuso apice retrorstum subcurvato alas Kuperanti, alis Uncanbus aculmsculis cum canna\* aequilongS basi laminae coactis ungue hbens

Hab m Armeniā meridionali probab propē *Karput* Noe (comixtus cum alii specie *AshagaU* absque Numero)

SufErutexbi-tnpollicans, folia polhcem, fohola 2 <sup>l</sup>ja~3 hneas circiter longa, iloros circ 5 V« lineas longi Gollocandus propē *A Caspmm* qui difTert cauhbus clongatis, folns sesquipolhcanbus nullijugis foltohs angustē Imeanbus elongatLs, calycirus dentibus villo occultatis, vexillo abbreviato alas vix excedenti Aflinis quoquo *A barbajow* qui calyce m dentes plumosos long6 partito et *A cryptocarpo* male noto qui folns glabrescentibus, stipuhs acutis flonbusque solitanis differunt Inter *Tragacanthas macrocalyctnas* et *microcalyanas* ambiguus

ASTRAGALUS ANTHYLLOIDES Lam. var' *lugubnz* Boiss et Noe

Peduncuh et lnpnmis bractes et calyces praeter pilos albos pihs nigris ssepē copiosionbus mgncanti-tomentelh Foliola mucronulo terminali sdepius cvanido obtusa vel subretu^a Calycis laciniae pauld longiores magis attenuatse a basi lanceolate subulatae

Hab in sulalpiuis Anatolia, Noe Jurno 1852 N° 1061



ASTRAGALUS CAUDICULOSUS Boiss et Huet (Sect. *Hypoglottidei*.)

A radice longa" verticali cylindrica caudiculos numerosos fiformes repentes nudos vel squamulosos edenti, folus ad collum congestis 6-7 jugis adpressissimè senceo-canescens, foliolis approximatis parvis ovato-oblongis obtusis, stipulas in unam acutè bidentatam oppositifoliam coactis, pedunculis e collo orrandis ascendentibus folia aequantibus vel superantibus pils adpressis basin versus albidis superne nigris obsitis, capillis lernunibus 0-9 floris densiusculis, bracteis oblongo-triangulibus brevibus, (loribus sessilibus, calycis pils adpressis nigris densè obsili den-  
 Ubus tubo 5-6pl6 brevibus, corolla caeruleo-violacea glaberrima calyce triplo longior, vexillo oblongo-lineari obtuso alas eisque obtusis cannam paulò superantibus, omnibus corollae partibus re-  
 cliusculis hinc, legumine

Hab ad nives montis *Tech Dagh* propfc *Erzeroum* Armeniae Julio 1853 cl Huet du Pavilion

Caespitosus, caudicibus 2-3 pollicares, folia pollicana, flores 0 lineas longi Species pulchella ab *A Lydto* et *Heldreichu* caulibus j>ubnulli<;, denibus calycinis abbreviatissimis facilè distinguenda

ASTRAGALUS ISPIRENSIS BOISS cl Huet (Sect. *Hypoglottidei*)

A rhizomate subterrescenti multicauli caulibus glabris stantibus erectis jam e basi ramosis, ramis erecto-patulis, foliis remotiusculè 5-7 jugis foliolis pils centro affixis hirtis gnosis elliptico-oblongis vel elliptico-hincanibus obtusis vel acutiusculis, stipulis in unam brevem oppositifoliam breviter bidentatam coactis, pedunculis folia superantibus glabrisculis, capitulis terminalibus oblongis Jaxiusculis 8-12 flora, bracteis hincanibus hirtis pedicellos brevissimos non superantibus, calycis pils nigris adpressis obsitudentibus lanceolatis tubo duplo brevibus, corolla intensè violacea" glabra calyce quadruple! longior, vexillo lineari obtuso longè alas eisque cannam superantibus, corollae partibus inter se hincanibus, legumine glabro cylindrico semicirculariter sursum arcuato inter semina substrangulato calyce 5-6plo longior

Hab propfc *Ispir* Armenian borealis Junio cl Huet du Pavilion

Caules '(4-1 pedales, folia 1-2 pollicaria, foliola majora 4-5 lineas longa, floris 10 lineas longi Pulchra species colore florum *A Dahuncum* reforens, collocanda propè *A Steventanum* DC quidiffert folus angustè linearibus, flonbus dimidiò minoribus 5-6 lineas longis

ASTRAGALUS CALOPHYLLUS Boiss et Heldr (Sect *Hypoglothdet*)

*A* caudiculis brevibus prostratis denudatis apice foliosis, stipulis in unam oppositifoliam acutè bilobam coactis, folus praesertim junionibus deiisi cano-tomentosis adultis ad foliorum margines flavicantibus sub 30 jugis foliolis junionibus phcatis contiguis adultis valdè approximatis ovalo-oblongis retusis, pedunculis adpressis lurtis folia pauld bupcrantibus, capitulo ovato denso, bracteis linearibus setaceis calycino tubo subbrevionibus, calycis patulè et conspue hispiduli lacinnis angustè setaceis hispidis tubi  $\frac{2}{3}$  sesquialteris, corolla violaceo-calycis sesquialteris longioribus, legumine

Hab *m* subalpinis propè *Sivas* Anatoliae Junio 1852 cl Noe

Folia  $\frac{2}{3}$  pollicaria 5 lineas lata, pedunculi 2-3 pollicares. E sectione *A emarginati* et *A densifolus*, ab omnibus dentibus calycis setaceis distincta praeter *A Cedreti* Boiss Diagn. qui eodem caractere gaudet sed indumento minus denso, folus capitulisque immixtis, dentibus calycis tubo triplo brevioribus a nostro sat differre videtur

ASTRAGALUS KARPUTANUS BOISS et Noe. (Sect *Hypoglottidei*)

*A* caespitosus subcaulis, folus adpressè canis non senceis 7-8 jugis, foliolis approximatis elliptico-linearibus obtusis, stipulis membranaceis in unam breviter et latè bidentatam coactis, pedunculis adpressis albo-hirsutis folia subsquantibus, capitulis densis rotundis 1-9 floris, bracteis lanceolatis calyces non aequantibus, calycis obconici longi densè et adpressiusculè albo-hirsuti dentibus lanceolato-linearibus tubo subaequilongis, corolla violaceo-caerulea glabra calyce 1- $\frac{1}{2}$  triplo longioribus, vexillo valdè elongato linearibus retuso alas carina pauli longiores multum superanti, legumine

Hab propè *Km put Armenia*<sup>1</sup> montanahs cl Noe Junio 1852 sub N<sup>o</sup> 3

Planta bipollicif ris., toliola 34 linear longa, corolla 7 h<sub>2</sub>icas longa  
 Peduncuhs subradicalibus, capituhis densis, vexilli forma et mdu-  
 mento lotius plant© propè *A bicolorem* Lam collocandus sed hie  
 differt stipulis acuminatis, peduncuhs semipedahbus, flonbus fla-  
 vcscenti-leucophaBis sursùm curvatis, vexillo obtuso

ASTRAGALUS APOLLINEUS Boi<sup>as</sup> et Heldr (Sect *Qnobryckwidei* j

A perenms multicaulis rhizomate suffrutescenti bfflpè ramoso,  
 cauibus ascendentibus angulato-flexuosis tenuibus adpressissimfi  
 cams, stipulis herbaceis breviter triangulanbus obtusiuscuhs a pe-  
 liolo et inter se libens, foliis 6-7 jugis foliohs oblongo-ellipticis  
 obtuiis pihs centro afixia adpressè canescentibus, peduncuhs folia  
 suporantibus adpressè canescentibus, flonbus 3-5 terminalibus  
 capitatis sessihbus, bracteis lineanbus brevissimis nigro-pilosis,  
 calycis pihs mgris albisque paucis intermixtis densè et adpressius-  
 culè hirsuti dentibus lineanbus tubo quadrupld brevionbtffB, co-  
 rollâ rubello-violaceS calyce dupld longion, vexillo oblongo mar-  
 gmc reflexo alas eis que cannam parùm excedentibus, legumine  
 cyhndnco-subcompresso recto adpressè mgro-piloso apice lon-  
 giusculè attenuato acuto calyce quintuplò longion

*A longipes*B etH in litt non Kar et Kir

Habitat ranssimus in regione alpinA montis *Pamas&i* cl Hel-  
 dreich Fl Aug

Gaules semipedales vel breviores arcuati, folia praesertim mfe-  
 nora longè peUolata, fohola 3-4 lineas longa, peduncuh 3-4 pol-  
 hcares fructifenelongati, flores 8-9 lineas longi, legumen sesqui-  
 polhcarc sesquilineam latum Afflne *A sencophyllo* Gnseb quod  
 differt subacaule, foliis argenteo-sericeis 2-4 jugis, legumine calyce  
 tnpl6 longion *A stenoceras* quoque caulescens ab eo dignoscitur  
 indumenta brevion et dentibus brevioribus calycis^ legumine duplo  
 brevion albo-hirto, etc *A maerolobw*WB usdem fere notis differt

ASTRAGALUS STENOSEMIUS Bmss et Noe (Sect *Raduxflort.*)

A subacaulis ad collum vestigis stipularum et petiolorumsqua-  
 mosus ohgophyUus, stipulis amplis basi breviter petiolo adnatis  
 paraleliber&lanceolatis ngidis subspinescentibusnervosisciliatis ni-

gucanlibu<sup>^</sup>, folii<sup>^</sup> artpressò llavesconti-seuccis remote 4-5 jugis fo-  
holis ulrmquc<sup>!</sup> aUcnualis elliptic<sup>^</sup> plica Us, pedunculopalentalbo-  
Inisuto folnsdjquilongo, capitulo terminali t>ubnutanliovato denso,  
bracleis oblongo-lanceolalis acutii violaceis inargmc longo ciliatis  
calycino Lubo loiigionbus, calycis pihs longia paLuli> albo-hispi-  
dissimi lacimii lincaibu>> lubo brevioribus, corollâ purpleA,  
vtmlllo nuLlo lanccolaLo a basi ad apiLem sensim atlonualo caljcc  
dupL6 Longmri alii biibdiipl<sup>^</sup> longion, cis apicc lon<sup>^</sup>6 attenuate  
acutis cannam rcciam oblusam valdè cxcudentibus

Hab in alpiibus prop6 *Dakkei Maaden* (Ardana) Armenia) mon-  
ilionalis cl Noo Maio

Koha ul tL peduncali hipolhcana, capilulum ferc<sup>!</sup> polbcarc, fo-  
liola °2 7,-0 fiuca<sup>^</sup>, lloros sex Imoas longi Species liabitu charac-  
lenbusque lions disLinUit>tima colLocanda propc<sup>!</sup> A *barbalum* Lam  
<qui dillerl indumciiLo albo-sLngoso, foliolit> approximaLis, Ilonbus  
inajoiibusj calyco corollain jjquanti vel excedenti, vexillo propor-  
tionc alarum mullo breviori

ASTRAGALUS ciiLonospii/Enus Doiss et Noe (Sect *Radiciflan* )

A acaulis ba,i vosligns foliorum et stipularum vetustarum i>qua-  
**inosu\***, folus paucis adpressiuscult cams *h*, jugis foholis oblongis  
**obtusis** obsoletè mucronulatis, slipulis breviter petiolo adnatib  
parte liberà lancoolalis ngidis mgncantibus ciliatis cannato-ner-  
vosis, podunculo loli.-) vix cYCcdenli patulè luspido<sup>^</sup> capitulo glo-  
boso denso, bracteis lanccolato-linearibus albo-lanatis Inflmis  
calycinum tubum ffiquanlibus, calycis brevis densè et patulè  
albo-lanati pilis nigrib brevionbus intermixti deDtibus lanceo-  
late tubo dupld brevionbus, corollâ flavo-virenti glabrfl ca-  
lyco 2 7al>f<sup>o</sup> longion, vexillo suprd calycis apicem angulo ferè  
recto surbum mrvaLo alat, ct cannam vald6 curvatam lertiâ parle  
oxccdeni

Hab in bubalpmis inter *Karput* et *Sivas* cl JNoe Jun. 1852

Folia ut peduncali pollicana vel paulo longiora, capitulum avel-  
lanâ pauld majus Vald6 apline A *htr&uto* Yahl ab eo differt m-  
dumonto noil scncco-nilenti, capituhb paul6 mmonbus, calyce  
abbrevialo 3 nec 4 7\* lincas longo, vexillo angulo recto nee pa-  
rum etsensimsursiimcurvalo A *globosus* quoqueaflinisfoliibelon\*  
pa Us multijugis, etc longuis distat

ASTRAGALUS AGIIANIOTII Orphanides (Sect *Radiaflon* )

A acauhs csspitosua, fohls parvib conferlis senceo-Lams ferè a basi 4-G jugis foliolib approximatis clhpticis acutiuscuhs plicatae, slipulis breviter petiolo adnalis ovato-tnangulanbiw acutis albo-membranacci!) longè hirsutis, capilulis ob pedunculum brevissimum e CEsplLo vix exscrtis globotis densis, bracteis lanceolaUs hirsuus calyce parùm brevionbus, calycis pilis albis *longis* biipcrn^ prdesertim hiiMiU&simi lacinus liueanbus ingricanlibus tubo acquilongit>, corolla pallid^ violascenti calyce subdupld longiori, vexillo recto lmeari supernfe angustato alas anguslè lineares longè excednti, Icgumme jumon oblongo acutius- (^ulo breviter albo-lomcnoso

Hab in cacumine moittis *Malevo* Laconiae ranssimus cl Prof Orphan ides Fl grsec exs N° 136

PlanLula cajspitosa argentea vix pollicans, folia 8-9 lineas longa, capituk iuagnitudinis avellanx, (lores 4 lineas\* longi Species disimctissima habitu *A hirsutum* et *pelhgerum* Feuzl referens sed llonbus multrt minonbus donata ob vejtilum vald6 attenuatura et angaslatum *A steno&emo* potids appropmquanda

ASTRAGALUS SQUALIDUS DOISS et Noe (Sect *Imam* ?)

A basi suffrutescens caulibus prostratis brevissimis denudatis apice folia numerosa gerontibus, stipulis petiolo adnatis parte herbd elongalis lancoolatis acutis ciliatis, folns longmsculft peliolatis sub 9 jugis foholis a basi anguslion sensim dilatatis obovato-cuneatis apice truncato-retUMS utnnqufe sed subtùs copiosiiis pihs albis centro aflixis adpressis inter se parallehs nervo medio obliquis obsitis, pedunculis pilis albis adpressis hirtis folia subsquantibus, capiLuhs terminahbus oblongis laxiuscuhs, bracteis lanceolatis membranaceis hirsutis tubum calycinum dinodium aequantibus, flonbus breviter pedicellatis, calycis albido-membranacei pihs adpressis albis nigrisque paucissimis hirti dentibus lanceolalis tubum dimidium xquantibus, corolla palhdè lulescenti-purpurea calyce subduplò longion medium versùs sursùm curvald, vexillo obbngo-linean obtuso alas LongmsGulè excedenti, eis cannâ ob- lusa paulo longionbus eique adnalis

Hab in subalpinis prope *Swas* Junto 1842 Noe

Folia sicut in *Uicem* vel 2 potheen, foliola 2  $\frac{1}{2}$ -3 lineas longa apice limbo laevia, (lorci circiter 0 lineas longi) Logumen ignotum. Lihitu *A mo I km* paululum referens sed Indumenti naturae et coloris forma inter *Imanos* potius collocandus. Forma foliorum *Onobrychidum* quasdam referit

ASTHACALUS GAMPYLOSEMA. DOISS

"Var *glabrescem* Doiss et Noe

Pili tenues affixi spirississimi, in *ydgm* inferius ad nervos tantum conforli, caeteros pilis nigris crebrioribus obsiti, vexillum parte superior! magis attenuatum

*A fodtnai* *wm* Doiss et Noe MSS

Hab in alpinis ad *Bakker Maaden* Armenia? Noe

ASTHAGALUS LEPTOMUS Doiss et Noe (Sect *Capni*)

A lolium patulum et molle hispidum, caudice denudatis, folia 8-12 jugis foliis praesertim inferioribus inter se distantibus petiolulatis ovalibus obsolete mucronulatis, stipulis albo-membranaceis longioribus ciliatis lanceolatis acutis, pedunculis folio brevioribus racemum brevem laxiusculum 5-6 florum ferentibus, bracteis hinc siccis ciliatis pedicellis florum aequalibus, calycis albidis paleis hirsutis lacinis lanceolato-haerentibus tubo duplo brevioribus, vexillo lineari recto incluso alas eisque carinam superioribus, legumine

Hab in alpinis ad *Bakker Maaden* Armeniae meridionalis ubi Maio 1852 legitur et Noe

Folia semipedata, foliola majora 6 lineis longa  $\frac{3}{4}$  lata, (lores 10 lineis longi) Valde affinis *A brachystachydis* C. a quo dislinximus ob indumentum patulum hispidum nee brevissimè velutinum, pedunculos graciliores, (lores paulo minores, dentes calycinis angustiores ferè setaceos, vexillum angustius et stationem alpinam dum *A. brachystachys* et regionibus calidis Syriac onundus est

ASTRAGALUS LACTEUS Heldr et Sarton (Sect *Capnum*)

A totus pube albifl. patula" longifl. substngosus acaulis caudiculis subterraneis denudatis, foliis brevibus 4-8 jugis foliolis ellipticis aculmsculis inferioribus remotiosculis, stipulis lanceolatis acuminatis elongatis rigidis longis ciliato-stngosis, flonibus subsessilibus ad collum congestis, bracteis stipulis similibus sed angustioribus calyces subaequantibus, calycis albi longi albo-stngosi lacinus linear-setaceis tubo aequilongis, corolla alba glabra vexillo oblongo-linearis alas ei&que c. arm. am. superantibus, legumine

Hab. in summis montibus *Malevo* Laconis Sarton

Folia 1 Vi-2 pollicibus, foliola 4 lineas longa, (lores 0-10 lineas longi) Inter omnes *Capnos* indumento et characteribus *A. diffusum* W. praesertim refert sed hic differt foliis multo longioribus 10-12 jugis, flonibus minoribus et praesertim angustioribus Legamina adhucdum ignota alias p. n. celebunt notas

Obs. Nomen *A. siliquosi* per errorem duabus speciebus alteris inter *Gahgiformes* Diagn II, p. 51, alteris inter *Capnos* Diagn VI, p. 40, datum fuit Igitur specieie Sect. *Capnorum* nomen in *A. lobophorum* Boiss mutandum est

ASTRAGALUS BRACTEOSUS BOISS et Noe' (Sect *Alopecuroidei*)

A caule erecto humiliter stnato pilis albis stngosis patulis hispido jam e basi ramoso ramis stngosis abbreviate erecto-patulis, foliis radicalibus caulisque paucis 15-22 jugis foliolis angustè elliptico-linearibus apice attenuatis obtusis supra glabris complicatis subtus petioliisque hirsutis, stipulis lanceolatis longè ciliatis, racemis ad ramorum et caulium apicem supra folium supremum subsessilibus cylindricis laxis, flonibus breviter pedicellatis, bracteis vix ciliatis linearibus apice setaceis calyces sequantibus, calycis pilis densis albis rigidis ejus diametro squilongis hispidissimi lacinus linear-setaceis tubo vix brevioribus, vexillo calyce subduplo longior oblongo-linearis sursum curvato alas angustè lineares superanti, canna subtus angulo recto curva acuta

Hab. in subalpinis propè *Tokat* Anatoliae cl. Noc. Jun. 1853

Planta 7-9 pollicans, folia semipedata foliolis 5-6 lineas longis sesquilineam latis Raccmi 4-5 pollicares, (lores 10-12 hincaslongi Pulclira species *A pectintilo* Boiss approximanda qui differt folioh\*. mult6 densiro el pectinatim confertis duplil lalionbu% stipulis latis tn.ingulari-l<incoolatib, (lonbus dens6 spicatis paul6 brevioribus, denlibus calycims corollid paul6 brevionbus, canna .ingulo obtuso curvalâ

ASTRAGALUS KimniNDicus Doiss et Noo (Sect *Alopemrmda.*)

A caulibus ercotis fohosis flexuosis albidis indumento brevitoli v^hitirus, stipulis hbcns membrinaceis lanceolato-lineanbui aculis landem marcescentibus, folus 8-9 jugis cosU crassa albidâ volulmii, tohohs ovatis calloso-mucronalis adpressmsculfe hirtis gnseis, capitubs ex axillis supremis pcduncuhs cis sqmlongis crcclo-palulis suffultis spbaincis dcnis, bralcis setaceis calyci (Dquilongis, calycis long6 tomenoso-hirsuti dentibus a basi lanceolata sotaccis tubum brevem latum aBquantibus, corollfl glabrfl, vexillo oblongo obtuso alis longion cannam subtus angulo rotundato gibbam acutiusculam vix superanti, legumine tomenoso rugosulo scrobiculalo turbinalo a medid parte lalion prominenti gibboso-subcristatd supcrn6 et infcrne atenuato acuto

Hab in montibus propè *Kimnd* in Persiâ Babylonia conterminâ Cl Noc Sept 1854

Planta ut videtur data, folia inferiora semipcdalia, foliola majora 8-10 lineas longa 6-7 lata, capiLala nuce ferfi triplid majora, *A obtusifohus* DC aflinis differt foliohs minonbus orbiculatis vel obovatis inter se distantibus, peduncuhs capitulo longionbus, lacmiis calycims lanceolatis brevioribus, legumine vix rugoso ad mediam partem minùs cnstato *A echinops* quoque aflinis differt foholis mulicis, capitubs plunflons, calycis densiùs villosi lacinus lauceolalis, legummc obcomco-pyramidato apice sublruncato in mucronem incurvum abruptè abeunti

ASTRAGALUS DRUPACEUS Orphamdes (Sect *ChnsUwii*)

A totuspube gnseâ longâ ngidulâ patulâ luspilus, caulibus elatis erectis simplicibus foliosis, stipuhs longis linean-acuminatis



demum marcescentibus, foliis fere a basi 15-20 jugis foliolis petiolulatis elliptico-oblongis obtusis retusis paginae superioris plicatis glabris inferioris hispidis glandulosis, floribus erecto-patentibus nunquam axilla 3-5-nis pedicellis inaequalibus calyce brevioribus suffultis racemum longum laxum foliosum formantibus, bracteis setaceis calycino tubo brevioribus, calycis patule et longe albo-hirsuti dentibus e basi angustissime lanceolatae setaceis flexuosis tubo basi oblique paulo brevioribus, corollam palmarum ochroleucam calyce duplo longior, vexillo sursum subcurvato late uncinato apice subattenuato alas lineares superanti, canna linear-oblonga subtus angulo obtuso rotundato curvata alis subbrevis, legumibus pedicello incurvo cernuis ovato-oblongis sutura superioris compresso-subcannatis oblique mucronatis glaberrimis epicarpio carnosio drupaceis rufescentibus

Hab in monte *Malevo* Lacomae prope *Hajani* alt 3000' rarus in prof Orphanides Fl Græca exs N° 131, in monte *Cyllene* Achaiae in prof Orphanides

Gaulis sesquipedales, folia intermedia semipedalia, foliola majora 6-1 lineas longa pedunculi 4-7 lineas longi, corolla pollicaris, legumen inter pisum et avellanam inedium. Species legumine drupaceo insignis prope *A. retamocarjmm* collocanda qui differt puberulus copiosus minutisque rigidis pilis nigris in caule intermixta, foliolis majoribus longioribus, racemis axillaribus secus totam longitudinem caulis numerosissimis, legumibus siccis plus duplo minoribus

ASTRAGALUS BERYTHEUS BOISS et Blanche (Sect *Buceratcs*)

A perennis vel biennis, caulis longis prostratis simplicibus vel parce ramosis pilis albis densis lanatis, foliis a basi 7-8 jugis foliolis parvis obcordatis vel oblongo-cuneatis superioribus glabris subtus minutis, stipulis triangularibus acuminatis a petiolo et inter se hinc, pedunculis ex axillis superioribus folia subquadrata superne praesertim pilis nigris densis lanatis, racemo brevi subcapitato laxiusculo 7-10 (loro, bracteis ovato-oblongis scariosis hirsutis, calycis pilis mgris adpressis albisque ranonibus densis obsidi dentibus hinc tubo subduplo brevioribus, corollam purpurascenti calyce plus duplo longior, vexillo oblongo-hinc alas caring

-icuuusculii paultilongioressuperanti, legumimbuslineanbrosubar-  
 arcuatis acuminalis resupinatis calyce 3-4pld longionbus latere  
 superior (convexo) profundè s>ulcatis infenon (concavo) cannatis  
 scabernmis praeterrdque pilosuhs

Hab in arenosis ad meridiem urbis *Beyrouth* Syriae cl Blanche

Caules pedales et sesquipedales, folia 2-3 pollicana, pedunculi  
 polhcares vcl pauld longiores, Hopes 7-8 lineas longi, legumen  
 12-15 hncas Ion gum dia metro lation 31 a turn Afline A (*uberculoso*  
 DC et A *Ham haehn* Spruner qui ambo a nostrd specie legumini-  
 bus valdè abbreviatis lationbusque vexilloque supernèlongè atte-  
 huato differunt

HippocnEPis EIUCAIIPA Boiss

H densè caespitosa basLsuffrutescens tota adpressè cana senceo-  
 argentea, folnsferè omnibus radicaibus 4-5 jugis, foliolis appro-  
 ximalis ovato-subrotundis obsoletè mucronulalis, caulibus erectis  
 simplicibus vel parcè ramosis medium versùs 2 fohis abbreviatis  
 instructis, stipulis oblongo-tnangulanbus obtusis, umbellis 5-7  
 floris, calycis sencei dentibus lanceolatis acutiuscuhs^ carmd an-  
 gulo recto ferè curvatfl, legumine 2-4 spermo latere supenon si-  
 nuato-cxciso undiquè land longfl e papillis crispulm constanti densè  
 obsito eique occultalo

*Coromlla enorarpa* Brass Voy Dot E^p

Hah in regione alpin.l mgni Granalensis

Hæc spccips lognraine accuratiis inspecto ost vera *Htpocrepts*  
 // *sguamatee* Coss — *C squamahe* Cav afflnis Hæc e regione  
 montani inferior regm Granatensis onentalis, Jenensis, Murciet  
 et Valentim onunda eximiè di/Tert indumento subsenceo sed gri-  
 \*co-virenti nee argenteo, foliolis majoribus oblongis vel cuneato-  
 obcordatis, slipuhs lineanbus, cannfl angulo oblusion incurvd,  
 legumine polyspermo ad scmina papillis brevuwnus squamosis  
 obsito inter ea plus minu<sup>d</sup>\* glabrp^centi

CORONILLA DURA BoiSS

**C annua glabra glaucescens puimla simplex vel parcè ramosa,**  
**foliis simplibus ohovatis ca>tpn<i pinnate 3-4 jngis foholit,**

cuoeato-obcordalis Infimis ad petioli Insertionem sitis abbreviatis transverse lationibus, stipulis in unam oppositifoliam bidentalam coalitis, umbellis 1-3 lions, peduncuhs folio demùm longionbus, calycims dentibus triangularibus acutis, legumine lenuissimo arcnato tereti-subtetragono ad articulationos non incrassato

***Ornthopus durus* Gav Ic tab 41 — *O helerophyUus* Brot**

Hab circfl Matntum Cavan Reutert Lusitamd boreah et medid ex Brot

**CORONILLA RE PAN DA BOLSS**

G annua glabra glaucescens pumila simplex vel a basi parcè ramosa, folns inferioribus simplicibus oblongis, supenonbus 2-3 jugis foliolis oblongo-linearibus infimis ad petioli Insertionem sitis transversè ovato-reniformibus, stipulis in unam oppositifoliam bidentatam coalitis, umbellis 2-3 floris, peduncuhs demùm folia Bequantibus vel vix superantibus, calycinis dentibus breviter triangularibus obtusiusculis. legumine crassiusculo valde arcuatotereti obscure tetragono ad articulationes uodoso-incrassato

***Ornthopus repandus* Lam**

Hab in Hispama australi ad Gades (Boiss Rout), Lusitani & Weiwisch \* Algarbus Bourgeau t Africà boreah ad Tingidem, Oran (Boiss et Reuter), in province Constantine Gallerand I

*C dura* prater notas indicatas differt ab eà folus simplicibus paucionibus, foliolis minonbus magis rotundatis, flores minores sunt canoa magis mcurvd et apice paulò production, legumina hneae tertiam partem nee hneam ferè tolam lata nunquam ut in *C repandd* inter articulationes substrangulata sunt Ambo omni jure *CoroniUoe* adnumerandse sunt

**ONODRYCUI S HUETIANA BOISS (Sect *Hymenobryctiis*)**

O perenms tota pihs adpre&ssimis brevibus canescens caulibus plunbus erectis vel ascendentibus parcè ramosis<sub>3</sub> stipubs parvis Inangulan-lanceolalis aculis hirsulis, folus longè petiolatis 6 jugis, foliolis remotis parvis ovato-orbiculatis obtusis suprA glabris subtùs adpressè hirtis, racenus florum laxis pedunculatis folia demùm superanlibus, flonbus mediocnbus brevissimè pedicellatis, bracteis

Imari-lanceolatis pedicellos superantibus, calycis densè et adpressusculè albo-lutescentibus denibus e basi lanceolate longè acuminatis tubo paulò longioribus, corolla calyce triplo longior pallidè rosea intensè rubro-striata, vexillo adpressè sericeo cannae glabrè tequilongò, alis angustè linear-lanceolatis margine ciliatis latere superioribus versis auriculatis calycem paulò superantibus vexillo duplo brevioribus, ovano densè lanato niveo, legumine.

Ilab in Armenia propè *Ispir*, cl Huet du Pavilion

Mania pedalis vel humilior, folia inferiora 4-5 pollicina, foliola majora \ lineas longa, racemi domum fere pedales, flores 6 lineas longi Formae alarum haec species ad *Oxyptera* et praesertim ad *Ornithoglossum* accedit Haec differt foliis multò majoribus mucronatis, corollis non striatis, etc

ONOURYCIUS ARMENA BOISS et Huet (Sect *Eubrychis* )

On pennis tota adpressè canescens gnava rhizomate indurato caulis inferè prostratos saepe in caudiculos subterraneos nudos vel in galos parte foliola erectos breves ramosos edenti, stipulis membranaceis interfoliis lanceolatis acuminatis, folis 6-9 jugis inferiorum trifloris superiorum elliptico-linearibus acutis vel retusis inter se approximate paginis superioribus glabrescentibus, pedunculis foliola superantibus in racemos primum densos tandem laxiusculos brevibus, floribus minutis breviter pedicellatis, bracteis lanceolato-acuminatis pedicellos superantibus, calycis minuti corolla triplo brevior adpressè hirti dentibus subulatis striatis subsymptosis tubo longioribus, corollis glabrè praeter cannam subtus pallidè violaceam albidis, vexillo apice emarginato cannae aequilongò, alis linearibus hinc apice subretusis basi latere superioribus auriculatis cannae vix triente brevioribus legumine minuto duplo brevioribus calycinibus longioribus adpressè pubescentibus obovato-compresso disco irregulariter 6-7 foveolato subrotundo foveoli marginibus media alis majoribus enatis disco multo angustior breviter 3-4 dentatis basin cernens

Ilab in Armenia propè *Ihosck* cl Huet du Pavilion

Ilab parte non subterraneum semipedales vel paulò longiores, folia 1 1/2-2 pollicina, foliola 3-5 linear longis, flores 6-7 lineas longi, legumen diametro majus 2 lineas longum Valde affinis habitu

*On Kotschyana* Fenzl qua calycis dentibus corollam dimidiam  
aequantibus, vexillo carina breviori, alis minutissimis canaliculis qua-  
druplo brevioribus eximie differt

HEDYSARUM ELEGANS BOISS et Huet

H subacaule totum indumentis adpressissimo ad petiolos et pe-  
dunculis pilis patulis mixto seneo-argenteo, stipulis in  
unam triangulam-cucullatam bidentatam oppositifoliam coalitis,  
foliis 4-5 jugis foliolis ovato-orbiculatis obtusis supernè saepe pal-  
lidioribus terminalibus non majoribus pedunculis foliorum longitudine  
in racemum per anthesin oblongam densam abeuntibus, flonibus  
subsessilibus magis, bracteis laminae hinc acuminatis,  
calycis adpressiusculis albo-hirsutis corolla dimidio brevioribus laci-  
is angustissimis hinc lanceolatis tubo multo longioribus, vexillo  
ochroleuco basi pallide purpurascenti canaliculis ochroleucis  
paulo superantibus, alis obovatis basi obtusis auriculatis obtusis ca-  
lyce longioribus vexillo tenente brevioribus, ovario breviter et  
adpressè hirsuto, legumine

Habitat in Armenia prope *Gumuchkhani* cl. Huet du Pavillon Fl  
Maio,

Podunculi foliaque 3-5 pollicina, racemus bipollicans, flores  
ferè pollicem, foliola majora 5-6 lineas longa Pulchra stirps ex  
Afumateif *grandiflora*, *argentea* et *candida* Prior foliis trijugis,  
pedunculis adpressissimè turgidis, alis vexillo dimidio brevioribus,  
postiores calyce corolla vix brevioribus, alis carinam dimidiam vix  
superantibus, omnes colorum florum et foliolis majoribus ellipticis  
vel ovato-ellipticis distinguuntur

HEDYSARUM ROTUNDIFOLIUM Boiss et Noc.

II perenne totum pubes adpressissimè canescens, caulibus erectis  
fossis subflexuosis, stipulis in unam oppositifoliam bidentatam  
coalitis membra natis rufescentibus, foliis 4jugis, foliolis longius-  
culis pedicellatis ovatis vel ovato-orbiculatis obtusis obsolete mu-  
cronulatis concoloribus inter se distantibus, pedunculis axillaribus  
folia tetraquantibus vel superantibus in racemos oblongo-cylindricos  
etiam per anthesin laxos abeuntibus, bracteis setaceis pedicello

longioribus citius deciduis, floribus parvis, calycibus adpressis hirtis dentibus triangularibus acutis tubo sequilongis, corolla rosacea calyce 4-5plo longior, vexillo canali subtus angulo recto rotundato curvato subbreviori, alis elliptico-linearibus calyce duplo carinae dimidio brevioribus, ovario junctis marginibus tantum hirtulo

Hab. in subalpinis prope *Karput* Armenia\* meridionalis cl. Noe Junio 1852

Caules pedales, folia inferiora 3-3 1/2 pollicaria foliolis diametro 5-6 lineas latis, flores eis *H. flexuosi* ferè minores. Species distinctissima foliis rotundatis dissitis, habitu et floribus parvis *H. Kotschy* et ains *OK Echynolobu* sectione accedens, ab his characibus et ovario glabrescenti **distinctissima**

HELYSARUM VELLTINUM BOISS et Noe

11 perenne totum indumento brevi patulo albo-velutino, caulibus pumilis erectis vel ascendentibus, stipulis in unam oppositifoliam longè acuminato-bidentatam coactis, cymis 7-8 jugis, foliis inter se approximate ellipticis vel elliptico-linearibus acutiusculis concoloribus, pedunculis incurvis folia multo superantibus in racemos oblongo-cylindricos laxiusculos abeuntibus, bracteis setaceis pedicellis superantibus citius deciduis, floribus minutis et sicco pallo carneis albidisve, calycis tomentelli corolla quintuplo brevioribus dentibus triangularibus acutis tubo subbrevioribus, vexillo angustè lineariter retuso canali angulo recto ferè recurvante breviori, alis minimis lanceolatis carina triplo brevioribus, ovario albo-tomentello

Hab. in montibus Armenia meridionalis prope *Karput* cl. Noe Junio 1852

Caulis 4-5 pollicaris, folia 2 pollicaria, foliola 4-5 lineas longa. Racemi 2-3 pollicares, flores 5-6 lineas longi angusti. Species indumentum naturæ et vexilli angustie et brevitate distinctissima prope præcedentem collocanda

VICIA SMITHIANA BOISS

V. annua glabra vel paucissima hirtula a basi multicaulis, caulibus filiformibus tenens procumbentibus paucis ramosis, foliis 6-7

**jugis** supenonbus cirrhosis, foliohs minutis infenorum minimis ovatis truncatis emarginatis breviter mucronatis superioronra angustè hneanbus acutw vel retusia, stipulâ alters lmean subfalcatâ acuminatâ alterâ petiolnlatâ palmatim 5-8 lacraiatâ lacinnis setaceis, pedunculis axillanbus folio longionbus anslatit. umflons rani s biflons, calycis basi obhqui dentibua e basi lanceolatâ setaceis tubo sublongionbus inter se subaequalibus corollas tertiam partem aequantibus, corolla palhd& violacefl stylo sab stigmato parcissimè puberulo, legumine breviter stipitato brevi glabro lineari compresso 2-3 spermo ad seraina toruloso, seminibus compressis badus hilo brevissimo

Hab in pinetis regioms montanas monlium circa *Smyrnam*, raontis *Mesogis* suprd *Trattes* in Canâ (Maio et Jumo \U<sup>h</sup>2 Boias )

Corolla 6-7 lineas longa, legumen 2 1/\* lineas la turn 9-14 longum Affinis *V monanthcB* quse differt foholis majonbus et praesertim longionbus, pedunculis folia non aequantibus, stipulis in 12-15 lacunas parlitis, denlibus calycims dimidiam corollam squantibus, legumie 3-3 1/1 hncas lato, semibus dupl6 raajonbus marmoreo-vanccatis *Victoria cilians* Fl Gncca ex Icone nostrcc speciei valdè affinis stipuhs ambabus multifldis corollidque brevion differt

VICIA SALAMINIA Heldr el Sart (Sect. *Crawa* )

V annua laote virens, cauhs debihbns angulatis scandentibus ramosissimis glabnuscuhs, folus adprqsse hirtis 4-6 jugis in cin rhum brevem ramosum abeuntibus, foliohs subsessilibus ovatis obtusis retusisve muticis vel obsolete mucronulatis, stipulis minutis semibagittalis acutissunis supremis substipitatis, pedunculis folia subduplò super an Lihus in racemos laxos secundos 4-7 flores abeuntibus, calycis violascenti\* basi obhqui gibbi adpress6 puberal\* dentibus lanceolato-subulatis infenonbus tubum sqnantibus supenonbus brevionbus, corollid calyce 34pl6 longion, vexillo intensè violaceo retuso in ungpem hnearem longe attenuato, alis albidis vexillo VIK brovioribus, cannd apice atropurpleA acutiuscuia ahs brevion, stylo apice et latere supenon barbato, leguminibus (iin-j matuns) oblongo-rhombeis 4-5 spermis stipitatis

Hab in fruticetis apncis insulan *Salatmnis* prop^ *Mnlki* Heldr. et Rarton Fl fine Apnhs

Gaulces 1/2 pedales, foliola 3-5 lineas longa 2 lata, flores 9 lin longi Affinis *V pseudoaacam Bert* quae differt caulibus procumbentibus firmionibus, foliolis oblongo-linearibus, flonibus parte terlift minoribus, stylo apice ferè undiquè barbato *V microphylla Urv* longius diiTert pube brevi patuld, foliolis minutis, corolla multir minor ferè concolor, vexilli lamina angusti ab ungue vix distincti, etc

VICIA DOISSIERI Heldr et Sarton (Sect *Cracca* )

Y permixta palulè villosa-subcanescens, caulibus angulatis elatis scandentibus nimosis, foliis remotiusculis 6-10 jugis in cirrhis ramosos ecurrentibus, foliolis saepius alteris longè elliptico-linearibus^ obtusis vel acutis mucronulatis, stipulis lanceolato vel linearisemisagittatis lacini basilari brevioribus, pedunculis cum racemo laxiusculo subsecundo antè anthesin plumoso folium aequantibus vel subsuperantibus, pedicellis tubo calycino brevioribus, calycis villosi basi gibbi dentibus a basi latiori linearis-lanceis mferentibus calycino tubo longioribus superioribus multo brevioribus, corollae violaceae calyce 2-3 pl6 longioribus, vexillo lineari lamina in unguem eA longioribus sublatioribusque sensim dilatata, alis obtusis cannam excedentibus, stylo apice undiquè barbato, legumibus pendulis 4-6 spermis glabris slipite calycino tubo sublongioribus sulculatis oblongis compressis basi apiceque attenuatis, seminibus globosis atque velutiformibus, hilo ambitu seminis sexies brevioribus

Hab in plantis maritimis ad radices *Olympi Thessali* propè *Katone* inter ptentes, in Bosphoro propè lacum *Copaidem* Heldr

Gaulces 2-4 pedales, foliola 6-10 lin longa 1-1 1/2 lata, flores 6 lineas longi Habitu refert *V vanam* Host var *villosam* quae differt radice annua, calycibus dentibus brevioribus, seminibus compressis, etc *V Sibthorpi* Boiss perennis quoque egregiè differt indumento densiore, caulibus humilibus non scandentibus, foliolis brevibus ellipticis, cirrho simplici brevi ad mucronem saepe reducto, pedunculis folio 3-4 pl6 longioribus, calycis dentibus brevioribus triangularibus, legumine subvillosa, etc



VICIA ANISODONTA Boiss et Huet (Sod *Crocca*)

V perennis, caudiculis filiformibus subterraneis elongatis caules humiles erectos flexuosos parvè ramosos angulatos adpressosculi hirtos edentibus, foliis abbreviatis a basi approximatis 5-7 jugis rachide rigida saepe recurvis in cirrhum simplicem brevem abeunt, foliis pallidè virentibus adpressosculè hirsutis submentibus nervosis subtibus vix nervosis oblongis ellipticisve in mucronem subpungentem subrecurvum attenuatis, stipulis minimis semisagittatis inferlorum laciniatis inferiori saepe bidentata, pedunculis folio duplo longioribus in racemos secundos densiusculos 7-12 floras abeuntibus, pedicellis tubo calycino brevioribus, calycis adpressè hirti basi gibbi apice violacei dentibus superioribus brevissimis latè et breviter ovato-triangularibus, inferioribus triplo longioribus triangularibus lanceolatis intermedio longioribus tubo subbrevis, corolla glabra mte « s6 violaceo calyce triplo longior, vexilli hinc retusi lamina ab ungue vix distincta eaque paulo breviori, alis oblongo-linearibus vexillo paulo brevioribus canaliculatis rotundatis apice aculeis superantibus, stylo superne circumscissis densè barbato, legumine stipite calicem aequanti suffulto basi subattenuato oblongo rhombeo subcompresso glabro 4-6 spermo, seminibus oblongis compressis fusciscentibus, hilo ambitu seminis 8plo breviori

Hab in monte *Tech Dagh* Armeniam Juno 1853 cl Huet du Pavilion

Planta 4-8 pollicans, folia 1/2-1 1/2 apocarpia foliis saepius 2-3 lineas longis, flores magis 6-7 lineas longi, legumina cum stipite 8-12 lineas longa 3-4 lata Species rigiditate et nervositate foliorum, characteribus calycis insignia, inter *V cicerotides* Boiss et *V mulhcaulem* Ledeb cujus faciem habet collocanda et inter gregem *V cracca* et *Gerardi* iransitum prebens.

## LATHRUS UNDULATUS BOISS

L perennis caule glabro erecto abbreviate angulato angustè bialato simpliciusculo, foliis glabris approximatis unijugis, petiolo angustè bialato foliorum inferiorum in mucronem rectum superio-

rum in cirrhum simplicem vel bifidum acutum, foliis petiolo  
 4-5 longioribus ovalis oblongisve inferioribus obtusis superioribus  
 acutis omnibus mucronatis subconatis nervosis margine  
 valde undulatis, stipulis semisagittatis lacinis lanceolatis acumi-  
 natis multifloris, pedunculis ex axillis superioribus folia superantibus  
 laxè 5-7 floris, pedicellis subrecurvo-patentibus calyci subaequali-  
 longis, calycis glabris denatis triangulari-lanceolatis acuminatis  
 tubo subaequali longis, corolla rosacea calyce triplo longior, legumine  
 jurone hueo viscidulo

Illic prope *Byzantium* Noe, in Bihyma Thirke sub *L. latifolia*

Illic planta *L. latifolia* affinis ab eo sat distincta videtur cauibus  
 tumilionibus in multis specimenibus vix sesquipedalibus, foliis  
 dimorphis 14-18 hinc longis margine eximie undulatis nervis  
 longitudinalibus evidenter minusque reticulatis, pedunculis  
**gracilibus** paucifloris, dentibus calycis magis alutis

#### LATICOROLLIS VINCALIS Desf. Ct NoC

L. aimuus? glaberrimus, caulibus antheris humilibus,  
 laxis uiformibus unicephalis brevibus angustis hinc acutis,  
 petiolo subtriquetro foliis 4-5 brevibus in mucronem rectum  
 acuminatis, stipulis semisagittatis lacinis angustis hinc acutis  
 aequalibus, pedunculis axillaribus unifloris folio bre-  
 vioribus floribus 3-4 longioribus subaequalibus articulis longioribus  
 antheris, calycis glabris basi aequalibus nervosis dentibus angustis  
 lanceolatis acutis tubo subaequalibus, corolla pallide rosea calyce  
 sesquialongioribus, legumine (jurone) hinc complanato recto glabro  
 apice attenuato calyce quadruplo longioribus

Hab. in vicinis prope *Karput* Armeniae meridionalis Junio 1852  
 cl. Noe

Semipedalis, foliola 1-2 pollicina hinc lata, flores  
 magnitudinis eorum *L. sphaerica* Legumen sesquipedale 2 lineas  
 ferè lalum *L. angulata*, *spumosa*, etc. folus plurijugis ecir-  
 rhosis pedunculisque elongatis recedit Habitu quoque ad *L. ten-  
 uifolium* Desf. accedit sed folia non cirrhosa, foliola multo longiora  
 minus dissita, pedunculi antheris, (lores minores et praesertim vexil-  
 lum ut in scilicet *Glymeno* inferne non bigibbum esse videtur  
*L. selifolium* et *tenophyllum* leguminis forma multo longius re-

LATICOROLLIS

LATHYMJS \PIUCA L var *tegummc rectiusado* Boiss. et Blanche

Hab in Syriâ Blanche

Flores eis formto vulgans saepiùs palil6 majores\* Legumina recta vel modicè curvata longiora 7-40 sperma Hunc sub nomine *L polyanthi* ut speciem distinctam pnmùm habuimus sed cultura docmt notas differentiates non satis conslantes esse

OrODUS AnMEnUs Boiss et Huet

0 pluncaulis glaber viridis, caulibos erectis crassis angulat^ stnatis foliosis alns stenhbus alus flonlens, Joins petiolo brovis- sismo complanato insideitibus caulium sLcnlium uiu llonfororum bijugis fohohs subdigilatis longfe oblongo-linearibus basi apicequc atLonuaLis acuminahs petiolo in mucronem lanceolalum brevem abeunti, slipulis semisagittatis lacimis huean-lanceolatis maequa- hbus, pedunculis 3-4 in axillis supremis confertis subcorymbosis slnctis folio brevionbus 5-8 lions, pedicelhs calyci subaeqmlongi^ basi bracteoia membranaced miuimfl ovato-tmncatfl dentatd in— stmctis, calycis basi obhqui gibbi dentibus tnangulan-lanceolaUs acutis tubo subbrevionbus, vexilh laming intens6 violacel subor- biculatA retuaâ alas canuamque sub^quilongas ccerulescenti-vio- laceas superanti, leguînibus jumonbus deflexis angustè hnean- bus reclis

Hab ad radices montis *Tech Dagh* propè *Erzeroum* cl. Huet du Pavilion

Caules pedales vel sesquipedales Fohola 2-3 pollices longa \ 1/»-2 hneas lata, caulium stenlium breviora et sublitora Ra- cemi abbreviati confertiAon Flores paululùm minores eis 0 *ses- sihfoln* cui valdè accedit, et qui differt surcuhs subterraneis ropen- libus caules plemmqe humiliores tenuiores magis llcxuosos eden- tibus, caulibus stenhbus brevissimis, pedunculis Laxiflons folia superantibus, flonbus majonbus vexillo oblongato

GiCEn GILECUU Orphamdes (Sect. *Vmoides*)

C perenne totum pilis patulis glanduloso-viscidis secu\* caulem et ad folia tomentellum, secùs rachidem foliorum pedunculosque

lunge; liispidum, caulibus erectis flexuosis herbacch. lenticulis  
 parvioribus, foliis 6-9 jugis inferioribus foliolo impari su-  
 p. pinnis cirrho bifido terminalibus, foliis oblongis ellipticisve rigidis  
 a basi ad apicem folii viv. dim. circ. regulanter et ar-  
 r. denatis dentibus mucronatis mucrone terminatis foliorum  
 superiorum in c. supreme depresso elongato subcircumscissis in cir-  
 ri mm. sibi distantibus, bliphus triangularibus vel ovato-triangularibus  
 dentatis plus minus profunde aculeato inciso-dentatis saepius in qua-  
 bus altera angustior minus dentata, pedunculis in axillis supremis  
 solitariis in caulo brevibus folio subbrevioribus raris unifloris  
 hiipius 2-3 laxis bulbosus feientibus in antheris selaceam  
 Jougam apicem spatulato-dilatatum abeuntibus, pedicellis angulo  
 recto lanceolatis calycino tubo longioribus, bracteis ad pe-  
 dicellorum basin c. brevioribus ovato-triangularibus dentatis  
 lobatis, calycis Joag. hispidi viscidis basi valde gibbi lacinus  
 lanceolatis acatis tubo subduplo longioribus, corolla alba calyce  
 scaquilongio, legumibus (juncibus) refractis oblongis hirsu-  
 lissimis calyce subduplo longioribus

Hab. in Peloponneso prope *Tnkala* cl. Prof. Orphanides.

Caule) fere pedalis, folia 2-3 pollicana, foliola 4-7 lineas longa  
 dentibus utrinque 1-8 ascendentibus, calyces 6 lineas fere longi,  
 illos eis *C. Songaria* majores. Species distinctissima *C. Songan-*  
*Lum* differt caulibus angulatis, foliis obovatis distatis a basi ad  
 apicem folii dim. circ. abbreviate, pedunculis numerosis valde abbreviate,  
 bracteis nullis, corolla calyce duplo longior, etc.

GICLII PUNGENS Doiss (Sect. *Tragocathoides*)

C. muicaule caulibus erectis a basi ramosissimis ramis flexuo-  
 sis sine usculis angulatis sub lente retrorsum breviter  
 imbricatis, foliis 2-4 jugis rachide crassa supra foliola in  
 spinam longam acerosam productis, foliis adpressis puberulis  
 nervosis obovato-cuneatis apice sibi truncato 4-6 dentatis dentibus  
 brevibus triangularibus accrobis stipulis minutis spinulis simplici  
 vel bipartitis constantibus, pedunculis axillaribus rachidi folii sub-  
 aequilongis obovatis acerosis supra medium unifloris, pe-  
 dicello lanceolato refracto calyci subaequilongo, calycis sub lente  
 brevioris hirsuti basi gibbi lacinus lanceolatis acerosis tubo longior-

bus, corollâ calyce subduplò longion, legunne oblongo nrfato brevissimè hirto calyco dupld longion

Hab ad cacumen jugi *Yomutt* dicti in regno *Cabuhco* ad altitudi aem 11,500 pedum cl Griffith

Planla ex meo specimine pedalis omnibus ferè partibus, petiolis, peduncuhs, stipuhs, calyceque spinosa Folia sesquipollicana, foliola 3-4 hneas longa apice 2 ' / < \lata, flores eis *C. Songana* subminores Species distinctissima

#### PISUM HUMILE Boiss et Noe

P annuum glaberrimum, caulibus erectis homiibus valdè mfraclo-flexuosis, fohis patenti-subrecurvis bi vel tjugis rachide longa in cirrhum ramosum abeunti, foholis remolis Inferiorum obovatis oblusis superiorum ellipticis acutis omnibus a medio ad apicem minute et acatt<sup>!</sup> crenato-dentalis, stipuhs pedunculo duplò brevionbus oblongo-semicordatis latere extenon a basi ad medium argute dentatis suyjeniç mlegns acutis vel acumvnaUs, peduncuhs uniflons folio brevionbus suprâ medium breviter anstatis, calycis glaucescentis dentibus lanceolatis acutis margine ciliatulis tubo longionbus, veulli lamina rotundatâ profundè emarginatâ \iolacei, ahs obovatis intend purpureo-mgnantibus, canna albidâ subttis eximie curvaU latere superior! concava, legumimbus jumonbus deilexis angustfc lmeaibus rectis.

Hab ad rupes Armanis meridionahs propè *Bakker Maaden*. Maio 1852 cl Noe

Planta 3-6 pollicans, folia tripollicana fohohs 6-8 lineas longis, stipule ejusdem magmtudims vel ferè majoros, flores magmtudinis cornm *P arvmsis* a quo ut et a *P elation* MB staturâ humih, foholis angustis acutè dentalis, vcxillo profundè cmargmato differl  
**Semina ultends observanda**

## ROSACES

AMYCDALUS STOGKSIANA BOISS (Sect *Chanusmygdalus* )

A inermis glabra, ramis corlice cinerascenli vostilis virgalis ra-

mulesis, gemmis fohaceis ad partem supenorom ramulorum paucis sparsis torminahbusque confertis, stipulis setaceis glanduloso-lacimatis, folns petiolo eis paulò brevion vel sequilongo suffultts obovatis vel obovato-oblongis basi cnneatis mucronulatis vel breviter acuminatis integris glabris glaucescentibus opacis, flonbus sub gemmis teimnahbus solitarus sparsis, pedunculo crassiusculo tandem deflexo tubo calycis paulo brevion, calycis tubo ovato-oblongo subventneoso 1 acinus ovatis obtusis margine breviter velutino-hirsutis, stamimbus 20-25 omnibus exscrtis, petalis roseis obovato-cuneatis retusis lacinus calycis 2<sup>1</sup>/<sub>»</sub>plu longionbus, ova-no sLylique parte inferiori albo-hirsulissimis, putamine

Hab in montibus *Hwbab* ditioois *Beloutschstan* cl Slocks.

Flores magmtadinis eorum *A Georgum*, folia majora pollicana 5-6 hneas lata. Ex afiinitate hujus et *A nance* a quibus folns form& diverbas, lacmus calycinis latis obtusis, flonbus sparsis paucis distinctissima est

GnATEGUS rvc?FOLOEA Boi&s. et Heldr

Gr fruticdsa ramis abbreviatis lortuosis apice demùm in spinas validas breviasculas abeuntibus, folns ad apicem ramulorum lateralium et ternunahum brevissimorum confertis senùs ramulo tandem elongato sparsis utnnquē densē et adpressē argenteo-senecis obovatisbasi plùs minùs longē cuneato-attenuatis subsessilibus pinnatipartitis lacimis valdē inter se approximate hneanbus vel hnean-oblongis acutis vel acutiusculis integns termuiali ranis 2-3 fidâ, stipulis obovatis integris, flonbus in racemossubcapitatos densos broviterpedunculatos termmales folns involucratos confertia breviter pedicellatis pedunculis pedicelhsqae albo-tomentosis, bracteis elhptico-lineanbus acuminatis glanduloso-laciniatis, calycis densē albo-tomentosi tubo obconico lacmus tngulan-lanceolatis acutis erecto-patulis, petalis obovatis albis, stylis quinque, fruclu (junion) globoso albo-tomentoso dentibus calycinis reflexis coronato, adulto (ex cl Heldreich) laterrtio

Hab in rcgione sylvaticâ montis *Kyllenes* Heldr I Orphan t alt 350(y-5000', in saxosis propē *Tnkala* (Heldr )

Frutex venustus 1-6 pedahs, folia majora 8-9 hneas longa 6 lata, lacinus ulnnquē 2-3 hneas longis Vr1<sup>1</sup>/<sub>\*</sub> lalis, florsmagnis

tudims eorum *Cr azaroh*, fructus peractS anthesi jam pisi magnitudine Species flonbus capitatis pentagynia fonnique foliorum afflms *C ianacotifohcB* qus eximie differt tninco arboreo et praesertun folus minùs profundè et latiùs incisus lacinnis distantibus apice acutè denticulate supernè tandem glabns subtùs breviter liirtis, lacinnis calycims abbreviatis

CMTJEGUS MELANOCAUPA MB var. *Kolschyana* Boiss

Indumentum petiolorum pedunculorum ramQrumque juniorum longius magis patulum Flores pauld majores. Styk 3-4.

Hab in monte *Elbrus* Persiae boreahs Kotschy N° 670 et 268.

CIUTJEGUS HELDII EIGHII BOISS

Cr TruLcosa spinis brevibus rubellib plùs minùs obsita ramis j union bus lomentellis, folus utrinquè sed sublùs copiosius etiam fructu maturo lomentelhs petiolatis antheseostempore integns trilobisque basi cuneatis, plants fructiferd ovatis pinnati-partitis basi truncatis lacinus sub quinque latè oblongo-lineanbus apice obtusis denticulatis terminali saspitùs trilobft, stipuhs semiorbicn-latis falcatis integris vel basi subdentatis, flonbus in racemos corymbosoa tenuinales folia vix superantes confertis, peduncnhs pedicelhsque breviter et patulè velutino-hirtis, calycis tomentelli lacinus oblongis obtusis, stylis 1-3 in unum ad medium usque SEB-pitùs coalitis, fruclu rubro parvo globoso siccitate subangalato lacimis calycims tomentelhs erecto-recurvis coronato 4-5 pyreno

Hab in regione abietinf t montis *Pomes Attics* Heldr. 1 in montosis Achaiae Heldr. I in Peloponneso, herb Fauchd

Species prater indumentum tomentosum foliis profundè pinnatipartitis sublùs prominulè nervosis, lacinus (praesertim infimis) valdè divergentibus costae mediae angulo ferè recto msidentibus, drupis parvis globosis ssep6 ut in *C lagemnd* in collum brevem apice abeuntibus insignis *Cr lamntata* Ucria ex Sicilid ex descriptione et specimine herjb Moncand dif!ert folus tantòm mcisopinnatifldis lacinus acutis, fructu majon elliptico

## CIHTEGUS SINMCA Boiss

Cr Irulicosa vel subarborea, ramis votushs lorUiosis cortice vrriuosa (illtuli vostitis novolhs rubns nilihs glabm spinas brevos roncoloris odontibm, fnlus prtioialis snhconacm snpr.l niti-diisculis subtil pallidis ulnnqul<sup>1</sup> sed biibtus copiosius ad TITVOS hirluli> alii^ curiftitH profinidt Irifldis.iius Inprnlilis parlilionibm oblusisapico cronalo-donLalis intermodi.l srpius LnlobA trifidvce, stipulis spmiorlncul«Uo-rdicalis lalnro oxtonon 3-1 dentalm, racemis llorum tonruuahbus corymboMs, (loribus prdicclhs longmscnlis gl.nljris suffultis, c.iljcis glabri dcnlibus Inangulan-lanccol.ihs .iculis citd delloxis, stylo umco, drupA rubella glabrl ovato-elliptiCil apiccin collum brevcm laciniis caljcmis deflexis tectum aUrnuatd monopyren.1

*Crntfpgus Aronm* Decai^nc Flor Sinaica, Ifochstellrr in pi Schimp Arab N" 271 cl 27.1 noil Dose

Hab in proruptis monlmm *SmaiHrorum* Llov61 Schimperl Folia ca *Cr GranatGnsisrefscrcnlia*. sed obtusiora obtusi usque dculala Drup.o ois *Ci mmogyruB* non majores, qui notd, carum forniA el-11plid nrc rolund.1, flonbusque lixr et longè nec breviter pedicrllatis a *Cr Aromtl* macrocarpo polypjrcno cximic differt Mcliiis collocanda ju\ld *Cr GratuUen&em* et *Cr heterophyllum* Flugge

## CoroNEASTEn PAHISASSICA DOISS cl Heldr

G fruticosa ramis jumoribus tomenlcllis, folns ovatis obtnsis ranis aculiusculis mucronulatis suprfi vindibus adpressc hi^tuhs subtus tomonlosis albo-gnsois, racemis 2-4 flons erectis folium axillarc plernmqc superanlvbus, pedicellis birtis (lore 2-3plò longionbus, caljcis globosi plus inmiisvc tomenlosi dentibus tnan-gulanbus aculmsculis, sLamimbuslongiuscuiè exsertis, drupd glabrA rubrfl caljcis. laciniis margine tomentellis superatd

Hab m rrgione abictind et a I pini monlis *Parnasst* Heldr I Ad eamdem stirpom spectare vidctar specimen a cl Prof Orphanides in monle *Gymnovouno* propc *Tnkala* I return

Allinis *C vulgan* \*et *pedunculan*, prior differt a nostrâ specie "calycis minons glabn JcriMbus obtu^is, pedunculis brevionbus



**Jftmum pendulis, stamimbusbrevionibus anUtensque dimidió bre-  
vionibus C pedumularis habet pedunculos sohtanos vel gerainato\*  
'Tonium peudulos ut et calyces glabros.**

UOSA LATISPINA Boiss. (Sect *Canma* )

**R<sup>r</sup>amis, 11 on fens rectis rutyflo-glauce&centibus glabns acutei\*  
crebns flavidis niUdis e basi latissimâ complanatâ acerosis subre-  
curvis triangularibus horndis, mtermixtis aculeis paucionbus e  
hasi subdilatâtâ subulaLis aubrecurvis, stipulisangustistomentellis  
ad"/, pctiolo adoatis margine glandulis seasihbus obscuró semi-  
latis, foliis 7-9 foholatis ovato-suhrotundia approxunatia utrmqni  
tomeatellifi sabtâs patlidipnbus margine aerraUs dentibua aubin-  
legris triangularibus aculis ascendentibus, pctiolo tomentoso **inter**  
foliola spinuhs subarcuatis obsito, flonbus terminalibus **corym-**  
bosis foliis 3 ut umFoliolatisinvolucratis unoquoque bractea pedan-  
culum squaiili suffulto, peduncuhs htspidulis calycims lacinnis vix  
longionbus, calycis tubo pneter glandulas slipitatas spinuhformes  
parcissimas versus basin glabro obpynformi in collum attenuato,  
1 acinus exappendiculatia laoceolatis hispidulia dorsoquoglanrtuloso-  
muncatis post antliesin deflexis, pelalis e sioco roseis cal^ci «utK  
eeqmlongig, stylis in conum valde hispidum brevem connaiis**

**Hab in regno *Cabulico* in alpinis prope *Kaioo* cl Gnfillh**

**Rami Qonfen recti pedales et ultra Aculei •prasertim infrfl or-  
tum foliorum conferti et sspe aubTercicillati 5 hneas longi basi  
scape 3 '/r4 lati ad corymbum usque obvii Foliola 6-8 lineas  
looga. Floras eis *R. catuna* minores 6-7 denei corymbosi Tubns  
calycis e baai subtruncata rotandata in collum attenuate nub an-  
theu piso Diultó minor**

**Rosi HELDHBICHII BOIBS et Reut (Sect. *Canma* )**

**R. ramis vireBti-rabelbs, acutala ebasi latâ subitb contracts i\*eu\*  
gracilibus setalisque gla«dulifens sparsu obsiUs, stipubj dilatatis  
parte hberâ breviter triangularibus facie etmargiitfglflndulissutH  
sessilibus crebrè obsitis, folne 5-7 foholatis foliolisobovatis obtusis  
vel subtruncatis infenonbus dunmutis omnibuB paginâ supenon  
hirtellis crebrè- glandulosisinferiori pallidis tomentelhs basi subin-**

**Plant onent nivar Ser sec No ?**

tegris superne dentato-serratis dentibus ascendentibus acutis creberrime  
 reticulato-glandulosis, petiolo hispidulis glandulosis parceque  
 spinulosis} floribus 2-5 corymbosis breviter pedunculatis pedun-  
 culis luboque calycino globoso creberrime spinuloso-glandulosis, laci-  
 nus clypealis hispidulis glandulosisque in appendicem elliptico-  
 lanceolatum integram rami subdentatam apice dilatatis, corolla  
 rosae calyci subaequilongis

Hab. in regione intermedia montis *Olympi Thessalici* Hel-  
 dreich

Affinis *R. tomentosa* et *R. villosa* differt floribus densis mino-  
 ribus, lobis calycis subintegris, aculeis tenuibus rectis, in-  
 dumento ad pedunculos foliola et stipulas creberrime glanduloso,  
 foliolo plerumque obovatis obtusis basi subintegris dentibus  
 obtusis creberrime glanduloso-marginatis et *spectabilis* quoque  
 affinis floribus raris majoribus, foliolo acutis dentibus attenuatis  
 divergentibus, etc quoque differt

ROSA ORPHANIDIS Boiss et Reut (Sect *Canina*)

Ramulis erectis rubellis glabris dense ramulosis ramulis brevibus  
 breviter puberulo-velutinis, aculeis flavidis e basi dilatatis subito at-  
 tenuatis tenuibus subrecurvis, stipulis velutinis floribus dilatatis,  
 foliis 5-7 foliolatis foliolis ovatis acutis ramulis obtusis mucronatis argute  
 duplicato-serratis utrumque breviter tomentosis subtus palmaribus  
 floribus terminalibus solitaris pedunculo brevissimo tomen-  
 tello insidentibus, calycis tubo oblongo apice attenuate spinulis  
 glandulosis parce obsitis breviter glabris, lacinis tomentosis apice  
 subdilatatis integris, petalis roseis calyci subaequilongis

Hab. in regione sylvatica montis *Olympi Themurici* Heldreich  
 Floret Julio

Valde affinis *R. Heckliana* Trattm in montibus Gracie fre-  
 quentis et forsitan hujus varietas et specimen obvis tamen di-  
 stincta foliolo acutis, ramulis saepe tortuosis, ovato-oblongo apice  
 attenuato nec ovato-glabro, parce nec creberrime hispidis *R. gkhan-  
 hian* indumento, etc longius differt,

POTENTILLA REUTERI BOISS, (Sect *Digitate?* )

1\*. perennis tota pilis longis plus minus adpressis canescens rhizomate brevi vagrois fuscis vestito, rosula centrali nullifl, caulibus pluribus humi expansis prostratis brevibus superne paret et dichotomy ramosis laxè et subcorymbosè 3-5 floris, foliis utrinque sed superne parcius hirtulis radicalibus et inferioribus ambitu rotundatis quinatis foliolis inferioribus minoribus omnibus obovatis cuneatis profundè pinnatifidis, lacimis brevibus hinc obtusis, foliis superioribus tematis foliolis oblongo-linearibus pinnatifidis, stipulis lanceolatis elongatis obtusiusculis, floribus parvis tandem longiusculè pedunculatis calycis adpressè hirsutis lacimis extensoribus hinc interioribus duplò latioribus triangularibus omnibus subaequilongis, petalis obovatis subretusis aureis calyce paulò longioribus, receptaculo longè piloso, carpellis glabris

Hab in calcareis siccis montis *Sierra Nevada* Hispaniae australis ad *Domajo* ubi aestate 1849 legit cl. Reuter

Caulis semipedales brevioresve Folia inferiora diametro 8-10 hinc lata Species affinis *P. Nevadewi* a qua differt indumento longiori parvis canescenti nunquam senceo, foliolis pinnatisectis nec dentato-lobatis, calycis lacimis squilongis Habitu et indumento valdè refert *P. gerantoides* Willd caulibus erectis, foliis subpinnatis, petalis rauldè majoribus distinctam

POTENTILLA DEORUM BOISS et Heldr (Sect *Ternatce* )

*P.* perennis caespitosa, rhizomate crasso nigro basi persistente! foliorum veterum densè vestito, foliis radicalibus numerosis confertis adpressissimè senceo-argenteis longiusculè petiolatis internati foliolis sessilibus obovatis basi cuneatis apice breviter 3-7 dentatis utrinque sed subtus manifestius nervoso-lineatis, stipulis lanceolatis acutis, caulibus paucis extrorsulanibus 1 ramus 2 phyllis ascendentibus adpressè tomentosissimis simplicibus folia 3-5plò superantibus, folio caulino parvo foliolis hinc lanceolatis acutis, stipulis longè setaceo-acuminatis, floribus 3-5 sessilibus in capitulo terminale confertis, calycis adpressè albo-hirsuti lacimis extensoribus linearibus sspè sublongioribus, interioribus multò

lalionbus ovato-triangularibus acutiusculis intus rubellis, petalis  
longis et angustè unguiculatis calycem parùm excedentibus laminis  
parvis obovato-rotundis albis, receptaculo hirsuto, carpellis glabris  
marginibus compressis dorso ad breviter onctiformi auctis

Hab in rupibus excelsis regionis alpinae *Olympi Thessaliae* Aucher  
N° 133, cl de Heldreich Julio 1851.

Folia in specimenibus majoribus petiolo bipollicari suffulta fo-  
lios 6-8 lineis longis, 3 latis Pedunculi 4-8 pollicares Adest  
forma pulvinata foliis nullis minoribus pedunculisque abbreviatis  
Flores eis *P. Apenninica* paululim majores. Haec species nostrae  
inter omnes magis a films egregie differt foliis apice integris vel  
tenuiter retusis, petalorum limbo longioribus magis exserto, carpellis  
dimidiatim minoribus apice pilosis dorso exalatis

#### POTERIUM GAILLARDOTI Boiss

*P. glaberrimum* glaucescens caulis crectis vel ascendentibus, foliis  
a basi 17-21 foliolatis foliolis parvis foliorum inferiorum ovatis cir-  
cumscissis profundè et argute denticulato-fissis, supremorum elliptico-  
obovatis apice 2-3 denticulatis integrisve, paniculae terminales longae  
laxae angustae ramis brevibus, monocephalis, fructibus ellipticis  
utrinque attenuatis acutis quadrangulis angulis crassiusculis obtusis  
laevibus, faciebus profundè reticulato-insculptis

Hab in rupibus Libani inter *Saida* et *Damascum* prope *Badkhan*  
*et Toghra* cl D<sup>1</sup> Gaillardot

A *P. sanghisorbia* L = *ditlyocarpa* Spach egregie distinctum  
panicula ob ramos laterales abbreviatis laxa nec corymbosa, fructu  
ferè nudis minoribus multo profundius insculpto angulis donatis,  
*P. munitum* Spach differt eisdem notis et reticulis facierum mur-  
ricatis Fructus eis *P. multicaulis* et *rupicola* vix majores

### ONOUKARIEI

EPILOBIUM SUVHNEUM BOISS et Bal (Sect *Lysimachia*)

Ep radice liberis evstolonosi, caule e basi erecto ramoso su-  
perne prorsertim pilis conspersis glandulosis tomentello hirsuto 2-4

e petiolorum marginibus decurrentibus percurso, foliis pithis adpressis brevissimè hirtis brevissimè petiolatis sessilibusve e basi rotundatâ oblongis denticulatis acutis, alabastris ovatis breviter acuminatis, foliis antè anthesin cernuis, calycis lacina lanceolatis obtusiusculis petala purpurea subaequantibus, stigmatibus in clavam coalitis, capsulis pithis adpressis hirtis, seminibus obovatis obovato-oblongis basi attenuatis

Hab. propè *Smyrnam* cl Balansa

Species indole radice, caulis et characteribus a *Ep roseo* a quo differt indumento praesertim in parte superioribus plantae densioribus magis canescentibus, foliis subsessilibus opacioribus intensius viridibus, sepalis non attenuatis acuminatis Floras eis *E rosei* vix majores sed petala intensius purpurea calycem vix excedentia Ab *E lanceolata* cui primum reluleramus caule hinc longius distat

EPILOBIUM HYNCHOCARPUM BOISS (Sect *Lysimachton* )

E radice elongata fibrosa estolonosâ caule erecto humilo parvè ramoso adpressè canescenti lineis 2-4 e ramulibus decurrentibus percurso, foliis adpressè puberulis glabrescentibusve sessilibus e basi cuneato-lanceolatis obtusiusculis obsolete repandis, alabastris globosis, calycis laciniis oblongo-lanceolatis acutiusculis, petalis palide purpureis calycem partim excedentibus, stigmatibus in clavam coalitis, capsulis longe pedunculatis strictis adpressè canescentibus, seminibus oblongo-ellipticis levibus basi attenuatis apice in rostrum crassiusculum earum diametro dimidiat brevius abruptè angustatis

Hab. in uliginosis ad fontem calidum sulphureum propè *Lar* ad radices montis *Demawend* Kolschy pi exs Pers bor N° 616 sub *E palustri*.

' Planta semipedalis valde affinis habitu et florum magnitudine *E palustri* cum eam olim retuleram et a quo differt caule hinc semibusque rostro manifesto longiusculo instructis.

EPILOBIUM MENTHOIDES Boiss. et Heldr (Sect *Lysimachton* )

E radice stoliferâ caulis ascendentibus teretibus ramosis hinc pubescentibus molliter villosulis, foliis sessilibus subsessilibus

hbusve molther viUosulis basi rotundatis ovatis oblongisve acutiusculis vel obtusis obsolete repandis, alabastns ovatis ante anthesin cernuis, calycis lacinnis rubellis glabns oblongo-ovatis acutiusculis, petalis violaceis calyce subduplo longioribus, stigmatibus liberis subpatulis, capsulis parcissime hirtis vel glabris virentibus, seminibus tenuissime tuberculatis obovatis basi attenuate acutiusculis

Hab ad aquas calidas *Taun* prope *Tschiff Kan* ad radices montis *Bulghur Dagh* cl Heldreich Sept 1845

Planta habitu, foliis et florum magnitudine formas *Ep. ortganifohi* caulis curvatis donatas referens sed ab eo indumento, caulibus hirsutis, foliis non acumatis, seminibus abbreviatis longe discedens et *E. montano* appropinquanda quod characteribus affinis differt indumento brevissimo parco, caulis erectis, foliis ovato-lanceolatis acutatis argute denticulatis, seminibus oblongis

EPILOBIUM MUTABILE BOISS et Reut (Sect. *Lysimachion*)

E radice elongate rosulas sessiles laxas edenti, caulis erectis superne ramosis teretibus conspue hirsutis glabrescentibusve hirsutis 2-4 parum prominulis e basi foliorum ortis percursis, foliis sessilibus a basi rotundata vel breviter cuneata oblongo-lanceolatis acutis brevissime et remote denticulatis, alabastns nutantibus ovatis mamillo superatis, calycis lacinnis glabris lanceolatis acutis, petalis parvis albis demum palide roseis limbo calycis subduplo longioribus, stigmatibus distinctis erectis, capsulis adpressis canescentibus glabrisve, seminibus obovatis subcompressis basi vix angustionibus minute tuberculatis

Hab ad aquas regionis mediae montis *Sierra Nevada* Hispaniae Boiss et Reut I del Campo I E seminibus Hispanicis in Hort. Valleys a duobus annis coctur,

Planta demum elata \ l\*-% pedalis, foha majora bipolycana 7-9 hirsuta la Flores magnitudine inter eos *E. montani* et *rosei* medu Species distinctissima nulli arctius approximanda *E. tetragonum* differt foliis angustionibus decurrentibus, flonibus ante anthesin erectis, stigmate clavato *E. palustre* caule elineato, flonibus minoribus, seminibus fusiformibus, *E. parviflorum* caule

elineato, flonbus majonbus, nqn versicoloribus, sepals lation-  
buSj^eminibus loDgionbus obovato-oblongis distinguuntur

EPILOBIUM STEVENI Boiss (Sect *Clumamenon*)

£ totum pilis adpressissimis canum, caule erecto a basi stnctè ra-  
moso ramisque foliosissimis, folus sessihbus hnearibus basi apice-  
que attenuate ID callum nigrapi abeuntibus uninerviis integns  
stnctis, racemis terminahbus laxiuscuhs, bracleispedicelhsfrac-  
tifens dumidiA brevioribus, calycis adpressè cam lacinus lanceo-  
latis acutiSj anthens oblongis, stylo basi tantium villosa, capsulis  
adpressè senceis, senusibus oblongts laBvibus utnngufe attenuate  
*E cane&cens* Stev Has. nee Endl.

Hab ID Georgia Caucasicl prop^ *Achalztche* (herb Steven).

Species affinis *E. rosmanmfoho* a quo specified distincta vide-  
tur mdumento cano, foliis lationbus (majors pollicana sesqui-  
polhcanaque 2 hneas lata) et probabihter alns notis quas e spe-  
cimine nimis imperfecto non enucleare potm

## LYTHRAMEJE

LYTHHUM SILENGIDES BOISS. et Noe (Sect *Hy&opt-folia.*)

L. annuiim glabrum a basi multicaule caulibus tenuibus angu-  
lati& decumbentibts oentrahque erecto omnibus subsimpUcibua  
a basi flonfens spicas longissunas virgatas lanusculas formanti-  
bus, folus glaucescentibus sessihbus oblongo-hneanbus acutius-  
cuhs uninerviis stnctis, flonbus axillanbus solitanvs rants bias  
folio axillan subbrevioribus, pedunculo stneto calyce subtripld  
brannon basi 2 braeteohs subnlats minutissmus socte, calyoe flb-  
nfero teamter c^liDdnco siricato striatotjue destibw quinque .^x-  
terionbns lauceolatifl acutts qnmqne internis membrao&ceis tnta\*  
gulanbus b̄revibus, petahs nulhs, stylo longiuscalè exserto, stlg-  
mate capitato, calyce fructifero stneto oblongo-cyliwirioG capsu-  
lam oblongam eo subbreviopem aretè cmgente, looulis binis, ~~so-~~  
mimbra pallidis obioogis angni»tis acutis,

Hab ID collibus cited *Bagdad* el. Noè anno 1851.

Gauhs centrahs 10 polhcanslateralespauldbreviores, folia Inferioia 0-7 hneaa longa lineam aut paul6 ampliùs laia, supefiora abbreviate Calyx fructifer 2-2'/'«linear longus, species distinctissima *Ammunnid* pelalorum deficientid accedens sed ab est calvcis form! abhorrens et *Lylhio* omni jure adnumeranda

## TAMARISCINEiti

TAMARIX NOEANA BOISS (Sect *Pachybotrym* Bunge )

T, glaucescens glabra, cortice purpurascenti, ramuhs folufens numerosis tenuissimis stnctis punctatis, folus e basi latiore tnan-gulan-lanceolatis acutis stnctis jmnctatis minutis margine laevibus, racemis e ramis hgnosis ortilaterahbus breviter pedunculatis longis, pedunculo laxè bracteato, bracteis ad florum basin hneanbus acutis pedicello 3-4pl6 brevionbus, calycis pedicello longions tetramen sepahs ovatis margine scanosis, petalis obovato-ellipticis basi longiuscul6 attenuatis dcciduis, disco breviter quadnlobo lobis retusis lilapientum basi lalms excipienlibus, antheris exapiculatis, styhs qualuor spathulatis basi coherentibus, capsuld calyce 2 VipW longiore

Hab in fossis propè *Baswra* et *Mohammera* (Babylonia) cl Noe Folia majora 1 lineam, minora 'I'VS<sup>line</sup>® longa Racemi fructifen 3-5 polhcares sex lineas lati, flonferos non vidi Species a *T tetragynd*, *Meyen* et *Boveand* quibus a dims est folus dupld vel tn-pW minonbus, ramulis tenuissimis statim dignoscenda

TAMARIX HISPANIGA Boias (Sect *Macrostyhs*.)

T vindis subglaucegcens-glabra cortice fasco-purpurascenU^ ra\* mis lignoais ramulos flonferos aliosque fohosos lterùm ramuloaos breves gerentibus, fohis aretè lmbncatie e bast laiion aioptexicauh triangulan-lanceolalis acutissunis punctatis, raoemis densu subsessilibus axillanbus terminalibusque in ramulos pyramidatos aphyllous secùs ramos lignosovetusiores aggregate, bracteis tnan-gulari-lanceolatis acutis calycem sqaastibus^ pedicello-calyeebre\* viore sepahs oblongis obtusia qumque, petalis qumque obovato-



ellipticis, disco 10-lobo, filamentis quinque basi latioribus cum glandule geminatis disci confluentibus valde exsertis, antheris lutescenti-roseis mucicis, stylis tribus apice in stigmata dilatatis ovarium dimidiatum squamulis, capsula

Hab ad *Puerto*, et *Guadaluppa* regnum *Jenensis* Hispaniae australis cl Blanco p<sup>o</sup> exs 1849 N<sup>o</sup> 340 sub *Tern Anghed*

Species habitu et racemorum crassitie inter *T Africanam* et *T Gallicam* et *Anghed* intermedia Folia ferè *T Africanae*, racemi pollicares vel breviores sub antheris 2 1/2 nec ut in *T Africana* 4 lineas crassi A *T Anghed* et *Galhed* distinctissima floribus duplo majorebus, disco decemlobo Ob florescentiam praecocem et racemos paniculatos quidem sed lateraliter e ramis hinc vetustioribus onudos haec species inter *Tamances vernaes* meo sensu mutare debet

Sub nomine *T Gallicae* cl Willkomm misit plantam in vallo *Loyola* propè *S Sebastien* Hispaniae borealis lectam PI exs 1850 N<sup>o</sup> 52, magnitudine et characteribus florum cum nostris congruam sed in quibus racemi longiores (sub bipollicares) longiusque pedunculati solitarii lateralesque e ramis hinc onuntur omnino ut in *T Africana* Hujus ulterior comparatio docebit an sit varietas *T Hispánica* vel species propria

TAMARIX STRICTA Boiss (Sect *Pleiandra*)

T glauca glabra<sub>3</sub> ramis vetustis rubello-cinerascentibus, novellis tenuiter et longe virgatis c<sup>o</sup> hinc punctatis simplicibus numerosis strictis, foliis arete vaginantibus horizon taliter truncatis cum mucronulo laterali brevissimo angustissimis ramo adpressis, racemis laxis longiusculis sessilibus ad partem superiorem ramorum novellorum paniculatis, bracteis ovato-triangularibus cucullatis acutis brevibus, floribus sessilibus, sepalis oblongis obtusis, petalis oblongo-ellipticis obtusiusculis spatulatis, disci decemlobi lobis in filamenta basi sublata abeuntibus, antheris apiculatis, stigmatibus tribus subsessilibus, capsulis bilineariibus

Hab in ditionibus *Sinde* et *Belouchistan* ad occasum Indiac sitis cl Stocks

Rami annotim pedales longioresque ob folia marginifolia veluti articulati Folia ad marginem circulaem lineae octavam par-

tern latum oculo nudo vix perspicuum reducta Racemi florum pollicares sesquipollicaresve laxi vix 2 lineas crassi Flores magnitudinis eorum *T articulate* cui fohornm forma valdè accedit & a quo differ L ramis crassionbus. racemis laxionbus, flonbus decandrih styhs subnulhs nee ovanum dimidium squantibus *T pyctiocarpa* et *mucrocarpa* quoque decandrae folns valdc Impresso-puncLatis noil lion/outaliter truncatis, flonbus majonbus longiùs distant

## MYRICAUIA AIIMENA Boiss et Hue I

M Irulicosd ramis elongalis bimplicibus rigidis virgatis glabns rubelhs stnalis hornLmis aphyllis ramulos folnferos in parte mfenon frquentiores spicasque florum laterales numerosas ferentibus, iohis ad ramulos jumores densiuscul^ confertis sessihbus lat6 hnearibus obtusismembranaceo-margmatiserecto-patentibus ramillos jumores in axilhs fovntibus, spicis florum laterahbus nuincrosis allerns ovalo-oblongis densis, rachide parte dimidio infcnon flonbus destituld bracteis fert<sup>l</sup>, ommn6 membranaceis supcrn6; hnccin-cuculialH laxis ad rachidis basin lmbncatis rotundatis ubsit<l, bracteis interfloralibus calycem subsuperantibus, flonbus pedicello calyce brevion suffultis, calycis lacimis angust6 lancoolalis herbaccis latiubcule roseo-marginatis, petalis lineancllipticis calyce sesquolongioribus, filamentis ad medium usqu6 inter se coalitis

Hab in Armenia? \alle *Ka&suklu* cl Huet du Pavilion et circ4 *Erzeroum* cl Calvert

Rami in raeis spccimimbus simplices pedalessempedalesque, ramuh folnfen pollicares, folia eis *M GermmiccB* majora, spices llorales 8-10 lineas long® ferè parle dimidiã supenon tantumflonfersB Frutex nabilu et inflorescentiã *Tamancem Afncanam* omnind relercns, affinis *M Lavunm* spicis lateralibus quoque donala3 et qua differt folus ferè duplò majonbus, spicis longis cyhndncis cum pedunculo bracteato saepè tnpollicanbus, bracteis llorc<; aBquanlibus, ^epahs latiùs lanceolatis

## CUCURBITACEJE

BUYONIA MICRANTHA Boiss Diagn N° 10

Nomen muta in *B Synacam* Boiss propter *B micranthato* Hochst jam anno 1844 in plantis Schimpenanis Abyssimcis propositam

CUCUMIS ERIOCIROPUS Boiss et Noe

G caulibus numerosis elongatis, tenuibus flexuosis prostratis simplicibus angulato-stnatis aculeolis diaphanis subretorsis e tuberculo ortis scabndis, folns palhd6 virentibus utnquë tubercuhs nmmitis albis exasperatos subtusque ad nervos exasperatis rotundatis basi latfe cordatis obtusissim6 palmatim 5 lobis lobo terminali latiori infenonbus obtus6 superioribus argutë denticulatis, petiolo mfimorum limbo longion superiorum brevion, cirrhis axillanbus simplicibus, flonbus parvis axillanbus 1-3, pedicello hispido calyce subbrevion, calyce patulë luspido obconico dentibus hnean-setaceis brevibus, petalis aurantiacis, ovano post anthesm ovato densissim6 albo-lanato, fructu prumformi velutino longitudinahter vittato

Hab in cultis ^TO^b]Bagdad cL Noe

*C villosus* B et Noe ohm in litt

Caules 2-3 pedales teuuissimi, folia majora 12-18 lineas longa Lataque, flores eis *Bryonw dioiccB* minores magnitudinis eorum *C prophetarum* Fructus maturus ex cl Noe pruni magmtudine vndis velutinus hneis longitudinahbus saturationbus 2 hneam latis percursus Pulchra species a *G prophetarum* distincta folns substantise tenuions, mintus aspens, fruclu non echinato, affinis quoque *C amhgno* et *C bardanw* Fenzl ex prov Kordofan,

CRASSUL VCEiE

PISTOIUNFA INTERMEDIA BoiSS et Reut

P tota glanduloso-viscida, folns tereti-complanatis oblongis in braceas. ovatas pedicello aeqmlongas vel breviores sensim abeuntibus, calycis corollino tubo 6-9plo brevions lacinnis lanceolatis acutis, corollae purpureae tubo longo cylindrico supernè sensim amplulo, limbi tubo 3-4plo brevions partitibus oblongis mucronatis,

Ilab in provinciâ *Gran* (Balansa pi cxs 1851 et 1852 N° 59 et G-14), in provinciâ *Algenetisi* (Jamin)

Habitus *P Hispanica* qua\* differt corolla tubo fertis dimidid angustiori cylindrico etiam sub limbo subconstncto, limbi lacinnis lanceolatis *P Salzmanni* eodem tubo corollino sursùm ampliato donata habet corollam flavam dupld breviorẽ Corolla in nostrâ specie 12-15 hneas longa

SEMPERVIVUM ARMENUM DOISS et Huct (Sect *Genuina*)

S fohh rosularum oblongo-spathulatis in mucronem abruptiusculè altitinalis glabris margine ciliatis, caulinis supenonbus facie etiam pubescentibus, cymis humilibus, cymis contracta, petalis luteis habens numciosis capsulis lanceolato-linearibus superant attenuatis glandulobovatis sepalis ru bellis hirtis 2/3plo longioribus, filamentis basi dilatatis hirtis, carpelibus glanduloso-hirtis, squamis hypogynis crectis lamelliformibus subquadratis

Ilab in jVrincini propè *Kassuldu* cl Huet du Pavilion Augusto flonfenim

Planta 4-0 pollicans, cyma diametro 4/5—2 pollicans, flores eis *S Wulfemi* minores *S (jlobifero* Besser atline quoddiffert caule pedali, polalis calyco quadruplo longioribus, squamis hypogynis Klinduliformibus

SEBUM 'GRISEDACHII Heldr

*S* annuum glabrum pumilum caule ferè a basi ramoso ramis ascendentibus, folns sparsis semicylindncis obtusis basi truncatis, cymaj ramis 2-3 racemifonnibus unilaterahbus, pedicelhs calyce subbrevionbug, sepalis ovatis obtusissimis, petalis pallidè flavis lanceolatis aristatis calyce tripld longionbus, filamentis glabns basi subdilatais antbens luteis, carpellis glabns erecto-patentibus subincurvis stylo longmsculo mucronatis

*S annuum* fl *racemiferum* Gnsebach Spicil Fl Rumel

Hab in rupestribus siccis regions calidae Macedonia? et Thracis (Gnsebach I Heldr 1) *Byzanthi* (Aucher 1) BithymsB (Thirke)

Affine *S annuo* L differt ramis post anthesin vix flexuosis, floribus paulò minoribus pallidioribus secus cymas ramos minus laxis ferè contiguus, potalis angustioribus aristatis nee acutis calyce triplo nee duplo longioribus, carpellis angustioribus, semibus dimidiis minoribus Locus natalis diversissimus in calidis regionis maritime nee in regione alpina Folia plantarum vivarum alia praebent discrimina

Obs *S Pornassium* Boiss et Heldr pi oxs a *S annuo* L non satis differt

SEDUM ARMENUM BOISS et Huet

*S* annuum vel bienne? glabrum caulibus prostratis radicanibus ramos erectos dense fohosos erectos breves edentibus, folns linean-oblongis tereti-depressis acutiusculis basi attenuatis, flonbus pedicello calyci aequilongo suffultis 3-5 in cymam terminalem brevem dispositis subconfertis^ sepalis breviter Langularibus acutis, petalis 6-7 albis lanceolatis nervo medio excurrente mucronatis calyce 4-5plo longioribus, anthonis intensè purpureis, carpelhs ovato-oblongis stellalim patentibus breviter hispidulis stylo longiusculè mucronatis

Hab circa *Koprubachu* Armenia} cl Huet du Pavilion Maio 1853

Rami 2-3 pollicares, folia 2 lmeas circiter longa, cyma conferta pauciflora, flores illis *S Hispama* pauld minores Valdè affine *S enocarpo* Fl Gracca a quo nunc plurais specimibus siccis con-

ferlis *S Orientate* Diagn X non sejungere possumus et ab eo discedens folns multd brevionbus, cyma conferta pauciflora, flonbus *albidis* mmoribus, pctalis pro longitudme lationbus, an tamen etiam hujus forma ?

*S Bithymcum* Doiss Diagn X a *S erwcarpo* non specificè differre videtur et ost probabilissim6 hujus forma montana sabperennans sub anther surcuhs slenlibus densè fohosis donata

SEDUM CALVERTI BOISS

S peronno, cauibus ercctis vel ascendentibus dens6 fohosis sub lonte sparsira ot brevissimè puberulis, folns sparsis (e sicco) hnean-oblongib tercti-subdepressis supernt angustatis acutis basi vi\ attenuatis, flonbus in cymam terminalem densam corymboso-capitatum disposiis subsessihbus, sepalis lanceolalis acut6 cannatis acutmscuhs rubellis, petalis albis hneari-lanceolatis acutis vel nervo excurrontc breviter mucronatis calyce 2 V^pti longionbus, Glamentis albis glabns mfern6 subdilatis, anthers purpureis, carpellis glabns oblongis in stylos cis longiores abeuntibus

Hab) in ArmeniA circS *Erzeroum* cl Calvert

Caules in specimine a me viso 4 polhcarcs, folia 7-8 lineas longa, cyma multiflora corymbosa diamctro pollicans, flores magnitudims corum *S albi* quod primfl frontc refert sed a quo longfc distat cyma conferU scpalisque elongatis acutis Species distinctissima collocanda prop6 5 *Lydmn* Boiss quod prater folia quadrupld minora (loresque trip 10 minores diiTert sepalis obtusis, anthers exsertis

SEDUM SAHTORIANUM BOISS

S perenne glabrum, caulibus crassis decumbentibus ramos ascendentes vel rectos pumilos foliosos flonferos surculosque steriles abbreviatos omnes crassmsculos edentibus, omnium folus adpressiusculè imbricatis brevibus subteretibus\* e basi lation sub msertionc products attenuatis triangulanbus obtusiusculis, cymis ramis 3-4 abbreviatis erecto-patuJis densiflons unilateralibus, sepalis oblongis acutmsculiSj petalis flavis lanceolatis acummato-attenuatis calyce triplri longionbus, anthers aureis

Hab in saxosis montis *Hymetti* Spruner! Sartou! Heldreich I

Species quantum ex speciminibus siccis dijudicare queo a *S. acn* et *neglecto* Ten quibus valde affinis caudicibus crassis pennam ansenam diametro ssepe aequantibus, foliis sparsis nee sexfariis, adpressissimis dimidiis hrevionibus acutionibus, flonibus confertionibus, petalis longe altenualo-acuminatis sat distincta

SEDUM LAZICUM BOISS et Huet (Sect *Phmfoha*)

*S.* perenne glabrum, caulibus basi repentibus dein ascendentibusj foliosis, foliis oppositis ovato-rhombeis a medio sursum obtus6 crenatis glabris, cyma tenninah conferta corjmbosa multiflora, pedicellis brevissimis, sepalis oblongis obtusis albo-punctatis, petalis roseis lanceolatis apice attenuatis obtusiusculis calyce 2—\*/p6 longioribus, filamentis glabris inferno dilatatis antheris purpureis, carpelibus glabris oblongo-lanceolatis rectis in stylos eis duplo bre^iores abeuntibus

Hab in alpiibus *Ponti* (Lazistan) cl Aucher N° 2662, in Armenia propè *Tortum* cl Huet du Pavilion aesi 1853

Alline *S. spurw* quod foliis ciliatis statim distinguilur *S. rossmrni* ex descriptione differt pedicellis calycem aequantibus, *S. oppositifolium* habet flores albos foliaque margine cartilagineo-denticulata

## SAXIFRAGACEE

SAXIFRAGA LANTOSCANA BOISS et Reut. (Sect *Aizooma* )

*S.* perennis lalò cespitosa glaberrima, foliis rosularum patentibus linear-spathulatis inferne attenuatis obtusiusculis supra convexis margine integris foveolatis foveolis squamulis calcareis albis oblongis versus apicem folii confluentibus tectis, caule erecto foliato in paniculam oblongam subumlateralem superne abeunti, folius caulium lineari-oblongis diminutis, ramis hinc hinc minimis, ramis leniibus erecto-patentibus 4-7 floris, calycis pallide virentis lacinis ovatis obtusissimis membranaceo-marginatis denticulate tubo hemisphaerico sublongioribus, petalis lacteis obo-

vato-oblongis subspathulatis calyce triplo longioribus quinque-  
vnis ad unguem hinc punctorum carnearum saepe pictis

Hab in valle *Lantosca* alpium Nicjensium infra pagum *Lantosca*  
ad rapas apneas verticales, Boissier et Reuter Aug 1852, in  
summa vallecula quae a pago *Fontan* ad pagum *Belvedere di Lan-*  
*tobui* iter ad rapas in consortio *S cochlearis* B et iter Jul 1854  
Floret Junio Descriptio e specimine floris in horto Valeyres  
cullis

Affinis *S hngulata* Dellardi vallis finitimae Tendensis in colli-  
bus ab effluvio virorum minus griseo ad brunnum magis vergenti, folium  
supra saepius convexis nec ut in *S hngulata* sulcata, folium mi-  
nus minus longius attenuatis apice non attenuatis rarius  
et obsolete acutis, crusta marginali tenui et ob paginae supe-  
rioris convexitatem minus perspicua. Nostra species proprie ac-  
cedit ad *S australem* Monch ex montibus Italiae orientali et cum  
*S hngulata* imminute confundam. Haec a nostra specie cujus folia  
characteresque habet saltem differre videtur statura minus, folium ab-  
breviatis crassius crustatis et imprimis calycis tertio parte majus  
lacinus obsolete denticulatis. Nostra species est eadem quam cl  
Schott in suis *Analecibus botanicis* sub nomine a nobis prius erronee  
communicato *S florum* Uentze descripsit

SAXIFRAGE CATALAUNICA BOISS et Reul (Sect. *Aizoonta*)

S perennis dense caespitosa, folium rosularum erecto-patentibus  
lineari-oblongis abbreviatis obtusiusculis supra subcanaliculatis  
marginibus integris foveolatis crustis calcareo albis continuis lobulatis  
marginatis, caule erecto folia ter in paniculam oblongam abeunt  
breviter glanduloso-viscido, folium caulis oblongis minutis, ramis  
erectis lobulatis glanduloso-viscidis apice subconfertim 4-5 floris pedi-  
cellis floris subaequalibus, calycis viscidibus basi glandulosis lacinis  
ovatis obtusissimis tubo breviter campanulato subbrevis, pe-  
talis lacteis obovato-spathulatis trinervis calyce 1 V. **lon-**  
**ribus**

Hab in lissinis rupium *Montis Serrati* Catalauniae cl Bourgeau  
pi exs 4854 et 4852

Folia 9-40 lineas longa 2-2<sup>1</sup>/<sub>2</sub>, lata caulis 6-8 pollicibus. Flores  
magnitudinis eorum *S cotyledons*. Affinis *S australis*\*, ab eo



differt foliis apice non spathulatis crnsU conturaft marginatis, pamculâ calycibusque glanduloso-viscidis nee glabemmis, petahs apice magis spathulatis A S *Ungulatd* longriis distat

SAXIFRAGA BORYI BOISS et Heldr (Sect *Aizoonia* )

S densè csspitosa, cauibus foliis vetustis nigricantibus imbn-catis densissimè tectis columnari-cyhndncis, foliis radicaibus in rosulas ssepè elongatas confertis oblongis obtusis conaceis glauc-scentibus glabns membranaceo-marginatis basi cihato-denticu-latis caelcrùm integemmis mtrâ marginem sub 9 foveolatis, cau-libus pumilis fohosis apice corymbose 3-5 flons glanduloso-hispi-dulis, folns caulmis glandulosis linean-spathulatis, calycis glanduloso-hirti lacinnis ovato-tnangulanbus tubo breviter campanu-la to brevionbus, pctalis , capsule subrotundâ in cornul ei sub-aequilonga abeunti

S *Spnmeri* Boiss in Heldr pi Tayg exs nonDiagn. — S *mar-gwata* Bory et Ghaub Fl P&op non Sternb

Hab. in regione altissima montis 5 *Ehas* Taygeti loco *Chov-pata* dicto, cl Heldr fructif Julio 4844

Caules columnares 2-4 polliccs longi, folia tres lmeas longa sesquilineam lata Scapi bipollicares A nobis pnûs confusa cum S *Sprunen* afflini quâ differt foliis paul6 minonbus glanduloso-pilosis, corymbo multifloro, capsuli dinudiõ minon brevissimè bicornutâ S *conophylla* Gnseb ex Albaniâ, Bosniâ et Dalmatid indigena longiûs differt folns linean-subspathulatis 2 hncas longis **lineæ**<sup>5/4</sup> latis angustissimè membranaceo-marginatis

**SAXIFRAGA** KOTSCIIYI Boiss (Sect *Aizoonta* )

S densè casspitosa, cauibus folns vetustis nigricantibus Imbri-catisdensissimè tectis columnan-cylindncis, folis radicaibus densè rosulatis linean-oblongis glabns glaucescentibus parte inferiori plains apice supcrnè canabulato-cucullaUs acutiuscuhs subtûs sJbcannatis membranaceo-marginatis basi utnnqu6 cihatuhs, in—trâ marginem minutè ct remotè 7-9 foveolatis, cauibus fohosis pumilis valdè glanduloso-hirtis apice corymbosè 9-13 flons, foliis caulims hnean-spathulatiSj, calycis subglandulosi lacinus tnan-gu-

lan-lanceolatae obtusis tubo breviter campanulato subaequilongis, pelalis oblongo-spathulatis in unguem attenuatis luteis calyce duplo longioribus trinervis nervis lateribus ramulosis, capsula subrotunda in cornua 2 acquilonga e calyce exserta abeunti

Hab in *Tauro Cihcico* cl Kotschy anno 1853

Gaules columnares bipolycaræ, scapil 1/2-2 polycaræ, folia 4 lineas longa 1/2 lata. A *S Boryi* differt foliis longioribus angustioribusque apice cucullatis subtusque cinnatis acutiusculis, capsulae minoris, ab eo et a *S Spruneri* petalis brevioribus luteis nec niveis, a *S. conophyllo* eadem notis foliorum subtus cinnatorum majorum, petalisque minoribus e calyce multo minus exsertis

SAXIFRAGA MELIENA Boiss (Sect. *Dactylodes*)

S densa et compacta caespitosa, foliis emortuis persistentibus secus caules columnas densas cylindricas forraantibus, annotinis obscure videntibus ad columnarum apicem rosulatis glanduloso-hirtis viscidis cuneatis ad basin usque sensim attenuatis nervosis nervis non pronatis apice in lacunas 3-9 breves ellipticas obtusas palmatim fissis, caulibus scapiformibus nudis vel folia pauca 3-5 fida gerentibus apice subcorymbosis 3-9 floris ramisque corymbi glandulosis, calycis glandulosis sordidi rubelli laciniis ovatis obtusis tubo longioribus, pelalis lacteis ovato-oblongis erecto-patulis subcontiguis exungiculatis nervis nervis nibellis percursis calyce duplo longioribus

*S Groenlandica* Lapcyri et auct Fl Gall non *L*

Hab in summis jugis Pyrenaeorum

Species colore nigro columnarumque nigro-virenti foliorum, foliis magnis lacteis, nervis foliorum non pronatis a formis omnibus *S exarata* facile distinguenda, magnitudine et colore florum propius accedens ad formas compactas *S pubescentis* Pourr quae tamquam foliis duplo saltem majoribus prominulè nervosis palidè virentibus facile dignoscitur. *Sax, Gromfandim* *L* est forma minor *S cernitosa* in Groenlandia, Labrador, alpibus Norvegia) abundè crescens et a nostra planta foliis multo majoribus jectis, petiolis foliorum surculorum basi membranaceo-dilatatis, petalis calyce sesquialongioribus, etc toto colore diversa,

SAXIFRAGA NEVADENSIS BOISS. (Sect *Dacyloides*)

S dense et compacte cespitosa, folns emortuis seeds caules persistentibm nigricantibus, annotims obscurfe virentibus rosulatis glanduloso-hirsutis viscidis nervosis nervis non prominulis ovato-cunealis in petiolum planum aeqmlongum vel longiorem attenuatis ferè usquè ad basin limbi tnpartitis lacinnis linear-oblongis obtusis laterahbus saep6 bifidis, caulibus scapiformibus pumilis nudis vel folia pauca cuneata trifida summaquelineana Integra gerentibus apice corymbosè et confertim 3-9 lions glanduloso-hirtis, calycis pilis crobns glandulosis hirtelU Lacimis ovatis obtusLstubo seqmlongis, petabs oblongo vel elliptico-spathulatis albis vel basi roseis exungiculatis trinerms calyce sesquilongionibus

*S mixta* Boiss Vo\ Bot. Esp non Lapeyr

Hab in regione superior! montis *S Nevada* Hispamae australis ad nives.

Hxc species quam in opere citato pro *S melcenA.* — *S. grobnlandicd* Lapeyr babui ab eà ex speciminibus spontaoeis cultisque collatis specific^ differt folus distinctè petiolatis limbo profundius flsso, flonbus tertift parte mmonbus ob pedicellos brevissimos saep6 subcapitatis, calycismdumento glanduloso brevion crebrion, pelalis magis attenuate e calyce minutis exsertis, cespites caulibus laxionbus seepiis constant *S pubescens* Pourret.—*S. mixta* Lapeyr differt folus elevatim nervosis palhd6 virentibus, eisdem scilicet notis quibus a *S meland* distinguitur.

SAXIFRAGA ERIODLASTA Boiss et R (Sect. *Dactyloides* )

S csBspitosa hirtuLa modicè glandulo&o-viscida, caulibus abbreviate tenmbus foliosis, folus minutis linear-spathulatis in petiolum brevem angustatis nerrosis sspiùs apice indivisis obtusis ranùs brevissimè tnlobis, gemims ex axilhs supenonbus breviter stipitatis ob segmenta interiora cucullata membranacea margine lanata bombycinis, caulibus scapiformibus folia pauca minima squamiformia ferentibus apice 1-3 flons viscidulis, calycis breviter glanduloso-viscidi lacmns ovatis obtusis tubo hemisphsenco subxquilongis, petalis albis vel rubellis ovatis erecto-patulis contiguus calyce

sesquilateralibus, capsula ovatae cornibus brevibus calycibus lamellis brevibus

*S. spathulata* Boiss Voy Esp non Desf

Hab in montibus calcareis siccis regni Granateosis mantimi in regione alpini *S. Tejada*, *S. Nevada*, *S. de Lujar* (Willkomm), *S. de Baza* (Bourgcau)

Ilanc speciem did pro *S. spathulata* Desf habui donec hujus specimina in loco natali leeta (*Atlas propè Behde*) contulisset Haec a planta Hispanica egregie differt foliis sicut et quidem profunde trifidis, gemmis intraxillas foliorum subsessilibus oblongis modice ciliatis nec folia aequantibus superantibusve ovato-rotundis lanatis, capsulis pediculisque tenuissimis glabris nec ut in nostra specie pro plantae magnitudine crassiusculis glandulosis, floribus paulominoribus petalisque angustioribus HIBC *S. spathulata* ad *S. Gibraltancam* et *S. Gibraltancam* nullatenus propius accedit

SAXIFRAGA POITTO-SANCTANA Boiss (Sect. *Dactylodes*.)

S dense caespitosa glabra lucida rubello-virens siccitate nigrescens, foliis connatis nervosis cuneatis in petiolum rigidum eis sesquilateralibus vel longiorem attenuate ad vel infra medium trilobis lobis triangularibus oblongis subdivisatis inlegis, caulis longifloris ex axillis rosularum solitariis vel plerumque glabris aut apice glandulosis flexuosis 4-3 floris folia parva linearia indivisa gerentibus, calycis glandulis minutis sessilibus obsiti tubo obconico basi valde attenuato, 1 acinus triangularis lanceolatus acutus tubo sesquilateralibus, pediculis aliis elliptico-spathulatis trinervis exunguiculatis 2  $\frac{1}{4}$  longibus

Hab in insula *Porto Santo* cl Webb t in monte *Pico Facho* ejusdem insulae cl Prof Heer

Foliorum majorum hinc 7-8 lineas longus apice 6-8 latus  
Caules longiusculi 2-3 pollicares, flores magnitudinis eorum *S. geranioidis* *S. Maderensis* sub nomine cujus missa fuit habet caules procumbentes, folia transverse latiora basi subcordata multilobata, flores fere ciliatis minores

SAXIFRAGA PARNASSICA Boiss et Heldr (Sect *Nephrophyllum*)

S annua tota pilis glandulifera hirsuta, folus carnosulis radicalibus confertis cuneatis in petiolum attenuatis apice trilobis lobis ovatis acutiusculis intermedio saepè latiore, caule humili flexuoso vel recto basi plures dichotomo dichotomus non floriferus, floribus secus ramos pedunculis per anthesin brevissimis suffultis, folus caulis sessilibus trilobis, ramis oblongo-lanceolatis integris, calycis tubo brevi subcompresso basi truncato-subretuso patulè glanduloso post anthesin transversè ruguloso dentibus ovatis acutiusculis erecto-patulis tubo  $\frac{1}{3}$  aequantibus, petalis oblongo-cuneatis apice rotundatis dentes calycis parte excedentibus, stigmatibus rectis oblongis bilobis, capsula recta pedunculo recto ei subaequilongis suffultis

Hab in regione alpina montis *Parnassi* (Spinner 1 Heldreich 1) montibus *Olenos* Peloponnesi alt 0000' (Heldreich)

Species affinis *S. controlerschi* Sternberg quæ cum culta eam cultam comparavi et qua? differt folus caulis minus pinguibus, ramis gracilibus, folus floribus minus angustibus, floribus paulo minus, calycis dentibus rectis tubo triplo brevioribus, petalis magis exsertis, stigmatibus obliquis breviter ovatis, capsula scilicet nee transversè corrugata basi in pedunculum attenuate nee truncato-subreclusa

SAXIFRAGA LINNÆI Boiss (Sect *Nephrophyllum*)

S aënea tota pilis brevibus glandulifera obsita viscidula, folus carnosulis a collo sub caulem sparsis cuneatis ad basin usque sensim attenuatis apice rotundatis vel truncatis ad quintam partem longitudinis quinquelobis lobis subaequalibus oblongis obtusiusculis, folus superioribus trilobis, floribus oblongo-lanceolatis indivisis, caule crassiusculo erecto a medio parte sursum alteroatim ramoso corymboso ramis erectis subsimplicibus, pedunculis sub anthesi calycis tubo brevioribus, calycis glanduloso-pilosi tubo campanulato per anthesin dentibus oblongis aequilongis fructifero basi rotundato dentibus duplo longioribus, petalis albis dentibus calycis  $\frac{2}{3}$  longioribus cuneatis marginatis «jbquinque nervis,

bligmatibus rectis orbiculari-spathulatis, capsula recta ovato-globosa pedunculo paulo breviori suffulsa

*S. asumdens* Fries — L. herb. ex cl. Fries non L. Sp. plant. — *S. petraea* L. Sp. ex parte, Wahlb. exel. syn. plur.

Hab. in Alpibus Norvegicis et Lapponicis

Species hucusque confusa cum *S. controversa* a qua<sup>1</sup> eximie differt. Laturam relationem 0-10 pollicum, folium majus secus caulem magis sparsis apice quinque nec trilobis, folium minus majus, pedicellum calycem longe superantibus apice emarginatis nec reclusis. Ambo culti characteres servant. Quamvis haec planta sit teste cl. Fries sub nomine *S. adscendentis* in herbario Linnaeano, huic descriptio in Sp. plantarum in qua "radix perennis, caulis adscendens dicitur et palma diversissima indicatur nullomodo congrua. Summus auctor in confusionem synonymorum, patridium et specierum de *S. petraea* et *S. adscendenti* madit. Omni jure legitur his nominibus omnino neglectis *S. adscendens* nomine *S. aequalis* Lap. et *S. petraea* nomine *S. Ponce* Sternb. designanda sunt.

SAXIFRAGA. COSSONIA BOISS. et Rcut (Sect. *Nejikrophyllum*)

*S. caespitosa* perennis, radicibus fibrosis gemmas ovatas bulbosas numerosas basi dilatatae peliolorum involutas edentibus, folium fere omnibus radicibus conferlis parvis carnosis pubescenti-viscidulis peliolo eibus longioribus utriusque ad medium usque trilobis vel oblongis semper emarginatis vel increnatis 5-9 crenato-lobatis, lobis rotundatis obtusissimis, caulis patens hirsutus credit, rubellus numerosis subdichotomis et saepe a basi ramosis 2-6 floris foliis longe pedunculatis, folium caulis paucis ad dichotomias inferioribus trilobis superioribus bracteiformibus hinc minus, calyce glandulis minus rubellus pedicellatis asperso ad  $\frac{1}{5}$  partito tubo hemisphaerico lacinis oblongis obtusis, petalis albis calyce subtriplo longioribus oblongo-cuneatis obtusissimis in unguem canaliculatum attenuatis nervis lateribus bifurcis, staminibus petalorum vix quantibus, antheris flavis breviter ovatis, stigmatibus complanatis verticalibus obovatis stamina non aequantibus, capsula globoso-subcompressa basi sulcata lacinis calycinis erecto-patulis subtequilongia coronata

Hab in rupibus septentrionalibus montis *Sierra de San Antonio* propè *Alcoy* regni Valentini Bourgeau pi. exs 1852 sub *S granulata* *ramosissima*

Gaulis 4-8 pollicares Folia 3-4 lineas longa lataque, pedunculi subdivancati ferè pollicares Flores magnitudinis eorum *S granulata*. A *S. Corned* Gr et Godr cui magis affirm differt foliis triplicibus minoribus, caulibus numerosis humilibus, tubo calycino hemisphaerico nec obconico, petalis calyce triplicibus nec 2<sup>1</sup>/<sub>2</sub> triplicibus majonibus

SAXIFRAGA BOURGANA BOISS. et Reut (Sect *Nephrophyllum*)

*S. perennis* collo ex axillis foliorum radicalium crebrè gemmifera, radice fibrosa, foliis hirsutis-viscidis ferè omnibus radicalibus minutis longiusculis petiolatis cuneato-spathulatis ad mediam vel tertiam partem lobis lobis angustatis obtusis, foliis infimis simplicibus etiam partibus partibus integris vel bifidis, caule tenero a basi dichotome et divancatim ramoso glanduloso-hirsuto, foliis caulis ad dichotomias inferiores triplicibus superioribus oblongo-spathulatis integris, lobibus longè pedicellatis, calycis rubro-glandulosi tubo ovato lacinis oblongis acutiusculis tubo aequilongis, petalis obovatis obtusis patentibus recurvis trinervis disjunctis calyce 2-3 triplicibus longioribus, filamentis calycis aequilongis, antheris flavis ovatis, stylis contiguis, stigma liberis divergentibus oblongo-linguiformibus, pedunculis post anthesin patentissimis, capsula ovato-rotunda calycis lacinis effl. vix brevioribus superat

Hab in regno Græciæ orientali undè cl Bourgeau semina misit loco non indicato Golui in H Bot Valcyr

Gaulis tenentur ut in *S gemmifera* a basi divancatim ramosissimi Gemmulae minutae in axillis foliorum conglobatae Folia petiolo 5-6 lineas longo suffulta 3-5 lineas longa lataque Floreg magnitudinis eorum *S gemmifera* quae crescendi modo et facie affinis differt indumento longioribus hirsutis, foliis triplicibus majonibus trisectione segmentis 2-3 partitis, petalis ovato-rotundatis margine sese obtegentibus, etc,

SAXIFRAGA HUETIANA BOISS (Sect *Micropetalum* )

S annuavel biennis glabra velsub lentesparsissimè glanduloso-hirila, caulibus fihformibus decumbentibus debilibus flaccidis mtricatis, folnstenens inferioribus reniformi-corddtis transversè latioribus obtusissimè et latfè quinquelobis lobo terminah lation, folns superioribus tnlobis ovalisque acutis integris, pcdunculis tenens elongate divancatis, calyce ad medium usquè in lacimas tnangulares acutmsculas per anthesin patulas deinsubreflexasdmso, petalis calyce tripld longionibus elhpticis obtusis lutcisluteo-punctatis basi cordatis obtusè biauncularis, capsuU breviler ovalA calyce longiore apice truncatâ stjlis brcvibus divergentibus superatd, semimbus minimis ovatis angulatis tuberculatis

Hab in monte *Bostepe* propc̄ *Tiapezuntem* cl Huet du Pavilion Maio 1853

Ex affinitate *S Siblhorpn* et *scotophilw* Prior differt caulibus minùs declinatis, flonbus majonbus croceo-aurantiacis, petalis basi vix et obboletissimè cordatis aunculis vix manifestis, calyce ultra medium in lacimas etiam per anthesin reflexas fisso, seminibus dupld majonbus vix tuberculous *S scotophila* habitu et florum magnitudine magis aflims differt folns inferioribus 9-lobis, calycis partitionibus latioribus etiam fructiferis patulis, petalis basi sensim attenuatis nee cordato-auncularis

**UMBELLIFERIE**

## ERYNGIUM NOEANUM BOISS

£ perenne glaberrimum palhdè virens, folns valdè conaceis radicalibus petiolo canahculato hmbum aequanti suffultis ambitu rotundatis tripartitis, partitionibus ldtè hneanbus totA longitudine profund6 dentatis dentibus tnangulan-lanceolatis in spinas acerosas longas subrecurvas abeuntibus, partitione intermediâ basi attenuate lateralibus secùs petiolum latere extenon breviter decurrentibus omnibus apicè ad tertiam vel quartam partem usquè tn vel bilobatis, caule tereti albido supernè parcè ramoso ramis



abbreviate strict is pamculum ohgocephalam formantibus, folio caulino uno alterutrove- tnpartito lacinns angustè hneanbus spinoso-dentatis, involucri phyllis angustft lanceolatis acerosis nervo dorsali valido Instructis infra medium utnnquè tenuiter unidentatis capitulo dupl6 longionbus, paleis lanceolatis spmosis integns calyces paulo superantibus, calycistubo papillis albis densè obsito laeinus oblongis latè uninervus in spinam brevem abeuntibus corollam subaequantibus

Hab propè *Kimnd* ID Persia Mesopotamia flnitund cl Noe Floret Septembn.

Cauhs in meo specimine sesquipedahs Folia radica 3 pollices circiter longa lataque lacimis 8-10 hneas latis ultrd medium in denies spinosos lobatts Capitulamagintadiniseorum *E campe&tns* Aflne prseserlim *E BiUardien* ab eo dibtinguitur foliis magis conaceis multò minonbus non bis pinnatilobatis, involucri phyllis brevionbus absque spims subulatis cum eis alternantibus *E Helderdmchu* foliis multifidis, involucri phyllis longis latè lanceolatis longiùs distat

TRINIA SCADRA Boiss et Noe

Tr. dioica pumila tota pihs brevibus papillosis prumoso-scabra caule a basi divancatim ramosissimo ramisque abbreviatis acutè angulatis, folns bipinnatisectis segmentis in lacimas hneares breves crassiusculas partitis, vagims brevibus mflatis membranaceo-marginatis, umbelhs 5-6 radiatis involucro monophyllo vel nullo, umbellularum involucellis polyphyllis pedunculis brevissimis, fructu

Hab in montanis circâ *Sivas* AnatohaB frequens c) Noe Fl Junio

Formas minores *Tr vulgaris* omnind referens egregiè differt indumento, foliorum laeinus abbreviate umbellulis propter pedunculorbrevitatemmiiioribus, involucellis saepitis polyphyllis nee nullis, plan tarn masculam tantùm vidi

PIMPINELLA GALVERTI BOISS (Sect *TragoseUnim* )

I\* perennis secus caulem et petiolos sub lente adpressè et bre-

vissim6 puberula ca&ctim glabra, folns radicaibus pinnalisectis  
 li jugis segmentis sessihbus basi cuneatis circumscriptione rotun-  
 dis profund6 2-3 fidis in lacinias tnangulan-ovatas apice atte-  
 nuato-acununatas lterum flssis, petiolo communi dilatato subcom-  
 planato, folus caulinis ad vaginam oblongam lacinulas abbreviatis  
 apice ferontem rediictis, umbellis umbelluhsque exinvolucratis,  
 flonbus albis, fructujunion orato glabro, stylopodus rotundis de-  
 pressis, styhs divergentibus stylopodio longionbus

Hab circd *Erzeroum* ubi legit cl Calvrt

Aflims *P saocifragce* ab ea" sat distincta videtur petiolo rachide-  
 que foliorum lation complanato, segmentis non tantura margine  
 dentatis sed profund6 tnsectis in lobos attenualo-acuminatos  
 flSSJs

PIMPINELLA GRIFFITHIANA Boiss (Sect *Tragium*)

P biennis vel perennis tota sub lente pilis brevissinis sec us  
 caulem et ramos deflexis scabndula, caule angulato-stnato a basi  
 raraosissimo ramis erectis tenuibus elongatis stnctis iterum ramo-  
 sis, folus radicaibus infenonbusque pinnatisectis 1-2 jugis cum  
 impan petiolo basi in vaginam multinervem ampliato suffultis,  
 segmentis ovatis obtusis basi breviter cuneatis obtus6 crenato-lo-  
 batis, folus caulinis sparsis vaginfl brevi lincan insidentibus 3-5  
 pinnatipartitis lacinus lmeanbus integris ssp6 angustissimis,  
 umbelhs long6 pcdunculatis 10-12 radus, radns tenuibus<sup>1</sup>, invo-  
 lucns involuccUisqac nullis, pedicelhs capillanbus hispidis flore  
 vix dupld longionbus, petahs albis florso hispidulis, fructu minuto  
 ovato patul6 et broviter hispidulo, stylopodus in unum conicnm  
 conjunct^ stylis recurvis stylopodio subbrevionbus

Hab in regno Cabuhco, cl Griffith Journ N° 897

Planta seaquipedalis habilu etcharacteribus *P Rwtenam* Boiss.  
 valde alTims, h&ec distinguitur caule ramisque glabratis, hisce  
 magis divancatis, folns 3-4 jugis, meri^arpns apice brewter atte-  
 nuatis, stylopodns a basi divfTgentibus stylis eis manifesto longio-  
 ribus superatis

PIMPINELLA POLYGLODA Boiss et Heldr (Sect *Tiagmrn*)

P perennis caudice squamoso-fibroso saepe suffrutescenti, caulibus erectis elatis teretibus flexuoso-angulatis ramisissimis glabris vel parte inferiori puberulis, foliis radicalibus praesertim secus petiolos puberulis hispidulis ramis glabris obscure virentibus pinnatisectis 3-4 jugis, segmentis subconatis ovatis basi obliqua subcuneatis vel ramis cordatis obtuse vel acute lobato-dentatis saepius indivisis ramis inferioribus bipartitis partitione altera breviter petiolulatis, foliis caulis petiolo brevi subdilatato insidentibus in lacinas oblongo-linearibusve acutas breves elongatasve pinnatis vel bipinnatis, umbellis 6-10 radiis fructiferae contractis, radiis tenuibus, involucris involucellisque nullis, pelalis dorso tomentosis, fructibus breviter tomentosis ovato-oblongis apice subattenuatis, stylopodio brevi depresso, styli divergentibus longissimis

*P Olenea* Boiss. et Heldr. Mss. — *P Parnassica* B. et Heldr. Mss

Hab. in regione sivalica *Olympi Tkessahw, Parnassi*, ad raper excelsas *Kalzivdi* dictas montis *Olenos* (Heldt)

Var. f. *pauaradiata* — Segmenta foliorum minora. Umbellae longius pedunculatae 3-5 radiatae

***P longiradiata* B et H Mss**

Hab. in regione superiori *Parnassi* (Heldr)

Planta procera 1 1/2-2 pedalis. Folia radicalia in specimenibus majoribus semipedalia segmentis pollicaribus, saepe autem unidid et triplicata minora, folia caulium lacinarum fons ea *P. saxifraga* var. *dissecta* referentia Affinis *P Iragto* a qua bene distinguitur statura majore indumento cum adest pubulo nee adpressissimo prumoso, foliis caulis ad vaginam brevem non redactis, fructu minus dense minusque adpressis tomentello apice magis attenuate — *P aromatica* qua? quoque lacinas foliorum caulium lineares habet differt caule bienni, indumento profuso, ramis floralibus vaginis hanc-setaceis crebre obsitis.

PIMPINELLA SARTORII Heldr (Sect *Tragium*)

P perennis rhizomate suffrutescenti cespitoso tola praetor Iruc-

tus ylabernma lieu<sup>l</sup> virens, foliis radicalibus expansis longè pe-  
liolalis pinnatispectis 3-5 ligis segmentis minulis ovalo-rotundis  
brevifloris cuneatis aculeo incisodentatis infimis saepe sublobis,  
caulibus numerosis lenuibus paulò suprâ basin dichotomè et di-  
vancalim ramisibsimi<sup>^</sup>, ramis nudis junceis, foliis caulis ad va-  
ginam brevem 2-3 laciniis linearibus minutissimas gerentem inte-  
gramve rotundis, umbellis longè pedunculatis 3-5 radiatis fructi-  
feris Mibconlralis, involucri involucri nullis, petalis dorso  
(omniotolib, fructu ovalo densè albo-tomentello stylopodio brevi  
depresso lermiiialo, stylis divergentibus clongatis

Hab in ivgione alpium Pamam Sartori anno 1840, Haldreich  
anno 1842

Plan la caulibus semipedibus vel paulo longioribus intricatis,  
tolorum breviter 2-3 lineas longis lali<sup>^</sup>que UabiLu formas quas-  
dam *P. tragn* vel *P. depressa* DC quo) ab ille specificè vix differ-  
retens, fructus omnino eadem sed paulò maiores, ab eâ distat  
defectu lidumoni pruinoso, umbellis pauciradiatis, sed an species  
leverâ distincta sil in loco natali ulterius observandum

#### REUTLINA PAPILLARIS Doiss

H, porrin<sup>-></sup> vel bicinn<sup>^</sup> »b leule biuviter puberula, radicever-  
lic. Uicui, caule credo lcnm ex ipsi basi ramoso ramis oblongis  
~~stricis~~ rimosis, Joints radicalibus abbreviatis ambitu oblongis bi-  
~~pinnatis~~ laciniis oblongo-brevibus acutis confertis minutis,  
~~foliis~~ caulis ad vaginas linearibus rarò apice bipartitis reductis,  
umbellae is inu<sup>li</sup>> 4-5 radialis pedunculis longis gracilibus sinclis  
sulTullis, involucri involucrique pliyllis 5 brevibus lanceolatis  
mcrabranacco-marginatis ciliatis, lobibus minutis, petals ob-  
longo-lanceolatis convolutis auricis, fructu minuto ovato a latere  
Lompresso palis gramlormibus densè pruinoso, stylopodio valdè  
depresso blyliadcllclMs co suljlongionbu<sup>^</sup> coronato

Hab in regno Cabulico propè nvulum Yonutt cl. Gniith  
IV 1018

L'caulis, lotia cuuipoliolo pollicana ea *Seseleos* sp referenda  
**Umbellae** horrcraj radii 2-4 lineas longi, fructilenpaulbelongati,  
~~species~~ in generibabiUi cl mdiimonto fructus iribigms

REUTEHA RIGIDULA BOISS et Orphamdes

R perennis caule clato tereti basi pilis deflexis brevibus molibus lurtulo superne glabro ramosissimo ramis erecto-patulis iterum plures ramosis rigidis basi umbellifera. Inflorescentiam amplani form. intibus\*, foliis radicalibus. Invenonibusque caulinis ad petiolo-, et cos tab hispidis usque ad limbum breviter puberulis ambitu amplè oblongis. Inpinna parviter pectatis costisque parvis. Uonum inferiorum oblongis, segmentis minutis ovatis sessilibus vel petiolulatis in laciniis\*, brevibus oblongas aculas partitis inferioribus ad basin laciniam costarum primarum secundarumque sitis, foliis tauribus bupenonibus rameisque ad vaginas triangulato-lanceolatas aculas seciis ramulos crebras redactis, umbellis breviter pedunculatis quinque radiatis radiis brevibus pedunculisque florum hispidis, involucre involucre nullis. petiolis intensè auricis dorso velut oblongis, convolute, iructu (juniori) ovalo villosa-velutino. Stylopedio depresso cupulan corona to, stylis stylopedio longioribus.

Habitat in Locrum urbe (Ki) Peloponnesi de Prax in herb. Fl. Morde, in monte Chelmos Achaiae prope Klahmes cl. Prof. Orphamdos.

*Pimpinella chrysantha* Orphan Mss.

Planta saepe in pedibus et ultra, folia radicalia cum petiolo pedalia ampla, umbellarum radii semipollicares. Species affinis *R. flava* Boiss. — *Pimpinella alyca* DC. a qua differt roliorum segmentis multo minoribus partitis nee dentatis lobatisve, ramulis loralibus crassioribus rigidioribus abbreviatis, pedalis intensè auricis nee flavis, fructu villosa-velutino nee cinereo-pruinoso.

CXNUM NOEANLIM Boiss

Glaberrima, pallescens virens, radice tuberosa ovalo-rotunda, caulibus tenuiter teretibus subteretibus flexuosis a basi parvis ramosis, foliis radicalibus longe petiolatis subpinnatis vel laciniatis angustissime basi abbreviatis acutis, caulibus pedibus brevi in vaginam siliam lato suffultis bipinnatisectis laciniis linoan-sclaccis valde oblongis, imbricatis 6-8 radiis longiusculis pedunculatis, in-

volucn phyllis sub terni^ involucelli quirns e basi lanceolatâ membranaceâ longiusculê \*ctaceo-caudatis, flonbus albis magms pedicel! is ovano duplô longionbus suffultis, petal! ercctis ovatis basin versùs riervo medio vittajformi percursis ultrâ medium bifidiscum lacinuU indexed ovano clongato pynformi, stylopodio depressissimo, b>lis> teuuissimis dellexis longisbimis stigmatate capitato terminate, friicLu

Hab in alpihus Arm en ire raendionahs ad *Bakker Maadm* ubi Maio floriferum legit cl Noc

Caules scmpedalcs vel pauld longiores, lacinire foliorum superiorum poliicares longiore&ve Petalorum formâ ol charactenbus vuldc alline *C eleganti* Fcn/1 plantss raultO procerion quus egregiè: diiTert foliorum radicalmm lacinus 2-3 hdis abbreviatis latiuscuhs oblongo-lmcanbus, caulinatorum mult6 lationbus, umbelhs multiradiatis, ovano breviter oblongo-pyriformt

#### CARUM HELDREICHII DOISS

G pcrennc glabrom radice verlicah ramosâ, folns radicaibus numerosis longfe peliolatis ambitu oblongis bipinnatiparLitis partitione ib us pnmarus sou segmentis 4-5 jugis sessilibus ovato-oblongis uiferioribus remolmscuhs supenonbus approximatis, lacinns oblongo vel clliplico-lineanbus abbreviatis acutis mucronulatiSj loins caulinis minonbus petiolo brevi basi vaginanti suffultis, canlibus ascendentibus gracilibus simpheibus vel parct ramosis, umbelhs trmmalibus long6 pcdunculatis Insequahter 3-6 radiatis fructiferis non contractis, involucri phyllis 3-5 e basi lanceolatâ long6 ctaceo-acuminatis radus 2-4plO brevionbus, involucelli similibus pedicellos floram subsBquantibus, petahs albis dorso vittA pallidâ notatis, fructu (linmaturo) oblongo jugis parûm prominulis, vallcculis tnvittalis, stylopodiiis inter se distinctis subdepressis, styhs dellexis stylopodio sublongionbus

*ChanuBmadvum Heldreichu* Boiss in htt.

Hab in montis *Parnassi* regione alpinâ usquè ad cacumen ubi caules procumbentes nani evadunt

Gaulcs 6-10 polhcates tenues, folia cum petiolo 2-3 polhcana lacinns confertis <sup>b2-u2</sup> /\* lmeas longis dimidiam lineam LaLis **Umbellæ** radii 4-6 linear longi Valde alTine *Caro GTCBCO* Boiss e(

Heldr quod differt foliorum partitionibus pnnanis 7-9 jugis m lacimas elongatas angustè hneares partitis inferioribus ssepè petiolulatis, caulibus elationibus ramosionibus erectis, umbellis fructifens contracts, fructiis jugis crassis, stylopodns in unum hemisphenco-conicum ad apicem usquè concretis, petalis dorso vittd obscuri ahisque lateralibus duabus percursis

GARUM nuPESTRE Boiss et Heldr

G perenne glabmm, radice verticali tenui ramosfl, collo fibris foliorum veustorum squamoso saepè in caudiculos subterraneos nudos producto, folns radicalibus numerosis petiolatis ambitu oblongo-lanceolatis bipinnatipartitis 3-5 jugis parLitionibus pnmams sessihbus in lacimas hneares acutas mucronatas expansas plùs minùs elongatas partitis, caulims subsessihbus sessilibusque pinnatipartitis tnfidisve summis indivisis Lineanbus, caulibus ascendentibus tenmbus gracillimis parcè ramosis, umbellis terminalibus longè pedunculatis longè et valdè inaequaliter 3-6 radiatis fructifens vix contractis, in>olucn phylhs 2-3 lmean-lanceolatis brevissimis, involucellis pedicellis floram pauld longionbns, flonbus parvis ochroleucis, petalis convolutis cum lacinuld inflexfl, fructu oblongo pedicello longion, jugis partim prominulis, vallecuis trmttatis, stylopodns obtuse comcis distinctly styhs stylopodio brevionbus

***Chamwsaadium gracxle* Boiss et Heldr in litt**

. Hab in rupibus fngidis regioms alpinse montis *Kyllenes* m dechvitate septentnonali alt 6500' Heldr et posted Prof Orphanides In regione sylvaticd montis Olympi Thessali (Heldr) forma elatior lacinnis foliorum tenmoribus longionbusque

Caules 6-10 pollicares in planta Olympi sesquipedales Folia 3-4 polhcana 6-9 lineas lata lacinnis 3-5 hneas longis hneae \*/ latis in plantâ Olympi 6-9 lineas longis Habitus spèciei prsecedentis et *LomatocaH alpim* quo graciluis tamen \ et minùs ramosum A C *Graco* et *HeWetehu* distinctissimum petahs flavidis, umbellis longiùs radiatis, caulibus gracilionbus, flonbus minonbus Ob characterem et colorem petalorum genen *Charnmsctadto* pnmùm hoc adnumeraveramus sed nullo pacto a C *GT<BCO* et C *Heldreichm* genence separan potest et quamvis istse tres species

a *Caro* valleculis pluvittalis di&crepent, eas huic genen potiùs quam *Chamcemadio* quod habitu diversissimo gaudet, adjungere maluimus, saltern donee revibio eeriè necessana Cart, Burt et generum alFunum fiat In hisce plantis ut in *Chamcesciadto* occurrunt vestigia plus minus manifesta dentium calycinorura sed simiha in *Caro Cam* alusque specibus observantur — *Caro rupestris* e descriptione facile adnumerarem *Silanm meoidem* Gr\* Fl Ruracl ui juga in eo arguta subalata dicerentur quocbaractero nostrre Ires species *Silao* quoque habitu afiincs ab co excluduntur

CARUM AIIENUM Boiss Ann Sc Nat Var fl *dnvrgni*\* Doiss et Huet

Radix a collo ramosa fibns longissirais Caulis pumilus a basi divancalim ramosus ramis s<pp! flexuoso-incurvatis

*C dtrergem* B et Hurt Mss

Hab in Armeniâ propè *Ispir c\* Huet du Pavilion

CAMIM ? LEUGOCOLIUM Boiss et Hue I

G glabrusculum, radice verticali simpliciunculâ cylindrica, caule ad collum vel basi ramoso pumilo ramisque rubro-violaceis, folis radi callibus confertis expansis petiolatis ambitu oblongis subbijugatis bipinnatisectis lacinis obtusis angustis; Unearibus brevissimis confertissimis, petiolsbasidilatatis violaceis membranâ albâutnna, quâ marginalis, folis caulibus brevissimè petiolatis petiolo ulnii-què membranâ mveâ oblongâ auriculisBformi repandâ latâ marginato ambitu subrotundis bipinnatisectis, umbellis valdè insequahter 12-46 radiatis, involucri involucellique phyllis paucis mmimis lineari-lanceolatis aliquando deficientibus^ petalis albidis extus roseo suffusis subrotundis emarginatis cum lacinulâ inflexâ, **fructu** .

Hab in Armeniae monte *Terhdagh* propè *Erztiroum* alt 6-7000 cl Huet du Panllon legit flonferum Julio 1853.

Planta 2-3 pollicansa basi subdivancatim ramosa et ob pedunculos umbellorum longiusculos subcorymbosa Fohorum radicalium petioli pollicare% limbus 6-8 lineas tantum longè tenuissimè



et confertissimè sectus Umbellae radii longiores pollicares breviores 3-4 lineas longi. Flores magnitudinis eorum *C. cam.* Quoad genus fructu ignoto subdubia sed *Cans* non bulbosis habitu benè congruens, petiolis latè albo-membranaceis foliorum caulinorum insignia

GARUH HUETII BOISS,

G bulbosum ? glabrum nanum caule parte subterraneâ denudato fibiformi divancatim et subcaespitosè ramoso, foliis petiolo in inferioribus longo basi dilatato in superioribus brevissimo vaginiformi insidentibus abbreviate subternatisectis lacinis paucis hinc acutiusculis divergentibus petiolo petiolulisque vix latioribus, umbellis longiusculè pedunculatis 5-8 radiatis, pedunculis radisque rigidis crassiusculis angulatis, involucris involucellisque nullis, pedicellis fructifera contractis fructu subbrevioribus, mericarpis breviter cylindrico-prismaticis curvatis, jugis crassis, valliculis latè univittatis, styli deflexis stylopodio depresso longioribus.

Hab in Armeniâ propè *Ispir* cl. Huet du Pavilion

Gauhis parte non subterraneis cum umbellis 2-2 1/2 pollicansramosus ramis divancalis veluti m'caespitem confertis, radii umbellarum 4-5 lineas longi, foliorum laciniæ sesquilineam late 3-5 lineas longas sæpe furcate Fructus ferè lineam longus. Ex affinitate *C. brachycarpi* Boiss quod ceterum longè differt caule erecto etongato, lacimis foliorum minus divaricatis^ umbellis 2-3 plò majoribus, mericarpis non curvatis, etc

BUPLEVRUM GLUMAGEUM Sibth et Sm Yar *aristatum* Boiss et Heldr

Characteres speciei sed involucelliphylla in anstamtertiampar<sup>w</sup> temlongitudinis phylli aequantemattenuata foliis sesquilingiora

Hab in agris et ad vias prope' *Thessalomcam* frequens Julio 1847 cl Heldreich

Hæc varietas habet-folia uninnervia, involucella omnind hyalina enervia speciei et caractere indicate tantum differt

## BUPLEVRUM CAPILLAHE Doiss. et Heldr.

B. annuum glabrum lætè nrens, caule gracillimo erecto tereti a basi dichotome ramosissimo ramis erecto-patentibus elongatis filiformibus dichotomè ramulosis ramulis umbelluliferis terminatis, foliis lineari-subfalcatis elongatis basi longè attenuatis acutis nervis venulosis, superioribus hinc setaceis cauli ramisque adpressis, umbellulae multae 2 bracteas lanceolatas involuicello breviores subpedicellatae (M2) floribus, involuelli phyllis 5 stramineis ellipticis breviter mucronatis quinque nervis inter nervo\* pellucidis avensis flores triplici fructibus dupli excedentibus

Habitat ad margines vinearum prope *Rachova* in parte inferiori montis Parnassi fine Julio a Heldreich

Planta bipedalis ramosissima gracillima. Folia inferiora 3-4 pollices longa sesquilineam lata. Umbellulae ad apicem ramulorum capillacearum 1-2 pollicum magnitudinis earum *B. glumacet* vel *upiculati*. Species insignis umbelliferis nullis, umbellulis ternariis solitariis

## BUPLEVRUM LIDANOTIGUM BOISS. et Blanche

B. annuum vel bienniale glabrum, caule tereti a basi dichotomè ramosissimo flexuoso ramis erecto-patulis incurvis ramosissimis, foliis basi subsquamulatis caulem cingentibus linearibus septemnerviis acutis raris abbreviatis, umbellulis crebris ramulis plerumque abbreviatis rigidis insidentibus 4-5 radiatis radius valde inaequalibus brevibus divaricatis, involucri involuicellisque phyllis 4-5 linearibus setaceis hisce umbellulae fructiferi subbrevioribus, fructibus confertis oblongo-subquadratis subaequalibus pedicello sublongioribus jugis costaeformibus crassis prominulis

Habitat prope *Broummana* Libani ubi Julio 1849 fructiferum legitur a Blanche

Planta pedalis ramosissima a basi caulis et parte inferiori ramorum crebre umbellifera paniculam effusam amplam formans. Umbellularum radii 2-3 lineas longi. Affine *B. Kurdico* differunt ambellulis breviter pedunculatis breviter inaequaliterque radiatis, invo-

lucellorum phyllis linear-setaceis nee oblongo-ellipticis longè acuminatis, fructu brevioribus nee sublongioribus *B Gappadicum* ramis radisque capillaceis, etc multo longius differit *B australe* Jordan involucellis fructus multo superantibus et *B Jacquimannii* ejusdem auct — *B Gerardi* Jacq. fructu ovato pedicello brevioribus umbellisque contractis, ambo radius tenuioribus elongatis distinguuntur,

**BUPLEVRUM BALANSAE Boiss et Reitt**

*B* perenne glaberrimum suffruticosum, caulis vetustioribus lignosis nudatis tenuibus erectis vel procumbentibus, annularibus horbaceis tenuibus erectis flexuosis angulato-striatis ad angulos scabris, foliis angustissimè linearibus rigidis acutis patentibus saepe subfalcato-recurvis utrinque 5 nervis prominulis inter se contiguis percursis margine angustè membranaceis facie superioribus subcanaliculatis inferioribus convexis ad nervos et margines scaberrimis inferioribus brevioribus ad basin caulis annularium confertis, caulibus sparsis, umbellae ramis axillaribus eas subaequantibus sulcatis paniculas elongatas angustas formantibus majusculè 4-5 radiatis radiis tenuibus elongatis, involucri phyllis 4-5 linear-setaceis radio multoties brevioribus, involucelli 4-5 lanceolatis obtusis pedicello duplo longioribus, umbellulis paniculae compactis, fructibus caulis oblongo-quadratis crasse costatis subsessilibus

Habit in collibus prope *Anew* Mauntaniae Tingitanae Reuter, prope *Oran* loco *kt Battene Espagnole* dicto cl Balansa anno 1852 N°482 Floret Juno fine

Caulis annularium pedales, folia 1-1 1/2 pollicina hirsutissima. Radix 5-9 lineas longa Umbellulae valde compactae primo numerosae Affine *B frutescenti* et *aculifolia* Boiss. Iud differt caulis angustis nee striatis foliis omnibus sparsis facie superioribus lavissimis inferioribus remotè nervosis, involucelli phyllis pedicellos fructus squamatis, hoc foliis linearibus 6-7 nervis inter se remotis aequo contiguis percursis, caule striato sed non angulato, involucri phyllis pedicellis multo brevioribus facile distinguitur. *B. danthii* folium Guss. ex descriptione differt caulis adpressè hirsutis, foliis lanceolato-linearibus 5-3plo linearibus illos *Dionta Bmgnam* referentibus, pedunculis involucello longioribus, etc

## BuPLEVMJM 0UUhCTIS BoibS

D percinie glaberrimum glaucum basi lignosum, caulis numerosis erectis basi praesertim fohosis subangulato-stnatis jam infra<sup>1</sup> medium pianos dichotomy ramosis ramis rigidulis tenuibus, folis linearibus corucei<sup>^</sup> rigidis apice attenuatis acuminatis basi non dilatalA amplrxicaulis subtùs 5 uervns margine scabnduhs, superiority ad dichotomias abbreviatis angustioribus, umbellis 2-4 radjis, involucn involucelliquo ph>llis mimmis linearibus acurnmali<sup>^</sup> Insc pcdicellos jloram pauld superantibus, umbelluhs compaclii) pauciflons, fructibus jumonbus pcdicelhs paul6 Ion-gionbus

Hab in decbvitac oriental! montis *Gebel Tongaur* propS *Batna* Mauritania<sup>^</sup> ononlahs cl Balansa pi exs anm 1853 N<sup>o</sup> 881.

Caudex lignosus crassitie digiti edens caules plures pedales sesquipedalsquo crctos dichotomy ramosos ramis erecto-patulis, folia in parto inferion caulis 3-4 approximate 2-2<sup>1</sup>/<sub>«</sub> pollices longa sesquilineam lala sublùs elevatira. nervosa Umbellae radii 6-12 lmeas longi Species meo sensu *B fititicescenti* inter omnes affinis quod differt caulis basi ramosissimis tortuosis parte supenori angulatis ramos numerosos abbreviates lteriim ramulosos edentibus, involucelli ph<sup>^</sup>llis lanceolatis nou acuminatis, umbellis pluriradiatis, radns pcdicelhsque crassionbus *B paniculatometB acuhfolmm* habitu noslrB spccici magis afflnia folus crebns longis pcdicelhsque fructu pluries longionbus caetens neglectis statim dignoscuntur

## DUPLEVIVUM BouiiGiFJ Boiss et Reut

B perenne glaberrimum, caudicibus induratis denudatis longè repentibus proslratisque basi fibnllosis supernè vestigus fohorum delapsorum squamosis burculos stenles fobosos caulesque florileros cdcnlibus, caulis aunolinis erectis ascendentibusve herbaceis tenuibus obtut>ç angulatis basi densiasimfe superaè sparsim foliosis dicholomè ramosis, ramis erectis elongatis tenuibus, folis infenoribus grammeis longis angusti hneanbus acutis l&tè vjrenlibus tnnervn<sup>^</sup> inrcrnè longè attenuatis basi iterùm dilatatis am-

plexicaubus, caulinis supenonbus valdè abbreviate, umbelhs longfi pedunculatis longè et tenmter 5 radiatis, mvofticro monophyllo lmean-lanceolato acuminato radus multoties brevion, umbelluhs compactis, involacelli phylhs 5 oblongis mucronatis herbaceis (lores sequantibus, pedicellis flon subxquilongis.

Hab in cacumine montis *Padron tie Bwn Servida* in regno Granatensi onctali cl Bourgean pi e\ 1850 sub nomine *B. paniculati*

Gaudicuh sBpfe semipedales, folia inferiora 4-5 polhcana supernfivix lineam lata, caulos pedales sesqmpedalesve *B. paniculatum* a noslrd specie valdò differt caudicibus non reptantibus, folns non flaccidulis sed ngidis longissimis elevatim nervosis, paniculd dirancatim ramosissimH, involucris polyphylhs, involucellis linean-setaceis, pedicellis florum 2-3plo brevionbus *B. Bourgm* aptiùs collocandum est propts *B. Baldense* radice simplici bienni, folns abbreviate sparsis, flonbus minonbus, etc ca3terùm distinctissimum

#### BUPLEVRUM .ENEUM BoiSS Ct Huet

B bienne vel perenne glabrùm totum nigrescenti-virens a collo ramosisbimum ramis divancatis ilexuosis patenlibus dichotomis teretibus stnatis, folns radicalibus oblongo-lanceolatis in petiolum longè altenuatis acutiuscuhs subtùs quiuquenervus angustè marginatis caulinis amplexicaulibus hnean-lanceolatis suprenus abbreviatis oblongis, umbellis pedunculis subincurvis longissimis msidentibus 5-7 inaBquahter radiatis. involucn pbyllis brevibus oblongis maequalibus acutmsculis, umbellulis compactis, mvolucelh phyllis 5-8 sordidè glauco-Yirentibus tnnervus ovalo-oblongis breviter et bubabruptè acuminatis iiores fusco-purpurascetes maequantibus, fructu. .

Hab in montibus Armenia suprã *Tach Ktrnprou* cl Huet du Pavilion , ID monte *Tech Dagb* propè *Erzeroum* in summis cl. Huet (forma depressa nana caespitosa)

Planta 6-11 pollicans, folia inferiora cum petiolo, tnpollicaria tres hneas lata Pedunculi saepè 4-6 pollicares, radii majores umbellae pollicares longioresve, involucelU phylla sesquilineam longa. Species afflms *B. Olympico* Boiss quod differt fohis obscurissimè

membranaceo-marginatis, foliis caulinis angustè hnean-acuminatis, involucri involucelliquo phyllis lanceolatis acuminatis multè angustionibus

ATIAMANTHA. CHILIOSCIADIA BOISS et Heldr

A. tota mdumenlo vclutino cmpulo brevissimo cana, caule proccro crasso elato a basi ramosissimo ramis suboppositè et crebrè ramulosis ramuhs abbreviatis, foliis radicalibus et mfenonibus longè petiolatis tñpiunatisectis ambitu latè tñangulanbus, divisionibus primarij secundanisqne longè petiolulatis, segmentis mfimis petiolulatis caitens sessilibus omnibus ovato-oblongis basi Iruncatis cuncatisve obtusmsculè et grossè crenato-lobatis, folns caulmns supenonbus petiolatis 3-5 partitis fidisve lacinnis hnean-oblongis acutis, summis bimpUcibus hneanbus, umbellis sectis ramulos crebns oppositis terminahbusque breviter pedunculatis innumens pamculam densissimam magnam fonnantibus multi-radiatis, radns nivcis umbellulis TIX dupld longionbus, involucri involucellique phjlls numerosis lineanbus deflexis llhs radiis 3-4pld brcvionbus lus pedunculos florum subaequantibus, umbellulis densissimis lomentoso-velutinis, petalis albis dorso velutims, fructibus (jumonbus) oblongis velutinis, stylopodio conico stylisque deflexis stylopodio tñplè longionbus coronatis

***Pimptnella chihosaadia* Boiss et Heldr olim**

Hab ad rupes excelsas *Katzevih* dictas in regione supenon montis *Olenos* alt 5800' Florebat Junu fine (cl Heldreich) Ad rupes excelsas montis *Parnes Attica*) loco *Ormto* dicto cl Heldreich

Planta 2-3 pedahs pamculam amplam elongatam umbellis sexcentis omnibus contiguis formatam a basi prsbens, odore suavi longè redolens **Folia radica ha petiolo non computato 6-8 pollices longa lataque Segmenta 4-5 hncas longa vel 2-3 Ada vel mdivisa utnquè 3-5 dentibus ovatis instructa. Umbellae majores diametro 1 1/2-2 pollicares Yaldè afflms *Alh Macedonicce* cujus specimina culta et ex insuld *Melos* Archipelagi onunda contulunus et qns differt folns minùs divisis, segmentis paucionbusmajonbus ovatis cordatis dentibus minonbus acutionbus utnquè 10-14 mstmetis, **umbellæ** radus paucionbus dimidioque mwionbus.**

## SESELI ATLANTICUM Boiss

**S** perenne glabrum glaucum, radice crassâ verticali, collo fibillis vestito, foliis radicibus petiolo infernè subcanaliculato in vaginam abeunti suffultis ambitu oblongis tripinnatisectis subquinquejugis divisionibus primarius petiolulatis, laciniis angustè hinc et inde univerviis acutis strictis margine sub lente scaberrimis, foliis caulibus petiolo abbreviate vaginiformi suffultis bipinnatis pinnatisve laciniis paucis saepè elongatis, caule tereti erecto jam infra medium dichotomè ramoso ramis elongatis erecto-patulis, umbellae pedunculo longo apice incrassato suffultis valde inaequaeter 6-12 radiatis fructifera contracta, involucri nullo vel monophyllo, involucri phyllis ferè omnino membranaceis breviter lanceolata acutis florum pedicellos vix sequantibus, petals albis, fructibus maturis linear-oblongis pedicellorum longitudine, valliculis univittatis jugis alba prominula latitudine superantibus.

**Hab.** in declivibus borealibus montis *Gebel Toumour* propè *Batna* provinciae *Constantine* Africae borealis cl. Balansa pi. exs. 1853 N-1024

Species valde affinis et intermedia *S. glauco* et *S. vartii* Trev. *S. glaucum* differt glaucescente minime, foliorum circumscriptione subtriangularum laciniis confertissimis, caule crassiori, umbellae multiradiatae fructiferae non contractae, fructibus oblongis crassioribus, valliculis jugis crassis angustioribus. *S. vortii* Trev. quod est provinciae Cancellariae (Hohenacker pi. exs. 4838) tantum novum habet quoque umbellas fructiferas contractas et glaucescentiam nostrae speciei, differt autem involucri phyllis late albo-marginatis longiusculis acuminatis, fructu hinc et inde sesquialterum ferè longo, foliis infimis ob divisiones inferiores elongatas ternato-pinnatisectis ambitu triangularibus. Dentes calycis in utroque minimi sunt in fructu maturo vix perspicui.

## ANGELICA REUTERI BOISS

**A.** glaberrima caule erecto elato tereti striato supernè ramoso, foliis palmeè virentibus tripinnatisectis ambitu late triangularibus, divisionibus primariis longè secundariis breviter petiolulatis, & eg-

mentis scssilibus ovalis indivisis vel inferionbns sublobatis basi breviler cuncatis acutis circumcircA crebrè denticulatis denticulis m mucronera callosum sursùm curvatum abfcuntibus paginã mfe non prominulft nervosis venosisque, foil is supenonbus minonbus minds dmsis petiolo abbreviate anguslè vaginaeformi suffultis, involucro nullo, umbellai 12-18 radiata3 radns angulatis msequa-hbus glabns, involucellis selaccis pedicellis dimidid brevioribus, fructibus pedicello subsequilongis, mencarprii oblongi jugis 3 cen-trahbus contigms crassmsculis, ahs marginahbus utnnqufc latitu-dine partis ceitrahhs vel angiistionbus

Hab in montibus provincial *Avila* Castellae vetens suprã *Pwdra-hita* ad aquas cl Rcutr Aug 1841

Folionim segmenta subaequalia pollicem vel sesquipollicem longa Mencarpia 2 '/\*lmeas longa 1 \*/\* lineam lata Valdẽ affnis formã fohorum et characteribus *A ten* Gay in Duneu pi Ast exs quaj differt folns bipinnatisechs partitionibus breviter petio-latis, umbellae mulliradiataB radns longionbus papillan-puberu-lis, mencarpiis majonbus ovatis alã marginali parte cenlrati lation donatis

#### PEUCEDANUM LASIOGARPUM BOISS

P totom brevissimẽ papilloso-puberulum, collo petiolis vetustis persisitentibus ngidis basi squanloso-dilatatis imbricatis vestito, caule tereti stnato crecto elato pauld jam supra basin et plunfes dichotomo ramis elongatis ereclo-patulis, folns inferioribus long6 petiolatis ambitu lanceolatis pinnatisectis 5-8 jugis segmentis in lacinias 5-7 lineares brevissimas acutas saepè incurvas partitis basi attenuatis subpetiolulatis inferioribus distantibus, folus su-penonbus brevissimẽ petiolatis 3-5 brevissimẽ laciniatis, uinbelhs longẽ pedunculatis 7-9 radiatis, involucri involucellique phylhs lineanbus hirtis e basilatori lineanbushisce pedicellis hirtis bre-vionbus, petahs flavescentibus extùs hirtis, mencarpiis pedicello aquilongis breviter papilloso-hirtis ovatis complanatis, jugis mter-medns iihformibus parùm prominuhs laterahbus in marginem vallecubs duplb latiore dilatatiss, vallecuhhs latè univittatis, com-missura bivittata vittis conliguis, stylopodio breviter conico, styhs deflexis stylopodio mulld longionbus



Hab in collo *Aktobat* dicto monlium ditioms *Afghanistan*, cl Griffith

Planta sosqmpedalis, folia inferiors cum pctiolo semipedahn scgmenlis 5-6 lineas lacinulis sesquihncam longis lineam dimidiam lais Radii umbellaj polhcares vel paulO longiores, monocarpia 2 'i lineas longa 2 lata E\ aflimlate *P Anchen* sod involucnllfi non membranacea Folia ca *Pimpinellw dissectw* quodam modo roferunt sed magis elongata segmentis rainoribus, lacinns paucio-nbus multdque brevioribui

PEUCEDANUM MUNBYI BOISS

P glabrum, caule tereti virgato crecto clato a basi alternatim dichotomèque ramosissimo, ramis ramulisque slrictiuscuhslenuibus pamculam elongatam ramosissimam multmbellatam formantibus, fob is sub anthesi jam evamdis viridibus subiiis glaucescentibus radicalibus ambilu lal6 oblongis petiolo basi dilatato suffultis bipinnatisectis segmentis scssihbus Infimis-ad ortum paritionum primanarnm nascentibus omnibus in lacunas 5-7 hneares mucronatas parlilis basi long6 cuneato-attenuatis, cauluus diminutis in lacunas paucas hneares simpliciter partitis, umbelhs rainutis vald6 insequahter 3-5 radiatis post anthesin conslntis, mvoluturo nullo, involucelli pli^lhs minutis lanceolatis acutis albidis, flonbu9 minutis, petalis albis extus rubellis intus convolutis ctm lacinuia mfiexa, mencarpus pdicello gracih subeequilongis ovatis apice subattenuatis conrexis, jugis filiformibus extenonbus in marginem lnervalhs jugorom aeqmlatum. dilatalis, vallecuh angustè unmttatis ad utrumque latus vittao longitudinahter prominulowflatis, commissurfl evittatfi

Hab ad vias circfi pagum *la Smia* prov. *Oran* in AfncA boreah Munby, Balansa sub *Peuc salso* Besser Folia fert Martio, flores Octobn, fructus maturos Decembri.

Cauhs 2-3 pedalis ramiqne graciles ngiduli, lohorum radicalium limbus sspè 5-& polhces longus 2-3 latus ilium *Dauci* specierum plunum referens sed glaber, lacimoB lineam circiter latas Umbellsc radii majores 8-9 line as longi, mencarpia 2'<lineas longa % lata *Peucedanum salsum* e RossiA austrah toto CCBO differt lacinns foliorum setaceis brevissimis subverticillatis, floribus luteoliSj me-

ncdrpus hneari-oblongi^ valcculis 3 commissurA 6-8 viUati<sup>1</sup>-  
Nostra species propfc *P Chabrm* el aflincs collocanda

**P&UCLDANUM SCOPVRIL'M Boiss**

*Johrenia? stopatia* Boiss> Dugri N° 1 p 01 — J *knmssima*  
**Boiss** in *JVoc* 11 c\5

llab in alpc *Kuh Damn VCKUB* ausralis Kolscliy, ad scpos circi  
*Km mil* in Persia<sup>1</sup> Babylonia; fimlmiA cl Noo

Friiclu^ malun hujus plantj a d Noe missi dcraoiisraverunt  
hanc *I'eucedano* adimcrandam csbc Haec descnpLioni adde Me-  
ncarpia podicllH paul6 breviora oblonga (2 hricas longa 1 \*/\*  
hneam lata), juga ltiLrmedu tcuissima vix promiiiula laleralia  
m marguiem angustissimum dilalala Vittae m valcculis solitariSB  
ranus binai tcnuissiraai, commissura ju\U utrumque marginem  
univittata Slylopodmm coitum slyhs deflexis ci acciulongis su-  
pcralum

**TEUCLDANUM c.MDioiDEs Boi>s ot Iheldr**

I\* glabrum, rluzomalc mcrassato (lbrasradicaleslongascylindri-  
cas edenli, caule cldto sulcato fohoso supenie parfc ot dicholome  
ramoso, folns ambitu Lnangiilarihub ternatisectis divisionibus pri-  
marus long6 pcliolatis bipinnatisectis, divisionibus sccondarns  
petiolulalib sogmentis ovatis basi cuiifMto-altenuatis in 3-4 parti-  
Lioncs basi cvincaU-, subdivdi it.itas divisio partiLioiuhus ad medium  
usque in lacinias oblongo-liucaro^ obtusas iuucronulalas fissi!>, folns  
supenonbus petiolo brevi lmcari vaginajfonni suITultis mi-  
uonbus bipinnaLisectis, umbellis longc pcdunculatis aiquahter  
15-20 radiatis radiib sub lente scabndulis, uivolucris involucellique  
phjllis nomcrosis Uncuolato-Uncanbub acutis anguslissimc mar-  
ginalis scabndulis deflexis brevibus, pctalib albis omarginalis cum  
lacmuU mllexa, fructibus pedicello eis longion vel diquali tenui  
suflullis, mencarpus oblongis basi cmarginati\$, jugit. mterraedus  
filiformibus vix prommulis, lateralilms m alam mvcam semiru  
lEquilatam ddaiatis, valcculis univiltatis, commissure bivittata

Hab in regione sylvatica *Olympi Thesmlt*, montisq; *Parnasst*  
supra *Arathma* cl Heldrcicli

Planta bipedah:\* majorque, folia infera cum petiolo **10-12** polices longa 8-10 lata divisions modo ea *Petrosehm salwi* vel *Cnidn apioidis* quodam modo referentia tenuia Fructus similes eis *p Rablensis* sed paulò majores basi que magis emarginati Inter omnes *P Austriaco* praesertim affine quod differt partitionibus foliorum elongatis hinc, involucri phyllis longo setaceo-acuminatis, menciis basi vix retusis

FERULAGO & YLVAIGA Besser Vat *Orphanidis* Boiss et Heldr

Folia minus ampla laciniis confertionibus sublinearibus pauloque brevioribus saepe crassis Umbellae fructiferae radii crassiores

**F Orphanidis et II Mss**

Hab in regione sylvatica Olympi Thessali Heldr t monte *Chelmos* Peloponnesi Orphanidis 1 Hinc varietati tandem referenda est planta a cl Fernaldsky propo *Thessalomcam* leuta

FERULAGO MONTICOLA BOISS et Heldr

F glabra caule elato crasso angulato superius corymboso-ramosissimo, foliis radicalibus caulis sessilibus abbreviatis bipinnatis segmentis in lacunas lineares breves antheras longiusculè mucronatas teneras multifidis, umbellae centrali amplissima composite longissima et multi-radiali, involucri phyllis oblongis mucronatis parallelè multivenis involucri oblongo-lanceolatis pedicellis fructifera brevioribus, menciis pedicello longioribus oblongo-ellipticis, stylopodio minuto piano styli brevissimis coronato dentibusque calycibus in cupulam corticam concretis circumdato, jugis omnibus corticosis Intermediis braeaeque elevatis lateralibus in marginem valliculis duplo latioribus acuminatis, valliculis indivisatis, commissura suboctovittata

Hab in dumosis prope *Rachoi* ad radices *Parnassi* cl Heldreich

Planta elatae partem superiorem tantum vidimus Umbellae centralis radii semipedales umbellas partiales 8-9 edentes Mencia 5-6 hinc longa 2 vel 3 lata A *F galbanifera* distincta foliorum laciniis brevioribus longioribus mucronatis, involucri phyllis linearibus, fructus jugis non filiformibus sed corticosis incrassatis, styli stylo-

pothoquo minonbub *F. tampeslms* ci-sdcm ferenotis> el prdesctim  
jugis mtermedilS fihformibus difTert *F. sylvatita* Bessei tandem  
e^l planta multo minor mencarpns dimidio minonbus ovatis

Obs *F. tenmfoha* Boiss m pi Noe Kurdist Mss est *F. stellata*  
LJoiss Diagn

**FERULA GUMMOSA BOISS**

F caule elato crasso teroti tonuiler stnato albido mcaUi  
farcto supern6 ramosissimo, ramis crassis, umbollis 4-6 radiaUs  
fertilibus sub radiorum insertione mcrassatfl umbellis mino-  
nbus llorummasculorum longiis vel brevms pednnculatis stipalis  
el sic prolifens, involucro nullo, folus infenonbus amplis quadn-  
pinnaLisectis petiolis ejusque dmsiombus medulla farctis angulosis  
divisiombus remotis, scgmenlis parvis oblongis secus petiolulos  
decurrentibus pinnatisectis rigidulis lobis dentiformibus oblongis  
planis obtusiuscuhs omnibus petiolisque secundarns tertiarusque  
brevissimc̄ tomentollis, folus cauhnis ad vaginas cucullatas tomen-  
losas reductis, umbellularum pedunculis apicc valdc̄ incrassatis,  
involucellis nulhs, mericarpns long6 ellipticis acutmscuhs pedi-  
cellis suis longionbus, stylis defloxis stjlopodio depresso multo  
longionbus, jagis intenoribus filiformibus prominulis, lateralibus  
in margtnem ml us flexum valleculis subaiquilatum dilatatis, vittis  
gummi hquido terobiathaceo scatentibns magms totum jugorum  
liitervallum occupantibus, commisburalibus indisLinctis vel nullis

*F. erubescens* Boiss Ann Sc Nat 1814 c\ parte

Hab in Persiā Aucher N° 3C58

Hujus speciei nomen mularc coactus sum fructusque descnptionem  
locupletare ob confusionem cum specie scquenti a me pri-  
mum cum eA confusā et quso etsi quoad umbellas fructiferas tan turn  
nota sit sat distincta videtur

**FEnULA HUDRICAULIS BoiSS**

F caule elato tereli meduM farcto supern6 ramoso ramisquo  
rabns, folus umbelhs fructifens multiradiatis sub centro urn-  
bellse incrassato pedunculis est longionbus umbellas florum mascu-  
lorum minutas gerentibus auctis profhens, radus crassis rubelhs,

mroiucns involucellisque nullb, umbellulaj pedunculo apice in-  
crassato, pedicellis tenmbus fructu brevionbus, mencarpns slra-  
mineis plains oblongis vel ovato-oblongis basi apiccque subretusis  
epicarpio inter juga filiformia mdistincta saepè m stnas longitu-  
dinales prominulo jugis exlenonbus in marginem vallecuh\* sequi-  
latum dilatatis, stylus deflexis stylopodio depresso multo longio-  
nbus, vittis tenmbus rugulosis indistinctis, commissurd sulculosd  
evittata"

*Ferula erubescms* Boiss ex parte

Hab in Peisias borealis monte *Dalmkou* Auch N° 4614, faucibus  
Alpis *Kith Daena* in Persia austrail Kotschy N° 666

Quamvis imperfectissimè nota differt a prscedenti umbellis  
multiradiatis, mencarpns pauld minonbus (6 lin loqgis 4 labs)  
obtusionbusque, jugis mtermedns vix prommuhs, vitlis non ma-  
gms turgidis in valleculd solitarns eamque implentibus sed angustis  
irregularibus in valleculâ 2-3nis Hanc speciem indescriptam re-  
liquissom donee ejus folia nota fuissent sed ejus specimma sub  
nomine erroneo a me dato in collectione Kotschyanâ publici juris  
facti exstabant

HERACLEUM PALMATUM Baumg Var 3 *petasites* Boiss et Heldr

Folia subtua palhdiora parcè puberula aeqnè lata ac longa ~~saepè~~  
maxima diametro pedalia et ultr&, inferiora ultra tertiam partem  
supenora ultrâ medium non lobata Mencarpia ilhs speciei paulò  
majora sspè sex lineas longa quinque lata apice exuniè obcordata

*H petasites* Boiss et Heldr Mss

Hab in rupibus altissimis fngidis montis *Olmos* Peloponnesi  
(Heldr)

HERACLEUM INGANUM BOISS et Huet

H pumilum, collo crassiusculo fibns foliorum vetustorum dense  
vestito, caule te/\*eti stria to breviterlaaato canescenti superni parcè  
et dichotomé ramoso, folus utrinquè breviter et dense canescen-  
tibus radicaubuset mfenonbus petiolaLis ternatisectis, divisiombus  
laterahbus breviter intermedia longiùs petiolatâ omnibus pinna-  
iisectis 2-3 jugis, segmentis parvis sessihbus ovatis acutmsculè

dentatis sublobatisque, folio caulino superius uno altero trove pe  
 Uolo vaginatiformi ovato albo-lanato insadonli biternato lacimis,  
 dimiutis angustatis acuminatis, umbellis 5-9 radiatis radns inse-  
 quahbus, involucri involuclloque nullis, pctahs albis extus to-  
 mentosis radianLibus, ovano junion oblongo puberulo stylopodio  
 margino undulato stjlsqae sLylopodio longionbus superato, fruc-  
 tu

Hab in montc *Tech Dagh* Armeniae supra *Erzeroum* a\ t 8-9000'  
 LI Huct du Pavilion

Peddle, folia ambitu triangulari-clongata tripollicana segments  
 5-7 hnoa's longis Affine *H humih* Sibth quod differt glabntic,  
 foliis siraphciter pinnatisclis, collo squamoso nee fibroso, etc

#### LOPHOSCIADIUM THIRKEI NUM BoiSS

L glaberrimum caule erecto simplici folioso supernè praesertim  
 acule angulato apice subumbellatim corymboso, foliis inferioribus  
 longè pctiolatis ambitu lanceolatis bipinnatisectis, divisionibus  
 infimis mtei se remotis oblongi-. cscotrib abbrevialisegmentis om-  
 nibus inter se approximalis in lacinis angustis linoarcs acuminata  
 mullifidis infimis pctiolo contiguis, foliis caulis ad vaginas lan-  
 ccolatas acuminatas herbacoasin axilla folium junctis abbreviatum  
 sessile multifidum foventes reductis, umbellis 10-15 radns centrali  
 majon longius radiata, involucri involuclhquo phjls lanceolalis  
 acuminatis herbaceis angustè membranaco-marginatis hisce pc-  
 dicellos umbellularum squantibus, fructu

*Loph meifohii* G Koch in plant Thirke non DC

Hab in Anatolia septentrionali Thirke

Species *L meifoho* et *L cant folio* intermedia Pnus differt fo-  
 his ob divisiones brevissimas hincaribus in laciniassetaceas multifidis,  
 involucris involucllisquo obtusis mucronulatis Po-\*tenus cui ut  
 synonymon adnumerandum *L Olympiciim* G Koch loc citato stam-  
 tim distinguitur foliis ambitu latè triangularibus lacinis lationibus  
 brevionibus, involucris involucllisque acutis nee acuminatis

*Ferula sylvatica* Besser a cl Prof Gnsebach *Lophosciadio* adnu-  
 merata a nostro *L silaifolto* divorsissima est et insuper ob fructus  
 characteres vera *Ferulagims* species, haic habet quodam modd  
 ticrbam noslri *L Tjurkeam* sed staim distinguitur caule pamcu-

la Um ramoso involucellisque angustissimis umbelluli dimidiis brevibus

LASERPITIUM PSEUDO-MEUM Orphanides, Heldr et Sarton

L glabrum caule tenui ascendenti vel erecto flexuoso jam paulo supri basin semel bisve dichotomo, foliis radicalibus petiolo basi dilatato suffultis ambitu oblongo-lanceolatis bipinnatis, divisionibus primariis 5-6 jugis inferioribus inter se valde distantibus omnibus ambitu ovato-oblongis sessilibus, segmentis Us approximate in lacunas angustissime lineares acutas confertas multifidas, foliis caulibus paucis vagina angusta albo-membranacea suffultis abbreviatissimis, umbellis longis pedunculatis breviusculis 5-9 radiatis radiis sub lente puberulo-scabridis, involucri involucellique phyllis lanceolatis parte inferiori latiusculis albo-membranaceis superius caudato-acuminatis hisce pedicellos aequantibus, petalis albis evanescentibus umbellis obcordatis cum laciniis multilobis, fructu (junone) pedicello triplo longioribus stylis longis deflexis coronato mericarpo oblongis, jugis primariis filiformibus, secundariis in alas albas undulato-plicatas latiusculas dilatatis

Hab in monte *Kyllene* Peloponnesi Prof Orphanides anno 1851, *Parnasso* in regione alpina Sarton, Heldreich anno 1852

Planta 9-1 & pollicans, folia radicalia cum petiolo saepe semipedalia breviora vel illa *Met uthammitia* et praesertim *Met Nera-densis* referentia sed laciniis paululum crassioribus abbreviatisque Umbellae radii 1/2-1 pollicares Fructus semimaturus 5 lineas longus Species foliis et characteribus distinctissima

DAUCUS SCARDIICUS Boiss et NOU

D caule elato ramoso, ramis junceis teretibus aculeis retrorsis brevibus sparsis scabridis, foliis inferioribus , superioribus petiolo brevi basi subvaginati suffultis bipinnatis cectis pinnis aculeiformibus adpressis scabridis laciniis linearibus setaceis acutis mucronatis, umbellae 10-12 radiatae radice sparsim et adpressis scabridis, involucro nullo, involucelli phyllis subulatis pedunculos florum aequantibus superantibusque ut ei scabridis, ovano albo-hispidissimo, petalis albis glabris radiantibus, fructu tenerrime hinc inde

malico, jugis pnniariis vi\ prominulis adpressè et broviter setu-  
 losis, secundarns in aculeos basi dilalalil confluentes fenuissimos  
 gljbros thamplo frucliis sexluplo lougioros abeunlibu\*

Ilab in cultis propft *Bagdad* cl Noc

Species afflnis *D pukhettmo* et *D Peisuo* Illic diflerl caule  
 ramisque glabus, folns glabns lacmuli!\* confertis obtuiiusculis,  
 involucclislaló racmbranaccis oblongi\*, llonbus duplo majonbus,  
 aculcis frucliis scabriuscuhs, Illic fohorum brevitci et densò pube-  
 sconluim Idciniis. brevibus confertis, canle ramisque glabns, m-  
 \ohicelbs oblongis membraiacois, pctalis pnlieruhs, etc dislm-  
 c^uitur

DAiinns (UDITANUS BOISS vl Hcul

D animus naims cnule a ba<ji dichotomy r^moso ramisque ro-  
 irorsùm Inspidubs, folns parvis tuspiduhs ambitu oblongis petio-  
 lati^ bipmnatiscchs sogmeulis abbreviate conferlis oblongo-cu-  
 neatis in lacinulas ovulas oblong.isquo obUisiusculds plus minùs  
 profundè fisis, umbellis mmutis compactis centrah in dicbolomiâ  
 infonori caulis subscssih, cailens longò pedunculatis, involucn  
 phyllis pinnatisoctib umbellam squantibus lacinulis minutis ob-  
 lorgis obtusis, involuccli hneanbus radiis pediccllisque brevibus  
 hirtis, umbellac umbcllularumque receptaculo vix dilatato, llon-  
 bus fructuminuto ovato, jugisprimarns albo-pilosuhs, secundanis  
 in aculeosrufescentes sctaceostcnuesbasisubdilatatâ non confluen-  
 tes apice globidiatos diametro mencarpn subajquilongos abeun-  
 tibus

Hab id herbidis circa *Gades* rara, herb Fauchd

Plan tula 2-3 pollicans, folia infcnora cum petiolo polhcana  
 2 •/« lineas lata, umbellne diamclro 0 lineas circitor latac, mencar-  
 pmm lincam longum Species nulli affinis inflorescenlid et fructi-  
 bus minulis notabilis

### AMMIOPSIS

**Calycis margo brevissimus coroniformis vix dentatus Petala  
 obovata rectusa cum lacinulâ inflexd marginalia radiantiaprofunde  
 et liiaQqnaliler lufida Fructus a latere subcompressus parvusoblon-**



gus sLylopodus dopressit\* ^\>ftque deflexis ois longionbus coronatus Mencarpia breviler prismatica sulcata jugis pnmarns khformibus MX prominuhs secundarns rotrmdalis latis omnibus uniformiter per totam suporficiem mencarpium minutè granulato-tuberculatis Valleculae obsolete Viltco nullfe Commissura granulata convexmscula sulco carpophori exarata Garpophorum mdi-  
visum Albumen concavum ? — Uerba Maunlanica facie *Dauci*

Novum genus inter *Daunneas* et *Cmicahdeas* ob alburnum formam ex fructu immaturo non ritè notam subincertum, fructu uniformiter granulato-scabro nrc aculeato, vittis nullis, etc ab affinis distinctissimum, *Szowitzcy* accedens qua} differt coslis secundarius fungosis senaliter cucullato-squainqpis, fructu vittato, etc *Ammi* cui cl Gandolleus nosliam plantam a Jjunxerat in ahd **tribu** ob juga secundana nulla mihtat

#### AMMIOPSTS DAUCOIDES **Boiss**

A jnnua? tota sec us caulom cL loha selis sparsis patuhs saepe plunbus ex eodera tuberculo orlis slrigulosa, caule\* erecto tereli stnato supernè diLholomc ramofco, ramis parcè fohosis umbelia termmatiSj folns cauhs pctiolo brevissimo membranaceo-vaginantia suffullis supradecompositis ambitu tnangulanbus segmentis minutis oblongis in lacinulas breves linean-lanceolatas acutas tn vel pnnStifidis, rameahbus diminutis lacimis paucionbus angustè hneanbus, umbelhs multirafdiatis post anthesin contractis, radns glabrib submcassatis, umbellB centro subincrassato, involucri ph>lhs deflexis raclns brevionbus hneanbus indivisis tnfidisque, involucelli lineanbus integns basi in discum coalltis pedicellos florum inauquales subsequanlibus, umbelluhsfructifenscontractis, flonbus a Ibis

*Ammi daucotdes* Salzmänn in DC Prodr

Hab in agns Tmgitanis, Salzmänn

Folia *Daua carolm* vel potiùs *D aurei* Flores *Dauci caroi*a> sed centrailis non abortivus purpureus Umbellse fructiferee radu ssppe elongati sesquipollicares Fructus ferè malurus lineam longus.

Tobius SYRIACA BOIS<sup>^</sup> et Blancne

T annua caute valdè clato lerej striato praeter pilos paucos retrorsum adpressos brevissimos glabro ramosissimo ramis erecto-patuis, folus petiolo subcanaliculato suis Tultis sparsim et adpressè sLngulosis amhitu triangularibus bipinnatipartitisparlitiombusinterionibus duabus longiùs peliolulatis segmentis oblongis subsessilibus in lobos oblongos acutmsculos saBp6 Intertum denlalos ad medium profundnisque fissis, folus supreims breviter petiolatis infoliolalis foholo supenon elongato oblongo, umbel Us longmsculfe pedunculatis 7-9 radiatis, involucro nullo, involucelli phylls lanceolatis pedunculos sequanlibus, umbellulis vald<sup>^</sup> convexis, petalis radian tibus ovarium aequantibus,, styhs stylopodio dupld longionbus, aculeis papillosis roctis apice glochidialis densissimis mencarpu linean-oblongi diametro dupl<i longionbus, mencarpio interiori (rard doobub) aculeis tnpld brevionbus adpressis abortivfe instructo

Hab ad margined agrorum circj *Saida* el *Djeban* Syria Libanolicaecl Blanche

Planta 5-6 pedalis culta 10-12 pedahs evad<sup>^</sup>ns, Mia eis *T anthusa* simiha sed ma)ora segments pollicem loiigis Umbellse pro plants) magwludine parvaa diametro polhcarcs et sesquipollicales Allnis *T neglectm* dilFert staturd datà folusque amplionbus, umbcllaa radus crassionbus brevionbus, mencarpu attenuati nee oblongi aculcisejQs diametro duple longionbusnecaequilongis,raericarpmm mtorms in hac specie abortu aculeorum pustuloso-granulatumevaditjin uno specimine mencarpium utrumque sicabor Uvum vidimus

## TOIILIS ciinYsoc\mpi Boiss et Blanche

1 caule virgalo supcrn6 ramoso glabro, ramis adpressfe etsparbim slrtgulosis, folus adpressè strigulobis bipinnatipartitis segmentis oblongo-lanceolatis in lacimas breves angustas lterfun partitis, iohorum suinmorum folioJis tribus hneanbus denticulatis, umbelhs 3-4 radiatis, mvolucro nullo involucellis lanceolatis stngulosis pedicellos brevissimos <sup>^</sup>uperantibns, flonbus , umbellulis fruc-

tiferit. globosis, mericarpio in tenon aculeorum abortu tuberculato cxlenori curvalo aculeis flavidis lanceolalo-lineanbus apicc glochidiatis ejus diametro longionbus crebns horndo

Ilab circâ *Saida* gynae cl Blanche

Aflnis pracedenti a quâ sat differre videtur caule sesquipedah fohohs magis dissectis, umbelhs pauciradiatis, fruclibus sigmoi-deo-incurvis mericarpio exteriore convexo interion concavo, aculeis flavis infernè magis dilatatis Tamen ultentis invcstiganda

TORILIS SETIFOUA Boiss (Sect *TncltocarpcBa*)

T annua glabra, caillo eroclo flexuoso tenui a bam dichotomo ramoso, folus inferioribus siipenonbus pctiolo brevi dilatato membranaceo-marginato suffultis biternatibectis lacinnis paucis divisionibus petioli aimilibus elongatis setaceis, umbelhs brevitei 3-5 radiatis, involucris phyllu> 3-5 hnean-setaceis infern6 merabranceo-marginatis insqualibus longionbus umbel lam asquantibus superantibusve, involucelll pilyllis pcdicellos breves superantibus rigidis trifidis setaceis infrâ divisionem ulnnquè latmsculè membranaceo-marginatis, flonbus mericarpu oblongi a dorso subcompressi jugis pnmarus sub lente setulosis, secun darns costaeformibus elevatis albidis pilos molles setaceos flavidos ejus diametr6 multoties longiores muUifanam edeutibus, stylopodus in stylos longiusculos rectos attenuatis, stigmatè mgncanti

Hab propè *Dair Haj* regm Cabuhci cl Griflth N° 548

Planta semipedahs, foliorum lacinitè e tenuissimis 6-9 hneas long® UmbellEB fructiferae diametro vix pollicares Aflims T *m-chospfniw* quse egregiè differt Foliorum segmentis oblongo-lanceolatis pinnatisectis, involucro nullo, involucelhs hneanbus mtegnis, mericarpio sublongion jugis omnibus obsoletis mordiDatim setoso

ANTHRISGUS HOLLIS Boiss ct Reut

A perennis vel biennis, caule erecto supernè dicliertomè pluries ramoso valdè blnato ut el rami pihs mollibus patulis densè tomentello, foliis ad peliolos ct costas molliter hi^pidis ambitu tnangulan-elongatis bipinnatisectis segmentis suprâ glahris sub-

ILLS ad margmus et vend\* ddprohsiusculij hi»piduli& oblongis pin—  
nalifidis obLusis, bupcrionbub basi decurrentibus lobis brevibus  
obtusis seep6 lterum donlatis umbellib mocqualitor b-8 radiatis, m-  
volucro nullo mvolucollt phylhs minimi-, defloxio ovalw acuminat-  
tis cilutulis, petahs , umbelluliB flonbus centralibus abortivis,  
pedicello fructu paululum brevion apicc subincrassato parcissimfe  
citiaLulo, mcricarpm liejribiis brevibus mtidis in rostrum sulca-  
tum eib sexluplo brovius abcuntibu«>5 s«k» htylopodiorum conico-  
mm divergciituum longitudmc, carpophoro apice fibso

Hab in dechvibus septentnonalibus montis *Gebel Toumour* propfc  
*Balna* in Afnci boreali cl Balansa pi e\8 1853 sub *A sylvestn*

Spocios ab *A sfflrestit* ut ot a cditens liuju^ generh indumenta  
jiilob patulo eiTiogiò distinclta, scgmciita foliorum insuper minùs  
divisa obtusa lobi> obtusis, mencarpia breviiis roslrata *A fuma-*  
*noides* IndumcnLo liolosenceo saep^s gaudct s«ed brevis.simo pulve-  
rulento et in eA insuper segmenta fohoram mull6 mmora, fructus  
broviores tubeiculati

#### ANTHRISCUS MAGNOCARP\ F3oi\*5 Ct Heidi

A porenni^ caule clato sulcato uino^o glabro vel sub lente pills,  
spar^is selulosis adpressis obsilo, folus ambitu lat6 ovaLo-triangu-  
laubus tn vul quadripinnalisectis ad petiolulos et subtùs ad foliola  
**brevissimò ol** patul6 hhpiduli^ scgmentis oblongis in lobos tn an-  
**gulari-lanceolatos** acutiusculos profaudò lissis,, umbellis C-8 Ta-  
diatii, uwolucio nullo Involucelli phylhb dedexis oblongo-lan-  
ceolatis acuminatis cihaluh, petals albis radiantibus, pedi-  
celhs fructu paulfi brevioribuss apiLG sctulosis, mencarpns ob-  
longo-lincanbus nigns rostro sulcato eis se\tuplò brevion ter-  
mmatib aculois e tuborculo orli^ incurvis jbcendentibus valde ex-  
abpeiati^, sLyhs stylopodus conicis longionbu^, >tylopodio apice  
hssso

*A npmoioba\txv matrocatpa* Uois^ pi cxi>

Ildb in umbrosiq moMtimi Auatohx', Cauae (Pinard), 'Fmoli in  
*Lydid* (Bbiss) *Lyctm* in monlc *Solymn* flleldr ) in montibus Grascise  
*Olenos* (Heldr ) et *Kyllene* (Oipliaiudes )

Foha radicalia ^icpò j)odoui *U* ampliii-s longa lalaque potiolulis  
s«p» jrigulo ft'it' u'Lto pdleutibii'\*, scifmenla ei> *A vjlmtns* Ma-

jora niinùsque profundè dissot La Mencarpia A linear longa A nemorosa cui nostram plantam pnùs adnumeravcramus differ! folns minùs pubescentibus segmenhs mirionbus, mencarpns tertiã vel quarts parte brevionbus acaleis minonbus ubsitis A Anato-hca aflinis quoque indumento minuto tomentello, foliorum seg-raentis lacinusque lanceolatis distinguitur

FREYERA Rchb

In oharactere hujus generis, quod idem est ac *Biusolettia* Koch non Presl nee Bertoloni, nola fructùs sic mutanda Valleculse evitatae Nulla3 prorsùs adsunt in speciminibus Dalnuticis a cl Petter missis et descriptionibus Kochu, Reichenbacliu Yisianuqae optimè convementibus Huic genen sic rformato adjungends sunl species Onentales *Buhnm* a me in Ann Sc Nat et Diagn N° X dc?cnptae et novae infra desenbondae Omnes a *Bulimd btimoide* lypo spociei rcedunt mencarpus hneanbns nee ovato-oblongis, ob juga arguta profundè sulcatis ncc convexis jugis fliliformibu^ indistinctia, stylopodio plùs rainùsve comco elongato Genus *Freyerce* sic reformatum inter *Anlhnsconi* et *Conopodium* collocandum a priori differl fructu erostrato non apice tantùm sed totd iongitudine sulcatb, a posteriori vallecuh\*> sulcatis nee planis, evitatis nee plunvittatis

FREYERA MACROCVRPA. BOISS et Spr

*Buttma tnacrocarpa* Boiss et Spr in Ann Sc Nat.

Hab in Hymetto (Sprun Doi»s Heldr ) moute Onion Beolhu cL raontibus *yravk Elevnn* (Holdr )

FREYERA STYLOSA BOISS

*Buttma stylosa* Boiss in Ann Sc Nat

Hab in montibus Lydioc (Boms )

FREYERA CnETILA Bois-i et Heldr

*Butuna Gn'tim* B cl If Di.ign X >

Hab. in montibus Greta?

FREYEA PARNASSICA BOISS. et Heldr.

Fr. glabruscula, radice tuberosa globosa, caule tenui tereti laevi erecto flexo supernè dichotomo foliis radicalibus longè petiolatis ambitu triangularibus bipinnatisectis segmentis in lacinas latiusculè lineares acutiusculas partitis, caulibus reductis. ad vaginam brevem 1 vel trifloram foliolis angustissimis, umbellulis terminalibus 3-5 radiatis radius lenuibus incurvis, involucri nullo, involucri phyllis 1-2 lanceolatis acuminalis, pedicellis fructiferae patentibus subincurvis fructibus subaequantibus, merncarpiis glaucis pentagonis apice subattenuatis incurvis, stylopodio conico-elongato in stylos divergentes abeuntibus

Hab. in regione alpina montis *Parnassi* (Heldreich)

Caules 8-10 pollicares. Folia petiolo neglecto sesquipollicem longa laciniatis 2-3 lineas longis hinc dinudiam latis. Merncarpia 2-3 lineas longa. Valde affinis *F. macrocarpa* differt laciniationibus foliorum, fructibus minus nitidis merncarpiis paulo longioribus apice subattenuatis propter curvaturam hinc abeuntibus neque contiguis, stylopodio conico-elongato neque depresso.

FREYERA DIVARICATA DOISS. et Orph.

Fr. radice bulbosa .., caule tereti glabro a basi dichotome ramoso divaricato ad nodos infracto flexuosoque, foliis pediculis bipinnatisectis petiolo secundum elongatis segmentis paucis glabris tenens oblongis basi cuneatis in lacinas oblongo-hinc obtusas profundè fissis, foliis caulibus paucis vaginam brevi angustam sessilibus segmentis indivisis attenuatis, umbellis 4 radiatis radius longis valde divaricatis extenonibus saepe horizontalibus, involucri nullo, involucri phyllis subternis lanceolatis pedicellis 2-3pluribus brevioribus, fructu pedicello paulo brevioribus, merncarpiis tenuiter hinc pentagonis incurvis hinc in stylopodia conico-elongata in stylos longos divaricatos abeuntibus attenuatis.

Hab. in monte *Kyllene* prope *Tnkala* (*Hagws Vktsws*) cl. prof. **Orphandes.**

Pediculis, foliorum lacinis 4-7 lineas longae 1-1 1/2, hinc latae,

radii pollicares sesquipollicaresve, mencarpia ires hneas longa A specie praecedenti distinguntur ramis radusque elongatis valdè divaricatis crassioribus, foliorum lacimis longioribus latioribusque et imprimis fructu ejusdem formae sed tenuiori, stylopodis cum stylo duplo (7\* lineae) longioribus

### HUETIA

Calycis margo coromiformis edentatus Petala non radiantia alba obovala incurva submarginata cum lacinula inflexa\* Fructus oblongo-elongatus a latere subcompressas stylopodiis elongato-conis in stylos rectos subdivergentes abeuntibus coronatus Mencarpia oblongo-Uneana Juga quinque arguta squamulis verticalibus aculeiformibus tandem obtusatis subnata Valliculae sulcatae nuntiat Raphe lineae commissurae aequalis Albumen antic6 sulco exaratum — Herba bulbosa pumila fane Burnt.

Hoc novum genus a *Qaro* et *Bimio* stylopodiorum forma albumineque subsulcato discrepans in *Seandmneanm* tribu juxta *Conopodium* et *Heterottmiam* militare debet Ab eis valliculis univittatis jugisque subnatis distinctum, a *Butmid* et *Freyerd* eodem nullo vitarumque praesentia distinguitur Dicitur cl. fratribus Huet du Pavilion qui Pyrenaeos, Armeniam Sardiniam Siciamque botanices studio addicti peragraverunt

#### HUETIA PUMILA Boiss et Reuler

H radice tuberosa globosa, caule basi subterraneo praeter 1-2 squamas e vaginis abortivis ortas nudo parte exserta brevissimo tortuoso-incurvo divaricatim ramoso, folio glabro radialis longè petiolatis ambitu breviter triangularibus bipinnatisectis, divisionibus primariis petiolulatis, segmentis petiolulatis ovatis in laciniis ovato-oblongas oblongasque obtusas parti us, folio superioribus vaginiflora brevi ovata insidentibus laciniis minutis confertis, umbellis 3-5 radiatis inferioribus brevissimis, ex tens longius pedunculatis, involucri nullo, radice saepius hirtulis, involucris phyllis oblongo-lanceolatis hirsutis pedicellis subbrevioribus, pedicellis erectis fructu brevioribus

*Bunwm alpmmn Fl Graec tab 274.*

Hdb in pasems regions «alpin& raonlis *Parnassi ad nives* (Heldreich)

Planlula 2-4 pollicarii ramis divancalis nicurvis sajpū subhori-  
/onlalibus, foliorum lawnisc minutw, radii fi-10 hneas longi,  
**mericarua** 1<sup>3</sup>/\* lwcas **longa**

**CNÆROPHYLLUM** HGLDRELCHIII Orphamde^

(lh perenno caule cLilo crasso slridlo glducescenti fohoso su-  
ber)3 parco rarnoso pilis adpres&is sparsis obsito, folns petiolo  
lon^iusculo Jiasi in vagmam dilalato suiTultis bitematisectis divi-  
\*ion' pnmanu supenon t«q6 lleriim pmnatisectJ petiolulis pn-  
nianis secuudariisqve Hongatii pihs albis palulis curvalis albo-  
pul»esculihis, seffmculisad peLiolulorum apiccm terms sessibus  
distinciis ovatis \(:l in segmenlum uuicum Lnpartilum coabtis basi  
iruncalis ve\ breviier cuncalis circumc\rci grosse crenatis crems  
ovatis obLnsis \cl acutiusculis paging supcion sparsim Inienon  
dense ellongiiis adpressfi pubescenlibus liypoloucis, fobis supe-  
rionbus vagirjfi brovi msidenlibus surarnib <d segmrnliim Infidum  
ifduclis, unibellis ad apiccm rainorum solitarus raagni« 8-15 ra-  
diaUsradiislongis dcraüm ngidis, mvolucelh phyllis membranaceis  
laticcolatis longé albo-ciliaUb pedicellos florum jpquantibus, potalis  
albis vix radianlibus, pedicclhs fruclifens incrassatis fructu acqui-  
lalis eoque 5-0j)lo brevionbus, fructu longissimo hnoari subtereti  
2 shhs diverge!)U-HLL>recurvi!S dun> puiiffentibus facie supenon  
sulcalis suporaLo slridto, |ugis crassis oblu^is subcontiguib, vally-  
culis anguslissimis umvillatis, carpophoro biparlito

Hdb in moiile *Kyllene* prop6 *Flambounlza* cl Prof Orphamdet.  
all 4000' Floret Maio, fructus maturat fine Jutiu

PlanLa 2-4 ppdalis folns cum petiolo pedahbus et ultrflj 9-10  
pollices lalw Segmenta 2-2 'a polhccs longa i '«-2 lata Radii  
umbelliu friictilcraD 3-4 pollicares, fruclus fort' polbcares, styli  
a stylopodio non distincti scsquihnam longi Species cunosissima  
juxtâ *Ch momlicvm* collocanda, uidumento hypoleuco, fructibus  
longissimis stylisque induratis pungentibns insignis



PIUNGOS Ancis ROM IN\*: Bois.s et Iluet

Pr radice crassâ, collo densè fibroso, fohis radicalibus humi expansis glabrib glaucescentibus ambitu Inangulanbns petiolo dilatato canaliculato suffullis ternalis divisionibus prnnanis petiolatis ambitu tngulari-lanccoldtis bipinnatibeclis segmentis sc^ilibus in lacinias mmutas coufcitas lme arcs oblongo-hnearesve mucronulatas partitis, caulo glabro toreLi pumilo prater vaginas lanceolatas acummatas apbyllo suprl lolia dichotomy ramoso coiymbo, umbelhsõ-H radzalis, mvolucro monophyllo, Involucellispolyphylhs foliolib brevibaimib c basi latiori linean-setaceis, floribus luteis, fmctu breviter oblongo-snbpyntorini apice obtu9o breviter pedicellato alato, alis corlicoso-mcmbranaceis mtegris obsolete undulatis diametro semfnib subaBqiilatis dorsalibus aliquand6 fer6 obsoletis, stylopodio disciformi lobulato styhs longis divergentibu\*. super alo

Hab inmontibus supra *Eizeroum* cl Huet du Pavilion

Cauhs flonfer brevissimus fructifer C-10 pollicans Folia 3-4 pollicea longa 3 lata lacinulis tenilibus 1-1 V\* lineas longis Fructâs basi saep6 subattenuati polhcem dimiduun saep6 longi Affinis *Pr melwcarpoidi* differt caule glabro, fructu basi minus atteniiato alis subundulatis A *Pr Pestulozzcs* differt glabnlie, abs non denticulatis, a *Pi pumild* ct *odontoptetd* foliorum lacimib mulld brevionbus

PYCNOCYCL\ FLADELLIFOLIA BOIS>S.

*Et hinophoi a <\* flabelhfoka* Boiss Ann Sc Nat PI Auchenana\*

Hab in Persiâ Aucher N° 3761, in subalpims prope *Kitnnd* in Persia Babyloniae conterminil cl Noo

Specimina quamvis incompleta tamen umbellis fructifern junionbus donata demonstraverunt hanc plantam genen *Pycnocyclce* adsenbendam esse Hdcc diagnosi addenda sunt Umbellis minutis planiusculis 6-7 radiatis radus brevissimis tomentos, involucri phyllis 5-7 lanceolatis acero<iis radios aequantibus, umbellulis 6-7 flons subglobosis, involucelli phylhs lanceolatis acutis pedicellos aequantibuajfloribusexlerionbusmasculispcdicellovillo^osuffultis,

petalis tomentosii pan is oblongo-lanceolatis in lacinulam mtùs iccurvarn canahculalam atlcnuatis vilLa" brunnea" prominuld lonqitudinahter pemusis, stjlopodio piano, (lore contrail unico hermaplirodilo scwli, ftuuu junion ovato albo-villoso pedicellis flonim stenlmm panlo bimon itylis duobus longissimis infernþ Mihincrassalis ÞnbiTiih-> supeiato, calyums dentibus omnium florum obsolotis

### PVRMIIDOPTERA

Cnhcis denies olongati lion/ontale? subulati Petala alba oblonga dor°i> imrvo vitlnifonui perun ^a suporni) rcurva dorso caiialiculata in lacinulam iu/le\ain LoaicLata Fructus indelnscieis apice truncatu^ shiopodio unico couiLO-elongato in stylos duo divergenLes, abeunti suppratus obpsunJidaUis prutapterus all\*? quinqc papyraceib aciUč Liiaiyularilms c dentibus caljcuns accrete ortis, ex apicc in acumen pungens iLori/ontaliter producto usquè ad basin fructùs scusun alicnualis ViUac nullrp Carpophorum millum Albumen — Iherba cUla CubuliCd facie LriserptCu

Opnus cunosissimum quoaatl locum in h>stemalealbuminft ignoto incertus Iribnm piopnau prohabilissimé constituens Structure fructub intn Umbrllilcras smiphcissima, denies calycini quinque longi, petala qianquo cum dentibus calycini^ allerna, juga p\*i-caana suturalia (id osL v sutui,1 scpalorum onunda) in nostrd plants oirwmt do:urit ol L,mtürn c\stant juga primana quinque cannalia (carinæ hopalorum n^pondentia) qua) cum dentiltus calycims accretis baser quinque ala> verticalcj, formant petalis alternas et quarum tre-t ad mcurarpium uiuiin duo ad alterum spectant

### I^RAMIDOrJ&ltV CALI IJIA BOISK

P perenni<> glabra claU , caulo tcioti stnato supernè ramoso-Mibcorymbosso, foius» puiiolo baM breviter vagmanti sufffulus ambitu lanceolate bipiunaliscctits bubtnjugib divisiombus pnmarus inter sp remotiu&culis segmentis ngidis linearibus cras^iusculis simphribusicl in 3-.J lacunas Unceolato-lineares acuminatas subpungnrncs li^si^, umbclii^ longisMmò pediinculalib multiadiatis, invnjjini phvllix uuinfiosih lini'imbu\*- .lcuminatis rflexis radio

quadruple) brevionibus, involuclis lineariibus deflexis, pedicello fructu brevion subcomplanato

Hab in rupestribus calcareis montis Gabuhci *Siah-Sung* ad alt 10000'-10500' cl Griffith

Planta ut videtur valde elata Folia cum petiolo 5-6 pollicana divisionibus primariis 8-12 lineas longis ca *Laserp Galhci* referentia sed lacinus angustioribus Pedunculi umbellarura pedales, rami saepe bipolycaros Fructus tres lineas longus superne inter extremitatem alarum oppositarum fere 4 lineas latus Alas superne horizontaliter truncate sesquilineam latae cuspidate) pungentes ab extremitate cuspidis deorsum Usque ad basin fructus dnguntur Sulci inter alas laeves hinc longitudinalibus fusciscentibus distinctis superne percursi Membrana commissuralis simplex inter duo semina

## CAI'JUFOLJACE/K

**LONGICERA** ETRUSCA Santi vdr fj *Rmett* Heidi

Glabra, rami procumbentes lenues\* Folia mmora magis rotundata, inferiora in petiolum brevem attenuata Capitula breviter pedunculata ebracteata vel bracteata Li bracteis minimis ovata non superantibus

Hab. in saxosis *Hymetti* cl Heldreich

LONGICERA ETRUSCA Santi vai y *hispidula* Boiss

Rami pilis brevibus patulis aim glandulosis alus eglandulosis obsiti, folia subtus hispidula, inflorescentiae rami denique glanduloso-hispidi rufescentes Corolla patulft glanduloso-hirta

*Ion vtmdula* Boiss in Kotschy pi *Gihc* 1853

Hab in sepibus et colibus circa *Gulek Boghas* (Cihcio Kotsch) • Balansa.

Hanc plantam characteribus datis a *L Etrusca* diversam autumabam sed cl. Balansa *L Etruscam* typicam eisdem locis quoque legit et transitus observavit

LOMCFIH (APIUMIUM L vai drmrua **Boiss**)

**Corollæ** Uibus subabbreualus lobis o\tiis pills sparsis **hispidulis**

Ilab in Armt;md cucâ *Ratoum* cl Calverl

LOMLLJIA IULLKMLA. Oiphanules (Sect *Chamcecerasm* )

*I* iruficosa minis, vetnstis corlico sortlidt; all)â glabrmsculd ves-  
tutis p>ianu\*1.Uo-ramulosis, ramuhs \claimo-hirlis, fojns oblongis  
**breviter** aoummalis brevissinu<sup>1</sup> pcliolalis basi rotandatis vel bro-  
viter cunonU^i pngin.1 SUJXTIOH liirlis inforiori palhdionbus \clu-  
iini^ pednnciilis axilldiibus J)iflons More duplo longionbus folio  
biovionbus patulc Jiulis su])glandulosis, corolla glabns c SICC  
tainrts broviter campannlnti^ ultrA mediumbilabiatis labio supe-  
rioiu iruucUo obboU'tissime^ cronato, tubo suprâ basin gibbo, fi-  
**laments** ai] iripdium usque Ijarbdtih, auilicrib coccinch, bracteis  
**linear-**ldnccolcilis gliinduloso-cilhiiii subiiicmbiaridccis ovano  
**duplo** lon^iuiibus, bacci-. disinctis ovatis rubris calyce coro-  
nalis

ILtb in raonte *Cbelmo* Achaim piopc *Slyrjem* rara cl Orphan  
.lit 5000' FJorol Tunio fruLiibniiiLiii.il Julio

Kolia HI spfciiiiuiljiis fruclifrris Iniidom '2-3 pollices longa  
12-ir» lineas Idfd Pednnculi 0-12 lmoaa longi, corolla C-7 lineas  
Juuga Halulubomimio *L Aljngenem* qufc long6 distat baccis usque  
ad apiccm in imam concrpUs *L Onenlahs* Lam Jaub et Spach  
Illu^tr tab 71 *L Hellenic*® quoque atfiins differt baccis connatis,  
pednnciilis breviorilju<sup>\*</sup>, corollâ vrlulina<sup>d</sup>

## RUBIACEÆ

TUTOBIA IISFANICA Coi^ Pi Rcul

P suffraticosa ianiis dense fohosis pilis crispuhs brevissimis  
pifesperUin paitoni supenorm \crMis puberulis mis adpressis

prostratis, foliis brevissimè petiolatis\* elliptico-linearibus obtusis vel acutiusculis marginibus subrevolutis et subtus ad nervum medium ^cabridis, stipulis in unam interfoliaceam brevissimè triangularem acummatam coalite, floribus brevissimè pedicellatis in cymis terminalibus sessilibus densis umbelliformibus confertis, corollis roseis tubo infero angustissimo sensim ampliato ovato quintuplo longioribus lobis lanceolatis laevem revolutis tubo quadruplo brevioribus

*P. Calabroica* Boiss Voy Esp non Pers

Hab in rupestribus regni Granatensis alt 500'-3000' Boiss !  
Heut! Bourgeau!

*Putona Cnabrica* Pers vera ex specimenibus Tarentinis Graecis Anatolicisque a nostris specie specificè differre videtur ramulis minus prostratis saepe ciliatis, lobis etsi polymorpha sint tamen brevioribus pro longitudine foliorum oblongis vel oblongo-lanceolatis, cymis paucifloris, corolla? tubo 3-4. nec 7 lineas longo inferius minus attenuato Dentes callosi, fructus antheraeque e sicco saltem notas differentialios non praebent

ASPERULA MUSCOSA Boiss et Heldr (Sect *Cynanchim*)

A perennis densa caespitosa humilis, radice filiformi elongata dura, caulibus breviter puberulo-velutinis basi denudatis procumbentibus vel ascendentibus dein angustè pyramidato-ramosis densè foliosis, foliis 6 vel 8 patulis linearibus basi attenuatis apice in mucronem brevem sensim angustatis pallidè virentibus midulis subtus proniè uninervis praetereaque obsolete reticulato-venosis ad margines et nervum medium scabridis sub lente crebris et regulariter lineolato-punctatis, internodiis folia aequantibus vel subbrevioribus, floribus ad ramulorum strictorum extremitatem solitariis terminibus breviter pedunculatis subsessilibusve verticillo 3-5 florum cymis superantibus suffultis, ovato-oblongo apice truncato obsolete margine subglanduloso crescenti subbilobo cincto, corollae e sicco alba vel pallidè flavescenti glabra carnosula breviter tubulosa ovario inferius lobis brevibus erectis oblongis apice cucullatis apice obtuso brevi intus flexo, antheris flavis oblongo-linearibus basi sagittatis filamentis brevissimis suffultis medio tubo in-

serlis, stylo ferè ad medium usquè bifido ramis uuequahbus, stigmatibus nigricantibus oblongis, Jructu

Hab in pinetis umbrosu. rrgiouib mediae montis *Olympi Thesvah* ubi fine Julu 1851 floriferam detexit cl dc Heldreich

Caules 3-4 pollicares, folia 4-5 lineas longalmeam dimidiam vel pauld ampln's lata Corolla 2 Imeas circiter longa Species dislinclibima habilu *Mtehrmgiam muscosam* referejis nulh alifB speciei generis propifis jproYimanda

(*JLs A moUth* Boisi Diagn III, p 31 eadein ac *A Awidwmis* Sims dclonda ost LOCIH « Syria » anncissimo a Sprunei qui earn milu commurucaviL nidicatu\* probabililer erroneus est Hanc a saxohis monlisifr/M/H6.N prop6 *Tnkula* (Heldr Oiiib ) ot collibus sabulosis ad *Mega&jnlron* Acliaaic (SartonJ habeo

ASPEIUULA AFUNIS Coiss el Huel (Sccl *CynoHckiLtt*)

A poreums IIIIU caudiculis nummosissimis ramosè piostialLs icnuibus itidiu ali^ Coins volui>tis plus minùs obbiti^, caulibus ascedentibus brevibus\* simplicibus foliosi-s glabife brevitci hirLulisve, loins qudterms angusiA hneanus oblusis margine revolutis glabrescentibus vel patulfi et breviter pubescentibus infimis brevis>simis approximate supenonbus elougatis internodns distantibus, flonbus sessihbu^ 3-5 in fasciculos terramales sohlanos vcl 3-4 breviter pedunculatos umbelldlo^ di^positis, foliis florahbus flores a^quantibus brevioribusvc ciirvatis apice in raucronem obtusum albidum brevem abeunlibus, corolla glabrâroseft carnosulfl siccitate rugobfl tubuloso-campanulata internè attenuate lobis patulo-recurvis oblongo-lanceolatis in mucronem obtusum callosum abeun- Ubus tubo tnpld longionbus, ovano oblongo apico margine rubello lobulato obbolol6 obsito, stylo ad tertiam partem bifido, stigmatibus ovato-globosis nigricantibus, anthens oblongo-hneanus luteis medio tubo insertis, fnictu

Hab in alpirus Araicniac Turcicas propt's *Palanteuken* alt 7000'-8000' cl Huet du Pavilion Fl Julio

Planla 3-4 pollicans densè caBspitosa liabitu et flonim magnitudme valdè afflnis formis subelongatis Asp *mhdee* Fl Grseca quae folns omnibus ngiduh in mucronem longum acutum abeuntibus *d* nostrâ eximiè difTerf *A alpitui* MB a nonnullis botamcis

vanetatibus *A cymnhtceae* adnumerata differt ovano et corollâ pubescenti-scabns, corollae tubo lobisque brevioribus, foliorum breviorum nervo medio vahnion

ASPERCLA THESSUA BOISS et Hold (Sect *Cynandiice*)

A perennis glabra multicauhs, cauhsbus elatis ascendentibus virgatis sparsim foliosis supernu oppositè ramosis angustè pyramidatis obsolete quadrangulis, lolus qualernis infimis approximatis ovato-oblongis miniims puberulo-pruinosis caetens glabernmis linealibus acutis margine subulsubrevolutis nervo medio crasso percursis, mlernodiis Joins longioribu\*. folns supenonbus floralibusquibims, llonbus lon g6 pedicellate ad apicem ramorum panicute paucis laxe fasciculatis, corollae sicco rosesse glabra longe tubulosa limbo ampliato III lobos hncare\*. tertiâ parte lobi longiores apice in calluni oblongo-linearibus nigris ad tertiam corollae partem superiorcin mscrUs, ovano ovato prumoso, stylo ultrd tertiam partem bipartito, stigmatibus ovatis rugns, fructu

Hab in regione sylvaticfl *Olympi Thessah* et in region e alpinâ *Parmst* Heldr pi c\ s N° 2462 et 2703

Gauls pedales vel etiam longiores, loha intermedia 8-10 bneas Jooga saepe lineae <sup>3</sup>/<sub>4</sub> lata Corolla  $3\frac{1}{4}$ , lobi 4 'U hneas longi. Species a&nis *A UmgiflortBy!* K a qua differt fascicuhs pauciflons, flonbus pedicellatisnecessilibusmajonbus, ovano pruinoso nee luberculato-scabro An tamen hujus vanetas?

ASPERUIA suFFRUTICOSA. Boiss et Heldr (Sect *Cymnchicce*)

A basi suffrutescens cauhsbus filiformibus induratis nudis flexuosis prostratis cortice cinerascnti vestitis, ramis ascendentibus simplicibus pruinoso-puberubs infernè foliosis, folns quaternis hneanbus acutiusculis muticis margine revolutis nervo medio prominenti subtùs percursis glabris mtidis siccitate nigricantibus saepissim6 patulis recurvisque, flonbus sessilibus fasciculatis pseudoverticillos 2-3 remotos ad ramorum apicem formanlibus, folns floralibus breubns, coiollâ o sicco fusco-luteil glabra tubulosâ in lmv

hum sensim ampliata lobis oblongis apice callo obliquo  
terminalis tubi parlem quartam aequantibus, antheris oblongis  
nigri, stylo fere ad modum parlem usque bipartite, stigmatibus  
margine globosis

Hab ad rupes prop<sup>1</sup> cinctiis montis *Delphi Eubem* alt 5000'  
cl de Helderici

Caudiculi squamulati saepe elongati hinc dimidiam et amplius  
diametro laniati scirpales Corolla linaea aut paulo ampli-  
us longa Folia longiora 5-6 lineas longa pluraque breviora  
Ut precedent) c\ terminalia *A longiflora* et *ejus* varietatis *A fla-*  
*adoe* Ten distincta videtur vegetatione, foliis abbreviatis firmio-  
ribus patulo-reflexis, colore margine plantae exsiccatae Ab omni-  
bus formis *Asp strut* distincta foliis laniatis non mucronato-  
**aristatis**

ASPEMJLA PILSTALOE Boiss (Sect *Cynanthia*)

A perennis Cicspila, radici<sup>1</sup> crassa, caulibus suffruticosis  
prostratis brevibus, ramis numerosis otCipitosis ascendentibus pu-  
**mulis** inferne denbissimis foliatis dem infraot flexuosis nudis  
**sparsis** et stent ramulosis, foliis prumososcabrulis quater-  
nis in verticillos subconfusos dispositis hinc setaceis margine  
convolutis in mucronem attenuate patulo-recurvis, flonibus par-  
vis ad ramulorum apicem sessilibus fasciculato-capitatibus, foliis  
floribus oblongis apice acuminalibus albidis ovata parum exce-  
dentibus, corolla e sicco alba vel pallide rosea breviter tubuloso-  
campanulata a basi amplata lobis lanceolatis patulis tertiam co-  
rolo partem aequantibus apice acutis intus ilexis, antheris ob-  
longis fuscis, stylo fere ad basin bipartite, stigmatibus glo-  
bosis marginatis, ovario ovato prumoso-scapulato

*A cynanthia* 0 *supra* Grisob Spicil non MB

Hab in *Bithynia* prop<sup>1</sup> Bolit cl doctor Pestalozza

Itami 4-5 pollicares, folia 2-3 lineas longa tenuissima, corolla  
lineam unam vix excedens Species ab *A cynanthia* et *A su-*  
*pra* (quae forsitan tantum hinc varietas est) distinctissima foliis  
confertissimis multo tenuioribus brevioribusque in mucronem  
longiusculum abscuntibus nee submuticis, flonibus fere dimidio mi-  
nionibus confertius capitatis, corolla a basi amplata inferne



tubulosfl—*Ad A supiruum* MB nunc refcro specimina a cl Balansa in *Tmolo* suprâ *Bozdagh* lecta et sub *A procumbenhs* Boiss nomine dislnbuta

ASPERULA RUMELICA DoihS (Sect *Cynanchica* )

A perennis multicaus, caulibus elongatis prostratis vel ascendentibus infernè brevissimè puberulis dein glabratibus albis mtidis quadrangulis mfracto-flexuosis opposite dichotomèque ramosissimis parcè foliosis, folns tunonum radicalmm pruinoso-scabndis abbreviatis caBtens quaternis glabns vel puberubs angustè hneanconvolutis slnctis breviter mucronatis, ramulorum brevissimis binis, flonbus parvis ad apicem ramorum inflorescentiae terms subsessilibus, corolla albi breviter tubuloso-campanulata a basi ampliata breviter hirta lobis corollae tnp16 brevionibus apice cucullatis obtusis, antheris mgris oblongo-hnearibus, ovario ovato tetmiter granuloso, stylo ad basin bipartite ramis divancatis, stigmatibus globosis nigns

Hab in planitiebus incuHis (*Steppes*) Rumehs circA *Kiistendje* Legi flonferam fructifcramque Augusto 4342 >

Caules pedales procumbentes plures ramosi laxè paniculati ramulis ultimis temis vix tres lineas longis Folia intermedia 5-7 hneas longa tenuia Corolla luieam longa Planta formas diffusas *A cynanchicm* referens sed ab *c&* folus lenuioribus, mflorulentid mult6 ramosiori divancalt, ramulis flonbusque ternatis, corollis minimis hirtis distinctissima Gorollae formd inter *Cynanchicus* et *Gahoides* ferè media

ASPERULA OVALIFOLIA Boiss etHuet(geçt *Galmidete* )

A perennis caespitosa, radice ramosi crassiuscula, caudicibus subterraneis intricatis flexuosis tenuissimè filiformibus nudis sensim abeuntibus in caules nanos lenues albos nitidos brevissimè et Biihcorymbosè ramosos densè foliosos, folus minutis mgncantivindibus glabns vel breviter scabndo-puberulis ovali-ellipticis utrinquè attenuatis subpetiolatis acutmscuhs qualernatim in verticillos eorum longitudine plerumque minùs distantes dispositis, flonbus subsessilibus ad ramorum apicem in fasciculos capituli-

fbimc> c folus vix exscitos confcrUs, foln^ iloiabbus dimnmtis, Poiollit<sup>1</sup> albac CAmparmlatrr gl.ibræ lobi^ ohlongo-lanceolalis obtusis tubo vix. brevionbu\*. inLus pallidè hlaoinis, anlhens oblongis lulois, sljlo ad (juarlam parlom bipartite, stigmalibus globosis mgns, OVJHO giabro

Ilab in monlc *Tnh Dagh* Armenia<sup>1</sup> piopr *Ei zn oum* all 0-10000' LI Hact du Pavilion Floret Julio

Specie^ distinclissima niilli ah<E dilmis Habitus *Gala Iferqjnm* vol *comrlenhizi* Caule^ cum caudicuhs 3-4 polhcare\* tenen Folia majora 2 *Unoas* longa, linram lata, plcraque minora CorollU 1 <sup>1</sup>/<sub>4</sub> tineas longa

GALIUM MUIICIGUM Bois^ el Ileui (Sect *Eugalia* )

G pcrenne glaucam glabornmuni, Laudiculis lenuibus suffruticosis laraosis, cauibus a^Lendentibu\*> vcl<<rectis albis nitidis subcylindricis supornè m paniculam diiguslam slncliu^culam abeuntibus, folJH senis. hiieanbus obtubiusculis dd margines revoluto^ if mole el obsolete acabridisciClcriini brevibus facie siipenont>ub lentr seriatim punclulaUs ricrvo medio basin versùs prominenti ni facie infcrion inagis albidâ percursn ssepe lfenonbus praesertim defloxio, folus supenoribus brevi-ssimis angustis, panculsB ramis rrcLo-palulls Lcnuiter fLliformibu^, ramulis capillanbus abbreviatib, flonbus 3-5 i,ubse;>silibtis vel pcdicelhs ovano aBquilongis sufTultis ad ramulorum extrcmUales capitato-congestis, corollaa lacles campaiiulalac ad medium usquè quadnlobaBlobis o\atis obtusiusculis muticis, anlhens tlavis, ovano lacvi

*Asperula galwides* Dourg pi exs Hisp 1850 N° 597 non MB

^ Hab in rcgno Murcjro in fi^suns rupium, ad monastenum *Fuen&anta* prop6 *Murcia*^Bourgcau! cl Langet, in regno *Jenensi* propè *Trujala* cl Blanco pi exs 1819 forma folus pauld longioribus

Plan La inter *Galium glaucum* L — *Asp gahoidem* MB et *G immnosumBoihs* Yoy Esp quasi media A priori differt glaucedina majon, caulibus magis suffmticosis, folus brevionbus margine vix scabndis, inprimis flonbus dimidio mmonbus brensunè nee longiusculè pedicellalis, corolla; lobjs brevionbus non acutatis. *G pi wnoium* qnoque vald6 glaucum differ! folm ollopticis mu-

cronatib brevisijimifa, painculffi ramisj patentibus Floret cjusdein magnitudims in eo quoque congcsli suiit sed tamen longiùs podu cellali, anthers nigrse

GALIUM XYLONUM Doiss et Huct (Sect *Ewjalu* )

G perennc glabmm siccitate ingrscens rhizomato abbreviate crasso Lgnoso, caulibus numcrpsis pumilis crectis vel ascendentibus quadrangulis angulis albis rotundatis, fohis 6-7 ms angustè lineanbus brevissimis opacis in mucronem albidum obtusum abeunlibus SQbtis nervo prominulo percursis erecto-patuli^ internodio brevionbus, flonbus in pauculam corymbosam dispositis, corollan albaj lobis in raucronem brevcm obtasum mtùs recurvum abeuntibus, antheris Ilavidis tandem fuscscntibu<i, stylo a pice tantum bifido, fructu laevi

Hab in dechvibus glarcosis ad radices montis *Tech Dag* Armenia propè *Erzeroum* Julio 1833 cl Huet du Pavilion

Gaules vix semipedales, folia C-7 lincas longa hneai '/--Vs tola Flores magn Vald6 afile *G tnegalantho* Boiss pro-cujus vaneitate primùm habui, tamen specific^ ut \idelur ab eo differ! fohis angostionbus exactis lineanbus cujus nervus medius in sicco subtùs vald6 prominet nee ut in *G megalantko* obsoletus est Flores msuper *G megalmthi* majores sunt *G mite* Boiss et Hohen est planta multo major pamculd ramosissimã

GALIUM NEVADENSE BOISS et Reut (Sect *Eugaha* )

G perenne caospitosum, caudiculis setaceo-flliformihus proslm-tis nudis abbreviatis intricatis, cauibus procumbentibus ascendentibusque tenuibus quadrangulis pumilis glabris puberuhisque nitidis internè densè supernè remotè foliosis, **fohis** G-7 ms palhdè virentibus mtidulis sub lente eximiè punctulatis subtùs nerro medio angusto percursis margine angustè revolutis Infcnonbus oblongis ovatis vel ovato-rotundis supenonbus oblongo-Uneanbus vix inaBqualibus, omnibus longmsculè et supremis exceptis abyaptè mucronatis, paniculae terminalis corymbosaB ramis ssepiùs maequa-Ubus elongatis erecto-divergentibus bis trifidis, flonbus ad ramulorum apicem 3-4 ms, pedicelhs stnetis fructu Ijevi 3-8pld Ion-

gionibus, corollas albi cainpanulatai lobis obtusiutulis, stylo brevi ad basin usquè bipartito

*G sylveMe tai alpestie* Boiss Voy Bot Esp non Gaud

Hab in regione superiori montis *Siena Nevada* frequenter

Haec planta cujus caules a 2 pollicibus ad pedem dimidmm ferè variant, genere Galio nunc labonbus optimis cl Jordan meliis illustrato, a vanctate citata *G sylvestn* — *G amsophyllo* Vill longiùs differt ctpropiùs ad *G tenue* Jordan habitu etcaulmm tenuitate accedit, ab hoc tamenfolus praesertimfenonbus magis dilatatis abrupt6 mucronatis margine rvolutis, pamculas magis corymbosao ramis elongatis, cauhbus eximiè angulatis discedens

Obs *Gal Cihcum* Boiss et Heldr Diagn X pag 66 est lpsissimum *G const) idttm C* ha lib Jordan, a recentionbus a *G palustn* prob6 disinctum, nobis co tempore ignotum quo *G Cretuum* descriptus

GALILIM PLEDBIUM BOISS et Heldr (Sect *Eugalta* )

G perenne cspitosum nanum, caulibus tenuiter liliformibus basi ascendentibus denudatis intricatis quadrangulis, folns 6-8 nitidis lente punctatis mfenonbus ovato-oblongis csbtens oblongis oblongo-unearibusvc omnibus subtùs nervo prominulo instructis margine subrevolutis in mucronem abruptiuscul6 abeuntibus, pamculas termmah paucillorâ subtrihdâ ramis pedicellisque capillaceis stinctis his ilore sesqui vel duplfl longionibus, corollae lobis obtusmsculis, anthesis flavidis, stylo apice bifido

Hab ad rupes in regione alpina montis *Olympi Thessahce*, cl. Heldr. fine Julii 1851

Caule\* tenuissimi 2-4 pollicares, folia intermedia ferè 2 hneas longa, floret eib *G Imis* paulò minores Ex affinitate *G Icevis*, *G anisophylhetprfcsertimtf JussimViil* et *G Nevadmsis*, ab eis folns minonbus et ultima specie excepta longiùs et abruptius cutpidatis, pedicellis setaccis, stylo non biparlilo distinctum Hdc notd habituque magit\* accedit ad *G demissum* Boiss Diagn quod differt colore nigricanti nec viridi-flavescenti plantae exsiccataj, foliis vix mucronatis, pedicellis folia supercraa non excedentibus

GALIMUM CYLLENIUM BOISS et Heldr (Sect *Eugaha* )

G perenne glabrum vel parcè et minutè pubescentum siccitate nigrescens nitidum caespitosum nanum, caulibus densissimè foliosis, foliis senis linearibus basi attenuatis apice longiusculè mucronatis inferioribus obsolete superioribus subtis promulè nervosis, floribus terminalibus paucis corymboso-umbellatis folia superiora non excedentibus, pedicellis fructu sesquialongioribus, corollae albis patentis lobis acutiusculis, antheris luteis

Habitat in fissuris rupium montis *Kyllenes* Peloponnesi ad cacumen alt 600-7000' Heldr ! Orphan Fl graec exs N° 183

Planta foliis nitidis secus caulos densè imbricatis anastansque *G Pyrenaeicum* et praesertim *G Olympicum* referens ab eo tamen facillè distinguenda foliis multò latioribus (scilicet 3 lineas longis lineam dimidiam latis) nervo tenui nec valido subtis percursis brevibus cuspidatis. Formae minores vulgo *G Orientalis* a nostra specie cum habitu quoque accedunt semper distinguuntur caulibus basi suffruticosis nec caudiculosis fragillimis, folia brevius cuspidata magis prominenter nervosa, panicula exserta contracta

## VALERIANE^

VALERIANA LEUCOPHLEA DC Prodr IV, p 641

V radice tuberoso-incrassata brevi basi in nullo & bivio & imos abeunti, caule erecto glabro simpliciter crassiusculo remotè folioso, foliis glabris radicalibus et inferioribus linearibus angulatis obtusis in petiolum brevem basi late membranaceo-vagina nuda aboumbellatis caetens sessilibus pinnatipartitis lacinis angustè linearibus vel linearibus setaceis elongatis acutis terminalibus sspè sublatioribus floribus corymbum capitatum densum ob ramulos laterales binos sspè oblongum formantibus, bracteis numerosissimis linearibus dignantibus albo-marginalibus corollas subaequantibus citè postquam

ihesineassuperantibusfructu inultolongioribus, corolla lubo limbo paulo longior paulo supra basin obsolete gibboso, fructu oblongo apice attenuato dorso 5 sternalo pils adpressis alindis dorso hincatim inter sternas etloU facie mtenon ohsito, limbocalycis 6-8 lobo lobis brevibus in ansis b-8 tortuosas plumosas achBino longiores abscunlibus

*Vala tana biadeala* m pi Huctian Armen ex

Ildb propè *Jiayazid* Armenia } Aucher N° 4G91, in monlo *Tritl Dugh* propè *Eizeroutn* alt 8-9000' cl Huct du Pavilion

Caulis lonler 4-0 pollicans fractiferpedalis scsquipcdihsve, folia radicalia 1 1/2-2 pollicos longa 3-3 1/2 lineas lata, buperiorum lacinae 0-0 linoai longae Habitus *V tuberoses* quac differ! folns radicalibus oblongis, cauhsis mums leninter disscctis, bracteis concolonbus lruclum non ssquantibus, calycis limbo 12 setoso sellis longiis plumosis Corolla e sicco mihi carnea nee leucophaea visa ftsf, nidi nomen spocificum Tournfortn potiùs c colore brae tearum onundum

VALEIIIANA OLENVEA BOISS et Heidi

*V* rhizomate crassiusculo verticah superno petiohs vetustis squamoso, cauhsibus 1-3 pumilis ascendentibus foliosis simplicibus glabns, folns giabns radicalibus longè pctiolatis oblongis obtusis indivisis vel ad hmbi basin utnque segmento oblongo mulW minon auctis segmenlis inLegerrimis, cauhsis 2-4 breviter petiolatis tnpalitis segmenlib oblongis apice attenuate obtusnibculis lateralibus multd minonbus, summis subsessilibus lanceolatis mrnonbus, floribus in corymbum terminalcm sub anthesi densmsculum confer Us, braclois lanceolalis oranum aequantibus, corollae roseaB tubo paululum supra mscrtioncm gibbo hmLo sesquilongion, fruclu oblongo-linean glabro hneato-costato, stamimbus longè exsertis

Hab in parte meridional! montis *Olenos* loco *Kolopano* dicto alt 6000' ad rupes cl Theod de Heldreich Jul 1848, in raonte *Cyllme* (*Zma*) alt 5500'-6500' prof Orphanides

Caules 2-6 pollicares, folia radicalia petiolo ssepè bipolhcari suffulta pollicem aut pauld amplms longa, corymbus suprd folia suprema breviter pedunculatus, corolla ferfr 3 lineas longa Alii-

ins *V SUXUOICBC A Mejer et V glokularuBfolive ad ab omnibus*  
notis in dscnplione enumeratis distinctissima

VALERIANA CRINII Orphan

y pcrennis caudiculis iihformibus ramosis nudis, caulibus  
pumilis smiplicibus foliosis erectis sub lente sparsim papillo-  
so-hirlis, folns vindibus glabns vcl sparsim papillosis omnibus  
mdivisis radicalibus infcrioribusque ovatis vel ovato-rotundis  
obtusis integris vcl obsolete repandis in petiolum eis 2—4pld  
longiorem abruptè attenuate, cauhs mtermediis e basi lation  
rotundala<sup>1</sup> oblongis acutmsculis repando-denticulatis petiolo eis  
brevion suffultis, suprcmis hneanbus, flonbus in corymbum  
terminalem capitatum breviter ramosum confertis, bracleis li-  
nean-lanceolatis ovanum glabrum paul(i superanLibus, co-  
iollai iosea<sup>3</sup> tubo limbo subaequilongo pauld suprA insertionem  
gibboso

Hab in monte *Chelmos* Peloponnesi propè *Sty gem* cl Prof Or-  
phanides Fl Junio

Gaules 3-4 pollicares, lolia 0-8 hneas longa Corolla vix 3 lioeas  
longa, anthers exsertae Species & *V Olencea* radicis mdole, folns  
indivisis, corollae tubo pauld brevion distincta, propè *V supmam*  
ct *sahuncam* collocanda

CEMTRANTHUS SiBTionrii Heldr et Sarton.

C perennis glabernmus glaucescens rhizomate caespitose multi-  
cauli, caulibus teretibus virgatis plemmque simplicibus foliosis,  
folns oppositis ternisvc oblongo vel hnean-lanceolalis mtegerimis  
nervosis inferioribus in petiolum longè attenuate obtusmscuhs  
csetens basi attenuate subsessibus longè et sensim attenuato-acu-  
minatis saepiùs falcatis, paniculec corymbosa; terminahs plerùmque  
abbreviataB cymis inferioribus breviter pedicellatis caetens subses-  
sibus, bracleis hneanbus puberuis, calcare tubo quarts parle  
brevion ovano subtnpld longion, gemtabusexserlislimbumpauld  
excedentibus

*Val angmtifoha* Flor Graca tab 29

Hab in fissuns rupium apricarum Grseciaj *Naupltp*, *AaocorinthQ*

(Doiss Heldr ), *Lycabelto*, *Hgnirto* mendionali, *PaTitelho* in Atticâ  
 Illdr ctSart Fl Apr Mdio

Caulos pcdales scsqaipedalesvc Folia inferiora 3-4 polhces longa  
 12-3 lineas lata, corolla cum calcare 7-12 lineas longa Species  
 inter *C rubrum* et *angustifolmm* intermedia Prior cui magis  
 affinis habet folu latiora infima brevissimè in petiolum attenuata  
 supenora ex basi laU abruptè acummata, corollas tubum brevior-  
 rum *C angustifolvus* longiis differt caulibus ramosissimis, calcare  
 ovano vix longior

CENTRANTHUS NEVADENSIS BOISS

*C glaberrimus* glaucescens rhizomate suffruticoso multicauli,  
 caulibus circatis simplicissimis foliosis, folus inferioribus oblongo-  
 linearibus in petiolum attenuatis caitens Imeanbus basi subat-  
 tuatis sessilibus omnibus subtus uninervis obtusiusculis, cymis  
 terminalibus confertis subcapitatis sacpiis solitariis, cymis lateralibus  
 cum adsunt breviter pedunculatis paucifloris, bracteis lanceolatis  
 membranaceo-marginalis, corollae rosae calcare ovano dupli-  
 longioribus multoties brevioribus, antheris sessilibus longè exsertis,  
 fructu oblongo-lanceolato facie externa saepius minutè tuberculato  
 interna quinquecostato

*C angustifolms* Boiss Voy Bot Esp non DC

Caulis 1/2-1 pedales Folia 1-2 polices longa 1/2-4 lineas lata,  
 corolla 6-8 calcar 2-4 lineas longum *C angustifolms* a nostris  
 specie di fieri caulibus ramosissimis, folus longioribus angustioribus  
 apice longe attenuatis, corollae et calcare brevioribus *C Ler-  
 rokn* Jordan nostris caulibus simplicibus magis accedens differt  
 folis trinervis aculis supremis acummatis, calcare corollaeque bre-  
 vioribus, antheris inclusis vel brevissimè exsertis Rhizoma *C Ne-  
 vadensis* cis omnium specierum proteronum generis multo magis  
 suffruticosum

VALERIANELLA ORIENTALIS Boiss et Balansa (Sect *Locustae*)

*V glabra*, folus oblongo-spathulatis repando-denticulatis obtusis  
 radicalibus in petiolum attenuatis caulis basi angustatis sessilibus,  
 caule a basi vel supernè dichotomo ramis abbreviatis tandem in-



crassatis, cymis capitato-confertis, - flonbus albis, fructu glabro breviter ovato dorso convexo costato-stnato facie interiori concavo clemum longitudinahter fissio subhianti, locuhs stenhbus conti-guis septo demum subevamdo sejunctis fertih sub media dorsi costa sito multo lationibus, pencarpio ad costam mediam dorsi et 2 costas laterales tantum spongioso-incrassato apice in 3 dentes brevissimos crassmsculos abeunti

*Fedia Orientalis* Schlecht in pi Kotsch Alep Kurd

Hab in lapidosis propè *Aleppum* (Kotschy), propè *Smyrnam* (cl Balansa)

Species distmctissima, flonbus nunc notis omnind *Valerianella* nee *Fedia* Fructus majores cum dentibus ferè i V\* lineaa longi lineam lati Inter *Loctistas* et *Selmomlas* fructus forma inter-media

VALERIANELLA LAXA BOISS et Balansa

V annia glabra, caule supernè plures dichotomo ramis diva-ricatis subincurns, ramulis florahbus subincrassatis, foliis radica-libus oblongo-spathulatis mtegris in petiolum attenuatis caulmis paucis sessihbus oblongo-lanceolatis basi saepè denticulatis, flonbus ahis in dichotomis summis sohlans alns per 3-5 in capitula ter-minaba congestis, fructu dichotomiarum tenuiter cylindnco obso-letè bisulcato dentibus tnbus brevibus rectis quorum unus brevior coronato loculo fertih cylindnco stenbbus obliteratis, fructibus terminalibus oblongis gibboso-curvatis dentibus tnbus rectis bre-vibus quorum dorsalis brevior terminatis locuhs tnbus dorsah fertili extu<sup>9</sup> elevatim corticoso-bicostato inter costas profundè sul-cato, caetens sublationbus stenhbus extus facie ventrah sulco pro-fundo sejunctis

Hab in collibue *Koukouloudja* propè *Smyrnam* cl Balansa

Species afiQnis 7 *Soyert* quae differt fructu breviort dentibus valdè maequahbus uncinatis coronato, loculo fertih dorso non ele-vatim bisulcato, inflorescenlia' minus laxa

**DIPSACE.**<sup>^</sup>**CEPHALARIA BOISSIERI** Reut (Sect *Lepicephalus* )

C annua, caule albido vel rubello sparsim, et retrorsum tuberculato-setuloso supernè subangulato prseterramulosaxillares non nullos nullos\e dichotomo, capitulis terminibus ovatis et in dichotomii pedunculis longis setoso-aspens suffultis, folus hnean lanceolatis acutis infernè sensim attenuatis basi breviter connatis denticulato-crenatis crenis ascendentibus summis angustè hneanibus integris omnibus prater marginem setuloso-ciliatum glabrusculis, paleis obovatis vel oblongo-spathulatis membranaceis breviter velutims in mucronem mbellum cis paul6 breviorum abruptè attenuatis, flosculis caeruleo-violaceis extis hirtis palearum anstas longè superantibus, anthesis fauce inclusis, involucello adpressè hirsuto 8 anstato anstis 4 involucello seqnilongis caetens tnpld brevionibus

Hab in *Synd* loco non notato (Boiss )

Valdè affinis *C Synacm* var *pedunculate* quaB differt flosculis fere dimidiò minoribus anstis palearum superatis, anthesis exsertis

**CEPHALARIA PILOSA** Boiss et Huot (Sect *Leptcephalitis* )

G perennis, caule gracili angulato erecto retrorsum hispido infernè parcè fohoso supernè glabrescenti sunptici vel tnfnrcato, capitulis mediocribus lodg6 pedunculatis, folus brevissimè puberulis praetereclque adpressiusculè et sparsim hispidis radicibus et inferioribus oblongo-lanceolatis acutis in petiolum brevem attenuatis subintegris vel sspius breviter et acutè denticulatis plerumque ob lacinulas breves hneares utnquè 2-3 lyratis, folus supenonibus ID lacinias angustè hneares pinnatipartitis sessibus omnibus conaceis, involucri phyllis ovato-triangularibus obtusis adpressè hirsutis, corollis ochroleucis adpressè tomentosis non radiantibus, involucello sub anthesi apice longè quadranstato. limbi calycini anstis msequahbus

Hab in multis circa urbem *Erzeroum* et Huet du Pavilion, Floret Julio

Planta tantum pedalis vel sesquipedalis. Folia inferiora cum petiolo 2-3 pollicina 3-4 lineas lata. Capilula ferè dimidio minora eis *C. cormiculata* Rasm et Sch. in indumento retrorso caulis affinis est sed hinc differt lacinis multo amplius radicalibus pinnatifidis, involucri non hispido, involucelli dentibus crassis triangularibus nec longis a basi tenuibus, calycis limbo in anastomosis multo copiosiores subaequales abeunt.

CEPHALARIA MICROCEPHALA BOISS (Sect *Lepicephalus*)

*C.* perennis, rhizomale incrassato pluncahu, caulibus sub lente minutissime puberulis virgatis a basi fohosis oppositèque raris, foliis conaceis laetè virentibus ad margines et petiolos pilis brevibus subdeflexis ciliatis caeterum glabris oblongo-ellipticis acutis basi attenuatis inferioribus utrinque acutè 2-4 lobato-dentatis intermedus minoribus lyrato-pinnatifidis segmentis lateribus lanceolatis terminali oblongo dentato vel integro, pediculis longissimis, capitulis sphaericis minutis, paleis velutino-hirtis exterioribus ovato-rotundis obtusis interioribus triangularibus acutis longiuscule ciliatis, floribus luteis, involucello (juncis) 4 anastomosis denticulis 4 intermediis minimis.

Hab in fauce *Dudera* montis *EWrus* Persiae borealis et Kolschy NM22

**Ab affinis *C. cormiculata* et *Uralensis*, differt caulibus a basi ramosis, capitulis dimidio minoribus, foliis inferioribus dentato-lobatis quidem sed raris. Species prior iterum a nostra distinguitur pilis longis deflexis partem inferiorem caulis vestientibus, posterior glabris.**

SCABIOSA SULPHUREA Boiss et Huet (Sect *Astetocephalus*)

*Sc.* perennis sub lente pilis densis breviter velutina pallescens virens, radice vertice, collo petioli vetustis squamoso, caulibus 1-3 simplicibus erectis tetraedris umbriferis bifloris foliorum parva bina remota ferentibus, foliis radicalibus ciliatis oblongo-lanceolatis integerrimis in petiolum brevem attenuatis acutis, cau-

llnis sessilibus basi connatis e parte inferiori latiori longè attenuato-acuminalis, Involucn phyllis lanceolatis acutis basi praesertim longè albo-hispidis flosculos centrales aequanlibus, flosculis sulphureis extus tomentosus exterioribus valdè radiantibus, involucri lubo (sub anthesi) densè et adpressè albo-piloso basi tereti, coronâ 20-22 radiatj, CILII limbo sessilibus 5 anthesis crassis nigris adpressè hirtulis coronâ multo longioribus constanti.

Habitatio *Tech Dagk* prope *Erzeroum* Armeniae alt 7-9000' cl Huet du Pavilion Floret Julio

Caulis pedalis yd paulo longior Folia radicata cum petiolo 2-3 pollices longa 3-4 hinc lata Capitulum magnitudinis illius *Sc mantimw* Pulchra et distinctissima species prope *Sc Cwcasiam* et *Sc alpestem* Kar et Kir collocanda

SCADIOSA ARGENTEA L var *Tmlea* Boiss et Balansa

Planta humilis Folia ad partem superioris caulis magis conferta pilis densioribus longioribus adpressis villosa sericea Capitula brevius pedunculata

*Sc Tmlea*, in Dal pi Orient e\ 1854

Habitatio in colibus circa stationem alpinam *Bozdagh* in Tmolo occidentali cl Dalansa

Hanc penam pro specie propria habuimus donec specimina plura a cl Balansa misa transitum ad speciem demonstrarent

KNAUTIA NYMPHARUM BOISS et Heldr (Sect *Tnchera*)

Biennis, caulis elongatis ascendens vel inferne decumbens teretibus fistulosis foliosis parte superiori oppositè ramosis indumento brevi patulo-subretorso velatinis, foliis tenuibus pallidè viridibus utrinque longè et sparsim pilis adpressis hirsutis oblongis acutis obtusè crenato-dentatis radicalibus in petiolum eis brevioribus retrorsum. hirsutum attenuatis, caulibus sessilibus, ramis oblongo-lanceolatis integris glabrescentibus, pedunculis longis tenuibus. indumento brevi crispulo pilis sparsis patulis longioribus intermixto obsitis, capitulis minutis paucifloris involucri phyllis deflexis lanceolatis acutis longè ciliatis lobibus brevioribus vel aequilongis, flosculis albidis vel carneis extus

pubcrulis, receptaculo villosa haemisphaerico, fructu piloso tetragono-subcompressa basi apiceque attenuata, involucri margine angustissimo quatuor lobis brevissimis cucullato-rotundatis denticulatis constanti, calycis limbo brevissimè pedicellato ferè ad basin usquè in 8 dentes lanceolatos aristatos basi pilosos fructu dumtaxat breviores diviso

Habitat in faucibus et sylvis umbrosis montis *Olympi Thessaliae* supra castrum *Hagw Dtonym* cl. Heldr. Floret fine Julii

Planta sesquipedalis. Folia inferiora cum petiolo semipedalia 2 pollices lata. Capitula numerosa laxè corymbosa eis *Kn arvensis* dumtaxat minora. Species distinctissima propter *Kn montana* Goult. **collocanda**



**DIAGNOSES**

**PLANTARUM ORIENTALIUM NOVARUM**

i KNK\A\_\_\_\_\_TYPI3 RAVBOZ FT S(,HDCH\HbT

DIAGNOSES  
PLANTARUM NOVARUM

PRÆSENTIM

ORIENTALIBUS

IN NULLIS EUROPEIS BOREALIBUS AFRICANISQUE ADDITIS

SERIES SECUNDA

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M<sup>o</sup> 8

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AUCTORE

E BOISSIER

Roc PHVS GBNCV SODAI

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LIPSIAE

APUD *ti* HEURMANN

—  
1856



## DIAGNOSES

# PLANTAUH MARIV PB ESERTIM ORIKXTALII !\]

## COMPOSITE

### *CURYMBIFEIUJ*

#### **PETASITES OLMIOLHITIS Hoi^h til HMM**

V loliis.po&lloi'Obiat>cciiUubub ieiiluiini-s.ubioluiidij> liau^eiv lalionbus acutè el uclie deutorialis uLimquè uiulibus. glabiiia-culis bat>i cordjUsi lubis lotundatis »mu lalo sujunctib pedunculo lougopilis cris-pis rans obbito Intjidculibu^, caulw iluiilen **vagus** mfenonbus laiç ovato-oblongib acumiiialu cucullalis aiuple**cau-**libus, pauculâ ihji&oideâ oblongâ laviu^culâ, capilulis omuibus peduuculatis pauciJlon&, braeLeis liieau-laiiceolaLib acuminate<sup>1</sup> pedunculos adpressoila\escenLi-birLos stfipiii^ acquanLibus, **invo-**lucn phyllis oblougo-lmeanbub lavidis obtusib bail tanlum **hirtis**, florum hermaphroditoruni rainis sljh brovibus ovatis

Hab in Armeniâ circâ *Zazulai hane* cl Uuet daFa\illon Flôï Maio

Species lanluin quoad plan lain heijiapbioditain et impoifecte quoad folia juniora adhucdum noUi SligmalisloimaPet *oflictmaU* appropinquanda ab eâ dilTeil fuhoiuiu auncuhs magis dnergenlibus, cauhum vagina amphoiibub cucullalis, unoluci^ llo&culit>que paucionbus ochroleucis nee violaceis IQSCI&VC Flosculi iceminei marginales paucisbimi ><pe iuilli

PLUQIEJL ARTitT-v **Boiss (Sect *Stylomus* )**

**M** cauhbus ba&i IIUILOM-, dcmidair rauio^i- iami> **classus-**

LUNIS erectis simpliciuatulis papilloso-scabridis: \* dense foliosis, foliis ellipticis acutis in petiolum brevem attenuatis utrinque argute 5-7 dentatis undique scabridis., capitulis in axillis superioribus pedunculis eis saepe longioribus glandulosis parceque hispidis suffultis corymbis terminalibus foliis eos saepe superantibus intermixtos foemantibus, involucri squamis adpressis scabridis hinc lanceolatis acutis ad inferius subcannatis pappo sublongiores sensim auctis, receptaculo elongato-punctato, lobulis focmineis multiseriatis centralibus hermaphroditis paucis, acheniis minimis cylindricis pneumaticis adpressis hirsutis pappo 5-7 setis longioribus superatis

Habitat in diluvio *Beloitsdustan* c. Stocks

Folia intermedia 9-15 nervis longa 3-5 lata Capitula liliata *PI Dioscondis* dupli majora Species corimbis orthocephalis foliis intermixtis, capitulis magnis, foliis argute dentatis ab omnibus distincta

SPHEILVMHUS STROBILIFERUS BOISS et Noe (Sect. *CitsptdeUa* i

Sphaeranthus annuus glaber, caule erecto a basi ramosissimo ramis erecto-patulis, foliis lanceolatis obtusiusculis mucronulatis remote denticulatis vel integris secus ramos in alas integras aoguste decurrentibus, capitulis axillaribus terminalibusque subsessilibus vel pedunculo crasso eis perquilougo utriusque ovatis rubellis, bracteu. capituli ovatis cucullatis in cuspidem duram eis dimidio brevioribus (losculos aequantem abrupte attenuatis, achenis glabris

Habitat in inundatis deinde in prope Noe Floretestate vel autumno

Planta 1/2-1 pedalis etiam procenosa Folia inferiora 1-2 pollices longa 2-3 lineas lata AENE angustissimae Capitula flonifera magnitudine pisi tandem dupli majora Axis cavata Bractee inferiores non adeo latae ut in *S. augushfoho* aliusque sectionibus *Cuspidella* et in superiores omnes apice exsertas sensim abeuntes, inde involucri universale minus distinctum est et species ambigit inter Sectiones *Cuspidellum* et *Polycephalum*

ASTER ALPINI% L \ar *Cyllenms* Boiss et Orphan

Rhizoma ramosissimo-caespitosum, folia cinerascens abbreviata magis spathulata, caule flonfen humillimi. involucri phylla intimis paucis exceptis obtusa Ligulae pallide

Hab in monte *Kyllene* alt 6000' ram\* cl Prof Orphanidès

Var *Armenus* Boiss et Huet

Dense caespitosus brevisVimè et dense hirtus\* Folia **angustata**  
Involucri phylla omnia angustata apice acuta vel acuminata

Hab in monte *Teclidagh* Armenia alt 8000' cl Huet

ERIGERON ORIENTALE BOHS (Sect *Tetmorphaea*)

E perenne, rhizomate abbreviato dense fibroso, caulibus erectis hirsutis densiuscule fohosis simplicibus apice capitula breviter pedunculata capitato vel subcorymboso-congesta ferentibus. folia radicalibus congestis oblongo-linearibus subspathulatis in petiolum attenuatis obtusis, caulinis strictis hneari-lanceolatis acutis omnibus breviter hispida scaberrimis, pedunculis vel brevissimis vel flore subduplo longioribus, involucri adpressè hirsuti grisei phyllis angustè hnearibus adpressis acutis, hylm roseis angustissimis pappi excedentibus, flonibus foemineis lubulosis plunsenatis, pappo achennis hirtis duplo longioribus

Hab circa *Erzeroum* (Huet du Pavillon), in monte *Savalan* provincia *Aderfndjan* Persiae borealis Aucher N° 4746, in herbis *Taun haunci* (Heldr)

Caules pedales et etiam longiores Capitula magnitudinis eorum *E acris* cm valde et forsitan mmis affine Tamen specificè distinctum videtur capitulis ob pedunculos brevissimos subcapitatis, ligulis non lationibus ied longioribus et ssepè numerosioribus

ERIGERON PULCHELLUM DC ex parte (Sect *Tetmorphaea*)

E perenne caespitosa patule hispida foliis radicalibus numerosis lanceolatis utrinque attenuatis acutis in petiolos longos basi albo-hispidos abeuntibus, caulibus folia longe excedentibus inonocphatis vel furcatis fohosis, foliis caulinis sessilibus lanceo-

lalh lineanbusqiu" acuminate in\olucn pihs articulatis crispis. IKivescentibus hirsili phylhs augu<sup>te</sup> hneanbu\* adpressis, liguhs iosris Intiisculis mvohicro duplo longionbus, floribus tubulosis omnibus heimaphroditis llavis pappoachennsjunioribnslongiore leceplacuh prsllis m longion

*Asta pnhMlus* WilJd *EngcHni Annemtm* Boiss et Huet pi Aimon ext▷

Ilab m monte *Tahriagh Aimenue* alt 8-9000'cl Huet du Pa-Mllon m *ArmeniA* loco 11011 notato Adcher N° 3248, in Alpibus Ibonco-dancasici<sup>1</sup>\* Sloven ' monto *Tarbngatm* Songan\* (Kar et Kn )

Vai *leitLitctib* — Liguke nivra<sup>1</sup>

Ilab cum t\po in monte *Teihdayh* Armenia Huet du Pavilion<sup>^</sup>

Caulcs 5-10 pulhcares, foha rjdicaha cum peliolo saspe 4-5 [tolhces longa smpii aulom breviora Capitula magnitudims eonim *Astens Alpim* qucm no&tra planta potiùs quam *Engerontes* habitu refert Piopò *E itwfloi urn* et *fngulnm* collocandum a quibus eximiú differt staturJ majon, folns lauccolatis acutis, liguhs fongionbus lationbusque Nosra planta cum planU Caucasicfl Steveni in DC herb et cum descriptione et loco WilldenowiiTDenfeconvenit, sed planta Sibinca et Dahunca a cl. DC citata diversissima est et Formam majorem *Ei uniflon* sistere videtur

#### KUGERON STOChSKNITM BOISI

lil annum, radice fibros<sup>^</sup>l, cauhbus pumihs" lenuibus fohosis a basi ramulosis tenuiter striatis infern6 glabns supern6 ut tota planta glanduloso-scabridulis, folns pingumsculib hnean-subspatulatis obtusmscuhs in petiolum attenuatis inferioribus ramulos-ubaequantibus glabns, superioribus rameisque angustè hnearibus scabnusculis, capitulis minutis peduncuhs hlifformibua flexuosis parce lohohosis <sup>uffultis</sup> lax6 corjmboso-paniculatis, involucri plijlhs parce glanduloso-viscidis subbiseriahbus oblongis acutmsculis mterioribus longionbus rubelhs acuminatis denticulato-fimbriatis, receptaculo alveolato, floribus marginahbus fcemmeis hgulatis plunscnahbui hgulâ linean revolutâ pappum parùm excedenti, interioribus hcrmaphroaitis pappo brevionbus, achenus <sup>ubcompre</sup>sis hirtis, pappo rufcscenti scabrido unisenah unifonni achenus mibdupld longion Involucrum paulfi superanti

Hab in ditone *Beloutschntan* propii *Johan* cl D<sup>T</sup> Stocks pi exs  
N° H06, ID regno Cabuhco propò *Jelalabad* cl Griffith

Planta scmpedalis, folia inferiors pollicera longa apice sesqui-  
lineam vix lata Capitula magmtudinib Illorum *Conyzie ambiguw*  
sed pappo multd brevion Species in genere involucris phyllis latius-  
culiSj ligulis brevibus siccitate apice convolutis insigiis

VARTHEMIA. IPHIONOIDES BOISS et Blanche

V fruticuiosa, caulibus ereclis virgatis jam paul6 suprà basin  
ramosissimis, ramis erecto-patulis foliosis ramulisque primùm  
crispo-lanatis dein glabrescentibus pubescentibusve dumum pam-  
culatum fbrmantibus, folns densi albo-sericeis obovatis ex apice  
lation obtusissimo ad basin sessilem amplexicaulem attenuatis,  
rameis usquè ad capitulorum ba^in numerosis brevissimis oblongo-  
hneanus obtnsis, capitulis ad ramulorum ultimi ordinis brevnun  
apicem sohtanis velbims obcouicis 10-12 flons homogamis, mvo-  
lucn pallidè virentis adpressè birti squamis laxmsculè imbricatis  
ab infimis brevissimis ad mtimas sensim auctis omnibus mfenon-  
bus praesertun obtusissimis subtruncatis, achemo adpressè hir-  
suto, pappi rufescenti setis numerosis scabns achemo dupl6 lon-  
gionbus, extenoribus nonnullis indistinctis brevissimis.

*Blanchea iphionoides* Boiss in pi Blanche Syr exs

Hab. in rupestribus calcareis omnium collium ad basin Libani  
circa *Saida* sitorum Folia prodit tantfim Julio, flores Octobr

Dumus densè paniculatus, multiflorus, ut videtur bipedals Folia  
caulina caulium novellorum 7-9 hneas longa apice treshneas lata,  
rameaha numerosissima *mvll*d mmora, suprema sensim in squamas  
infimas involucris eis breviores transeuntia Capitulum 4 '1/a hneas  
longum Ex hàc planta primùm frustulo flonfero tantum *notd.*  
genus *Blancheam* condideram sed specimimbus copiosis a clar  
Blanche et Gaillardot nuper collectis et cum *V Persica* et specie  
sequenti collatis quibus habitu sat congruunt compen notam e  
setis nonnulhs extunispappi brevissimis petitam non satis esse ut  
hanc plantam a genere *Varthmid* sejungerem

VARTIEMLV CONYZOIDES BOISS

V basi suffrutescens, caulibus erectis virgatis glandulosis breviter quo pubescentibus fohosis a medio sursum ramosis, ramis erecto-folialulis rigidis paniculam corymbosam formantibus, foliis adpressè luras ovato-oblongis obtusis apice phcato subretusis basi subatenuatA semiamplexicailibus rameis sensim diminutis supremis squamaeformibus in squamas involucri sensim transeuntibus, capitulis soli tars terminibus sub 15-floris obconicis, involucri adpressè Inrli albidi squamis ab inferioribus oblongis apice virenti breviter recurvo-squarrosis ad intimas lineares sensim elongatis imbnatis omnibus obtusis, achenus glandulosis infernèque hirsutis, pappo rufo multiseto setis scabns achemo duplfl longionibus

*Linosyris montana* DC Prodr — *Chrysocoma montana* Vahl ?  
*Inula conyzoides* DC Prod Suppl VII, p 283

Hab in monlo *Synai* Bov61 Schimperl

Prascedenti habitu etliarac^enbus valdfeaffinissed indumentum parcius glandulosum, panicula minus ramosa subcorymbosa involucrique squamae squarrosuc Antherse in hiic ul in pracedente long6 i, andatte qu£ notd a *Linosyris* de longè differt Genus *Varthemia* ab *Inula* cum habitu tñr capitulis homogamis satis differt *Chihadenus* Cass — *Jasoma* sect *Chihadenus* DC — *Jos gluhnosa* DC huic habitu et ctiacharacteribus proximò accedit et pappo regulariter bise-nato lantum differt

PLATYCHETE CARNOSA BOISS

VI suffruticosa caulibus tortuosib cortice albicanti vestitis, ramis novellis brevibus parcf fohosis parcè et laxè corymbosis, foliis teretibus carnosis lmeanbus obtusis subflexuosis infernè subatenuatibj capitulis terminalibus solitanis vel bims approximatis lolia suprema ea-subbracteantia vix superantibus obcomco-hemisphencis, involucri albidi glabnuscuhs squarrais paucis adpressis ab inferioribus oblongis angustè fusco-marginatis ad interiores lanceolato-hneares sensim auctis, achenus brevibus teretiuscuhs adpressè hirsutis, pappo extenon coroniformi breviter fimbriato achemo quadruple brevion, interioris achemo dupld longions pallidè rufe^centis setis subcomplanatis scabns

Hab ad rapas calcareas *Aligoum* propè fauces *Bolan* regions Beloutschistan cl Griffith

Affins *PI glaucescenti* a quà differt folns non glaucescentibus pauld breonibus, pappo paulo breviori non albo, corona achenn dupld iongion

PLATYCHIETE VILLOSA BOISS

PI basi suffrutscens tortuosa ramosissima tola villis longis adpressiusculis cnspuhs albo-villosa, ramis pumihs fohosia, fohis camosulis obovatis obtusis in peliolum senam attenuatis supremis lmearius, capitulis ad ramorum vel ramulorum apicem 2-3 approximatis subsessilibus folia suprema vix superantibus coiymbos ohgocephalos formanibus hemisphaenco-obcomcis, mrolucn araneoso-hirti demium glabrescentis squanus obtusis ab. infimis oblongis ad superiores lineares sensim elongatis omnibus adpressis, achenio (junio) adpresso hirsuto pappo extenon coroniformi longiuscule fimbriato, extenon eo tnpld longions caducissim setis albis complanatis scabns

Hab in ditone *Scinde* Indiae boreahs cl Doctor Stocks

Raminovelh3-5 pollices longi Folia mfenora cmn petiolo 6-9 hneas longa apice i 7,-2 linear lata AIBms *PI glaucèscenti* el *car-nom* a quibus mdumeato et folns plams differt

INULA PANASSICA Boiss et Heldr, (Sect *Bubomum* )

I perennis, rhizomate caespitoso, collo petiohs vetustis novelisque basi vaginantibus incrassato parcè lanalo, folus tenuibus adpressissimè tomentelhs cinereis novelhs subtiis magi&canis omnibus oblongis acutis basi apiceque atenuatis subintegris radice libns et caulinis inferioribus loagmsculfe superioribus breviter petiolatis, caule cano simplici supernè 2-3 capitula axillana reraotiuscula capitulumque terminale ferenti, pedunculis apice praesertim mcrassatis axillanbus capitulo EBquilongis vel dupld IODgionbus ternunah longion, capitulhs depresso-hemisphEBncis, involucn cano-tomentosi phylbs lineanbus adpressis extenoribus crassiusculis oblusiusculis Inlima tenmora acuta subaequantibus, extimis 2-4 sacpfe fohaceis lineanbus vel oblongis flosculos

superantibus aliquando capitulo duplo longioribus, floribus marginibus femineis unisexualibus breviter hinc indentatis, CSB-lens hermaphroditis, achenis striatis glaberrimis, pappi setis fere 10 achenio duplo longioribus

Hab in rupestribus *Parnassi* propè *Arachova* cl de Heldreich Floret fine Julii

Folia radicalia 2 $\frac{1}{2}$ -3 $\frac{1}{2}$  pollicibus longa in petiolum 2-3 pollicarem attenuata, omnia vel in *homonifolia* tenuia nec ut in *candida* crassa. Caules pedales longioresque. Capitula diametro 8-9 lineas lata. Ab *homonifolia* Sibth et *candida* distinctissima caulibus homoglyphis, capitulis majoribus, achenis glabris. Radius insuper in nostris species manifestos quoniam in speciebus citatis nunquam occurrit, forsitan ideò varietas radiata *Conyzes Candida* a Iannseo citata ad nos Irani speciem spectat

INULA HETEROLEPIS BOISS (Sect *Bubonium*)

Perennis tota dense pannosa cana, caespitosae collo basi petiolorum persistenti incrassato squamoso lanato multicauli, foliis crassis concoloribus integris vel crenulatis pagina inferiori saepe elevatim reticulato-venosis ovatis obtusis basi rotundatis vel breviter attenuatis radicalibus petiolo eis aequilongis vel longiusculis, caulibus etramis sensim diminutis breviter petiolatis, caulibus a medio sursum alternatim ramulosis apice divaricatis et dichotomae corymbosis, capitulis ad ramulorum incrassaturam dichotomae apicem solitatis vel saepe bimis subsessilibus, involucri phyllis inferioribus 1-3 foliiformibus subpetiolatis ovato-oblongis valde aequalibus majoribus superantibus intermedias cernunt brevissimis crassis linearibus obtusissimis adpressis, intimis membranaceis hirtis lanceolatis duplo longioribus flosculos aequantibus flosculis omnibus tubulosis marginibus femineis, achenis siccatis parce hirtis pappo 10 setis eis duplo longiori superatis

Hab in *Sipylo* supra *Magnesium* (Boiss J) in *Cand* (Pinaridji ad Smyram Balansa pi exs N° 246, in Bithyma Thirke sub *I candida*)

Folia crassa pannosa munda radicalia 10-15 lineas longa. Caules fere pedales, capitulum in dichotomiae superne saepe bimis soletarium



pedunculo eo longior suffultum, rami apice brevissime furcati saepius 2 capitula subcontigua ferentes. Planta a me ipso p. n. **cum** / *candtd* et / *hmomfokd* confusa. Affinis / *hmomfuhee* Sibth. *qusB* eximie differt foliis tenuibus nee crassis, majonibus, capitulis fere duplo majonibus, squamis patenti-subsquarrosis omnibus cernens ab intermediis ad intimas sensim elongatis dum ID specie nostra squamae intermedia} ab intimis brevitate et indumento p. n. distinctissimae sunt. *I Candida* species valde polymorpha (quacum / *hmomfoha* tamen non confundenda) a nostra specie magis differt inflorescentia, foliis acutiusculis oblongis in petiolum longe attenuatis, squamis involucri lacinatis ad internodios ad intimas sensim auctis, etc.

Obs. Gl. D<sup>T</sup> Gnebach in itinere Hungarico / *cordatam* Boiss. pro synonymo *I squarrosa* L. habet sed in descriptionibus Linnaeae / *squarrosae* nullus de foliis basi cordatis in / *cordata* missibus fit sermo. Citanturque patria Gallia et Italia ubi nostra species nunquam lecta est. Omni jure igitur pro / *squarrosa* L. / *bubonivm* Jacq. habenda videtur / *spirceifoha* L. eadem species quoque videtur.

INUIA \RIGULAT\ Boiss. et Balansa. (Sect. *Bubonmm*)

I. pereunis, caule erecto subflexuoso sinuato foliato pilis adpressiusculis hirsuto superne breviter in 2-3 ramos dimisso corymboso, foliis v. indubus utrinque breviter molliter adpressiuscule velutino-hirtis radicalibus et internodios late lanceolatis in petiolum longiusculum longe attenuatis, caulibus basi sessilibus breviter decurrenti late rotundato-auriculatis, ramis oblongo-lanceolatis basi rotundato-amplexicaulis omnibus obtusiusculis integris vel obsolete denticulatis, capitulis ut unoquoque ramo 2-3 pedunculatis villosis eis v. l. in sp. longioribus sullulis foliis ramis saepe superatis corymbum oligocephalum laxiusculum formantibus depressis latiusculis, involucri sordidi flavescenti-lanati phyllis erectis laxiusculis anguste lanceolato-lineari acutis subaequalibus, ligulis acutis trifidis discum non superantibus, achenis junioribus hirtis, pappo 15-16 seto.

Hab. in pascuis montis *Tmoh* Lydiae ad *Bozdagh* cl. Balansa. Floret fine Julii.

Planta sesquipedalis, folia inferiora 6-8 pollices longa 1/2-1/3 lata petiolo tripollicari suffulta. Corymbus 3-7 cephalus, capitula illius *I. conyzata* duplo majora magisque abbreviata. Alisms / *thapsoides* a cujus formis omnibus differt foliis basi late auriculatis auncibus adnatis nee longe decurrentibus ad scusim attenuate, capitulis duplo vel triplo majoribus pedunculatis nee sessilibus / *bifrons* L. quae folia superiora aunculato-amplexicaula quoque habet differt glabritie foliorum, capitulis triplo minoribus confertis numerosis basi bracteis ovatis eis brevioribus suffultis involucri glabro, etc

INULA GRANTIOIDES BOISS (Sect *Limbarda*)

Perennis tota indumento brevi conspuo-papilloso viscidulo obita, caulibus creclis vel basi procumbentibus crasmsculis ramosis, ramis usque ad apicem foliosissimis, foliis carnosulis multinerviis et caulibus cuneatis apice truncatis breviter trilobis lobis integris vel irregulariter 2-3 denticulatis basi longe in petiolum angustatis, ramis anguste linearibus basi angustatis apice integris vel 2-3 dentatis, capitulis soli ternis terminatis folio uno alterutro involucri subaequilongosopt; bracteatis, involucri squamis glandulosis adpressis paucis oblongis obtusmsculis ab externis subherbaceis ad intimas submembranaceas sensim aucta, ligulis paucis radio sesquilongioribus, acliens striatis. teretibus parvis, pappo multiseto rufescenti acheno vix sesquilongioris setis irregulariter inaequalibus

Habitat in ditone *Beloutschistan* cl. Dr. Stocks

Prope 7 *cnthmoidem* collocanda quae differt foliis omnibus hincanibus, pedunculis imbris squamulosis, involucri phyllis subaequilongis. Habitu valde affinis *Giontus Auchen* quae generatim differt pappo bisinato extenon brevissimo, interiori pauciseto

PENTANDRIA NADIATUM Doiss

Per annum saepius pluncaule, caulis erectis vel ascendentibus ferè a basi ramosissimis ramisque pluries dichotomis patulis et longe hispidis, foliis utrinque molter villosis integris vel parvis et remotè denticulatis radicalibus oblongis in petiolum brevem alle-

nuatis cauhsis rameisque ovatis oblongisque sessilibus amplexicaulis, capitulis ex axillis supremis terminalibusque solitariis pedunculis tenuibus villosis eis 2-3plo longioribus suffultis, involucri phyllis subaequilongis extensoribus setaceis vix distinctis squarrosopatentibus hispidissimis interioribus erectis angustè hinc ciliatis, florum radii femineis angustè hinc hirsutis longe parte superioribus glabrescentibus induratis radio duplo longioribus, achenis glabris, pappo 10 seto

Hab in Indiae borealis provincis *Sande* cl Stocks et *Peshawer* cl Griffith

Hujus plantae specimina aha pedalia alia minora coram oculis habeo. Folios, capitulorum magnitudine *P. dwancato* similibus ab eo egregie differt pedunculis minoribus, involucri hirsutis quidem sed laevibus squamis omnino occultanti non vix distinctis, hinc non Mt in *P. divaricata* disco vix tertio parte longioribus parteque superioribus hispidissimis, achenis glabris nec hirsutis, pappo 10 nec 5 seto

Obs *Inula pulchra* DC Prodr Suppl vol 7 p 284 est *Pentanema Auchen* Boiss

PULICARIA AHABICA Cass var *Hispanica* Boiss

Planta glabra nunquam cana. Capitula omnia dichotomiam utet terminalia longiusculo pedunculata. Ligula\*. plerumque paulo majores

Hab in Hispania centrali et australi, Lusitania, *Tingide* (Salzm)

Hanc pro specie propria habemus sed characteres achenium et pappi omnino eadem «t transitus observant — *P. Kotschyana* Schultz in Kotschy pi Alep Kurd est *Pul. uhgmosa* Stev = *P. dentata* DC (quod nomen quamvis antiquum seponendam nam species sapius foliis integris gaudet) Hac *P. uhgmosa* a *P. dysenterica* radio brevior tantum differre videtur et forsitan hujus forma australis tantum est — *P. inchoeptata* DC Prodr et herb est tantum *P. Arafoca* Cass e specimine demisso vix evoluto descripta — *P. desertorum* DC. est *P. undulata* ejusdem auctoris ipsissima

## PULICAMA STOCKSII Boiss

P annua pumila glanduloso-scabnnd breviter hirta canescens caule a basi ramoso corymboso ohgocephalo, folns infenonbus oblongis obtusmsculis denticulatis sessilibus basi attenuatis caetens oblongo-hneanbus subintegns basi semiamplexicauhbus, peduncuhs longmsculis foliolosis, involucri phyllis extenonbus vindibus breviterhirto-subscabndis hneanbus obtusmsculis disco pariunbre-vionbus, intmonbusanguslionbus subbre-vionbus membranaceis acutis, hgulis disco dupld longionbus, achenns hirtis, pappo extenon coromformi acutè lobato mtenonlOseto

Hab. in ditione *Beloutschtstan* cl Stocks

Planta 3-4 pollicans, folia in femora pollicem longa 5-6 lineas lata Capitula llhs *P Arabic*® paulò raajora et multd longiùs radiata Species distinctissima juxtd *P Ruppelln* Scultz Abyssimcam collocanda

## PULICAMA LONGIFOLTA BOISS

P perennis saopiùs inuUicaulis, cauhbub erectis vel ascendenti-bus rubelhs follows pubescnttbus subglandulosis elongatis paniculato-ramosis vel subcorymbosis, folns Tindibus scabndis praeterea plùs minùsve hirtis mfimis hnean-oblongis in petiolum attenuatis ca?tens hneanbus elongatis integns vel remotè denticn-latis supra basin angustè scmiampleKicaulem sspè angustatis, rameis angustè linearibus, capitahs omnibus longiusculè peduncu-latis peduncuhs hirsutis nudis vel minutè squamulosis, involucri phyllis hirsutis linear-setaceis adpressis extenonbus pauld bre-vionbus mtimis acuminatis disco şublongionbus, hgulis tnden-latis disco sesqmlongionbus, acheniis minimis hirtis, pappo exte-riion cupulan dentato interion 10 scto achenio quadrupld Ion-gion

Hab in humidis jugi Sinitici Schimper pi exs N° 317, 216, 301 sub *Pul Aralnca* el *Conyzd B&vei*, deseì^i /Egyptiaco-Arabici cl Husson I circd *Bagdad* Aucher N\* 3095, in Africà boreali circà *Pistora* et *Batna* Balansa pi exs 1853 N° 774 sub *P Arafocd*.

Planta elata pedal is longiorque Folia inferiors 3-i polhces

longa 2-3 hneas lata, capitula magnitudims eorum *P Arabica*® quicum diu confusa fuit et quae differ! radice annua, foliis oblongis, inflorescentia dichotoma nee paniculate capitulis in dichotomis saepe breviter pedunculatis, squamis nitidis involucri vix acuminatos, indumento in typo Orientali speciei semper plus minus senceo

LACHNOPHYLLUM NOEANUM BOISS

L monocarpicum totum longe dense et mollior hirsutum cinerascens sub pilis patulis glanduloso-viscidum, caulis pluribus ascendentibus foliosis simplicibus vel basi patule ramulosis superne angustis paniculatis, foliis integris oblongis obtusiusculis basi sessili cordato-semiamplexicaulis, radicibus sub anthesi jam exsiccatis, ramis angustis hinc brevibus, paniculae ramis brevibus crassis strictiusculis glandulosis monocephala vel inferioribus 2-3 capitula lateralia breviter pedunculata ferentibus, involucri phyllis adpressis hinc lanceolatis glandulosis ab externis brevibus palide virentibus acutis ad internodia submembranacea acuminata. Bosculos squantia sensim auctis, florum femineis omnibus ligulatis plunsenatis roseis hgula revoluta pappo paulo longiore, flosculis hermaphroditis tubulosis luteis pappo brevibus, achenis compressis hirtis apice in collum brevissimum attenuatis pappo niveo multisetis uniseriatis longioribus superatis

*Inula rhodostemma* pi Noeans exs olim

Hab in montibus Persiae occidentalis ad irrandum prope *Kertnachah* cl Noe Floret Aug Sept

Planta pedalis Folia inferiora sesquipedalem longa 5-10 hneas lata. Panicula angusta semipedalis longiorque Capitula eis *Er aens* paulo majora Habitus *Fransceunce* vel *PuL gnaphalodis* Stamina prostrata ecaudata Omnino generem *Lachnophyllo* Bunge adnumeranda, *Engeronti* proximo sed habitu, hgulis revolutis et praesertim acerbis apice in collum attenuato distinguendo *L gossypinum* Bunge in Lehm indumento et habitu nostrae plantae affinis differt caule gracili oligocephalo, capitulis pedunculis longioribus laxioribus suffultis, involucri phyllis squarrosis-refractis

EVAX PERPUSILLA Boiss et Heldr in pi Graec exs 1852

E tota densu griseo-lanata simplex vel a collo ramosa ramis brevissimisconglobatis, folns oblongis obtusis capitulain glomerolum densè conglobata laiiçi mlertcxta involucrantibus caque non superantibus, involucn phyllis oblongs mfernè glabns supernè dsnsè Janalis obLusis cojjca\is ceulro vindibus. casterum latè albo-membiauaccis, achoniis obovatis breviter papilloso-hirtis

Flab in pascuis siccis regionLS abietnae *Parnassi* prop6 *Hagws Ntcolaos* 15 Ang 1852 cl Heldrcich, in regione alpma raontis *Sierra Nevada* Hibpanice Bourgeau N° 1244 sub *E discolon* var *micropodioidi*

Plantula vi\ semipollicans ranus polhcans monocephala vel e gloraorubi) plunbus sub'-cssilibus piso vix. majonbas constans Ab *E discolon* loto Cjcb differt Inter omnesi? *enospfuerw* Boiss et Heldr magis aflims ab c4 ut et omnibus ferfi alus involucn squajns muticis nee m cihpidcm e lanà exserlam abeuntibus digno'-citur

SANTOIIINA OIII ONGIFOLF \ BoiSs

S Lola adpressò sencea suffruticosa, ramis stenhbus elongatis ramulosis, flonfcns parte mferiori laxiusculè foliosis supernfe denudaLis apicc subincrassatib, folib oblongo-spathulatis inpetiolum sensim attenuates plains alus puiiiiiiidb lacimis utnnqu6 3-5 hnean-oblongis obtusis alus praesertim ad ramos stenles utnnquç obtusè 3-5 dcntaLis, capilul^ majuscuhs, involucn glabnuscuh squamis adpressm

Hab in *Hispania*, loco non notato (Herb Pavon)

Rami flonfen ferè pcdalcs, capitula magmtudinis eorum 5. *romartnifohce* Rami stenles scmipedalcs longioresque Folia majora 8-9 lincas cum potiolo longa apice 2 $\frac{1}{a}$ -3 lata Species folns dilatatis junionbus lantiim dcntdtis a *S pectvnatd* Lag cui magis aflims distmcta Flores in meo speciminp destructos nee achenia desenberc potui

## PTAHMIC4 AMBROSIAG\ Boiss et Heldr

Pt caespitosa tota indumenta adpresso opaco cana, caulis basi ascendenti suffrutescentibus simplicibus, foliis ambitu oblongo-lanceolatis pinnatisectis segmentis oblongis lterum in lacinas angustè lineares obtusas pinnatisectis radicalibus petiolatis caulibus sessilibus, capitulis ovatis pedunculis eis aquilonibus vel ramis longioribus suffultis corymbis oligocephalos terminales formantibus, involucri squamis ovatis medio herbaceis camis margine latiusculis fusco-membraceis, hinc 5 albis rotundalis obsolete lobis basi rubellis involucri brevioribus, flosculis purpurascens, paleis membranaceis apice lacens nigricans. Ubi

Hab in rupestribus regionibus alpinis montis Olympi Tiflis ad naves Detexit cl. Th. de Heldreich fine Julii 1851

Planta simpliciter intermedia inter *Pt. umbellata* et *Pt. Fraam*. Primum habet staturam et indumentum canam opacum sed differt foliorum bipinnatisectis neque pectinatorum lacinis angustè hinc neque late oblongo vel obovato-hinc *Pt. Fraasu* nostrum magis affinis differens caule elato, indumento sericeo, capitulis numerosioribus in corymbum densiorem confertis cymbo-obcommissis neque ovato-campanulatis, hinc majoribus

## ACHILLEA KOTSCHYI Boiss

A. pilis adpressis flexuosis canescens, caulibus ascendentibus simplicibus in corymbum terminalem compositum abeuntibus, foliis ambitu oblongo-lanceolatis, radicalibus petiolatis bipinnatisectis segmentorum primariorum laciniis oblongo-hinc 1-2 dentatis acutis, caulibus ad basin sessilem usque pinnatisectis segmentis oblongo-hinc acute pinnatifidis dentatisve rachide latiusculi Integra, involucri hirtuli squamis margine palide fuscis

Hab in monte Tawo Kotschy annis 1836 et 1853

Species *A. odorata* et *A. sylvatica* Ten intermedia. Prior differt foliis in lacinulas tenuissimas bipinnatisectis, rachidibus primariis et secundariis angustissimis posterior segmentis lation-

bus, rachide densifera etc — *Ach odoraia* Koch Sjn , Rchb Flor Germ e\ s N° 1901 et Schullz Fl Gall ct Germ exs N° b)2 a planW gcmiinA Lmnaei ex. GalliA mendionah et Hispanid oriunda cccitè differ I et A *Kut&tkiji* magis iiHimsest.

COTA PAiunsbicv Boias ctlleldr

C perenms lluzomate indurato plus minus ramoso ramis ssupè elonpatis prostratis fibnllosis, cauibus numerosis tenuibus basi piocunibentibiis ascendellitLU3^e adpress6 canescentibiis foliosis ssepuis simplicibus monocophalis lanu^ parc6 raraosis, folns subtus julpressfe sencco-canis supia vircentibus parcè et glanduloso-pnberulis oblongs ad basin usque pinnatipartitis rachide latmscuia integr<\ paititionibusd nietlio toho ad bas<in usquè decrescentibus linean-oblongib m lacinulas oblongas ascendentes albo-mucronatas legulantor et peclinalim profunde pinnatilobatis, capituhsmcdiocnbus in\olucnplyllisadprossismargineetpraBsertimapice late fencis dorso parcè alho-pilosis e\tenonbus acutis) interioribus obtusis apice fimbriato-setosis, receptacuh paleis oblongis superne rubelhs cannatis in mucronem ^i\ pungentemabruptèattenuatis, hgulis alhk demurn defle\is involucro diipld longionbus, achenus quadrangulu-compre&sib utroqnc margme acutis utrdque facie obsolete sub v-sliialis coroni brevi laccro-dentata superatis

Hab in regione alpina montib *Pmmssi* frequenter cl Helder Floret mcunte Augusto

Caules /\*-1 peddles tenue\* Folia inferora 8-9 hneas longa partitiombus 2-3 linoas longis apice linear a/, latis Capilula magmtudim\* ferè eorum A *montaim* Species inter *Cotas* pereones caalibus tcuibus decumbentibus subsimplicibus insignis, propè *Cotam man antham* Gnseb collocanda quae involucn phylla quoque fusco-marginata habet sed differt cauibus elatis crassis ramosis, folioium lacinulis multd majonbus **disstis**

**ANTHEMIS LEUCANTHEMIFOLIA Boiss** et Blanche (Sect *Euanthenus* )

A annua a collo pluncaulis cauibus prostratis abbreviatis TOMS pihi ensuhs hirli« sunphcibu\* monocephalis vel in 2-3 ra^



mos breves fohosos akquando recurvob sub capitulo incrassalos  
 abeuntibus, folns adpressiusculè hirtis oblongo-spathulatis apice  
 rotundalo-truncalo obtus6 3-7 crenato-dentatis basi longè at-  
 nuatis margine integris, summis sub capitulo breviter hnean-  
 Lngulatis integns, capiluhs mediocnbus, receptaculo conico,  
 paleis oblongo-lanceolatis acutis flosculos xquantibus nervo vi-  
 ndi subtus prominenti mstruclis, hguhs albis ovato-ellipticis  
 obsolete tnlobis demtüm reflexis disco brevionbus, tubo flosculo-  
 rum hermaphroditorum bialato, achenus parvis albidis lasviuscuhs  
 obsolete quadranguhb apice latere interiori corona dimidiata bre-  
 vissima margimformi saepe lobulata superatis

Hab in arenosis ad meridiem *Abarouh* prop6 *Saida* S>nae cl  
 Blanche Fl Marie

Gaules in meo speciminaB 2-4 polhcares, folia 8-9 hneas longa  
 apice 3-4 lata Species foliis apice tantüm dentatis dfetinctissima  
 ex habitu et achemorum naturà propè *A peregrnam* L collo-  
 canda

Obs 1<sup>l</sup> Accuration examini subjecta ^4 *multicauhs*Tt et Heldr  
 in Heldr et Orph pi evsiccatsB ab *A arvensi* non sat differt  
 Panter inter plantas Noeanas Orientales *A Noëana* n sp ad *A*  
*crassipedem* Boiss et *A plebeia* n sp ad *A Rascheyanam* Boiss re-  
 ducends sunt

Obs 2\* Si *CottB* generi a cl et amiciss Gay proposito (charactere  
 suo forsan non satis firmo, nam *Anthemides* nonnullae achenus ems  
 quadranguhs quidem sed non compresso-ancipitibus transitmn  
 prfflbent)civitatis jus datur, species *Anthemtdum sequentes* in Diagn.  
 pi. Orient descnpts ad *Cotam* transferencē sunt

*Antheims orمنيoides* B et Heldr =GOTAORMENIOIDESB etH.

*Anthemis ccelopoda* Boiss = COTA G^LOPODA BOISS

*Anthemis Pestalozzi* Boiss = COTA PESTALOZZI: BOISS

*Anthemis Brachmanni* B et Heldr = COTA BRACHMANNI B et  
 Heldr HSBC inter ambo genera dubia est et inter ea transitum prae-  
 bens, habitus *Cota* sed achenia quadranguLa vix coiupressa, inte-  
 nora subcylindnca

ANTHEMIS PEREGRINA L var *Heracleottca* Boiss et Heldr

Caules ul in specie diffusi Foliorum laciniae pauciores Capilula

pauciflora receptaculo conico Ligulas angust® demiim reflexaj disco vi\ longiores Palese nervo intensiusbrunneo superataB pauld longiùs anstulatœ Achcniã ut in specie albida stnalula corona dimidiatd brevi rotundatfi patuld percursa

Hab m campis propè *Heradeam Attica*\* cl Heldr Jun 1851

ANTHEMIS TRIPOLITANA BOISS et Blanche

A annua tola pihs cr^pis obsita palhdè flavido-virens, cauibus numerosis erectib procumbentibusque simpheibus Tel parcè ramofiiis, tolus ambitu oblongis in lacmulas minutissimas oblongo-hncares albo-mucronatas confertas tnpinnatipartitis ramis bre>i-bus supornè; nudis mcrassatis, capitulis flonfens globosis dein oblongis, involucn phvllis adpressis pallidis obtusis hyalmo-marginalis extùs sparsim hirsutis, receptaculo tandem oblongo-conico supornè tantùm paleato paleis angustè lanceolato-hneanbus acutè cannatis acutis, liguhs oblongis tandem deflexis disco brenonbus, achenns receptaculo aretè adhaerentibus adpressissimis parvis brevibus dorso obsoletè sulcalis plùs minùs tuberculatis apicc planis in aunculam oblongam patulam crassiusculam saepè angulato-sublndentatam latere supenon productis

Hab m agns sabulosis circà *Tnpohm SyriJE* cl Blanche

Caules in meis specimmibus vix semipedales, folia abbreviata lacmuhs confertissimis Gapitula fructifera tandem saepè 6-7 lmeas longa Achema valdè curvata in capiliilum densum supernè tantum paleis intermixtum conferta Habitus *Anth tomentoscBVrv* sednon tomentosa lacinulaeque foliorum multd tenuiores, receptaculi et achemorum charactenbus inter bpecies pappo lateraliter aunculato donatas distinctissima

ANTHEMIS GRONIA. BOISS et Heldr (Sect *Euanthenis*)

A perennis rhizomate ramoso intricato fibras radicales longas numcrosas edenti caBspitoso multicaul^ caulibus tenmbus erectis Qbcendentibusque pumihs simpheibus monocephahs parte mfe-non sparsim foliosis, folus adpressè camis brevibus subsimpheiter pinnatiparlitis lacinus paucis oblongo-hneanbus obtusis, capitulis minutii, involucn phvllis adpressissimis palhdè fusco-marginatis

inferioribus triangularibus-lanceolatis acutissimis adpressè hirtis internodiis obtusis, hinc albis demùm reflexis, paleis oblongo-hincibus supernè subdenticulato-lanceolatis acuminatis, achenis parvis cylindricis albis apice umbonatis corona lobulata eis tripliciter breviori superjctis

Hab in pascuis saxosis montis *Hagios Ehas* jugi *Maleoo* supra *Agnani* in *Italia* Th de HeLdreich

Caules palmares Capitula eis *A Gerardiana* Jordan etiam minorum *A montanae* formis omnibus foliis paucipartitis et praesertim achenis minoribus, corona manifestè superatè distincta Magis affinis *A Reutenance* Boiss e montibus *SmjncB*, quae eadem ferè faciem habet differt in colorum lacinis linearibus subulatis acutis, radicibus bipinnatis, coronae achenium ferè aequanti

AMHEMIS *Kutschera* Boiss (Sect *Eitanthemis*)

A perennis rhizomate tenui longè fibuloso caules floriferos surculosque breves basi denudatos foliosos edenti, caulibus elatis ascendentibus tenuibus foliosis simplicibus saepius ferè a basi ramosis ramis inferne tantùm paucifoliatis elongatis nudis virgatis monocephalis, foliis adpresse canisculis linearibus longè petiolatis limbo ambitu ovato-rotundo bipinnatis lacinis breviter linearibus vel linearibus-spathulatis obtusissimis, foliis ramis in lacinas paucas abbreviatis partitis petiolo brevi dilatato suffultis, capitulis parvis terminalibus longè pedunculatis umbellatis, involucri phyllis adpressis adpressè hirtis oblongis acutiusculis praeter hinc mediam viridem pallidis, receptaculis paleis linearibus subulatis apice truncato-subulatis nervo medio excurrente breviter mucronatis, hinc flavis ovalo-rotundis femineis apice trilobis tandem reflexis involucri brevioribus, achenis albidis linearibus obsolete quadrangulis coronatis coronè lobulatis achenio quadruplo breviori in internodiis praesertim subunilaterali

Hab ad terminum arborum in *Tdura* Ciltctco superft *Gulek* alt *GOOffd* Kotschy

Var 8 *pwalolepis* —Minus cana Ligulae diminuta limbo rotundato involucri tripliciter breviori Involucri squamae eleganter fuscis marginatis

*A paalolepts* Boiss in Kolschy pi Taur 1853

Hab ad lacura *Koschan geul* Taun Cilicici alt 8000'-9000' cl.  
Kotschy

Caules cum ramis longis pedales sesqmpedalesque Laciniae foliorum eis *A inontanee* var *majons* ferè angustiores magis confer tac et obtusissimae Capitula magnitudinis eorum *A nobihs* Species Ugulis abbreviate flavis distinchbsima e descnplione *A brachyglossai* G Koch affinis quae csBtetum caulibus pumilis, folus aculissimè pinnalifidis, etc diffort

ANTHEMIS UMDILICATA BOISS ot Huet in pi Armen exs (Seel *Euanthemis*)

*A* perennis mulUcaulis, caulibus adpressè canescentibus pumihs paul6 suprâ basin divancatim ramosis, ramis superaè longmsculè nudis ngiduhis monocephalis, folns adpressissimè camis bipinnatipartitib laciniis divancatis parvis oblongo-spathulatis obtusissimis, capituhis mediocnbusvald6 umbihcatis, involucri squamis adpressissimis pallidis adpressè et densiuscul& hirtis mfenonbus acutissimis estens obtusatis, liguhis albis demtüm reflexis ovatis involucro subaBquilongis, receptacuh pains oblongis subcannatis apice subdenticulatis in mucronem abrupt^ angustatis, achemis albis obpyramidatis obsoletè quadrangulis extenoribus curvatis sulcatis interioribus Uevibus vel tenuissimè rugulosis omnibus corona brerissimâ marginlformi acutfl instructis

Hab in *Armemd* prope *Kassuklu* cl Huet du Pavilion

Planta semipedahs Capitula magnitudims eorum *A montanm LiwnearuE* Gren et Godr = *A Gerardiance* Jordan cm characteribus et achemis valdè affims est sed tamen ut nobis videtur distincta caulibus pumilis divancatim ramosis, lobulis foliorum divancatis, coronâ minus obsoleU *A fruticulosa* MB folus nostram refert sedhabet capitula majora non umbilicata

ANTHEMIS SPRUNERI BOISS et Heldr (Sect *Euanthemis*)

*A* perennis tota adpressè senceo-argentea, rhizomate snffruticoso ramoso ramis tenuibus prostratis caudiculos breves fohosos caulesque fertiles edentibus, caulibus ascendentibus fohosis sub-

simplicibus in pedunculum longum nudum monocephalum abeuntibus, foliis saccatis longe petiolatis limbo ambitu ovato bipinnatipartito lacinis paucis latiusculis linearis-spathulatis obtusissimis, foliis superioribus sessilibus pinnatipartitis lacinis acutiusculis, capitulo discoideo, involucri squarosis adpressis saccatis praeter villosam angustam videri pallo scanosis, paleis late linearibus subcanalicatis apice erosis abrupte et breviter mucronatis, achenis, albidis elongatis subquadrangulis coronam integram aequali brevi marginiformi superciliatis, exterius subcurvatis

**A absinthifolia B et Spr ex pane**

Habitat in *Parnasso* Spruner, in rupestribus regionis abietinae Parnassi ad *Gourna* et *Dipotomo* cl Heldreich

Indumenta cl habitu affinis *A absinthifolia* (Anatolica qua) certe differt caulibus floriferis sub rosula centrali sessilibus nascentibus, foliis subbipinnatis lacinis brevioribus acutiusculis, achenis brevioribus magis sulcatis coronam brevi dimidiata superatis exterioribus tetragono-turbinatis In *A absinthifolia* super corollam tubum valde crassato-fungosum Ab *A caryoccephala* et affinis praeter indumentum foliorum lacinis laciniosis, limbo amplius ovato sat distincta videtur

Obs Nihil grege *Anthemidum* perennium discoidearum di/Ilcihus Cl Gay omnes praeter *A peucedanum* pro forma *A montana* habet, de qua sententia iudicium sat firmum ferre non audeo. Achema eadem paleaeque vix dissimiles sed in habitu, crescendi modo, forma foliorum et etiam odore graviora discrimina inter omnes eas plantas invenies. Sequentia Lantium hic observanda — Ut *A chrysocephala* D et R tantum planta Hispanica ex montibus Castellae agnoscenda est caulibus floriferis circa rosulas centrales sessilibus orthophyllis plerumque nascentibus, foliis angustis bipinnatipartitis lacinis paucis insignis. Planta e Byzantio et Asia Minor cui synonyma *A caryoccephala* Griseb — *Anaclus Onmtahs* DC — *Lyonnetia tenuiloba* DC — *A monlanayai Byzantina* Gay Mss adnumeranda sunt, a priori certe diversa est rhizomate surculos stiles elongatos caulesque floriferos edenti., foliis bipinnatisectis laciniis longioribus et plerumque tenuioribus. Hae a botanicis qui eam ab *A montana* diversam habent *A tenuiloba* nominanda est, vanat foliis virentibus glabrescentibus canescentibusque — Alia *Anthemis* in monte *Penlehco*, monte *Parnes* Atticae frequens crescit et a

cl de Heldrich quoque in Pisidii observata fuit, hanc pro *A chrysocephake* forma dñm erronec̄ habuimus Hasc *A montanm* ad hiic magis aflinis est et a formis bujus specie! in eisdem regionibus crescentibus et ad *A tnontanam Lmnaanam* Gren et Godr — *A Gerardmnam* Jordan referenda ligularum defectu tantum ut videtur dignoscenda Adest denique planta Indumento senceo vel etiam dense cano obsita, caulibus prostratis abbreviate, capitulis longi<sup>d</sup> pcdunculatis insignis, de cujus differentia specific Idra a praecodenli cum ab *A tenmlobd* tamen non satis certi sumus HEC crescit in montibus clationibus *Crette* (Heldr !) *Taygeti (Heldr \)montis Taun(Kotsc\iy)et Libam (Boiss) et est ipsissima Sntokm alpina* Sibth Fl Grseca lab 851 ron L — *Anthemis in-mna* dicenda si ab *A montand* differre probatur

LEICANTIIKM\IM Fo^T^NESH Boi<s et ReuL

L perenne glabrum caule robusto atrato-sulcato erecto folioso supernè corymbosè ramosissimo ramis erectiusculis elongatis foliosis apice monoccephahs, foliis oblongo vel obovato-spathulatis sessilibus inferioribus longè attenuate mtermedus et supenonbusbasivix attenuate obtusè aunculato-amplexicaulibus omnibus regulariter et argutè dentatis.dentibus tnangulanbus ascendentibus mucronatis, foliis ramcis a basi lation oblongio-lanceolatis acutis minutè denticulatis, capitulis magms discoideis, involucri squamis adpressissimis pallidè vircentibus glabns extenonbus tnangulan-lanceolatis Interioribus linean-oblongis apice obtuso late scanoso-marginatis, acbenus epapposis mgns albo-stnatis basi lubattenuatis cexterionbus subcurvati^

***Balsamta virgata* Desf**

Hab circa *Algenam* ad sepes Moreaul Monardt in herb Fau-chd, *Algenap* propè *Bmnadrets* Jamin pi exs N° 1705 circa *Bone* ad nvulos Steinheil t Floret Junio et Julio

Planta bipedahs longiorque a formis discoideis *L. vulgans* distinctissima caule robustion multè ramosion, foliis nunquam pin-natisectis nee lobatis sed regulariter serralis dentibus mucronatis «upenonbus basi non attenuate sed distinctè aunculatis Capitula quoque dupld majora sunt Forma) discoideee *L montam* et *L pallenhs* longitis distant

CHAMAMELUM KOTSCHYI BOISS

Ch perenne radice Fibrosâ, caulibus plmibus humihbus ereclis  
vel ascendentibus simplicibus vel supernis? oligocephalis glabrius-  
culis, foliis sub lente parvis hirtulis ambitu ovatis in lacinas ati-  
geste Unearum elongatas Integerrimas acutas rigidas bipinnatipar-  
titis radicalibus longè petiolatis superne sessilibus basi dilatati  
aunculato-multifidis, capitulis minutis pedunculis longiusculis  
hirtis suffultis, involucri palhdi squamis oblongis margine an-  
gustè membranaceis, hylis radio duplo longioribus, acheniis  
ventre profundè bisulcatis costâ medii acuti dorso obsolete ru-  
gulosis apiceque biglandulosis pappo coromiformi brevis sublobato  
superatis

Hab ad angustias *Gulek Boghas* in regione montana alt 3800'

Ab affini *Ch oreadi* differt foliorum lacinis rigidioribus lon-  
gioribus, involucri pallidis acheniis biocellato, costâ medii ven-  
trali acuta nec rotundata An satis specificè distinctum?

CHAMAMELUM MONTICOLUM Boiss et Huet

Ch perenne, caulibus erectis rubellis glabrisculis foliis su-  
pernis corymbosis, foliis parvis et adpressis pilosis oblongis in la-  
cinias setaceas mucronatas confertas abbreviatis bipinnatipartitis,  
surculorum petiolo remote pinnatilobato suffultis ostens sessili-  
bus, rachide inferne dilatata laciniis multifidis canaliculatis adpressis aun-  
culiformibus, pedunculis longiusculis subnudis, involucri phyllis  
sparsim hirtis oblongo-lanceolatis obtusis interioribus margine  
scariosis palhdi affescentibus, hylis oblongis albis disco duplo  
longioribus, acheniis tuberculato-rugosis costâ ventrali angustâ  
dorso apice biglanduloso, pappo brevi coroniformi truncato

Hab in *Armenia* *UTC & Erzeroum* Huet du Pavillon! Calvert!

Habitus omnino et capitulorum magnitudo *Malt chamonilla*  
A *Ch oreadi* cum affinis differt caule non simpliciter sed corym-  
boso, involucri pallido, acheniis tuberculato biocellatoque A  
*Ch calloso* distinguitur pappo distincte coromiformi nec ad mar-  
ginem angustum reducto

**PYRETHRUM** LEUCANTIEMIFLOIIUW Boiss ol Huet (Sect *Lmcoglossa* )

P perenne caulibus suffnitico&is procumbenlibus denndatis ramos foliosos supernfc nudoi\* submonocephalos edentibus, folus dense breviterquc cuiereis ambilii oblongis in lacinulas tenues confctas hneari-cuncaUs obtusas plunēs pinnatipartitis infeno-ribus longfe petiolatis supenonbus sessihbus diminutis bipinnati-sectis, mvolucris phyllis> adpressi-j adpresb6 hirtis ovato-oblongis obtusis vircentibus pallidē mombraDaceo-marginatis, hguUs albis oblongis disco dupld longionbus, pappo coronacformi brevi

Hab in valle *Kassulhu* Armenia) ol Huet du Pavilion Floret Junio

Magnitudo capitulorum et color plantae fcr6 ut in *P aneranie-foho* sedlacinulw fohorummmulibsimoonumcrosissimaoconfertaB Folia uifenora petiolo bipollican nuffulta 2-2 '/> pollicana G-10 lineas lala. Rdiiu ascendentes 8-10 pollicareb

PYIVETIIRUM rsEUUANTIiEMis Boiss el Huet (Soct *Lmcoglossu* )

P basi buffrutescens caDspitoso-multicaule, caulibus tenmbus rectib infernō follows supern6 monocephialis, fohis sub lente nii-nutōet enspē lurtuhs palhd6 vircentibus ambitu oblongo-hneanbus rculantCF el peclinaUiii pnnalisectis segmentis oblongo-hnea-nbus abbreviatis in laoinulab broviler oblongas setaceasve pinna-Hfid is parti tisvo infcrioribus petiolatis caulmis sessihbus summis hnean-subulatis integns, mvolucris squamis adpressis cnsपो-hirtuhs pallid6 vircentibus oblongis extcnonbus obtūsē cannatis mti-mis apico membranacois, ligulis albib oblongis tndentatis disco duplō longioribus, acletuis> junionbus brevissim.6 coronatis

Hab propè *Messirt* ArmsnidJ cl Huet du Pavilion

Caules circ 10 pollicares Folia *Pyr lanaceloutisvclachilleiefolii* 3-4 linear lata CapItula Indgniludims corum speciei precedentis

PYRETMJM CILICIUM Boiss (Sect *Gymnochnes* )

V perenno, caulibus oldtis crcllis sub lento pihs minutis ens-



pulis ob<sup>^</sup>itis foliosis apico corymbum composilum polycephalum terentibus, folns radicaibus cauhs sessihbus oblongis pinna- tipartitis segmentis latè lanceolatis acutiusculè lobatis secùs rachidem superioribus latè inferioribus angustè decurrentibus, foliis supremis valdè diminutis tnpartitis indivisisque, capituhis minutis numerosissimis pedicelhs plerumque eis paulè longioribus suffultis, involucri squamis palhdibus hirtulis linearibus subcannatis apice scanosis obtusis, ligulis albis obovatis tndentatis patulis involucri triplo brevioribus, achenis pnsmalicis inferne attenuatis glandulosis pappo tupulan angustissimo superalis

Hab in monte *Tauro* Kotschy 4830 (sub *P. macrophylo*), in sylvaticis montis *Casm* Syrise (Doiss )

Habitus omnind *Achillewpallescenths* Afine *P. macrophylo* **quod** differt caule crasbion, folus tnplo majonibus, supremis vix. diminutis, bgolis fert dimidio minoribus Capitula trita valdè aromatica.

*Pvnetirum* YAHLLII BOISS, et Rcut (Seel. *Gymnochnes*)

*P* caulibus suffrutescentibus procumbentibus tortuosis ramis folnsque adpressè hirsuto-canescens hisce ambita oblongis in lacumulas minimas abbreviatis confertas bipinnatisectis inferonibus petiolatis rameis sessilibus junonibus albo-lanatis, capituhis 3-5 ex axillis supremis longè pedunculatis corymbosis subglobosis, involucri pallidissimi squamis adpressissimis adpressè hirtulo-lanatis oblongis obtusis latiusculè scanoso-margatis, flonibus foemineis paucis ligulatis ovato-subrotundis discum vii excedentibus, acheniis stnatis glandulis sessihbus <aspersis pappo coromformi apice lobato eis tnplo breviori terminatis

*Tanacetum Vahl* DC Prodr

Hab in *Castelid novd* (herb Pa von)

Var *Q* subflosculosum — Magis canum, capitula subsessilia capitato-congesta Ligulse paucissime discum noo superantes

*Tanacetum Willkomm* Schultz in *Willkomm pi Hi<sup>^</sup>p* exs N-462

Hab in *Castelid novd* cl Willkomm

HSBC planta habitu, flonibus foemineis ligulatis, *Pyrelthro* adnumoranda est et proptè *P densum* Lab coilocanda Receptaculum

subpalcaceum a cl DC dictum sempei oinnmò nudum etiam in speciminibus herb DC **vidi**

PARBTHRVM MTENS Boiss etNoe (Sect *Eutanaceium*)

T perenne basi suffrutescens procumbens mulUcaule to turn adpress6 senceo-cinereum, cauibus ascendentibus foliosis simpheibus apice corymbum compositum capitato-confertum ferentibus, folus ambitu oblongis pinnatipartitis infenoribus petiolatis caul in is sessihbus segmentis ulrmquò 5-7 hncari-lanceolatis acotis Integernmis ranùs. paucidenticalis, foliis supenonbus diminutis, iloiabus integris, capituhis mmutis oblongis pedicelbs eis brevionbus suffuHis, involucris phylls oblongis adpress6 hirtulis palhdhis apice obtusissimis margine membranaceo denticulato, U-gulis disco vix longionbus foemineis tndentatis, pappo coromformi

Hab m colhbus Armenitfi mendionalis circa *Karputh* cl Noe. Floret Junio

Planla vix pedahs, folia majora pollicem aut pauld ampliùs longa segmentis lineain latis 5-6 lineas longis Corymbus diametro polhcaris poljcephalus Species fohoiium segmentis subintegns distinctissima, habitu *Tan argentmm* referens sed *Pyrethro* ob hgulas etsi mimmas lamem mamfestas adnumeranda

TANACETUM UMBELLIFEnUitf BoiSS

T monocarpicum radicc verticali subsimplici, collo squamis lamgens petiolorum vetustorum incrassato, caule redo simpheissimo crasso folioso stria to glabrato albido medulld farcto tandem fistuloso, foliis ambitu oblongo-lanceolatis sublanato-hirsutis gnseis in lacinulas selaceas abbreviatas acutas confertissimas pinnatim supradecompositis, segmentis pnmaius oblongis in rachide lobulatA sessihbus a medio folu versùs basin sensim abbreviahs, rachide foliorum radicaum in petiolum complanatum abeunti, folus caulims sessihbus supremis remotiubcuhs floralibusque ad rachidem setaceam longiui>culaiu reductis, corjumbo composito terminah umbelliformi poljcephalo, pedunculis pedicelhsque longmsculis angulatis Qstulosih albidis, f apituhis liemisphaBncis, involucris squamis oblongis obtusi<sup>1\*</sup> prptter don>um pallidè Mrentem omnind sea-

nosis albidis, flonbus omnibus hermaphrodites, qumquedentatis, achenns juDionbus incurvis glanduloso-tubercularis epapposis

Hab propè *Datr Haj* regni *CoMiha* cl Griffith N° 554

Gaulis sesqmpedalis crassitie ferè pennai ansennae Folia infenora 4-5 pollices longa parte supenon sesqmpollicem lata Corymbi radii sesquipolhcares Capitula piso pauld minora pedunculis 6-10 lineas longis bracteas setaceas ferentibus suffulta Species distmclissima aflims *T longifoho* quod csetens neglectis differt capitulis corymboso-capilatis, involucris fuscis, receptaculo conico Planta simillima habitu, fohis, capitulis, radice monocarpica *Achtlle*(*Bti'tchophyll*<*E Schrenk* quac differt gencnce receptaculo paleato et specificè inflorescentia compositè corymbosa

ARTEMISIA GRIFFITHIANA BOISS (Sect *Absynthium* )

A annua multicaulis tota adpressè can a, caulibus pumilis simplicibus, fohis petiolatis ambitu ovatis in lacimas lmean-setaceas subcuneatas obtusas bipinnatisectis, capitulis subrotundis sohtanis" pedunculo stricto ùlifonni aequilortgo vel longion suffultis racemum laxum spicatum trmmalem formantibus, involucri adpressè hirsuti squamis exterioribus herbacei\$ linean-oblongis lfitenoribus ovato-rotundis scanobi&, floscuhs glabns, receptaculo pihs de§sis rectis hirsutissimo

Hab in valle *Barman* regm *Cafotha* cl Griffith

Gaulesin meo specimine 10 semipedales ascendentes Folia minuta 3-4 lineas longa lataque petiolo tenui eis subbrezion suffulta supenora et floralia sessilia Capitula 5-7 racemum bipoUicarem forman tia,eis *A NorvegwcB* ferè dimidi6 minora Species distinctissima propè *A macrocephalam* et *Stcversiawim* collocanda

DORONICUM MAXIMUM Boiss et Huet (Sect *Eudorontcum*'

D glabrum caule elato stnato-sulcato fistuloso, fohis radicaibus longissimè petiolatis ^ordato-remformibus transversè latioribus obtusissimis obtusè et grossè dentato-lobatis sínu basilan valdè aperto, caulims inferioribus brevius petiolatis petiolo auncuhs bims magnis ovatis dentatis ad medium usquè cum eo coahsaucto, folns supenonbus sessihbus amplexicaulibus ovatis cucullatis den-

latiSj capitulis 5-7 terminalibus breviter pedunculatis dense corymboso-subcapilatis, foliis\* lioralibus oblongis vel lanceolatis capitulos subaequantibus, involucri viridis phyllis lanceolatis margine breviter ciliatis acuminatis, hinc intensè flavis involucri dupli longioribus, achenis (juncibus) inratis

Hab in monte *Tech Dagh* propè *Erzeroum* ad nivos alt 7-8000' cl Huet du Pavillon

Folia radicalia petiolo sesquipedah suffulla 7-8 pollices lata 3-5 longa. Capitula eis *D pnrdahancJies* paulo minora Affine *D macrophylo* Fisch quod differt foliorum. Imbo Inversè brevior, inflorescentia pubescenti-glandulosa, capitulis longiuscule pedunculatis la\6 corymbosis, foliis floribus hinc lanceolatis

SENECIO CALVENU Boiss (Sect *Obtsjaca* Cass)

, S annuus viridis totus indumento crispulo glanduloso-viscido obsitus, caule simpliciusculo vel supernè parca ramoso ramis strictis, foliis inferioribus obovatis in petiolum attenuatis, superioribus latè linearibus basi amplexicaulibus omnibus dentatis vel lobatis lobis obtusiusculis triangularibus saepe retusis indenticulisve, capitulis pedunculatis longiusculis foliis lanceolatis integris obsiUs suffultis ovato-cylindricis paucis subcorymbosis, squamis accessoriis lanceolatis paucis adpressis, involucri phyllis vix glanduloso-viscidis marginibus connatis margine membranaceis acutiusculis dorso subbaccatis, hinc minimis, revolutis, achenis glabris, pappo niveo.

Hab. circa *Erzeroum* cl Calvert

Caus ut videtur vix pedalis, folia inferiora cum petiolo sesquipedalica sex lineas lata, superiora ad medium saepe pinnatifida, capitula magnitudine media inter ea *S sylvatici* et *S viscosi* a quo differt foliis non bipinnatifidis, panicula corymbosa oligocephala *S Kotschyanus* affinis quoque differ! visciditate nulla, involucri phyllis latis planis

SENECIO BALANS^ BOISS et Reut. (Sect *Obwjaemdei*)

S annuus praeter pilos sparsissimos annulato-crispulos glabrescens, caule a basi subdivaricatum dichotomo, foliis inferioribus

oblongis dentato-lobatis in petiolum attenuate, csetens suprA basin sessilem amplexicaulem longò biaunculatam angustatis lyrato\* pinnatipartitis segmentis triangularibus acutis terminali multo majore elongato, foliis supremis hinc lanceolatis dentatis, capitulis ad ramorum longiusculorum nudorum vel foliorum squamiformibus obsistorum apicem solitaneis laxissime corymbosis ovatis basi truncatis, pediculo apice incrassato squamulis apice acuto sphaerulatis hinc calyculum irregularem formantibus obsito, involucri phyllis glabris lanceolatis anguste marginatis dorso bicarinatis apice sphaerulatis, ligulis latiusculis flosculis duplo longioribus, achenis striatis compressis adpressis et brevissime hirsutis apice minutissimis umbonatis pappo achenio duplo longiore

Hab in dechvitate boreali montis *Gebel Toumour jtroj Constantine* cl Balansa anno 1853

SpeciCb prop6 & *petrmim* B et R collocanda cum foliis et capitulum magnitudine valde affinis est et qui differt involucri omnino calyculato, foliis caulis indivisis et achenis longioribus **non compressis** A *S vernah, Atlantico et crassifolio* caeteris neglectis capitulis duplo majore longius dilat

SENEGIO FARFAR-EFOLIUS BOISS et Kotschy. (Sect. *Sarracenta* )

^ perennis, rhizomate ramoso pluncipiti, caulibus tenuibus mveis interne paucifoliatis in pedunculum longum apice moncephalum abeunibus, petioliis mveis limbo triplo longioribus, foliis supra glabris subtis adpressis arachnoideo-mveis cordato-reniformibus lobatis lobis 6-9 brevibus triangularibus in mucronem abrupte abeunibus sinu basilari valde aperto, involucri hemisphaerici adpressis mveis phyllis anguste lanceolatis acutis^ calyculi paucissetaceis paulobrevioribus, ligulis 12-15 aurantiacis disco sesquialongioribus, achenis glabris

*P fufuraceus* {per errorem typograph } Boiss et Kotschy pi Ciliensis exs

Hab in schistosis borealibus *Taun Cilwia* alt 7000' cl Kotschy Fl Jul Aug.

Folia majora dimetro bipollicana saepe autem minora Gaules 8-10 pollicares Capitula eis *Homogynes aHpiwB* vix majora. Spe-

cie<sub>3</sub> dialinctis<sup>mi</sup> habilu *S Pet swum* vel *Liguhu*\as qua<sup>dam</sup>  
*Caitrasicas* lcfrcns

SENECIO JACQUINIVMS Rcbb \ar *ejcpansns* D el Hcldr

Caulis elalus it<sup>i</sup>Teinc ul et folia mmutissime sub lente glandu-  
loso-hntiis Panicula conmbosi demim amplissima valde. glau-  
duloso-pubcacens Iniolucn phjlla glandulp.sa

*S erpinisus* B et II M<sup>s</sup>

Hab in montc *Ohjmpo Thessalo* cl Hcldr Julio 1831

\*sii\ECio BV\O>SENSIS Boi<sup>^</sup> (Sect *Sanacemci*)

S caule clalo cias»so ]reM>»iinò pubemlo strialo-sulcato bu-  
pernc in conmbiiu compos I um dcnsum abeuDli, folns oblongo-  
laiiceolaLisbrcMleraLUiiiiialis<sup>^</sup>upia glabus subtus ferrugineis ad-  
pressuiscule et brcvissunè lrtis omnibus eliam rameis petiolatis  
argute et minute ^ejjalo-denlati&. supremis rameis linearibus in-  
tegns, m<sup>^</sup>olucio ovoideo-campaniilato brevissimè hirto phjllis  
apice abrupte ct bieutci acurauiat, squamis accessorns angusti  
linearibus involucrum rpquantibu<sup>^</sup> tlonbus qumqueligulatis, ache-  
nns glabru

Uab in Calhd auMro-occidentah in s\lvatic\s prop6 *Bayonne*  
*e\Vc&* portam *Moussetole* dictam Ferat m herb Fauch<sup>^</sup>

A *S Fuchsu* = *Sai i acemco* Gren etGodr an L cm magis af-  
finis mihL distinctus videtur caule et prsertim corjmbi magis  
conferti ramis crassioribus, folus minus Ion gò acummalis subtùs  
araneoso-velutnis ncc glabns, capituh crassionbus plunfloriš,  
caljculi squamis. elongalis. a cactens sectionis speciebus longiùs  
distat

SENECIO TBM<sup>^</sup>LMNIGUS BOISS (Sect *Crousendes*)

S perenms, cauibus ascendentibus simplicibns sulcato-slnalis  
mfern6 denudatis dein foliosi<sup>^</sup> m pcdunculum monocephalum  
apicc incrassatum brevitcrpuberulumabeuntibus casterimglabris,  
folus tenuibus glabns vindibus subtùs pallidoribus oblongis acu-  
Im<sup>^</sup>culis acute rt regulariter dcnlatis dcnlibustriangnlanbusoblon-

gib acutiusculb acutè el regulariter dcildU\* dentibus tnangulanbu> alternatim minonbus, folus infenonbus m pctiolum longiusculum, supenonbus minonbus lanceolate acuminatis in petiolum brevis-simum attenuate, involucio hcmisphtericophjllis glabns inter se subdissitis linean-lanceolalis apice breviter acuminato nigncanti sublanatis, caljcu h ph)lhs hnean-setaceis involucre tertüA parte brevionbus, tloscuhs 8-10 longè ligulalis, acheniuh glabns pappo niveo subbrevionbus

*SenectodorowcumwiT glabemma* Rochel e\ Kotschy pi Tran-sjlv e\s 1850

Hal) in saxosis alpinis Trans) Ivan lie prop6 *Arpasch* alt 7000' cl Kotschy

A *S doromco* distinctissimus foliis tenuibus nee conaceib regularanüs et profundius denticulatis sup en on bus non somiample\i-cauhbus, involucris phjlhs planmscuht, nee bicannalis, ligulib longionbus et angustionbus Meosensu magis accedit ad *S Tour-iiefortn* a quo tamen caule umfloro, nnolucn ph^Hisapice lanatis, etc difiert

SENECIO PISIDICUS BOISS etHcldr (Sect *Crocisendes*)

S perennis parcfè araneosus demùm glaber, caule striato folioso 1 vel 2 ccplialo, folus carnosulis mtegris oblongo-lanceolatib infenonbus m petiolum brevem angustati>> caetens sessilibus supenonbus acuminatis apice araneoso-lanatis omnibus mtegerri-mis costâ abba latâ percursis, involucris parc6 et breviter lanati phyllis apice mgricanti breviter acuminatis, caljcu h pli^lhs lanceolatis mvolucrum dimidium vi\ acquanlibus, ligulis 10-12 intensè luteis disco dupl6 longioribus, acbenib lurtulis

Hab in regione supenon month *Stauos* Pisidis cl Heldreich alt 6500' Fl Augusto

Planta 7-10pollicaris Habitus spcciminum minorum *S doronici* Species inter *S Olympicnm* et *S Tmoteum* quasi intermedia Prior egregLè differt caljcu h squamis latissimis, posterior cm propiüs accedit folib radicalibus ovatis vel ovalo-oblongis longè peliolabs, mflorulentid corymbosâ sat differre videtur

SENECIO BRACTEATUS BOISS et Orphanides (Sect *Crocsendes*)

S perennis glaucescenti-virens, caule crassiusculo elato striato indumento araneoso demum deciduo obsito folioso simplici apice paniculatim vel umbellatim corymboso, corymbi simplicis pedunculis divaricatis arcuatis, folis demum glabris glauco-virentibus subconatis integris vel minutissimè denticulatis radicalibus et inferioribus ovato-oblongis obtusissimis in petiolum abruptè attenuatis, superioribus oblongis basi rotundatà sessilibus acutis sspè mucronulatis in bracteis eis similes sed minores basi attenuatas margine araneas pedunculatis subnatis breviores sensu abeuntibus, involucri hemisphaerico parè araneoso vel glabrato phyllis conatis dorso elevato sulcatis nigrescentibus superne abruptè et longiusculè acuminatis apice ciliato-lanatis, calycis phyllis triangularibus dimidiatis brevibus, ligulis 12-15 disco duplè longioribus intensè flavis, achenis hirtis

Hab in regione medii montis *Kyllene* Peloponnesi alt 5000' cl Prof Orphanides

Planta 2-2<sup>1</sup>/<sub>2</sub>\* pedalis Folia inferiora 4-5 pollices longa 2-2<sup>1</sup>/<sub>2</sub>, lata Corymbus G-12 cephalus Valde affinis *S Macedonia* Guss (CQI referenda est planta a cl Heldreich olim in *Taygeto* lecta et a nobis pro *S Orontia* habita qui achenis glabris differt), ab GO differt fere ut *S Germ d%* Gren et Godr a *S doronico*; folis inferioribus ovatis nee elongato-lanceolatis, integris nee dentatis, caulibus non acuminatis, ramis dilatatis et in formam umbellatam more involucri ad pedunculorum basin confertis *Sen Tmolem* cui eum penitus retuleramus folis radicalibus ovatis et achenis hirtis quoque donatus differt eis inferioribus grossè dentatis, caulibus floralibusque Unanibus

SENECIO EUBATUS BOISS et Heldr (Sect *Crocisendes*)

S perennis, caule erecto striato-sulcato adpressè arachnoideo cano nigido superne vel ab medio sursum corymboso corymbi ramis sessilibus simplicibus elongatis erecto-patulis, folis rigidis penitus araneoso demum glabrescentibus oblongis integris vel obsolete repandis inferioribus in petiolum attenuate obtusis ciliatis ~~5061-~~



hbusbasisubangustatâ semiamplexicauhbus, rameis linearibus araneoso-canis, involucri campanulati adpressè nivei phyllis conaceis lanceolatis apice sensim acuminatis, calycuh lanceolalis patentibus involucri dimidiò brevioribus, hgulis 13-15 intensè aureis fuscolineatis disco dupld longionibus, achenis glaberrimis stnatis pappo eis sesquolongion superatis

Hab in rapestribus montis *Delphi (Xerowuni)* Eubæe alt 5000' ubj detexil cl de Heldreich Flor ineunte Augusto

Planta pedabs sesquipedabsve Corymbus 3-5 cephalus in plantsculU ramosior pedunculis 2-3 pollices longis Capitula cis *S doroma* et *Olympia* ferè majora Pulcra stirps ex affinitate *S Olympia*, ab omnibus affimibus mdumento arachnoideo mveoper-sistenti cauhs et involucrorum distinctissima

SENECIO CILICIUS BOISS (Sect *Croasendes*)

S pereDnis totus indamento adpresso pannosus niveus, caule ereclo vix. striato fohoso supernè subdichotom6 ramoso corymboso, lohis oblongis vel oblongo-lanceolatis integris vel remoliuscul6 denlatis acutmscuhs radicaibus longè inferioribus breviter in petiolum attenuate supenonibus oblongo-lanceolatis basi sessili senuamplexicaulibus rameis angust^ linearibus, involucri adpress6 mveiphyllis lanceolatis acutiusculis intiis longitudinahter concavis, calycub phyllis lanceolatis acutis involucri partim brevionibus, hgubs 12-15 aurantiacis oblongis fuscolnatis disco dupld longionibus, achenis junionibus breviter hirtulis, pappo subumsenah.

Hab in herbibus *Taun Ciliaa* alt 6400' cl Kotschy, in *Armenta* propè *Maimansour* cl Huet du Pavilion Floret Julio et Augusto

Planta 1-2 pedabs Folia radicalia 3-4 polkces longa polltcm vel paulk amphùs lata. Capitula eis *S doronta* pauld minora Pulcherrima planta habitu *Tephrosendes* referees scd caljculata Affinis *S. molh* DC Prodr. an Willd. Aucher N° 3428 qui a nostr4 specie difTert indumento totius partis supenons plants glanduloso-crispo nee mveo, involucri minutissimè calyculati phyllis acntè cannatis giandulosis' Pappus in utroque subuDisenalis sed characteres stigmatis et involucri ommnti *Seneaoms*

<sup>1</sup> *S eriocarpus* DC nostrai speciei etiam magis prozimus tain en \$atli differt radumento tenuion griseo, folna DOB deatatis ned profund^ mcisjs

## CINEEEJE

EuiiNOPb DOVLI Doiss Diagn VI

Var « *cotmgerus* Squama una allerave flosculorum supeno-  
lum in coinu lonucsjjpc capitulo dupl6 longius elongata

*E spinosus* Desf ,F1 Atl? non L = *E spmosus* Balansa PI  
Alg exs 152N°57G

Hab circA *Oran* Doiss et Reut, Balansa, ad fluvium *Sig* (Du-  
rando)

*E spinosus* L verus ex ^Egypto cst species diversissima Lota  
mvea

Var p *macrotJujetus*

Sclae ad basin involucri propy numcrosissimao co xquilongse  
Folia minùs dissccta spins abbreviatis

*Echinops spinosus* Balansa PI Alg exs 1852 N° 492

Hab ad prom *Falcon* provinciEe *Oran* cl Balansa.

Praeter characteres mdicatos omma habet *E Bovei* a quo spe-  
cificè non distinctum esse arbitror In diagnosi *E Boiei* pappi  
descnptio e speciminibus achonns maturis donatis sic mutanda  
a pappis setis Lasi concretis jam mfri medium libens

NB *Ech Synacus* ex speciminibas mehonbus fructa maturo  
donatis observatus pappum reverb usquò ad medium longitudims  
tantùm coactum habet et ide6 in *Sect Ritronem* juxti *E Crehcum*  
transferendus

EciiNors GAILLAIDOTI BOISS (Sect *Psectra* )

E caule gracihsubsimpli-3cephaloadpress6araneosopraete-  
re&que setuhs -viscidis acnleohfonnibus mgncantibus crebns pa tubs  
obsilo, folns superni parcissimèaraneoMs scabndisque subtùs ara-  
neoso-cams bipinnatisectis rachide lacinnsque angustissimis hisce  
in spinas tenues acerosas abeuntibus, capituhs violaceis, setis paucis  
involucro tnpld brevionbus, m^olucris squamis infenonbus apice  
spathulato-dcltoideis longè floccoso-lanalis attenuato-acuminatis,  
mtermèdiis lanceolatis spinulosis medium verstis utnnquè barbel-

latis mlegnsve parcè ciliato-lanatis intimis brevioribus tenens infernè connatis, achenio glabro, pappi setis dilalatis paleaceis barbellatis a basi hbcns

Hab m collibus infenonbus *Libam* prop6 *Saida* cl D<sup>f</sup> Gaillardot  
Species clegans folns tenuiter dissectis, caule valdè glanduloso inter *Psectras* achenns glabris, squarais c\tenonbus involucri araneoso-lanatis msignis

ECIINOPS GRIFFITHIANUS Boiss (Sect *Psectia*)

E caule crasso sulcato-costato arachnoideo-cano praitereâque papillis elongatis glandulâ teriainatis obsito supernè ramoso-corymboso, foliis pinnatipartilis suprd parciis subtis densissimè arachnoideis cam segmentis tngulanbus lobatis apice ct lateraliter in spmas flavidas abcunlibus, setis mvolucro dimidio longiori bus numcrosis in penicillos plumosos coactis, squamis externis apice deltoideo-spathulatis apice denticulatis in acumen bpinosum attenuatis, intermediis infernè mgncantibus medium versùs palmato-flmbnalis in acumen vahdum eis asquilongum angustatis, intimis in tubum pentagonum nigrum ad  $\frac{2}{3}$  longitudims arcissimè coalitis parte liberâ lanceolatis fimbnato-lacens acuminato-spinosis, achenio pentagono adpressè senceo flavido, pappi setis longiusculis paleaceis barbellatis a basi libens

Hab in colhbus saxosis propè urbem *Caboul* cl Griffith  
Species characteribus flons distinctissima

Crnsiuu PITYLLOCEPHALUH Boiss et Blanche (Sect *Epitrachys*)

G. caule erecto dichotomÿ ramoso corymboso-pamculato ramisque lanâ patulâ enspâ obsitis, folns radicalibus cauhnis suprâ setoso-scabns subtis parcè arachnoideis canescentibus a basi amplexicauh aunculatâ lanceolatis pinnatilobahs lobis paucis tngulanbus in spinas flavidas lobo acquilongas vel breviores abeuntibus margine setoso-spinulosis, capitulis terminalibus soUtanis vel binis approximatis sessikbus basi folns 3-5 basi attenuatis pinnatipartilis flores superantibus involucraUs, involucn parcè araneosi squama dorso glabrescentibus llavovirentibus parvis numerosis adpressis oblongis apice subcannatis infunis brevissim6 mucronatis inter-

mediis super non bu&que longiusculè subulato-acurainatis inermibus, flosculis roscis

Ilab *a&Broummana* Libani cl Blanche Floret Augusto

Species distmctissima Cauhs land tenui sordidd longmsculfi obsitus Folia involucrantia 1-7«-2 pollice blongalaciniis utrinquè subbinis remotis mferionibus multO minonbus omnibus in spinas abeunlibus Capitula & C *miensis* fore dupld majora Exaffiniale *C lappacei* Mil

CIRSIIUM HLARMONIS lioi^b (Sect *Epitrachys* )

C caule pumilo dense albo-tomentoso supernè corymbosè 3-7 cephalo, loins supernè tenuiter et adpressè setosis praeterea que araneoso-canescenlilms subtùs adpressè cano-tomentosis omnibus pinnatipartitiis parLitiombus circbns lanceolatis in spinas validas (lavas abeuntibus basi seeds rachidem Inermem decurrentibus, folu&radicahbus bast attenuatilib cauhnissessilibus^capitulis breviter ovatis sohtanis folus 5-7 bracteantibus pinnalipartitis in spinas validas abeuntibus capitulo dupld longionbus basi suiTaltis, involucn squamis oblongis adpressi-s in spmam tenuem lanceolato-subulatum erecto-patulam attenuatis sub spinfi arachnoideis, flonbus purpureis

Ilab in cacumimbus *Hetmonis* supra *Rascheya* Boiss Julio 1846

Pedale vel sesqmpedalc Folia radica ha semipedaha, floralia 2-3 polhccs longa, capitula Illis *C lanceolati* pauld minora A *C phyllocephalo* differt mdumento cano-tomentoso, folus partitis margme non seloso-spinulosis, capitulis latioribus, squamis longiùs spinosis Magis alRne formis longè bracteatis *C lappacei* et praosertim *C tomtoso* CXU = *C lappaceov&v tomtoso* ? quod codem gaudet Indumcnlo sed ut omnes *C lappacei* forms inflorescentiam subracemosam habet

CIRSIIUM STOCRSH BOISS (Sect *Breea*?)

C perenne? totum glaucum, cauhs erectis simpheibus glabns valdè striatis, folus lanceolatis supra glabns subtùs parcè pulvorulento-arachnoideis infimis in petiolum planum attenuatis caetens sessilibus omnibus pinnatilobatis-parlitisve segmentis ovato-trian-

gulanbus brevissimis lobulatis in spinas flavidas breves abeun-  
 Ubus, spims paucis utnque e basi petioli seeds caulem decurrentibus,  
 fohis supenonbus lanceolatis dentatis, capitulis paucis peduncuhs  
 stnctis eis longioribussuffTultis paniculam corymbosam formantibus  
 breviter ovatis, involucri squamis glabns adpressis tnangulan-  
 lanceolatis apice subcannatis in spmam brevem subpatulam abeun-  
 Ubus intinus elorigatis inermibus lanceolatis acuminate, flonbus  
 roseis, pappo tubum corollas per anlhcsin VIK aequanli, limbo ad  
 Vs 5 partito, filamentis glabns

Hab in dilione *Beloutschislan* propè *Khet&lum* cl Stocks

Habitus *C anensts* a cujus formis omnibus differt folns angus-  
 tionbus, pamculS stnctft, involucri squamis sensim ab infimis ad  
 intenores elongatis nee supenonbus abrupt^ multO longionbus,  
 cxtenonbus spinà manifesto subpatulft terminatis nee inermibus,  
 limbo corollae ad basin usque non parlito An pappus in hdc specie  
 post anthesin longior At et ide6 an recte Sect *Breecs* adnme-  
 randa est?

CIRSIUM CHELMEUM Orphamdes (Sect *Cephalonoplos*-)

G glabemmm, caule umco simplici densè fohoso slnato fohii.  
 oblongo-lanceolatis, infimis citiùs exsiccatis in petiolum attenuatis  
 caetens sessilibus basi auriculatis non decurrentibus omEibu\*  
 sinualo-lobatis lobis brevibus lteriim lobulatis in spinas numero-  
 siasimas flavas tenuissuias folu latitudine saepiùg longiores abeun-  
 tibus, folns supenonbus angustionbus abbreviate acuminatisden-  
 siùs spinosis, capitulia subsessilibus in paniculam thyrsoidream  
 terminalem aggregate oblongis fohis floralibus involucrium ssquan-  
 tibus confertissirais intimis ad spinas pmnatas reductis bracteatis,  
 involucri glabn squamis palhdè lutescentibus lanceolatis dorso  
 cannatis in spinam inermem lanceolatam margine denticulatam  
 apice patulam abeuntibus, intimis multd longionbus in appendi-  
 cem subdilatalam acuminatam abeuntibus, flosculis e sicco albidis  
 vel palhd6 carneis, filamentis breviter papillosis

Hab. in monte *Chelmos*. Peloponnesi cl Prof Orphamdes Fl  
 Julio

Planta bipedalis. Folia ferè G *glabn* sed mmora et spinis te-  
 nuionbus et numerosionbus marginata Capitula magnitudmi9

t'orum *C. Mon&pcssulam* Species a *C. apiculato et Kotschyano* quibus affinis folns minùs profundè localis trnuissimè et numerosissimè spinosis, squamis internis involucri apico subspathulatis distinctissima. An ex duralione quam monocarpicam esse suspicor et folibus stylo imperfecto donatis libanda? cttunc forsitan inter *C. arvenwm* *C. polyanthum*?

Cinsium GAJLIARDOTI BOISS (Sect. *Orthotetrone*)

*C.* caulibus tenuibus simplicibus foliosis, folns tenibus lanceolatis acutis supra araneoso-glabrescentibus subtùs araneoso-canescentibus integris subrepandis margine rariùs spinulosissimis inaequalibus basi seciis cgmleis ferè a folio ad folium in angustam ciliato-spinulosam decurrentibus, capitulo terminali folibus superonibus acummatis superalo oblongo, involucri squamis adpressis vifidibus parvis araeot>is oblongo-lanceolatis in mucronem spmosum album brevissimum abeuntibus, filamentis glabris, flosculis purpuris, pappi setis niveis apice denudatis incrassatis

Hab. ad raper ultra pagum *Djebad* Libani cl. D<sup>r</sup> Gajliardot. Fl. fine Augusti

Planula distinctissima ex unico specimine mihi tantùm nota. Caulis ut videtur decumbens. Folia intermedia 3-4 pollices longa 6-8 linear. latic. Capitulum in meo specimine unicum magnitudinis illius *C. Smih*. Species inter *Orthocentra* foliis substantis tenuis integris margine spinulosis spinulis longioribus lineam longis intermedis multo brevioribus insignis, habitu *Carduum argentatum* referens

CARDUUS TAYGETEUS BOISS et Heldr

*C.* tenuissimè araneoso-puberulus pallidè virens, caule alato ahs multipartitis breviter spinosissimis apice 2-3 cephalo, folns atnquoque tenuiter araneosis pinnatipartitis parvis lobatis in spinas flavidas tenues numerosas abeuntibus, capitulis subrotundis solitanis longiusculè pedunculatis subnatis involucri rubellae parvis araneosis squamis in spinas margine revolutas subulatas longissimas reflexas abeuntibus

Hab. in rupes regionis monlaud) *Taygetim* tauce *Andtourthta* cl. Heldreici

Haec species quam dñ. pio *C. nutantis* forma habuimus cut simillima est ab eo specificè differre videtur folns magis dissectis et inprimis involucii squamis in spinas revolutas saepè fcrò pollicem longas eximie reflexas tenues abeuntibus nee lanceolalis patulo-reflexis. Capitula antfc anthesm in nostrâ specie eximie squarrosa

#### CA. RDUUS OLYMPICUS Boiss

G. caulibus ascendentibus parcfè arachnoideis angustis alatis alts in partitiones ovato-trianguares breviter et tenuiter spinosissimas partitis, folis ambitu lanceolato-hneanbus parcfè araneosis glabrescentibusve pnnatipartitis partitiombus sinuatis in spinas flavidas tenues abeuntibus, capitulb terminahbus 2-3 peduncub cano-tomentosis capitulo sequilongis brevionbubve nudis suffultis ovato-rotundis, involucri glabrmcuh squamis angustfe hnean-lanceolalis nervo medio prommeuti percursis in spinulam brevissimam flavidam abeuntibus prueter e\tenores subpatulas adpressis, intimis apice Longè attenuatis pappum aequantibus, flosculis roseis, achemis

Hab. in regioae supenori *Olympi Bithym* ubi legi Julio 1842, eodem loco Aucher N° 3532.

Species affinis *C. acmthoidt* L., Koch ab eo distincta capitulis majonbus inter ea hujus et *C. nutantis* inagnitudine Intermedns, peduncub nudis cams nee alato-spinulosis suffultis, spinis foliorum et alarum validionbus ranonbus ad apices loborum lantùm obvus, involucri squams magis adpressis mlimib acutionbus nigidioribus

#### GAHDUUS MARMORATUS Boiss, el Heldr

G. bienms cauhbus ramosibimis glabns angulato-sulcatis vitidulis angustissimè alatis alis inaequalibus dcnliculatis dentatisve dentibus hinc indè in spinas flavidas vahdas patulas diametro caulis longiores abeuntibus, folus suprâ glabrescentibus vitidub subtus araneosis gnseis ad nervo^ viscidulis h̄rato-subpinnati-

partitis, partitiobus ovato-rotundatis obtusis & sessilibus rotunda  
tis sejunctis inferius multo minoribus superioribus multo  
confluentibus omnibus grosse dentatis dentibus spinas palmatas  
longas acerosas allenuatis, folis superioribus ad spinas palmatas longas  
reductis sub capitulis usque obvis, capitulis 3-5 ovatis sessilibus  
ad ramorum apicem glomeratis, involucri flavescentis parvissime  
arachnoideis squamis imbricatis lanceolatis subciliatis in spinam  
attenuatis adpressis, intimis purpureis internodiis acuminatis floscu-  
los purpureos subaequalibus, achemis flavidis etidis stentatis obso-  
lete transverse<sup>1</sup> rugulosis umbone stipitato capitato

Hab in agris et locis stentibus *Messene* circa *Pylos* cl Held-  
reich

Species habitu et capitulorum magnitudine affinis *C cephalantho* Viv qui differt folis longioribus non gratis partitiobus  
numerosis profundè lobatis, caulibus interruptè alatis, capitulis  
numerosis densè capitato-corymbosis, involucri squamis intimis  
obtusis flosculis multo brevioribus Folia in *C marmorato* facie  
superiori è immo albo-maculata

NB Nomen *C Bowyeri* Boiss et Reut Pugill pi nov in *C.  
Reuianum* Boiss ob *C Bourgeanum* Schultz Bip Cananen-  
som penitus propositum mutandum est

#### CARDUUS BAXANSIS BOISS et Reut

*C monocarpicus* caule a basi parvè ramoso ramisque toto lon-  
gitudine ahs interruptè partitis in spinas flavas aciculares creber-  
rimas patulas diametro ramorum triplo longiores abeuntibus ob-  
sitis, folis radicalibus inferioribusque papilloso-hirtis viscidulis  
in lacinas triangulas lanceolatas lobatas tenuiter spinosas pinna-  
partitis, caulibus superioribus angustissimis, capitulis sessilibus  
3-5 ad ramorum apicem sessilibus ovatis basi umbilicatis, invo-  
lucri glabrescentis vel parvissime araneosis squamis lanceolatis ca-  
rinatis margine denticulatis inferuè subleucis minutè tuberculato-  
punctatis in spinas tenues erecto-patulas attenuatis, intimis acu-  
minatis albulis pappi acquantibus, floribus purpureis, achenis  
ferebilibus flavidis unibone non angulato

Hab in arenosis circa *Mostaganem* cl Balarmpl exs 1851 sub  
*Cf myrweantho*



Species affinis *C mynucantho* Salzmann sed ab eo facile distinguenda caulibus validioribus, spinis alarum 4-6 lineas longis nee brevissimis, capitulis majoribus ovatis nee ovato-oblongis basi umbilicatis nee rotundatis, squamis involucri marginis c. minute denticulatis.

CARDUUS VALENTINUS BOISS et Roux

*G* monocarpicus glabrescens caule humili ferè a basi rarissimo ut et rami alii in lobos minutos tenuiter spinosissimos partibus interruptis ad apicem usque obbito, foliis ad nervos subtus parvis hirtis caeterum glabris pinnatifidis partibus inferne attenuatis lobis dentatis rotundatis dentibus in spinulas minutas tenues numerosas abeuntibus, capitulis ad apices ramorum solutis vel 2-4 nervis pedunculis dense spinosis aequilongis vel capitulo brevioribus suffultis ovatis, involucri squamis parce araneosis lanceolatis in spinas subulatas tenuissimas patulas abeuntibus, lacinis lanceolatis apice rubellis acuminato-mucronatis inermibus papillis aequantibus; flosculis roseis, achenis flavo-cereis multidis lineato-striatis transversè obsolete punctatis umbone centrali non angulato

Hab in regno Valentino, circa *Alicante Bourgean* coll ann 1852 N° 1599 sub *C ensperis*, in regno Murcico in monte *Sierra de las Cabras* Bourgeau 1850.

Caulis in meis specimenibus pedalis; folia eis *C ensperis* multo congestiora profundius partita et longius bipinnulosa, capitula ejusdem magnitudinis sed pedunculata squamis in spinas longiores et patulas nee adpressas attenuatis, intimis nunquam ut in *C mspensis* flosculos subaequantibus

CARDUUS CAMPORUM BOISS

*C* glaber caulibus basi flosissimis supernè ramosissimus laxè corymbosipedunculatusque ad apicem usque alatis angustis ensperis in lobulos minimos brevissimè et tenuiter spinulosos lobis partibusve fohispinnatifidis partibusverigidis partibusobtusis triangularibus spinosis, foliis rameis brevibus bene lanceolatis pinnatifidis crispis, capitulis subsolutis ovatis longiusculis ped-

dunuilalis, involucri parvè araneosi squamis angustè linear-lanceolatis crectis adprecisiusculis mucrone brevissimo flavido spinuloso abruptè terminate limis longè attenuate liermibus pappum aequanlibus, flosculis roseis, acheniis griseis hneatis tenuiter punctulato-subrugosis umbone centrali non adgulo

Hab in plainiis (steppes) ad meridiem Danubii in Rumelidura *Kustendje* Legi flor Aug 1842

Specie affinis *C. consp.* a quo differt glabritate, foliorum profundius partitorum rigidiorum magis crispatorum spinis validioribus, capitulis subsuturatis longe pedunculatis, involucri squamis brevioribus magis adpressis apice abruptè mucronatis intimis longioribus pruinosis Achenia multò evidentius quam in *C. consp.* longitudinaliter hneato-sulcata

CORDUUS THESSALUS Boiss et Heldr

*C. monocarpicus* glabrescens caulibus elatis strictiusculis ramosis ramisque ad apicem usquè angustè alatis alis ex lobulis rotundatis consp. spinis albidis brevibus numerosis obsitis in caule remotiusculis in ramis coifertissimis constantibus, foliis ambitu lanceolatis praeter costam subtis parvè papillosam glabris pinnatifidis partitioribus patulis vel subretorsis flabellatis 3-5 lobis, lobis lobisque spinis vix breviter terminatis nervis subtis valde promuliss, capitulis corymbosis inter se approximatis pedunculatis crebris spinulosis circumscribitis suffultis ovatis, involucri parvè araneosi squamis lanceolatis erectis nervo valido in spinam validam brevem abeuntibus intimis acuminatis inermibus apice ribelhs pappo subbrevioribus, flosculis purpureis, achenis lineatis transversèque rugulosis minus, umbone centrali »on angulato

Hab ad radices montium *Olympi Thessah* propò *Katunne* cl Heldr qm legit Aug 1851

Caulis 5-6 pediculis spinarum alarum 1-2 hneas longae Capitula paulo majora et *C. consp.* qm differt foliis minus partitis spinis tenuibus brevibus nee vix acerosis obsitis, teneris nee conaceis prominenterque nervosis In *C. consp.* praetered capitula subsessilia aggregata sunt — *C. camporum* magis affinis differt capitulis solilatis minoribus longo pedunculatis, foliis brevius spinosis glabris\*, squamis involucri paulo angustioribus brevioribusque

**CRANÆPEUCE** STBICTA DC var *Giwca* B et Heldr

Folia amphora elongata subtus densius arachnoideo-cana Caulis latius alatus Capitula saepe longiuscule pedunculata nee subsessilia Involucn phylla inferne magis arachnoidca

*Ch utropurpurea* B et H Mss

Hab in umbrosis subhumidis regions sylvalicae montis *Olympi Thessah* prope coenobium *Hagio Jhomj&i* (Heldr)

SAUSSUREA GRIFFITHSII Boisb (Sect *Benedictia*)

S caule glabrusculo erecto simplicij fohoso stnato fistuloso, folus oblongo-hneanbus acutis parcissime araneosis demum glabratis facie supenon praesertim margino et apice scabridis subhis laevibus inferioribus basi longe attenuatis breviter decurrentibus supenonbus basi sessili subangustatis, capitulis ovatis subsessilibus in corymbum capitatum densum confertis, involucri squamis imbricatis parce arachnoideo-hirtis ab infimis ovatis apice nigrescentibus ad interiores oblongo-lineares rubellas anguste membranaceo-marginatas sensim auctis omnibus obtusis, receptaculo paleis hneanbus longis albis dense obsito, achenis glabris, pappi setis exteris liaequalibus barbellatis, infernis basi in anulum concretis longe et dense plumosis, anthocarum appendicibus basilanibus crebre ciliatis

Hab in regno *Cabuhco* cl Griffith

Planta fere bipedalis, folia intermedia bipollicana tres hneas tata, capitula 10-15 magnitudinis eorum *S alpirwe* sed magis rotundata basi minus attenuata Prope *S alpinam* collocanda Habitus *SeiratulcB divaricate* F et M sed pappus divaricatus,

## ONOPORDON POLYCEPHALUM BOISS

0 totum araneoso-canum, caule ramoso, folus inferioribus rameis lanceolatis breviter lobatis apice et laterahter in spinas acerosas flavidas lobis longiores abeunlibus in alas eis saepe aquilataa lobulatas longe acerosas secus ramos decurrentibus capitula pluribus parvis subsessilibus in corymbum densum terminatam

aggregate, involucri araneoso-cani squamis in spinas subulatas. glabratas rectas supremas flosculis breviores abeuntibus, intimis longioribus rariis apice subulatis lincibus, flosculis roseis

Hab in *Tawo Cihcico* cl Th Kotschy (sub *Cirsium onopordioidi*)

Haec planta cujus ramum lateralem tantum vidi inter *Onoporda* habitu *Cirsium* vel *Cardui*, capitulis 7-9 ovatis dense corymbosis illis. Ceterum specierum generis minoribus, involucri squamis adpressis distinctissima est. Ob receptaculum alveolatum achemaque etsi juniora tamen distincte rugosa generi *Onoporda* absque dubio adnumeranda est

#### ONOPORDON LIDANOTICUM BOISS et Blanche

On. totum arancosum canescens caule pumilo parce ramoso totum alis angustis ad basin usque in lacinas triangulari-lanceolatis partitis breviter spinulosis obsito, foliis inferioribus pinnatifidis partitibus oblongis interius pinnatifidis lobis in spinas flavescentes breves abeuntibus, caulibus lanceolatis pinnatifidis decurrentibus, capitulis parvis, squamis basi araneoso-lanceolatis brevibus in spinas rubellas infimas reflexas intermedias superioresque patulas erectasve flosculos vix superantes sensim attenuatis

Hab in *Libano* prope *Broummana* cl Blanche, in Syria Aucher N<sup>o</sup> 3485

Planta  $\frac{4}{5}$ -i pedalis. Capitula nuce non majora, squamae longiores cum spinis 8-9 lineas longas. Aliae *O. homodo* Yiv. = *O. Illyrica* var. spinis elongatis auct. plur., ab eo differt capitulis dimidiis minoribus, squamis multo brevioribus, alarum foliorumque spinis brevibus tenuioribus. An nota sat constantes et an ambo ab *O. Illyrica* sat differunt?

#### ONOPORDON CYNAROCEPHALUM BOISS et Blanche

On. praeter tomentum araneosum parcissimum ad faciem inferiorem foliorum et basin involucri obnum virens, caule elato breviter papilloso-glanduloso caeterum glabro ahsanguinissimis viridibus in lacunas triangulari-lanceolatis vix spinosis ferè ad basin usque partitis percurso, foliis radicalibus et inferioribus elongatis lan-

ceolatis bullatis profunde pinnatilobatis lobis ovalo-triangulatis. iterum denotatis spinosis, foliis caulinis abbreviatis angustis, capitulis amphistichis, involucri squamis nitidis glabris late oblongo-lanceolatis platis erectis regulariter imbricatis adpressis in spinam brevem abeuntibus ab infimis abbreviate ad internodum florum vix breviores rubrae attenuato-acuminatas subnervis sensim elongatis, achenis eum rugulosis quadrangulis angulis elevatis, hilo basilari breviter lanceolato, pappo achenio vix duplo longior.

Habitat in Libano inter *Djoum* et *Sherbet Berri* provinciae Sidonensis in cl. Blanche.

Habitu, capitulorum magnitudine et squamis latis platis solo *O. nervoso* Boiss. comparandum. Hoc specificè differt caulibus latissimis indivisis nec parvis, foliis demum bullatis, squamis longioribus longiusque spinosis.

SEIWATTILA GRIFFITHII BOISS (Sect. *Klasea*)

Species annua caule angulato-sinato humili a basi patulè ramoso aspero obsoleteque sub lente araneoso, foliis infimis radicalibusque ovato-oblongis in petiolum brevissimum attenuatis pallidè virentibus supra laeviusculis subtus aspensulis grossè repando-dentatis aliis basin versus pinnatilobatis sublyratis lobis dentibusque in mucronem brevem calcareum abeuntibus, foliis fœmibus parvis oblongo-hinc linearibusve denticulatis mucronatis, capitulis ad ramulorumque apicem solitariis pedunculis crassiusculis breviusculis suffullis oblongo-cylindricis, involucri parvè et breviter araneosi squamis imbricatis adpressis oblongo-linearibus in spinas rigidulas tenues patulas stramineo-rufescentes longiusculas abeuntibus, supremorum appendicibus lanceolatis erectis in nervis flosculos subaequantibus, flosculis palidè roseis omnibus hermaphroditis, achenis (junioribus) hilo basilari, pappi multiserialis setis scandentibus.

Habitat in ditone *Beloutschistan* in cl. Stocks.

Habitus *Centaurea aspera* B. Caules semipedales a basi plures dichotomi, folia infima cum petiolo saepe bipollicaria 6-8 lineas lata. Capitula 9-10 lineas longa, involucri squamis intermediis circ. 3 lineas late. Species juxta *S. xeranthemoidem* collocanda.

JuniNE\ cii/TTOLtris Boiss (Sect *Klasea* )

J basi suffrutescens ramosa multicaulis glaberrima, caulibus tenuiter virgatis simplicibus angulato-sinatis fohosis monocephalis, foliis sessilibus carnosulis angustè hneanbus mucrone bran calcareo terminalis striclis, capitulis oblongo-cylindricis, involucri straminei mitidi squamis numerosissimis angustissimè hnean-lanceolatis carinatis in setam longam sensim attenuatis omnibus adpressis ab externis ad intimas sensim elongatis prater inferiores libeas omnibus inter se basi longiusculè concretis, receptaculo fimbriato, corollis palhd6 roseis, filamentis papillois antheris basi caudâ brevissimâ truncato-bilobâ terminatis, achenus pappi setis numerosis fragilibus multisenatis longè scabundis intimis longioribus

Hab in regno *Cabulico* ad *Tatzeen* cl Griffith (Journal 1194)

Rami pedales breviores ve, folia 5-6 lineal longa lines  $\frac{3}{4}$  lata. Capitulum ferè pollicem longura medium versùs 5 lineas latum. Species pulcherrima involucri squamis numerosissimis adpressis setaccis insignis. Achenus ignotis propter caudam (ctsi brevissimam) antheriarum *Jinneis* poliùs quam *Serratula* adnumeravi

JURINE A MODESTA Boiss

J annua arachnoidico-candescens, caule humili basi tantùm folioso simplici vel a cello 1-2 ramoso ramis nudis monocephalis, foliis sessilibus lanceolatis integris acutis, involucri squamis araneoso-campis imbricatis adpressis internodiis triangularibus interioribus lanceolatis omnibus acutis membris, corollis roseis, achenus obpyramidatis nitidis subcompressis apice umbonatis, pappi mei setis paucis patulis subscabundis interioribus 1-2 duplè longioribus

Hab in regno *Cabulico* propè *Khuggar* cl Griffith

Folia vix pollicem longa 2-3 lineas lata. Caulis 2-4 pollicans nudus, capitula breviter ovata lili / *Pelichn* dimidiè minora. Antherae caudatse generis

CAULIN OLIGOCEPIUUA Boiss et Kotschy pi Taunexa 1854

G caule erecto vel ascendenti folioso breviter lanato demum glabrato albido apice monocephalo vel corymbosè 3-4 cephalo ramis elongatis fohosis, erecto-paluis, lous rigidis palhdè virentibus tenuiter araneosis demum glabratis radicalibus et inferioribus ambitu linear-lanceolatis pinnatisectis segmentis utrinquè 3-5 remotis saepè ad basin usquè 2-3 partitis lanceolatis carinalis in spinam tenuem attenuatis raclude laU spinulosà, foil is supenobus rigidibus sessilibus lobato-spinosis, supremis in involucri sensim abeunlibus flosculos subsuperantibus, involucri phyllis extenonibus albidis angustè linearibus canatis spinosis utrinquè 2 spinis lateralibus brevibus alterà basilari ramosà alterà supra medium simpliciter auctis (losculos superantibus, squamis intermediis brevissimis lanceolatis mucronatis inermibus densè lanalis, intonobus scanosis flavidis linearibus glaberrimis apice lanato undulatis denticulatis breviter acuminatis radiantibus flosculis paucis longioribus

Hab in valle *Gusgutu xaun Cihcxa* alt 5500' el Kotschy

Planta circiter pedalis Capitula illi» *C vulgare* vix majora. In *C frigidata* B. et H quae differt caulibus densius fohosis, foliorum segmentis utrinquè numerosius longioribusque, capitulis brevissimis pedunculatis corymbosis congestis formantibus, involucri phyllis extenonibus 5-10 spinis laterales ferentibus, intimis apice integre glabris acuminatis

KENTROPHYLLUM TENUE BOISS et Blanche (Sect *Atraxyle*)

K tenue, caule tenui glaberrimo albido supernè corymboso-paniculato, foliis brevissimè sub lente papilloso caeterum glabris inferioribus pinnatipartitis linear-lanceolatis lacinis triangulano-lanceolatis spinosis raclude spinulosà, ceteris rigidibus e basi sessilibus subauriculatè lanceolatis patulo-subrecurvis superne canaliculatis in spinam validam abeuntibus pinnati-lobatis vel integris margine spinosis elevatim reticulato-nervosis, pedunculis virgatis capitulo aequilongis longioribusve, involucri parcissimis sub lente araneosis phyllis exterioribus foliis summit similibus vix an-

guslè lanceolate in spinam abeuntibiu. margiue 2-4 spinuhs obsilis pa Lull\* erecti&que lloros. subaiquantibus, squamis lutenonbus lanceolatis albidis iritegerrmihpubcruhlh pungentibus flosculis rosefs subbrovioribus, acbenm> marginalibus calvis brevibus tetragonis scrobiculalis ujlerionbuslasvibu'\* papposis, pappinigricaliitispaleis omnibus iruncatis ah exlrims ad intermedia\* senbim auclis, sene HJLimi dupl6 brevion

Hab m Şu'ia ureâ *Jieyroulht Biommaua Libani t Saidat cl Blanche*

Species alliriis *K Stjitaco* quod cammdem regionum incola **diff**erl, caule plus mm'ii^vo enspo knalo, foliis glaucescentibus prui-~~no-o~~-hirli'o, capitulis paulo majonbus raagis. confertis sub^essilibu^, pappi albi p.ilo> inlormodiis multo longionbus acaminatis->nmis

#### COIBINIA DIP).N>VIA Boi^

C caule dicholomo rarnossissimo ylabrescenli albido uL et rami 3-4 alis virentibu\* angustis lobali^ spmulobit. non mterruptis e folus lamem caulinibquc deem n in lib us ab apicc ad ba^jn percurso, folus ladiculibusaniplNclongalisanibituoblongolanceolatisamediosursum dcorsiimquc dnguslalit utnuquç LenuiLer cinerasceuti-aracb-iioidel', bipinnaliscGlis, lacmiis primarus sccondarusquc linean-lanceolatisundulaLo-erosuhs apice minuLissim^ spinulosis pateuti-subrecurvi-, ractudo diigustç cLirreyul.inter alata inter partitiones inajores saepu lobuliferd, foliibcaubnib lanceolatisangustis brevibus in parlo superion plantar ad alas earum flccurrentia ortas reductis, ramis apicc dichotomø 2 vel 3 ccphalis, capitulis oblongo-cylm-dncis basi roLundatis G-8 flons peduncuhs eis ajquilongis vel (in capitulo infcnon) cis 2-3pl6 longionbus suffultis, involucn vindis parcè araneosi squamis hncan-laiiceoLatis superu^ hamato-recurvaLib spino>)is, Intcnoubus ereclia spinulo^i^ selis recceptaculi lae-\\ibus, aclicnus

Ilab in diliunc *Beloutsikittan* cl D<sup>r</sup> Stocks

Folia radica ha mollia, disseclione eaCentaurearumcx alDmlalc C (*Mat?up®* relereiitia, 8-11 pollices longa 3-4 Jata. Caulis ut videtur vald6 clalus ramo^usque alls 1/';-1 '/i linear la Us GapiLula 5 li.o.is loiiu^a IJM 1 lata Involucn MjuauiaiumLU^pides rccunaj



sesquilineam longae Pedunculi tenues saepius\* parte inferior\* angustatis alati Species in signis ex affinitate *C. alata* et praesertim *C. dissecta* Kar et Kir

COUSIN LV BADEHI Doisy

Gracilis perennis humilis a basi ramosa ramis dichotomis, foliis radicalibus confertis ovato-oblongis basi angustatis supra glabrescentibus sublimis cernis apice breviter spinosis praeter spinulas paucas marginales subintegras, foliis caulibus ovato-triangularibus triangularibusque angustatis in spinam flavidam abeuntibus erecto-patulis in alas integras spinulosas ad dichotomiam inferiorum usque ubi evanescent sensim angustatis decurrentibus, capitulis adramonim apicem 1-3 breviter pedunculatis ovatis sub 20-floris, involucris araneosis squamis basi concretis in spatulis iriquetras capituli diallois breviores spatulas angustas abeuntibus intimis scandentibus linearibus obtusis mucronatis, lacinis roseis achenis punctato-scribiculatis apice obsolutissimis 3-4 deuteriis, receptaculo setis laevibus

Habitat prope monumentum imperatoris *Abas* juxta urbem *Cairo* in Gallaia

Planta ex specimine semipedalis Folia radicalia sesquipollicem longa Capitula minuta magnitudinis eorum *C. brachyptera* et *Aleptoclea*, cui ut et *C. carhnoidi* affinis, eximie distincta ramulis superionibus ob alas sensim diminutas obtriangularibus Illos *Staticeae* *Egyptiacae* quodammodo referentibus

COUSINIA ALPIDEI Boiss

Gracilis foliis radicalibus rosulatis conatis supernis glabris lucidis infernis cernis ova vel ovato-oblongis petiolatis et ob segmenta utrinque 1-2 secus petiolam minuta ovato-triangularia spinulosa sessilibus lyratis acutis vel obtusiusculis circumscissis et propter marginem undulatum subbifariam crebreque deorsum-spiralis, caulibus erectis alatis jam in femore dichotomis ramosis, foliis caulibus inferioribus oblongis basi attenuate breviter decurrentibus ramis lyratis, superionibus triangularibus integris in alas a basi latius sensim angustatas integras remotas spinulosas decurrentibus spinis flavis-

cenli terminate capituh axillanbus cl in dicliotomns pedunculo crasso eis brevion suffultis soli tarns ovatis 15-20 floris homdis, involucn pared araneosi squamis aceroso-tuquetns vahdis vindibus inferioribus subrecurvis in termed us patuhs supenonbus erectis omnibus diamelro capituh sublongionbus, achemis receptacuh setis laevibus

Hab in ditione *Beloustchstan* cl D<sup>f</sup> Stocks

Folia radica ha 1  $\frac{1}{2}$ -2 polliccs longa petiolo brevissimo lobulato suffulta superfc c\imie roticulato-venosa Gaules pedales vel longiores alis ad basin fohorum 3-4 lmeas la Us sed infern<sup>s</sup> angustatis altero latcre glabrmscuhs nilidis altero cams, capitula spinis arcuatis vel patuhs 5-6 Uneas longis hornda magmtudine inter pisum et avellanam parvam media Species fohorum forms distinctissima, affinis *C Babert* a qud prater fohorum formam differt capituh majonbus, involucris spinis dupl6 saltern longionbus

#### COUSINIA HETEROPIHYLLA BoiSS

G cauhbus hum I lib us supernc dichotomy ramosis tenuibus parcè araneosis, folus conaceis ulnnqu6 parcè araneosis inferioribus petiolatis ovato-rotundis circumcired lobatis lobis triangulan-ovatis in spin as tenues abeuntibus, supenonbus ovatis lobato-spinosis latiusculè in alas spinoso-dentatas sensim angustatas breviter decurrentibus, florahbus lanceolatis minutis angustè decurrentibus, capituh brevissim<sup>^</sup> pedunculatis ad ramorum apicem confertis corymbosis folia floraha vix superantibus oblongo-cyhdricis 3-5 minutis, inTolucris breviteT lanati squamis basi concretis apice tngulan-lanceolatis scanosis spmulois brevissimis erectb adpressis villo fer6 occullatis, achemis margine minutissimè denticulatis, receptacuh setis Iambus

Hab in regno *Cabuhco* cl Griffith Journal N<sup>o</sup> 760

Planta semipcdahs, folia inferiora sesquipolhcana ferè sequilata basi abrupt<sup>^</sup> et breviter cuneata petiolo semipolhcan suffulta, capitula corymbum terminalem forman tia basi attenuata Involucrum tres lineas longum GorollsB e sicco flavescens Ex aflimtate *C stenocephalce* fioiss

## COUSINIA GBIFFITHIANA BOISS

G. caujeeolato ramosissimo ut et rami erecto-patuh virgati nudiusculo tereti laevi albido, folns inferioribus ambilu oblongo-lanceolatis supra glabrescentibus subttis cams pinnatipartitis partitiombus margine eximiè revolutis hneari-filiforimbus insequilibus saepè longissimis indivisis vel basi lacinulis 1-2 auctis in spmas tenues brevissunas apicc abeuntibus, rachide hnean angustè alate lobuhs spinosis inter partitiones auctd, folns caulims supenoribus rameisque ad spinulas hneares reductis, paniculi ternunali elongate ramis patuhs, pedunculis erecto-patulis capitulis solitanis ovalis 15-20 flftrls 4 'i~2pld longioribus, involucri tomentelh squamis breviter lanceolalis in spinulas breves recurvas abeuntilibus, achcrms fungosis scrobiculatis 3-5 costatis coslis 2 prominentionibus apice costanim productione irregulariter et breviter dentatis, receptacuh sellis brevibus

Hab in rcgno *Cabuhco* propè *Nowouk* cl Griffith Journal N° 764

Folia lofenora semipedalia longioraque parlitiombus majonibus bipolhcanbus hneam tantùm latis Gapitula pauld minora eis *C CandolleantB* Jaub et Sp quae valde nostrae afflnis differt folioram rachide integr& partitiombus brevionibus &quiloDgi5j involucri glabnuscuh squamis spmâ brevissimfl nee hneam longd terminatis

## COUSINIA ACTINIA BoiSS.

C perennis collo squamoso bomb^cino, caule elato tereti fólioso glabrescenti simplici supernè tan tùm in ramos florales breves 3-5 dichotomè diviso, folns conaceis glabns reticulato-nervosisutruiqu6 sub lente pustulato-tuberculatis lobatis lobis lanceolatis in spinas tenues longmsculas flavidas attenuatis, radicaibus oblongo-lanceolatis infernè attenuatis subpetiolatis petiolo piano margine lobulato dentato, caulims approxunatis inferioribus sessilibusbasi in auriculas breves rotundatas decurrentibus, superioribus sensun diminutis ovatis spinosissimis, capitulis subsessihbus 3-5 secùs mflorescentia? ramos fasciculatis bracteis lanceolatis spinosis mvolucrum sequantibus suffultis 10-15 floris ovatis, involucri flavidi **parce** et breviter araneoso-tomentelli squamis omnibus erectis

pitenonbus imbricate lanceolatis canuatis apice spinosis margine minutè denliculatis adpressis, inlimis membranaceis apice in appendicem lineari-spathulatam flavam denticlato-fimbnatam obtusam vquamas extenores Uosculo&que superantem ah^unftbus, receptacuh setih mfernè ltevibus apico sublationbus scabrous, achenns obsolete scrobiculatis pappo brevi pauciseto scabndo superatis intenoribus compressis extenonbus ob costas dnas fungosas producta^ trigono-subtnptens ahs apice in denies breves crassos lobiformes productis

Hab prope urbem *Caboul* m rupestnbus ad monumentum ImporaLons *Barber* cl Griffith Journal N° 951

Caulos 2-3 pedalc, folia radicalia cum petiolo 3-5 pollices longa 1-2 pollices lata Pamcula terminalis dichotoma scmpedalis vel pauli longior stnctiuscula Gapitula fasciculala sessilia 7-8 hneas longa Invohicri squamsB nitenores numerosae apice subdi-  
**latatae** oiunin6 hgulas mentientes Species distincLisaima

**COUSINIA nACEMOSA BoiSS**

C perennis caule tenui duro *iereti* glabro virgato folioso simp-  
cissimo parte supenon m racemum simplicem abeunli, foliis radicaibus . cauhmsngidissimisambitilinearibusbasisubdilatis sessilibus ad parlem fibroso-vascularem ferè reductis in spinas breves lanccolato-hncares ex eodem puncto binas patulas sursùm dirctas approxunatas subverticillatim pinnatipartitis supernè glabns nervo medio lato prenchymate angustissimo caco ad spjnorum basin marginato, capituhis ovatis 25-30 floris sessilibus vel brevissime pedunculatis solitarns laxè racemosis basi folio florali lanceolato ad spmam vahdam basi lobato-spinosam reducto involucro brevion suffultis, involucri glabn squamis numerosis Imbnctis conaceis breviter lanceolatis apice subcannatis spinosis adpressiuscuhs, squamis intenoribus longionbus lationbus acuminatis mermibus sub lente tuberculato-asperuhs, achenus compressis 2-3 costatis costis apice in dentes lobiformes rotundatos breves abeuntibus, pappo achenmm aequante, receptacuh setis apice scabrmsculis

Hab ad *Ovmye* jugum regm *Cabuhci* alt 10500'-11000' cl Griffith

Gaulis bipedals forsā Jongior Foliā 1<sup>4</sup>/r2 polliqes longa stricta in spinas nti<sup>4</sup>nquē bifafias veluti semiverti Qillatas ^Slineaslongas crebernmas partita, Capitula 7-10 avelland majora conacea racejn.um,4)d3 pōtypar<sup>4</sup>m gupernē minūs laxum formantia Habitfts et capital? *Chflrpfpeuces*

COUSINIA P^GNOLOBA BoiSS

C perennis polio lanato caule parçē araneoso tandem glabrē, s-centi Bupernē pānculato-ramoso ramis erecto-paAilisi folus radicahbus lineanbus supra minujtē papillan-glandulosis vindibūs subtūš camš pinnatipartitis 15<sup>4</sup>25 jngis rachide angustissimā Infe-grS| angustē alatā laciAiiš subverticillatis hneanbus in spinam<sup>4</sup>révent ftavidam abeuntibus patulis vel subretrorsis versūs apicem et prse<sup>4</sup>ertim basio<sup>4</sup>olu sensim abbreviatēs, verticillastns lacimajum inter se valdē approximatis, foliis caulinis valdē diminutis supremis ad spinas lineares reduclis, capitulis ovato-rotundis basi subtruncatis 40-50 flons sohtarus longiusculē pedunculatis, involu- cn parçē araneosi squamis imbnctis e basi dilatātā abruptiusculē in spinas infimas- recurvas intermediās erccto-patulas acerosas capituh djametro. subsequilongas apeuntibus, squamis intimis memb<sup>4</sup>naceis In appendicem oblongo-spathulatam fimbnato-laceram flqsculos<sup>4</sup>uperantem papillan-hirtam abeuntibus, acheniis . . .

**Hab. in monte Chehel prov Beloutschistan alt 9700 cl Dr Stocks.**

Folia ra<sup>4</sup>cakasemipedaha<sup>4</sup>medium Versūs 9-15 lineas lata. Ca-  
--i.i- J<sup>4</sup>—1<sup>4</sup>—<sup>4</sup>lit J.\*<sup>4</sup> 5<sup>4</sup>io<sup>4</sup>a iōngiusculō peduucu-

tacuh spinis yalidionbus ex basi lation non abruptiustalē atle-  
nuWs'ēt ptdasertitn stffiarilis%tiinis subnlato-acuminahs' nee id<sup>1</sup>  
appendicem **dilatātā laceram abeuntibus** f

**COUSINIA NOIANA** Bpiss<sup>ir</sup>

**d<sup>4</sup>peVefeilulHuf<sup>4</sup>a<sup>4</sup>eo<sup>4</sup>dnescetas, ca<sup>0</sup>litos pāmir<sup>4</sup>**  
alatis tenuibus apice monocephalla<sup>4</sup>-toliis mferidribūs<sup>4</sup>bblongolanceolatis basi atlenuaUs sessilibus margine sinuatis minutē spinulosis, caulinis oblongis vel ovato-tnangulanbus ad apicem cau-

hum sensim diminutis m alas minute ,spinulosas integras sensim angustatas secus caulem decurrentibus, capitulis ovatis basitruncatis 45-20 floris, involucri arancosi squamis imbricatis ID appendicem glabruaculam ovatam patulam in spinam lanceolatam flavam abeantem utrinque internè 2 spinulis auctam abeuntibus, squamis intimis lanceolato-subulatis inermibus, flosculis roseis, achenis nigricantibus subincurvis angulato-striatis apice obsolete denticalatis, receptaculi setis brevibus

Hab in montibus propè *Ktrrmd* Persia Babylonia finitimè et Noe

Semipedalis, capitula magistadine inter avellanam et nocem media Ex affinitate *C cybolepidis* Boiss et *C squarrosa* Bms a quibus capitulis saltem diaminonibus, involucri spinis multitudine tenuioribus squamosis differt, magis proxima *C purplew* Mey qua? tantum a nostris distinguitur foliis caulinis majoribus, capitulis paulo majoribus, involucri squamis intimis manifesto longioribus latioribusque cartaceis

### Coismu AURICUIATA Boiss

Graciosa adpressissima araneoso-canescens, caule albido angulato-striato ramoso ramis foliosis apice monocephalis, foliis multinerviis caulinis ad dichotomias sitis rameisque oblongis glabris basi in auriculas laterales rotundas decurrentibus utriusque canaliculis prominenter nervosis lobatis lobis rotundatis obtusis nervis productione spinas tenues flavas -edentibus, capitulis ovatis 70-80 floris, involucri arachnoideo-lanali squamis superne glabro-canaliculis lanceolatis canaliculis elongatis acerosis, inferioribus reflexis, intermediis patentissimis, superioribus erectis, intimis brevioribus vix pungentibus achenis.

Hab in regno Cabuco prope *Akrohat* et *Gniffith*

Plants partem superiorem tantum vidi Capitula parva aequalia *C hystnicis*, involucrum fere eundem sed spinis paulo longiores longioresque Ab ea distinctissima foliis ovatis laterales et rotundatis auncularis, caule aptero

## COUSINIA MICROCJLRPi BoiSS

G. adpressissimè araneoso-canescens caule fohoso alerruptè alato a medio corymboso-ramoso, folus radicaibusinflnusqueoblongis basi attenuate ad medium usquè pinnatilobatis lobis ovatis repaodo-denticulatis breviter spinosis, folus cauhnis ovatis oblongisve dentato-lobatis ID alas eis breviores vel sequilongas senaun angustatas dentato-spinosas decurrentibus, capitulus sohtanu globosis 40-50 flons longiusculè pedunculatis, receptacuh squamis ban Goncretis araneoso-lanatis abeuntibus in spmas glabras mtegemmas lanceolatas tnqaetras validas duras diametro capituh siitbBBquilonga9 recurvas vel pateutissiraas, squamis interionibus longionbusflosculossuperantibusscanosis linean-lanceolatis acumioatis, acheniis minimis lsvibus ovatis subcompressis ecostatis apice prorsus edentulis, receptaculi setis apice scabndulis

Hab in regno *Cabultco* cl Griffith Journal N<sup>o</sup> 868

Ptanta ut videtur Uumihs facie et staturae C *Hermoms* Capitula penphaena spinarum supputatd magnitudine nucis, spinaB basi 1 <sup>1</sup>/<sub>4</sub> hneam lates circiter 5 lineas longs Species achenus hneatn tautnm longis lsvigatis insigDis. AJfims C. *Belangen* que habet eadem squamarum dispositionem et formam sed squamas basi minus latas, intunas minus productas angustioresque, capitula paulò minora et IDpnmis achenia scrobiculata ban attenuate apice denticulate

Obs Quadam de varnis *Cousmtm* speciebus notanda.

1<sup>o</sup> € *pyrrhocephala* Jaub et Spach Iiustr. tab 167 est ipsissima *Cow. Olmm* DC. Prodr.

2<sup>o</sup> *Coustma ennacea* Jaub et Spach Illustr, tab 165 ex icone *CousmuB tenuifolw* Meyer quoad capitula simillima est et plania Meyen partttiooibus foliorum longionbus liearibus tantum differt. Probabiliter ambo speciflcè non differunt

3<sup>o</sup> *GotuiHta tUafoka* Jaub. et Spach tab 164 habet omnino capitula C. *Aucken* DC , ab eà foliis sinuato-dontatis nee pinnaU-partitis speciflcè differre videtur

## PTOSIMOPAPPUS ULIGINOSUS BOISS

Pt perennis collo fusciscenti, caule solitario erecto virgato subangulato simplici vel supernè bifido pilis conspersis hirtello, folis parvis puberulo-conspersis pallidius virentibus lanceolatis utrinque attenuatis acutis remote repando-denticulatis radicalibus et medio nervibus in petiolum saepe longe attenuate, intermediis linearilanceolatis sessilibus integris costae seeds caulem in angulum subdecurrenti, summo hinc setaceo, capitulo ad pedunculum longe nudum apicem solitario subgloboso, involucri squamis adpressis glabris flavo-virentibus margine angustè membranaceo-fusciscentibus oblongis obtusissimis mucicis, intermediis subpalmatis et breviter 7-natis, intimis appendice oblonga denticulatis tenacatis, flosculis pallide roseis marginalibus nervis tix radiantibus achemibus (juncibus) pappo pauciseto brevissimo terminate

*C. uliginosa* Brot Fl Lusit

Hab in uliginosis et ad novos prov *Beira* et *Extremadura* *Transtaganm* (Wehivitch)

**Habitus *Serratulae nudicaulis*** A *Pt sempervirens* hinc aemulans caule subsimplici, folis sparsis elongatis, squamis multo brevioribus ciliatis, etc Genen *Ptosimopappo* adde species segmentes

## PTOSIMOPAPPUS ARGUTUS BOISS

Pt glaberrimi resinoso-punctatus, caule solitario simplici vel parvis ramoso basi suifruticuloso deudato, folis inferius linearilanceolatis argutè serratis superioribus duobus integerrimis, capitulo terminali breviter ovato, involucri squamis depressis flavo-virentibus ovato-oblongis obtusissimis margine angustè membranaceo supernè breviter denticulato-iaceroso ciliatis sulphureis marginalibus non longioribus

*Centaurea arguta* Nees

Hab in regione montand insularum *Tenmfc* et *Faima* (Weib, pourgeau)



**PTOSIMOPAPPUS ARBOREUS BOISS**

Pt frutescens, ramis cano-tomentosis inferne denudatis superne 6-foliolis 2-3 nervosis, foliis ovato-ellipticis obtusis denticulatis acutis puberulis petiolatis, capitulis ad ramulorum apicem solitariis subcorymbosis ovatis basi 2-3 Mils<sup>1</sup> obtusis involucri squamis adpressissimis flavo-virescentibus ablongis obtusissimis apice subpinnatis 12-16 ciliatis ciliis adpressis, in timbra appendice longiore ovata pallide ciliatis densatis flosculis airphureis marginalibus subbreviter

*Centaurea arborea* Yitob Phyt Ganar

Hab in rupestribus insulae Palma (Bourgeau 1)

Habitu ad *Pt bracteatum* magis quam ad antecedentes accedit

**PTOSIMOPAPPUS WEBBIANUS BOISS**

Pt. suffruticosa ramis adpressis ciliis inferne denudatis superne 6-foliolis apice parvis corymbosis ramulosis, foliis elliptico-lanceolatis obtusis petiolatis acutis supernis denticulatis, ramulis revolutis usque ad partem ultimam foliorum foliolis lanceolatis parvis integris Yobisram siliqua denticulata involucri squamis adpressis mitidilavescentibus appendice deefdua ininit scariosa triangulari 3-5 denticulato-lanceolata terminatis, flosculis purpureis marginalibus brevioribus

*Centaurea Webbiana* Webb Phyt Ganar.

Hab. in partibus montibus Webb; Bourgeau

Inter *Pt bracteatum*; *Pt. ciliatissima* alias species generis habitu intermedius.

**PLECTOCARPUS ABYSSINICUS Boiss**

Pt. erecta simpliciter sulcata foliosa breviter pilosa puberula superne denudata aspectu monocaula, foliis sessilibus basi sessilibus obtusis biauculatis Bean-lanceolatis acutis margine minime et remote denticulatis sensim demum supremis antheris, capitulo magno ovato-rotundo, utroque lobis squamis flavidis appendicibus

dicem adpressam utnqud decurrentem nigram tngularem ci-  
his palhdis lalitudine appendicis sublongionbus eximiè pectina-  
tam, intimis appendice lanceolate nigrt lacero-fimbnatA tenni-  
natis, flosculis purpureis margmalibus neutns longissimè radian-  
tibus, pappi setis achenio (junio) longionbus

*Centawrea Abymnica* Schultz.

Hab in Abyssinia (Schimper t)

Cauhs 2-4 podalis, folia infertora 4-5 polhces looga 8-10 Uneis  
lata Capitula llhs *Pled Amencam* v|| minora pedunculo apiee  
incrassato suffulta Planta elegantissima appendicis formd, flosciilw  
neutns longissimè radiantibus et pappo elongato omnind huic ge-  
nen potms quam *Ptosimopappo* adnumeranda

PLEGTOCEPH\US CYANOIDES BOISS

PI glaber, radice fasciculalo-flbrosâ, caulibus decumbeotibus  
fohosis sub rosulfl centrah paucifohd nascentibus, folus oblongo-  
lanceolatis obtusiuscuhs obsoletè repandis radicalibus in petiolum  
brevem altenuatis caulims basi angustatis sessihbus, capitulis ter-  
minalibus sohtanis, involucri squamis adpressis lanceolatu fla-  
vescentibus eleganter nigro-marginatis cilnsque nigncanUbus pec-  
tinatis, floscuha purpureis, margin alibus neutns valdè radiantibus  
involucro 2 V»P<sup>W</sup> longionbus, achenus (junionbus) long6 pap-  
popsis

Hab in Abyssiniâ Schimper N° 519 coll. ab amiciss Bucbinger  
communicates sub nomine *C vartantts* Rich.

Habitus omnind *Centaurew montona* Folia radica 2 \*/• pon-  
ces longa 6\*7 lineas lata, caulma pauld nunora, caulea 4-5 polli-  
cares, capitulum magmtudinis ilhus *C. mmtanw*.

AMBERBOA MICRAGTIS Boiss et Rent (Sect *Cyanastrum*.)

A annua caulibus tenuibus dicholomè ramosis ramistpB stnctis  
elongalis stnatis papilloso vel subaraneoso-htrsutis viscidabs, folus  
cnspis papillis sparsis obsitis viscidis vindibus infenoribus  
oblongo-lanceolatis obtusiuscuhs mucronulalis in petiolum atte-  
nuatis remotè et acutè denticulatis mdinsis vel pinnato-tnfldis  
segmentis infenoribus Unean-lanceolatis terminali oblongo-lan-

ceolato multd' minoribus, fobis superioribus lineanbus sessilibus acutis strictas integns, capitulis ad apicem ramornm longè nudorum sohtanis ovato-rotandis, involucn parcè lanati squamis Imbncatis adptesns ab infimis ad mtimas sensim elongate tnaagulanbus plams virenti-flavidis mgro-marginatis in spinolam flayam tenuem inermem erecto-patulameisbrenoremabeuntibus, intimis lanceolatis acutis, floscuhs albis eis radii disco vix sesquolongionbus neutns, hmibi tabo aequilongilaanus linean-setaceis, acheniis glabbrascalis multicostatis inter costas profund^ foTeolahs margme denticulate corcmatis, pappo extenon palhdfe auranhaco paleaceo achenio aequilongo paleis apice denticnatis ab extenonbus ad intimas sensun elorgatis, pappo intenori in columnam pentagonam concrete

Hab in plamlie Am *el Turk* propè (*han Dalansa pi Alg 1852* N<sup>c</sup> 490 sab *A mvncald albiflortl.*

Herbfii, squamarum imolucn formâ, *A muncatw* similis sed capitula ut in eâ apice non constneta sed demuin patula, corollce radii 5 nee 9-10 lineas longas lacinus subsetaccjs nee latd hnean-lanceolatis, pappus achenio seqtnlongus nee brevior, acnenu margo longior magis denticulatus scrobieulique profundiores Species distinctissima quae in Hort Yalejres culta characteres servavit.

#### ZOEGEA CRINITA BoiSS

Z aanua tota breviter papilloso-scabnda palUdè vxrecs, caule angulato-stnato supernè dichotomè ramosissimo ramis erectopatubs rigidmscuhs, foliislinean-lanceolatisobtusiasculis infern6 attesuatis sessilibus integris indivisis vel rands lacmia oblongâ infernè unâ alteràve auctis, capitulis ad ramorum nudorum apice incrassatoruni extremitatem sohtanis laxissimè corymboso-paoiculalis, mToLacn straminei squamis adpressis sutistriatis plaais ad medium aob lenle tenuiter \elutims in appendicem tngularem patulam cihatam abeuotibns cilns tenuissunè setaceis appendicis diametro 4-6pld longioribus patentissimis, sqaamis intums lanceolatis albidis scanoais apice obtusinsculis denticulatis subdupld longionbns flosculos radii subseqaantibns, achemo compresso viloso tandem glabrato nitido apice sulcis inbns transversis circu-lanter exarato pappo oxtenon mvco achenio 2 \*/<plO longion

paleis externis breuissimis interuis supernè seUceis, pappo mtenori Tirenti achemo dimidid breuion.

Hab in Persiâ australi Kotschy N<sup>o</sup> 900 sub *Z leptoured*, in ditione *Beloutschtstm* cl Stocks qt regoo *Calrulico* cl Griffith

Hæc species habitu et charactenbus aiBnis est *Z leptaurece* L Syrian el Mesopotamia insolffi sed hæc a nostrd sat specified differre videtur capitulis. ob setas squamarum diametro appendicis \ix dufj,^ longiores mullò minus cnnitis. flosculis radii squajnas interior mult6 superantibus, achenns ferè dimidib minonbus supernè, 4 sulcatis pappo vix sesquilonion superatis Acherna in *Z. pyntfA* 2 lmeas, pappus 3-4 hneas longus

#### CHARTOLEPIS INTERMEDIA BOISS

Ch caulibus erectis supemè stnctè ramoso-pamculalis ramisqae alatis ahs ramorum angustis cauhs latis Integeirimis, folus radicaibus oblongis obtusis basi attenuatis petiolatis, cauhs lanceolato-lineanbus acutis in alas decurrentibus omnibus mtègemmis, capitulis ovatis. squamis albo-flavidis nitidis adpressis conaceis mfimis ovato-rotundis obtusis exappendiculatis c\$tenis in appendicem membranaceam cucullatam ova^to-quadrangulam lacerò-flsam obtusam squamd breviorẽ abscuntibus, florum stenhum limbo 4 partito

*Ch Biebersteimi* Jaub et Sp ex parte quoad locos Rossiam meridional em Sibmam et Songanam

Hab in Rossrt mendionalit Sibindt SonganA

**Inter Ch. Tournefortn et Ch Bieberstemu intermedia** Pnor o^f fert squamis involucn omnibus appendiculatis appendicibus amplis squama longionbus medio fuscescentibus patulo-squarrosis Posterior distnguitur folns angustè lineanbus, caule ramosissimS, squamarum appendicibus brevibus rotundatis medio flscescentibus et stirps transcaucasica est In utrâque caulis angustissimfe alatQ9 est nee alis 2 hneas latis a summo caule ad ejus "basin decurfentibus obsitus

**Obs Genus Chartotppis** a cl Jaubert èt Spach cum *Clkfajlepide* consociatum ab ed meo sensu inTolacri squanhs et prWsertim pappo duphci interior! paleaceo brevissimo summbperè HitTert

**PSEPHELLUS HETEHOPHYLLUS BOISS et Hucl**

Ps rhizomate brevi horizontali collo valde lanuginoso, caule ascendenti parce fohoso pumilo apice monocephalo, foliis ad col- lum confertis caulibusque paucis supra glabrescentibus videntibus subtus dense cano-tomentosis petiolatis alus ovatis indivisis mi- nute denticulatis, alus lyratis divisionibus ovato-oblongis acutis ternariis majon, alus sinuato-pinnatifidis partibus ovato- rotundatis sinibusque obtusis, foliis superioribus sessilibus lanceolatis indivisis, capitulis ovatis, involucri squamis abscissis in appen- dices fuscescentes lanceolatas acutas ciliis palmaribus lente puberulis latitudine appendicis longioribus eximie pectinatis, squamarum minorum appendicibus ovato-oblongis obtusis apice tantum ci- hatis, flosculis purpureis marginalibus valde radiantibus, achenis albis puberulis pappo brevissimo scabundo

Hab prope *Trapezuntem* in Ponto cl Huet du Pavillon Florèt Majo

Caules 2-4 pollicares apice plus minus longe deimdati Folia cum petiolo 4-1/2 pollicana alia simplicia alia pinnatifida vix lyrata Affinis Ps *dealbato* et *dechnato* differt foliis dissimilibus, petiolis colloque basi valde lanatis, appendicibus squamarum angustius et acutius lanceolatis

**AMMAOPOGON GONCINNUS BOISS et Hucl**

A perenni totius indumento araneoso adprosum canescenti, caule erecto humiliter fohoso apice monocophalo, foliis oblongis acutis margine denticulatis in petiolum brevem attenuatis cauibus sessilibus, capitulo ovato rotundo, involucri squamis abscissis in appendices membranaceas planas fuscescentes ovatas squamas omnino occultantes ciliis fuscis lente puberulis diametro appen- dicis brevioribus eximie pectinatis, extimis omnino membranaceis triangularibus acuminatis intimis appendice ovali lacerata terminatis, flosculis purpureis exterioribus valde radiantibus, ovano (sub anthesi) pappo eo tantum longior scabundo subplumoso albo superalo

Hab circa *Erzerown* cl Calvert

Plautoneat nov. ir Str sec N° 3

tt

**CENTAUREA** \MPLIKOLK Boiss et Heldr (Sect *Centaunum*)

(J glaberrima caule angulato-striato erecto inferno foliato simplicissimo superne demidalo semel vel bis in ramos 2-4 longissimos virgatos nudos, monocephalos dichotomos, folia 3-5 multinerviata pectiolalis lyrato-pinnatifida latis partitionibus ovato-oblongis oblongis & obtusis acutè duplicato-serratis ab minimis minoribus sessilibus vel subpetiolulatis ad superiores secus longitudinem late decurrentes sensim auctis terminali majore basi cuneata, foliis intermedus ob partitionibus intermediis 2-3 partita basi bipinnatis, superioribus sessilibus partitionibus minus aequalibus late linear-lanceolatis acutis, capitulis magnis ovato-rotundis basi truncatis, squamis imbricatis ovato-rotundis adpressis concavis flavidis rargine superioribus nigricantibus alboque membranaceis demum lutescentibus, interioribus oblongis in appendicem longam ovatam obtusam sabulacram cucullatam albo-membranaceam abentibus, flosculis pallidis purpureis tubo ad hinc basim laxato, marginalibus\* necnon lacinis limbi triplicibus longioribus angustioribus linearibus, actionibus magnis subcompressis tenuiter transverse rugulosis fuscescentibus, pappo exteriori nigro fusco achemo subbrevioribus pappo interno subduplo brevioribus paleis 13-16 latis constanti, cupula marginata umbone breviter tubuloso obsita achemum superante

Habit in faucibus umbrosis regionibus abietinis montibus *Kyllenes* (Zina) alt 3000'-4000' Heldreich! Orpliamdes! et in monte *Gymnovouno* prope *Tnkala* Heldr I Floret Junio

Plan La 3-4 pedalis Folia pedalia ampliora quo circumscriptio ovato-oblonga segments salsi pedem dimiduum longis 3-3 1/2 pollicibus latis Capitula eis *C scabiosa* paulo majora Affinis *C Afn*-\* *Lmw* et *Ceniauno* a quibus ceteris neglectis solummodo amplexu lullis roliorum distinguitur

**CYATHA** \AGMOPHYLLA Boiss (Sect *Cyathus*)

G, tota mollis et adpressè araneoso-cana, rhizomate densè fibroso caulibus plures basi subvaginatos simplices erectos elatos (oliosos ceteri, folia linear-lanceolata margine inferius ob-

lulis in petiolum attenuatis ceteris sessilibus non decurrentibus, supenonibus in spinulam membranam longiusculam attenuatis, capitulis terminibus ovatis, involucri squamis abeunlibus in appendices fuscas latè triangulares margine in cilia alba nitida lanceolato-linearibus appendicis latitudine subbreviora pectinatim fissas, flosculis neutris paucis violaceis radiantibus ceteris purpureis, achenis

Hab in montibus prov *Aderbidjan* Persia? borealis Aucher N<sup>o</sup> 484-1, in collibus argillosis ad radices montis *Demawend* propè *Lar* Kotschy pi Pers bor N<sup>o</sup> 318

Planta pedalis, folia inferiora 3-4 pollicibus longa 4-5 lineas lata, suprema in spinulam tenuem 1-2 lineas longam abeuntia. Capitula eis *C montanai* paulò majora et laliora basi rotundata, cilia involucri eis *C cants* et affimum crassiora. A varietatibus majoribus *C cance* sat distincta videtur statura" majori, foliis summis longè acuminatis, appendicibus latioribus longioribus et crassius ciliatis.

#### CEKTAUREA HIJETII BOISS (Sect *Cyanw*)

Gracilis perennis adpressissima canescens rhuomate subrepente surculos breves steriles caulesque ascendentes supernè ramosos foliosos cidenti, foliis surculorum stentilium oblongo-lanceolatis obtusiusculis basi attenuatis in petiolum inferne membranaceo-dilatatum abeuntibus, caulibus inferioribus sessilibus supenonibus ramisque lanceolato-linearibus acutis nullis decurrentibus, capitulis ad ramorum supernè denudatorum apicem sohtarnis, involucri squamis abeuntibus in appendices oblongas vides lineatas margo-marginatas circumcirca cilis albis latius appendicis diametro subbrevioribus pectinatis, flosculis rubellis marginalibus albis radiantibus achenis puberulis pappo rufescenti eis tripliciter brevioribus superalis

Hab in Armenia cl Huet du Pavilion

Folia tunonum subrotundata cum petiolo 2-2 1/2 pollicaria 3-4 lineas lata. Caules floriferi 1/3-1 pedales 4-6 cephali. Capitula magnitudinis eorum *C depresses* Species crescendi modo, caulibus ramosis, etc ab omnibus *C carw* formis distincta

CENTAURIA (UUDIM Boiss et Rout (Sect *Jacea*.)

*C. perennis*\* tota viduincito araeoso demum plus minusve secedenti obsita, caulis pluribus ascendentibus foliosis angulati? simplicibus vel superno ramosis, foliis inferioribus oblongis in petiolum attenuate integris vel saepius minutè denticulatis superioribus sessilibus angustè hinc lanceolatis omnibus acutis, capitulis terminibus ovatis basi rotundato-truncatis foliis 1-3 brevibus stipitis, bracteatis, involucri squamis abeuntibus in appendices rotundas membranaceas albas vix fusciscentes nitidas squamas omnino obtogentes cucullato-subsquarrosas minutè denticulatas demum profundè laceras, flosculis pallidè purpureis marginalibus radiantibus, achenis albis puberulis epapposis

*C. amara* var. L. Gaudin Fl. Helv.

Hab. in castanetis montanis ad lacum *Lanum* Italiae borealis supra *Lectum* et in *valle Sasina* Gaud. et Thomas et Boiss. et Reut. I.

Ab alia *C. amara* differt capitulis turgidioribus, involucri appendicibus magis cucullatis subpatentibus et ob colorem albidum nec fuscum habitum *C. albae* pro se ferentibus

CENTAURIA RUSCINONENSIS BOISS (Sect *Jacea*)

*C. perennis* tota pilis papillosis obsita aspera cinerascens-virens, caulis ramosis erectis acutiusculè angulatis superno prorsertim indumento crispulo canescentibus, foliis lanceolatis radicalibus petiolatis caulis sessilibus basi sulcatis inferioribus obtusis sinuatis lobatisve superioribus acuminatis integris, capitulis terminibus foliis 4-5 lanceolato-hinc in involucrum aequantibus superantibusque bracteatis, squamis multum paucis basi arachnoideis in appendicem albam linearem pectinatam abeuntibus, intermediis in appendicem fusciscentem nitidam cucullatam ovato-rotundam scanosam margine fimbriatam profundè quo laceram apice 3-5 cilia palmatim gerentem dilatatis, interiorum in appendice lacero-fimbriata ciliis terminibus destitute, flosculis purpureis neutris radiantibus, achenis pubescentibus compressis pappo albo brevissimo superatis

Hab. in agro Ruscinonensi prope *Port Vendres* cl. Huet du Pd-viUon qui legit die 16 Julii 1852



Habitu omnino affinis *C amurce* et praedertim *C Jacece* et *C pratensis* Thuill. = *mgrescens* Gren et Godr., ab eis praeter indumentum asperulum in foliis praesertim manifestum differt appendice peculiarium squamarum nonnullarum, squamis\* intermediis apice tantum ciliatis, achenis papposo

GENTALREA BREVIPAPPA Boiss et Reut (Sect *Jacea*)

Perennis papilloso-asperula vmdis, caule acutè angulato erecto ramoso, foliis inflis lanceolatis in petiolum attenuatis profundè subpinnatifidis lobis paucis remotis, Intermediis basi attenuate sessilibus pinnatifidis, superioribus e basi latiori rotundata subunculatis attenuatis acuminatis, capitulis ad ramulorum apice mcrassatorum extremitatem sortans corymbosis 1-3 foliis eis brevibus bracteatis ova Us, involucri squamis abeuntibus in appendices adpressiusculas fuscas triangulares ciliis fuscis diametro appendicis longioribus eximè declinato-ciliatis squamas ipsas omnino occultantes, squamarum intimam appendicibus circumcinctis denticulatis, flosculis purpureis marginalibus neutris radiantibus, achenis albidis subcompressis puberulis pappo uniseriale equali eis sextuple brevioribus superatis

Hab in pratis alpinis vallis *Macugnaga* ad meridiem montis *Rosa* in Piedemonte sitae Aug 1955 Boiss et Reut

Affinis *C pratensis* Thuill. = *nigrescens* Gren et Godr. ab eâ achenis distinctè pappo dignoscitur *C transalpina* Scubl. Joints (loribus capitulum excedentibus, involucri appendicibus minus adpressis minusque Ypulanter imbricatis longius differt

CENIAUHEA NEVADENSIS BOISS et Reut (Sect *Jacea*)

*C* perennis tota induimento adpressissimo aramoso canescens, caulibus erectis elalis acutiusculè angulatis parte superioribus corymbosis ramosissimis, foliis omnibus integris, radicalibus multiflorisque obovato-oblongis obtusis in petiolum sensim angustatis subundulatis, caetens e basi sessili rotundata vel subcordata oblongo-lanceolatis vel saepius oblongis ovalisque acutis, capitulis lermibus ramis abbreviatis mcrassatis midentibus turbinalis. foliis superioribus parvis subbracteatis, involucri squamis abeunt-

bus in appendices luscas eximiè triangulares regulariter et ad-  
 prev>o imbricates bquamas ommn6 occultantes crins albidis earum  
 dianietro longionbus crebrè pectmato-ciliatas, flosculis pallidè  
 purpuieu marginalibus ncutns radiantibus, achenis albidis pu-  
 beral i\* pappo brevissimo umseriah supcralis

Hal) in 1 cgionc calidiori montis *Sierra Nevada* propè *Dylar* cl  
 Bourcrau pi exs 1851 bub *C ntgrd* £ semimbus Hispamcis  
 plantam \ivarn in Hort Valeyrcc educavi

Planla sponlanoa pedahs culta bipediis Folia radica ha cum  
 potiolo semipedalia grossi undulata, rami et ramuh fohosi folns  
 sensim abbrevialib latiusculis Capitula Illis *C jacece* minora In-  
 volucrum ob appendices fu^cas acutè tnangulares regulariter Im-  
 bricatascilus pallidis crebernmis margin a tas pulchr6 vanum Spe-  
 CICS distinctissima babitu *C incanam* Ten referens a qufl caeterum  
 folns caulibus lalis forraJque appendicum involucris longe dislat

CKNTAVRFA NEAPOLITAN\ Bois^ (Sect *Jacea* )

G pcrems Lota adpressè plus minusve araneoso-canescens,  
 cauibus erectis slnatis virgatis a medio ramosis ram is erecto-pa-  
 tulis elongalis apice monocephahs corymbosis, folis radicaibus  
 oblongo-lanceolatis acutis in petiolura longmsculum longè at-  
 tuatis, mtermedus subsessibus sinuato-dentatis pinnalilobatisve  
 superioribus e basi lation subamplexicauli lanceolatis integris  
 usquè ad capitula sensim diminutis, capituhis oblongis, involucris  
 squamis striatis pallidè vircentibus minutè araneosis demum gla-  
 brescentibus abeuntibus in appendices erectas adpressas fuscas  
 minutas squamas non occultantes. tnangulares tenuiter pectjato-  
 ciliatas mermes, flosculis roscis margmalibus radiantibus, achen-  
 nus minutis albib epapposis puberulis

*C incana* Rchh fil Icon Fl Germ tab 28 non Ten *C m-*  
*grecens* Ten S^Hog non all or

Hab circa Neapolm ad *Puteolos* Heldr ! circa *Pausihppum* Boiss  
 Planta serotma Augusti fine florifera

Ovules sesquipedales, folia inferiora cum petiolo 3-5 pollices lon-  
 ga capitula eis *Jacets* paulo minora Appendicis forma ctminutie  
*C Vochmensi* solium comparanda quae foliorum formd alisque no-  
 tis cajlerum longè differt. *C. mcava* Ten est planta longè diversa  
 halntu (*I thswrtam* ~~eterens~~)

**CENTAURIA** J URINE-EFOLR Boiy- (Sect *Jacea* )

C perennis folns radicaibns oonferhs aim indmsis lanceolato-lineanbus in petiolum attennatis obLusiuscnlis ahis pmnalipartitis segmentis utnnquè 2-4 Unean-oblongis mtegermms termmali longiore, rachide segmentis aequilatA sensim ad basin' usquft fohi in petiolum attenuate, omnibus supri tenuiter araneosis virentibua subtùs adpressfe cams, caulibus virgatis parc6 ramòsis ramisque erectis incaais, folns inferioribus pinnatipartitis supenonbus mdivisis oblongo-lanceolali^ sessilibus tasi attftnuatia ad capfttla usquò sensim dlminntis utnnqu^ cams, capitulis ovatis, lovdluca squamis pulverulento-araneosib bñatis oblongis adpressis apice vix appendiculatis fusco-marginatis brevissun.6 mucronatis utnnquè ciliis 4-6 fuscesceulibus brevissimis marginals, intimis in appendiccin pallidam minulam flmbnato-laceram abeuntibus, flosculis pal Hed rose is marginal ibtis breviter radiantibus achenusjunonbibi pappo albo supcralib

Hab in *Bessarabi* & cl Tardent

Folia radicalia fen<sup>l</sup> ommni *Jynnee tnollts* > radicalia cum petiolo 3-i pollhcana, segmcuta laleraha 3-0 lineas longa, rachb 2-4 Imeas lata CapUula eis *C InrecB* pauld mmora Species distinctissima ut videtur a botanicis Ros<sup>^</sup>icis non observata, propè *C cuneifokam* Siblh el *rutcrfoham* Sibth collocanda sed nulli tamen arctfe afliiib

CENTAURIA OnPi<sup>À</sup>HIDEik Ieldr et Sart Mss (Sect. *Acrucentroides* DC j

G peremiLs muUicaulis tola setis brevibu^ pra&sertim in folii paging supenore crebermms scabra et mdumento arachnoideo-canescente obducta pKBcipu6 in caulibus foliorumque pagini mfen ore, caulibus strlctis ngidta angulosis folioaie a Jiasi ramosis, ramis ramihsque numerosia altemis divancatis ngidis pectmato-pmnatipartilis v hinc mde lyratis, radicalibus petiolatis caetiStis sessillbus brevibusf bciniis remotmscuiis hneari-oblongis interdum lñ rohña inferioribus paucidentata, omnibus setâ in laciuifl ler<sup>^</sup> minah majore tofrataatH, fohoWmsupenbram 1 acini is tasilaribus

exigiis bini\* terni».que, lermindh multd majore, folus summis m-  
divisis dimmutis, panuMila" divancato-ramosissimd, ramuhs latera-  
hbus abbreviatis, capilulis termmahbus solitarns parvis, involucri  
squamis m appendicem fuscam tngularem subdecurrentem  
utrmqec pectinato-ciliatam productis, spinâ terminali squamara  
fere aequante cilns laterahbus validiore pun gen te fused in squa-  
mis extenonbus brcviore, cilns laterahbus albis diametrum ap-  
pendicib superantibus, squamis appendice scanosi subintegrA spa-  
thulaU subinermi terminatis, Horibus purpureis, achenns nitidis  
pubescentibus, pappi nivei setis senei extern® valde inaequatibus  
paleaceis barbellatis, longionbus achemum subsequantibus, senei  
in tenons plus quam dimidiO brevions setis tenuionbus conniven-  
libus

Heldr pi exs IV<sup>0</sup> 2300

Hab "in plamtie AUicfB ad vias et in campis inter *Alhenas el* ra-  
dices *m Pamclhos* Jumo ilorcna (Sart. Heldr.)

Caulis 1-1 V\* pedalis, folia media pollicana sumnid 1-2 Unea-  
na, capilulu illis *C squanosce* paulo majora, squamarum appen-  
dix spinosa 1'/i-2 lin longa Species habitu peculiar ramis ngi-  
dis divaucatib disinctissima prope *C Parlatons* Heldr collocanda,  
qukc egregie differt ramis gracihbus elongatis patulis apice denu-  
datis, foliorum lacmiis 1 mean bus nullo longionbus, capitulis du-  
\k) majonbus, spinA squamarum brevi vi\ pungente aliisque no-  
ti" *C sqimnosn* Vf *C calolepis* Boiss et species a (lines recedunt  
lnnore^centifl corymbn-o-paniculat,l, capitulis saepo aggregate,  
involucrisquam^omnindseniosissquarrosisque fHeldr et Sart  
desenps Nov 1852 }

**CENTAUREA PAiu-ATonis** Heldr Ann doll'Acc degli Asp nat  
1813 V I, p 287,1 ;J— Gu\*s S>n II Sic II, p 510 var *Bomteri*  
H^ldr o» Sart Mss

Involucn squamarum appendix paulo longior magis fusca,  
spina terminally parum vahdior absque ahâ differentiâ a specie  
*Sicutt*

*Cmtaurea Greeca* Boiss et Spr in Boiss Diagn. VI, p. 128 non  
Grsb Spicil — *C Boissteri* Walp Repert VI, p. 298 non DC Pr.  
Hab frq in Attica? montibus Maio Jumoflorens

Planta Graeca ut Sicula valde vanabih.s, caulibus nunc 1-2 pedibus virgatis nunc abbreviate depress, indumento nunc parco evanescentLe nunc denso bombycino

Var *ochrolenca* Heldr etSart Mas

Densè cano-tomentosa, involucri squamis pallidionibus, flonibus ochroleucis

Hab rarò in cacuminc *Anhydn* {*Mavra-Vouna*) in Atticae d 20 Mai 1848 (Heldr) —Heldr etSart descr Nov 1852 \*

GENTAUEA cmmsoLOPHA Boiss etKotschy (Sect *Acrolophus*)

C tola to men to araneoso tenmssimo secedenti obsita pallidè virens, caulibus erectis angulato-stnatis a medio paniculalo-ramosis, folus inferioribus pinnatipartitis partitionibus utnquè 2-3 oblongis mlegris secus racludem angustè decurrentibus terminali pauld majori, folus intermediis tripartitis sessihbus supenonibus rameisque oblongis indivisis obtUMs, capitulis ad ramorum paruculae apicem subsessilibus densè corymbosis oblongo-cyhndncis 15-20 flons, involucri squamis pallidè virentibus stnatis abeuntibus in appendicem parvam tngularem flavam vel pallidè fusciscentem membranfl angustfl secus squamam decurrentem adpresstusculam muticaia utnque cihis 4-5 ejus latitudmi aequilongis pectinatam, squamis intenonibus longionibus purpureo-mgncantibus hneanbus apice albo-membranaceis obtusissimls, floscuhs roseis, achenns omnibus pappo ets aequilongo superatis

Hab in rupestribus calcareis aquilom obversis in monte *Gtsyl* *Deppe* alt 8000' (cl. Kotschy) Flor Julio

Gaules pedales et pauld longiores, panicula semipedahs Corymbi ramorum saspis ramulosi 7-10 cephalis. Capitula cumfloribus 8 lineas longa Pulchra species affinis *C aggregate* F. ctM q<sup>BB</sup> differt folus multd majoribus lyratis, involucri appendicibus triangulan-lanceolalis longitis ciliafTs apice subpatentibus miimi\* acutis

<sup>1</sup> DescriptioDcm cl et amioin. de Ueldnioli transcripn. Ego *C Pattatoru* itcuUm nondikm vidi neo cam *C Gnmsd* B etSpr conferre potui. *C Grmca* Griwb non D etSpr Tidetor vanetai apwu lavolnon miaonbaB *C Sprvneri* B et llcldr

CENTMIREA TouCOURtNsis Boiv> etReut (Sect *Acrolophus* )

C i>erciinu> pluncaulis lota jdpresse' araiieoso-candj cauhbus erects acutiuscule angulatis fet<sup>o</sup> a basi raniosis, ramis tenuibas virgati^ ereLto-patulis ngidnlis foliosis, folns mfenonbus pinna-liparliti-. lachide angustū Imean partitionibus utnnqut 7-8 sub-lationbus lmeari-lanceolatis lermimah sublongion omnibus acutis, foliis. rameis indivisi-. liueai ibas, capitulis terminabus sohtarus oblongi-. folio supremo mimmo saepiis siitfultis, mvolucn squa-rais abeuntibin in appendices ^ubrotunda\*. squamas occultantes centro fuscas inapinulambrovemabeuntes circumcircel albo-mem-branaceas membrana denticulata lacer^que secus squamam bre-viter decurrenti, cilus ulrmqu6 24 ad bas>in spinae terminalis spinae subaequilongis wpiiis obviis, llo^culis pallide rose is omnibus her-nupbroditis, acheiuib puberuh pappo eis tnpl6 brevion auperatis, pappi inten or is <icti> subbrevionbus nee lationbus

Hab in monte *Djebel Tongoiu* prop6 *Batna* Balansa pi Alger OAS N° 80\*2 sub *C albd* var *foltohs altahs*

HPBC species differt ab omnibus formis *C albw* appendice sse-pms ciliaLā cujus membrana non uL in ei cucullato-inflata est in Luspidem aUenuata sed adpre^iu^cula vcl apice longò cihata vel retu^a spinulft inter membrane lobos laceros exeerta" Pappus in-tenor praetoreJ in *C albd* evlenon conspicuè brevior

CENTALHEA VcscEniTENSib Bo^s (Sect *Acrolophus*)

C pei emus indumento la\e' a ran eo so secedenti obsita demùm glabre:>>cens a ba&i raulticaulis, caulibus tenuibusvirgatisacui& an-gulatis dichotomè ramosis ramis erecto-patulis ngidulis, folus interioribus pinnalipartitis partitionibus angustè hneanbus acutis integris angulo recto patentibus rachidi aequilatii, foliis supenon-bus lincanbu^ Integra, capitulis ad ramorum apicem soli lams oblongi\* iiNol'icn squamis vindi-llave>>centibus abeuntibus in dppendicom diigustc' tngularem utrinquè 3-4 cilns albis dia-meiro appendici> longionbus margmalam intrA cilia membranfl tnarigulari limbnaU decun'cnti ulnnqufe obsitam apice in spi-nam subulalum non pungenlein erecto-patenlcni fusc^cenlem

appendicem longiorem ab?untem, inquam liliationibus in appendicem membranaceam angustè oblongam subintegram abeuntibus, flosculis roseis nervis paucis non longioribus, achenis uigris punctulatis puberulis oblongis basi attenuatis subcompressis pappo niveo eis triplo brevioribus superatis, pappo liliationibus paleis quadruple brevioribus acumine liberis saepe obsoletis

Hab in monte *Djebel Tougou* prope *Bnlua* cl *Balaua* in alveo torrentis *Oud Bisktu* cl *Balansa* pi exs 1852 sub *C Parlatous* Heldr

HSBC planta a *C Pailatensis* (p ^peti^nuibus Alticis nam Sicula non vidi collata) cui valde affini differt foliis niu^ evolutis in parte ^upenon plants abbreviatis angustatisve, capitulis paulo minoribus angustioribusque, squamis involucri in spinam longiorem basi tenuiorem abeuntibus et presertim achenis brevioribus magis compressis basi manifestius angustatis pappo interior! brevissimo vel nullo

Obs 1 *C xanithina* Boiss et Heldr pi Grac exs M&s est *C Peha* DC. Prodr

Obs 2 *G pinnosa* DC Prodr est *C rutifolia* Sibth Fl Grac

#### **CENTAUREA OLYMPICA BOISS (Sect *Adolophus* )**

*C* papillan-pubescentis vinctis caule erecto acutè angulato parte infera fohoso superni paniculato, foliis pinnatipartitis partitionibus oblongis obovatisve obtusis mucronulatis, foliis supremis oblongis indivisiH, ramulis rigidis usque ad capitula oblonga solitana basi subattenuata fohosis, involucri pallidi squamis adpressissimis parè araneosis glabrescentibus striatis in appendicem brevem triangularem vix (Jecurrentem utnque 3-4 ciliatam spinulosis brevioribus vixque latione terminali abeuntibus flosculis pallide roseis, marginalibus neutris aequilongis, achenis albis oblongis subcompressis puberulis pappo eis duplo brevioribus superatis, pappo interior triplo brevioribus

*C paniculata* WT *Olympica* UC Prodr

Hab in *Olympo Bithyno* Aucherf Boiss 1

A *C panimlaki* Europe^ studus recentioribus elucidata specificè differt lodamento minus cano, foliorum segmentis lobatis. appendicibus involucri minus attenuatis in spith brevioribus

abeunlibub Adinis est quoque *C cunetfohce* Siblh. Fl Grec tab 901 quas habet indumentum canum, fohorum partitiones ampliorcslobatas, capitula pauld majora flosculis neutris radiantibus, ot ad quamforsan special *C pamculata vat sublanata* DC Prodr

Obs *C pamculata vai Macedomca* Griseb a cl de Heldreich iterum in monte *Korlhwti* propè Thessalomcam lecla, a *C OlymptcA* cui valdè affims lacinns angustè hnearibus fohorum, squamis longiùs ciliatis et pappo achenio vix brevion differt et Me notà *C arenante* MB conjungenda est videtur

CENTAUEA RUMELICV Boiss (Sect *Arrocentron* )

*C* perenms caulibus virgatis acutè angulatis erectis s>implicibus vel basi parc6 ramosis arachnoideo-lanatis demùm glabrescentibus» apice monocephahs totii longitudine foliosis, fohis conaceis\* asperiii lenuissimè arachnoideis demùm glabratis oblongo-lanceolatis acutis infern6 longè in petiolum attenuatis aliquandd pauld supra insertionem 1-2 lacinulis hnearibus auctis, capitulo ovato mediocn, squamis parcissimS arachnoideis demùm glabratis vi-renlibus in appendicem fuscscntem Iriancularem breviter spinosam margine decurrenti breviter pectinato-cihatam abeunlibus, mtimis appendice cucullatft inermi valdè patulft ciliato-lacerd terminatis, flosculis flavis subeequahbus

Hab in Rumehd propè *Wtdm* cl Noo

Habitu *G jaceie* Folia 2-2<sup>1</sup>/<sub>3</sub> polhces longa 3-4 hneas lata Capitula Illis *C collincB* dimidid minora Appendix spinA triangulan-lanceolati margine ciliatd constans squamd ipsa tnpld brevior

♦ GENTAURA SALONITANA. VIS var *macracantha* B. et Heldr.

Capitula eis speciei majora Invohicn squama? in spinat\* validas eburneas maquales squamd ipsd saapè tnpl6 longiores abeuntes *C colhna p macracantha* DC Prodr.

Hab in valle *Sperchn* et monte (*Età* Thessahae cl Spruner, circà *Tnpoltzza* cl Sarton, in vinetis Parnassi propè *Arachom* cl Heldreich

Abit per ninumeros transitus in *C Salomtanam* qu» est quoque *C colhna* Fl Grac tab 014 non L *C Salomtana* quae quoque



squamis omnibus mutuis occurrunt semper a *C. colhnd* dignoscitur eis apice rotundalis spins cum adest abruptè terminatis nee in spinam sensim attenuatis

Obs *C. AffawDC* synonyma addenda sunt *C. rupestns* Fl Graeca tab 915 non L ! et *C. cmetfolta p angusttloba* DC Prodr , forma glabrantie ramorum et foliorum a specie tantum diversa Huic *C. Athoce* valde affinis est *C. Macedomca* Boiss Diagn , discedens appendicibus non fuscis aed concoloribus abeuntibus in spinam nunc longam et subulatam in typo speciei, nunc brevem saepe o>ficiem in var. *brachyacanthd* B et Heldr in monte *Korthuto* et colibus *ThessatomccB* a cl de Heldreich collecta

CENTAURHEA ACHAIA Boiss et Heldr (Sect *Acrocentron* )

- *C. perennis* parce araneoso-pubescentia demum glabrata viscidula, caulis erectis basi teretiusculis striatis paulo supra basi in ramos erecto-patulos acutè 4-5 angulatos dichotomè divisis, foliorum radicalium uno alterutrove oblongo indiviso vel lyrato lobo terminatum ovato-oblongo lateralibus utrumque 1-2 hinc lanceolatis multo minoribus, folium est pinnatifidum partibus oblongis lanceolatis hinc anibusve inferne attenuatis aequo rachidem plus minus late decurrentibus mucronatis elevatim nervosis concoloribus integris remote denticulatis raris paucilobatis terminalibus majore, folium radicalibus teretibus caulibus breviter petiolatis, superius sessilibus pinnatifidum vel indivisum lanceolatis capitulis magis, involucri squamis in appendices concoloribus aibidos minoribus glabris squamis omnino occultantes abeuntibus, appendicibus ovato-triangularibus dorso longitudinaliter plus minus striatis margine crebri et longiuscule ciliis albis pectinato-ciliatis apice in spinam longitudine vanam erectam vel erecto-patulam abeuntibus, squamarum interiorum appendicibus superioribus meris cucullatis longe pectinato-ciliatis, flosculis roseis marginibus neutris paucis alios non superstitibus, achenis ovatis senceis valde compressas pappo extortas fere triplo longior terminatis, pappo integro fere longitudine acheni

Var *a tubmuttca*. Appendicibus cilia approxinata duobus latitudine appendicibus longiora, spina tenuis ciliis vix duplo longior

Hab. ad radices montium *Cheynos* Achara Heldr et Orphan 1 Fl Junto, Juho

Var 6 *tntet media* — Oramnd padem sed spins<sup>1</sup> squamis multd  
longiores hquauns uiternis iivolucn anquilongse.

**Uab com pi 101 i**

Var *yferor* — Appoiidice-> conacissimae obsoleliife slnatae eih»  
margmalibū<sup>^</sup> hrevionbu& paulō minus confertis Dbsitae, sensimin.  
spinds niveas ba<sup>^</sup>i latas spmulo<sup>^</sup>as suprâ planiusculas subtus eon-  
vpxas llo<sup>^</sup>culos Ecquatites vel superantes abeuntes

Hab in vinelis propfe *Mesoihis* plamtiei Atticas cl Heldr Floret  
*tine Junn*

(1 *eryngioides* Fl Graica tab 943 non Lam

Spocics pulchernma pedalis vel sesquipedalis Folia radicalia  
^emipcdaha longiorave partihonibus seep6 bipollicanbuslatitudine  
varns Capitula eis *C en/ngioidis* ferè majora Vanetates descnptsB  
*m\rii* intermcdus una in altcram Lranseunt Spins involucri in asaepè  
vix hneamlongaB, in y 12-45 hneas longffi. Aflims *C eryngtmcR* et  
*C Sprwnen* Iliia differt caulibus ssepiAs simpheibus sub ea<sup>^</sup>SIts  
long& denudatis, involucn spmis patulo-reflexis, foHorumiacmtis  
abbreviatis, achenus pappo eis fequilongo superatiã; *C Sptoimn*  
qua eadem omnin6 ac *C - Gram* Gnsebacb Spicil 'non<sup>^</sup> ~~et N.~~  
a *C Achaid* var *y* distinguitur foliorum sub antheai jam ~~evando-~~  
ram laeimis abbreviatis saepiùs rotundatis, involucn squamteDarvd-  
virentibus ob appendices ad cilia marginalia reductos non occul-  
tatis Icon citata Siblbopru vaneiatcm *y* optimè refert sed lacmias  
foliorum saspitis ampliores sunt

CENTAUREA ERYNGIOIDES Lam

Var *a giabnmcula* Radicis collo lanuginoso Involucn aquamse  
intermediBB in spinas vahdaa flosculos purpureos sgepè asquantes  
abeuntes

Hab in rupestribu<sup>^</sup> montis *Sinai* Bov<sup>^</sup>l Schimper! In Libano  
suprâ *Eden* Boiss

**Var P mbarachnoidea B et Heldr**

Gaules supernè prsertim albo-lanati, folia proserttm secùs  
rhachidem arachnoidea. Spinse et flosculi var. a

Hab in rupestribus montis *Taygeti* Laoomae cl, Heldr. I

Var *y brachyacantha*. — Vanetati *a*. similis sed **spivs** tenuiores  
saepè flosculos vix aequantes. Capitula paulō mioora. Pappus «lon-  
gatus saepè achenio subduplō longior

Hab in *Palmttna* ac *S' Saba al Anuhbano* i>uprd *Zebdani* (Boiss )  
 Var e *palhda* Boiss — Caulps parle inferiori et folia patulè  
 drachuoideo-hirtella gnsea Floscu non ut in«alus tanetahbus  
 purpurei sed albidi tubo aurantiaco

Hab circâ *Erzeroum* Armonia; Iluet du Pavilion f in Cappadocia  
 boreah cl a Tchihatcheff •

CENTAUREA CECCARINIANA BOISS et Heldr (Sect *Acrocentron* )

C perennis caule simplici tereti stnato subnudo arachnoideo-  
 cano mferne glabrescenti, folis omnibus radicalibus aut versùs  
 basin cauhs silis petiolatis subconaceis subtùs arachnoideo-canis  
 supernè parciùs arachnoideis glabrescentibus uno alterove ovato  
 indiviso vel lyrato lobis laterahbus 2-4 ovato-oblongis minutis,  
 cffitens folis pinnatiparlitis, partitionibus ovatis bast petiolulato-  
 attenuatis apice brevissimè attcnuato-acuminatis in folis mfenon-  
 bus a basi foln ad apicem ejus auctis in supenoribus ab mferio-  
 nibus majonibus ad supenores minimas sensim diminutis, capitulis  
 1-6 magois peduncuhs eis brevionibus suffultis in summo caule  
 racemoso-paniculatis, involucri squamis glabrmscuhs virentibus  
 apice rotundatis obtusis margine brevissime ciliatis spiny albidis  
 crassfl lanceolati supra plana bubtus convex^ longitudine vana  
 abruptè terminatis, intimis appendice inermi ovata cihato-laceri  
 terminatis, flosculis roseis omnibus hermaphroditis, achenis dense  
 senceis oblongis compressis pappo extenon rufescenti eis duplo  
 longion supcrâtis, pappi interiorispaleisnonnulhs pappo extenon  
 aequilongis

Hab in regione abietma *Livadi* suprd *Delphos* Parnassi cl Held-  
 reich Fl Julio

Folia semipedaha longiorave segmentis pollu-em et ampliùs  
 longis Capitulum vel 2 terminalu, caelera cum adsuntremotms-  
 cula llhs *G eryngioidi8* ferè majora Spin© involucri aliquandd  
 tantùm 2-3 hneas longs, sajpiùs valida? 8-9 lineas long® basi h-  
 neam latae Species a *C Sprunen*, *eryngwide* et affimbus mdu-  
 mento cano, squamis apice rotundatis Dec in spinam attenuatis,  
 pappi interoi longitudine distinctissima

CENTAUREA IMI \riMiiv Pois^ pi Helder (Socf *Aaomition* i

C a basi ramosis & inia cauhbus tenuibus angulatis ngidis rainis- que erecto-patulis dcnudatis viscido-puberulis, fohis sub anthesi jam omnino destructih parcè arachiioideis glabrescenlibus ngidulis pinnati \el bipinnatipartitis segmentis oblongo-lmearibus linean- busque obtuMs mucronulatis nitegris ^el basi lobulatis terminal] angustion elongalo. capiluh-> terminahbus longt? pedunculatis ovatis involucn parci^imè araeوسي glabrati squamis virentibus obtusis cilu^ albis relroisib brevibus marginalis infenoi ibus in spi- nulam b^e^em abeuntibin intermedus spind subulatâ longissimâ patulâ alba capitulo longiore lermmatis, mtimis in appendicem inermem. oblongdin prolunde iimbnatam minutam abeuntibus, flosculis pallide purpurei^, ueutns paucissmiiia non majonbus, achenus glabres.cenLibus hilo loiige piloso pappo exlenore sordid^ albo aclienio snbdup]6 longiore, interiors paleaceo pappo dimidio **brevion**

Hab in regione infenon *Pmnassi* ciuA *Arachoiac*l Helderich

**Habitus** *C solstitialis* CaulespedaleselullrAdbaMramosi ramis **rigiduli**^ longis Capitulaci^ *C eii/ngioidut* minora, spinae squama- mm intermediai urn 12-l."> lmeas longa! a ba>i tenucs rands inferne dilalatae Species di<tinctis«.ima e Sect *C eiyngioidu* Folia mfe- riora 3-4 pollicana lupiiiiiatipaitila cetera multd breviora Seg- menta .3-5 lincas lonçra aiiffii^ta

CENTAUREA H\I 4NS ^ Boi^ el Rent (Sett *Aaocention* )

C peienniN lolu\* < omnibus ladicahbus expausis ^uprà glabrati Mibtus parce et tenuiler arathnoidci^ glabratisve pinnatipartitis partitiornbiib ovatis triangulanbus oblongisve acutiucus basi saep^ altenuatis margine undulato-sinuatis sgepe angustè secùs rachidem decurrenlibus minonbus intermixlis terminal! sa?p6 majon pltis minùs lobato, capiuh-. 1-3 inter folia radica ha brevissimfe pedun- rulatis subsessilibu^ve o^atisbasitmncatis, involucn glabrescentis squamis flavo-virentibus obtusiusculis apice in appendicem brevis- ^niam tngularem brevissimè ciliatam decurrentemque in spi- nam hrevem patulo-reflexam attenuatam abeuntibus, flosculis lu- **lets** neuhis pauci« non Inngionbus

Hab in plamtic *Batna* Africa boreal is cl Balansa

Habitu etfolns acceditad *C acaulem* e provinciã *Oran* onundam el cui phrasis Lmnaeana benè convenit, partitiones fohorum tamen abbreviate sunt minds lobatae et pauciores sed prsecipuum discrimen adest in capitulis in noslra plant;! rainonbus squamisque m— volucn in *C acauh* appendice magnà cucullatã longè et eximiè peclinato-ciliatd squamae ommno occultati terminate

CENTMJREA FUNKII BOIS ct Eleut (Seel *An ocentron* j

G acauhs tota mdumenlo densè pannoso nivea^ foil is expansis rosulatis lyralo-pinnatipartitis lobo termmati ovato oblongove laterahbus utnnqu^ 3-6 imiumis ovatis vel rotundalis. sensim decrescentibus», petiolo basi densè et longfebombjcinolano, capitulis in caespile 1-3 solitarus ovatis, involucri bombyce petioloram occultati breviter Idnalo-tomentelli squamis palhdissim^ vireiitibu-> ad apicem usquè tomentellis oblusis longmsculè pectinato-cihalil cilns albis in spinulam tenuem albam adpressam cihis> 2-3pl6 longiorem abeunLibus, aquamis intenonbus appendice beano&a cucullatd alba rotundata flmbnato-dentaU lerminati? floscuh^ aurantiacis, neutns paucis vi\ radiantibus

Hab in fissuris rupmm montis *Steira de Mana* i cgtm Granatensii cl Funck

Folia cum petiolo 1<sup>1</sup>,i-2 polhtana lobo teiminali 5-7 linea\* longo Gapuula eis *C jace<B* majora villo foliorum fer6 occullata (losculis tantumexsertis Cilia squamarum tomento involucri suboccultata Spinae tenmssimEe inermes 1-2 lineas longae Species distinctissima propè *C Hanseleri* et *aciularem* collocanda

Obs *C geocephala* Noe pi Cappad c\s et *C chtonocephala* B clHuetpl Arraen e\s *C usiulatwDC* forma appendleum involucri vanabih adnumerandae suni

GENTAUREA GAHNEOLA BOISS in Kotschy pi Taur exs 1853

G monocarpica tola adpre^ araueoso-gnsea, caulibub erects ^trictè ramosis ramisque virgatis ob folia decurrentia anguste alatis alis mtegris, folus radicallbus petiolatis lyratis segmenlo teiminali oblongo multA majon Tulus caulims scssihbus hneanbii\* Integra

dcuLis, peduncubs biactei& angustè hneanbus brevibus sparsis  
obsitis, capituhs parvis, involucn phyllhs flavidis lanA brevissima"  
detersih obsitis mtegnis apice palmato 3-5 spinosis, spinis flaYis  
lateralibus nnnimis terminah tenui squamS ipsfi rar6 longion sae-  
piùs brevion, iloscuhs roseis, achenus parvis lasvibus marginahbus  
fusccscentibus epappo^is, uiterinnbus pallidis, pappi albi sene  
mtenon achenio longion

Hab in agns otiosis circa`*Mersrna* CIICISB Kolschy 1 Cadet de  
Fontenay , circft Tarsous *Hemert* ex Heldreich Floret Junio

Planta herbâ et plunmis notis *C solslitiah* valdè affinis sed ab  
cd ut vjdetur distincta capituhs paulo minonbus, spinis termina-  
libus phjllorum involucn brcvionbus ct prsesertun tenmonbus,  
flosculis rosois noc flavin Achenia paulO minora sunl

CENTAUREA IRERTCA Tre\ir \ar *Noeana*

Folia cauhna elongata pinnatipartita begmentis latd hneanbus  
e\ongatib rachidc alata sublationbus

*C Noeana* Doiss pi Not; Mesopot exs

Hab in Mesopotamia el Arabislân frequens amiciss Noe

CLMALMA RRALIKII Boish (Sect *Scridia* )

C tota arlpressc araneoso-canescens viscidula, fohis radicalibus  
humi expansis longiusculè petiolatis sublyrato-pinnatipartitis seg-  
mcenti«iovati4obloiigis\ e obtusis terminali paulO maion lateralibus  
utnnqc 2-4 versùs basin foln diminutis omnibus acutè denticula-  
tis, caulecollo capitnlum sessile ramosque prostratos parcè ramo-  
eos edentij folu^ rameis pinnatilobatis hneanbus, capituhs ovatis,  
involucn densè araneoso-lanati squamis apice atlenuato abeuntibua  
in appendicem villo fer6 occultalam crectam palmatim et facie  
supenon fasciculatim 7-9 spinosam spinis fenuibus erecto-patulis  
squamS brevionbus terminali paulò longion vahdiorique, squamis  
intimis appendice oblongâ lanceolata subintegrA tenmnatis, flos-  
culis marginalibu^ vi\ longionbus, acljenus (jlinionbus) albo-pap-  
posis

Hab in aieno^ .Egj>ti prnpr`*Aboukircl* Kraliksub *C pumild*  
F Loii'I Maitio

Folva radica 2-3 pollice\* longa 8-10 Uneaslata, capitula raa-  
gniludinis eorum *C sonchifohm* Spins longiores involucn 2-\*/<sub>a</sub>  
lineas longs Formâ appendicis etiam in paging supenon sptosaj  
et involucro lanato accedit ad *C enocephalam* folns decurrentibus,  
capituhs dupld majonbus, spinis longionbus, floscuhs neutns  
longè radiantibus distinctissimam

CENTAUREA MALACITANA BOISS (Sect *Sendm* )

C perennis tota breviter papilloso-asperula glanduhs sessihbus  
obsita viscidula, cauhbys erectis flexuosis acutè angulatis foliosis  
simplicibus vel sinctiusculè ramosis, folus Infenonbus obovatis  
vel sublyratis obtusiusculis in petiolum longiusculum attenuate  
caeteris oblongis elliptico-lanceolatisve acutissimis basi breviter  
attenuato-petiolatis petiolo non decurrenti auriculis minutis acu-  
tis stipuhformibus aucto, omnibus'acutissimè denticulatis denti-  
culis calcareo-spinulosis, capituhs folus supremis minutis subli-  
neanbus suffultis ovatis, involucn glabn squamis in appendicem  
patulam vel reflexam 5-7 palmato-spinosam squama pauld bre-  
viorum abeuntibus, spinâ supenon alus sublongion, floscuhs pal-  
hdè purpureis non-radiantibus, achenns

*C sonchifoha* Boiss Yoy Bot Esp non L

Hab in regione montanâ prov *Malaatance* Hisp austrahs circd  
***el Uolmeilar (Rambur! Prolongo), circa Camillas de Aceituno***  
(Boiss)

Erroneè ad *C. sonchifoham* adducta qua\* csetens neglectis folus  
decurrentibus differt Proxima *C spherocephala* B quac involucro  
ferè simih donata spinis tamen plerumque longionbus distingui-  
tur, indumento araneoso-canescenti non vrscido, fohis etiam su-  
penonbus lyratis vel pinnatilobatis sessilibus basi latè et obtusd  
auriculatis, denticulis quum adsunt non spinulosis *C sphaerwe-  
phala* littora mantima habitat *C Malacitana* autem regions  
montanae incolat

CENTAUREA LUSITANIGA DOISS et Reut (Sect *Sendia*)

C perennis papilloso-asperula praetereâquæ secus caules parce  
araneosa, cauhbus erectis vel basi procumbentibus aculiusculis

angulatis jam infra medium corymbosè ramosis ramis erecto-patulis, foliis oblongis indivisis vel lyratis segmento terminah oblongo lateribus utrinque 1-2 ovatis multò minoribus omnibus minutè denticulatis inflexionibus petiolatis capsula sessilibus linearilanceolatis supra basin subangustatis secus ramos et caulem semidcurrentibus, capitulis ovatis subtruncatis, involucris squamis glabroscentibus abundantibus in appendicem flavidam palmatim 5-7 bipinosam patulo-reflexam squama breviora spini terminah vix alius longiora, flosculis purpureis marginibus radiantibus, achenis albidis pappo albo eis subnatis brevioribus superatis

Hab in Lusatia circa Ohmponem Wftlwitsch t Guthmck 1 in arvis incultis AlgarhcB propò Lagos Bourgeau ex 1853 N° 1925

A *C naptifolia* cum earn ohm retuleramus appendice palmatim et longioribus nee pediformiter in rasti formam spinulosam, a *C sphwiocephala* et *Malaatand foliis decurrentibus*, a *C sonchifolia* L ex Italia<sup>1</sup> et Grsecij cui magis accedit indumento non arachnoideo-villoso, foliis angustis et breviter nee latè et a folio ad folium decurrentibus, caulibus tenuioribus magis elongatis distincta

#### CENTAURIA ENIOCEPHALA Boiss et Reut (Sect *Sertdia*)

C biennis vel perennis? tota adpressè araneoso-cana folus ad collum confertis rosulatis elongatis petiolatis pinnatipartitis segmentis ovato-triangularibus integris vel paucidentatis dentibus spinulosis rachide latè, caule ex ipso collo ramoso capitulum centrale sessile ramosque procumbentes simplices vel bifurcos parces rareos edenti, folus raris angustis pinnatipartitis dentatisve in alas angustas spinulosas sectis totam rami longitudinem decurrentibus, capitulis terminalibus magnis ovatis basi subtruncatis squamis involucris copiosè araneoso-lanatis in appendicem palmatam palmato-fasciculatim 9-43 bipinosam abeunlibus spinis flavis superioribus alius longioribus validioribus squamibus subbrevioribus flosculis roseis marginibus radiantibus, achenis junioribus papposis

Hab in arenosis circa Bisfara Balansa pi exs 1853 N° 797 sub *C polyacantha*

A *C polyacantha* distincta indumento cano nee papillan-hirlo, caule longiore erecto ramoso foliis radicalibus non lyratis **caulis**



non latè auriculatis sed decurrentibus, spims appendicum mae-  
quahbus nee subaequahbus, flosculi<sup>1\*</sup> pallidionbus neutns minùs  
**longè** radiantibus, etc

*CICHORACEJE*

*GICHORUM GLANDULOSUM* Boiss et Huet

G annuum caule erecto subangulato-sinato infernè albo nitido  
glabro supernè plùs minùsve dichotomy ramo<sup>o</sup> pihs patuhs te-  
nuissimis apice glandulosus ut et rami pedunculique obsilo, folns  
radicalibus caulims e basi sessili obtusè subaunculatd oblongo-  
lanceolalis acutis denliculis acutis apice subspinulosus obsitis pal-  
lid6 virentibus utnque pihs a Ibis papillanbus scabndis, florah-  
bus ad peduncolorum capituiorumque basin oblongo-lanceolatis  
acutis ngidis, peduncuhs a basi sursùm incrassatis longitudine  
varns, capituhs 10-42 floris alns ad apicem peduncolorum soh-  
tams alns in dichotomns et ad ramorum partem superiorem ses-  
silibus, involucn pihs glandulosus obt>iti squamis basi induratis  
externis subbreuionbus oblongis acutis apice spmescentibus, mter-  
nis bisenalibus basi glabratis lanceolatis apice subincurvo obtusis  
serie interiori angustion, receptaculo medium versus squamulosOj  
achemis rufescentibus oigro-maculatis angulatis tenuissimfe sub  
lente rugulosis extenns subcomprebsis corona rosci eis sextupld  
breuion paleis subbibenahbus lineari-spathulatis ngidis inter se  
contiguus constanti superatis

Hab in ruderatis circa *Erzeroum* cl Huet du Pavilion, circa\*  
*Diarbekir* Mesopotamia Kolschy 1843 N° 138

Species habitu *C divanatum* Schousb et ejus fonnas *C pumt-  
lum* et *C minimum* referens Omnes a nostrA specie differunt m-  
dumenti glandulosi defectu, involucn squamis interionbus exte-  
riores triple superantibus longè linean-attenuatis *C intybus* ra-  
dice perenni alnsque notis longiùs differt

*LEOHTODON PAYONII BOISS* (Sect *Apargta* )

L perenne radice simplici verticali elongate nigr3, folus om-  
nibus radicalibus rosulalis hnean-lanceolatis irregulariter pinna-

**lobatus** atltMiualu-dLUiinnallS basi sensim m peLiohim basi 1111-  
 >« (Ulalalum niembrariaccum <iitciraalh> lobismenoribus triangu-  
 gulanbus brewbus Mipronn» ulunquiu" 2-3 anguslè lmeailbus^acu\*  
 1w pilis Mibtis ad contain mcdumet ^upomc ^parsis simphcibus  
 elongate albis t-a?pc c\ eoclm puncto plunbu^, caule a^ccndenti  
 simphci vel paulo >>upia biMn iamulo auclo glabio parte inferioii  
 -2-'3 loins liueanbus obsilo, capitulo mediocn involiicri phylht,  
 Imbucalis Idnceolatib obtu^is nigricaiitibus latè albo-marginatis  
 e\tenonbui subpatuhs doiNo pilis nonnullis simphcibus hirtis cae-  
 tens glabi is achenus pappi sordid^ albi sens omnibus aequali-  
 bus a basi plurao&is

Hab pi ope *Salamanca* HKpama; in colle *Altos de la Mora*fdiclis  
 Floict Sceptembii (beib Pa^on )

Stirp^ memorabiliN cujus iniausto casu specimen unicum possi-  
 deo Radix crasbitie pcnse antennae utvidclur longa parte supe-  
 non saltern iibrilh> deslituta Folia ^-2'/a polbces longa angusta  
 Iaciniisiire2;ulanbussa}p6 tros hneas longis lmeambasi latis Sea-  
 pus 8 pollicaris Capitulum Illo *L ha&tihs* paul6 majus Radice  
 \crticah ab omni tpcione *Dens leontslioch* abhoirct ct mvito ha-  
 bihi in sections *Astetolhitx* prope *L Hispamium* Mi?r rnihlare  
 debet

LEO.NTODC^ Gn LCL M B ft H ^ai *Held>eich\anum*

Indumentum densms nvgis gribcum pilis omnibus elongatis  
 apice J-5 furcdtis\* couslans nee elongalis stellisque sessilibus m-  
 termi\tum Involucn squama? sublaxiore^ dorso pihs simphcibus  
 nee lepidoti-> stellali^ hirsutse

*L Heidi eichtanus* Lioiss Mss

Hab in rcgione modid et bupenori *Olympi Thessah* (Heldr !), in  
 regione alpina montit, *Olenos* Pcloponnesji (Heldr ), in rupibusre-  
 gionis alpinae *Parnasst* ^cl Heldr j

Forma intermedia inter formam tjpica m rupestnbus regio-  
 ms cahdai occurrenlcm et var *alpinmn* omnibus partibus mino-  
 rem Transitus manlfe^tl inter omnes \anelates occurrunt

Obs Numerosa series speciminum a cl Th Kotschy e\ monte  
 Tauro missorum me docuit *L dnancatum* Boiss Diagn *L oxy-  
 leptdi* ut formam pilis longionbus crebnoribus donatam et eliam  
*L. Ubanoiicmn* cidem specici adnumeianda esse.

LEONTODON BALANSA: BOISS (Sect *Oponna*<sup>9</sup>)

L. perenne radice horizontali squamosa<sup>9</sup> extremitate pramorsâ 1-2 cipiti latere inferiori fibras validas cylindricas verticales edenti, folus omnibus radicalibus oblongo-lanceolatis aculis sinuato-dentalis in petiolum brevem sensim angustatis indumento denso pilis apice 3-5 furcatis constant] canescentibus, caule scapiformi monocephalo nudo vel 1-2 squamulis brevibus obsito sulcato apice incrassato folus (fructifero) triplo longiore, involucri phyllis hinc biseptatis evanescentibus dimidio brevioribus inaequalibus dorso pilis elongatis furcatis scabris post anthesin saepe reflexis, internodiis dorso piloso scabro vel glabro obtuse canalicatis tandem conacis supernè attenuatis mucronatis obtusiusculis albo-cilicatis, corollis achenis brunneis staminibus transverse mucronatis supernè sensim attenuatis pappo sordide albo eis vix brevioribus superatis, pappi setis uniseriatis basi subdilatatis ferè tota longitudine plumosis

*L. hirsutum* var. Cosson

Hab in latere septentrionali montis *Gebel Toïgour* propè *Batna* Africa? borealis, cl Balansapl exs Alg 1853 N° 1026

Species meo sensu ab omnibus formis *L. hirsutum* distinguenda achemo multo longior (5 lineas) et inprimis supernè longè attenuato, setarum pappi exiliorum piliformium defectu radicisque indole quae magis elongata latere inferiori non fibrillas tenues sed fibras crassas cylindricas edit Indumentum in superius diversum et involucri squama? multo magis conacae Pappo in sectione *Oponna*, habitu in sect *Dens horns* Koch mihi lit at

TRAGOPOGON STENOPHYLLUS BOISS Pl. Huet

Tr glabrum multiceps collo vaginis fuscis reticulato-fibrosis dense vestito, caulibus simplicibus foliosis monocephalis, folus radicalibus numerosis e basi sensim angustatis angustè hinc flexuosis plicatis subquinqve-nerviis margine scabris. caulem dimidium aequantibus, caulibus basi amplexicauli longius dilatatis dein lineari-setaceis, supremis abbreviate, pedunculis sub *Qore M* incrassatis involucri basi brevissimis pubescentibus criculis glabris

phyllis e basilicaris subulatis (lores, marginales non aequalibus flexuosis, corollis luteis, achenis

Hab in *Amiend* propè *Tortoum* cl Huetdu Pavilion Juno 1853

Radix crassiuscula tumida fasciculos foliorum caulesque plures floriferos sub anthesi 8-9 pollicares edens. Folia superne in lineam lata, caulinarum parte dilatata saepe pollicans lato-uneans. Capitula cirsii *pratensis* ferè minora. Species collo tunicato, foliis tenuissimis, involucris phyllis setaceo-acuminatis insignis habitu *Tr. mnafohum* Boiss. quodam modo referens quod floribus roseis, foliis latis, etc. ceterum longè differt. Affinitas ob achenia non nota incerta.

TRIGOPOGON LONGIFOLIUM Heldr. cl Sartou

Tr. glabrum, radius cylindricus collo nudo caulem saepius unicum elatum striatum rubellum ramosum edenti, foliis radicalibus caulibusque inferius plunnerviis linearibus strictis apice attenuatis callosis, pedunculis elongatis rigidis supernè vix incrassatis foliis brevibus lanceolatis strictis obsitis, capitulis parvis, involucri basi subpulverulenti ceterum glabro octophyllo phyllis lanceolatis acutis flosculos marginales spicantibus, flosculis luteis subtus subvescentibus, achenis brevibus laciniatis spinuloso-mucatisve in rostrum eis tripliciter brevius apice villosum attenuatis, pappo sordido achenium cum rostro aequanti.

Hab in montibus *Phalen* Attica? inter Juncos cl Th. de Heldreich

Folia inferiora pedalia sesquipedalia sesquialtera lata. Caules tandem 2-2 1/2 pedales. Achenia cum rostro 5 lineas longa. Valde alline *T. bremrostris* DC. a quo differunt foliis longioribus nunquam floccosis nee undulatis, achenis brevioribus apice minus tenuiter et brevius rostrate, caulis prope minus ramosus et folia ramea basi minus dilatata.

inAGOPOGON RETICULATUM Bois. et Huel

Tr. radice cylindrica verticali, collo vaginis reticulato-foliosis vestito, foliis radicalibus linearibus supernè longè attenuatis, caulibus basi dilatatis oblongo attenuato-acuminatis, omnibus phyl-

nerviis margine srapiik floccoso valdè undulatis apice (lexuosit>, cauibus 1-2 monocephalis folia radicalia non multum superanlibus apice non incrassatis, involucri basi sublanati phyllis 8 lanceolatis acutis flosculis marginalibus luteis subbrevionibus, achemis mucato-echinatis in rostrum eis tripldbreviùs apice lanatum abrupt^ attenuatis, pappo sordido achenmm cum rostro aequanti

Hab in *Armenid* propè *Erzeroum* cl Huet du Pavilion

Gaules 8-10 polhcares, folia radicalia 2 ' /s\*3 Imeas, cauina infernè 6-7 Imeas lata, capitula magnitudims eorum *T Onmtalis* Achenmm cum rostro 7-3 lineas Ion gum Hæc species collo vaginato ut *T stenophyllum* donata ab eo fabric^ fohorum et involucri phyllorum longiùs differt et aptiùs propè *Tr lalifohum* collocanda quod collo non iibroso, folu\* non heteromorplus, caule ramoso aliisque distat notis

TRAGOPOGON PLANTAGINKUM BOISS et Huet

Tr radice verticali cylmdricâ, collo vaginis in fibras crassas, tandem solutis vestito, caule humillimofolioso monocephalo, folus glabris mullinervus margine scabndulis radicaibus obLongo-laq- ceolatis basi attenuatis caulims e basi rotundatâ oblongis omnibus breviter attenuato-mucronatis, pedunculo lanato apice subincras- sato folus supremis brevion, involucri phyllis 8 lanceolatis mar- gme undulatis acutis flosculos luteos aequantibus, achemis

Hab in *Armenid* propè *Ehdja* cl Huet du Pavilion

Planta ex unico specimine nota habitu valdè singulans Caulis vix semipedalis capitulum magnitudims *Tr. pralenm* sed angustius ferens. Folia radicalia 3-3 <sup>4</sup>/i pollices longa 40-15 lineas lata, folia caulina 34 inter se approximala bipollicana subrecurva 12-13 lineas lata. Achemis ignotis incerta aifimtas sed prob propè *Tr lattfohum* collocandum quod csetens neglectis collo non fibroso et folus lanuginosis differt

Obs. *T CcBlesyrtacum* Boiss Diagn N°II re accuratiùs perpensa *Tr ertospermo* Ten inter omnes species generis magis affine vi- detur, ab eo statuirâ pumilâ, pedunculis vix incrassatis, involucri phyllis quinis tantum differt et verosimiliter hujus tantum vane- tatem sistit

PODOSPLRMUM ARMENIACUM BOISS et *Hnet*

P perenn totum tomento brevi pulverulento plus minusve de-  
tersih canum, radice cylindrical verticah, collo squamoso folia ra-  
dicalia expansa caulesque 4\*3 edenti, cauibus pumihs ascenden-  
tibus erectisve ~~SSB~~US a basi dicholomè ramosis ramis divancatis  
sursùm arcuato-recurvis, folus radicaibus peliolatis ambitu lan-  
ceolatis pinnatipartitissegmentis angulo recto patentibus obovatis  
vel oblongo-spathulatis integris denliculatisve basi saepit lobulo  
retorso eis brevion auctis terminali hnean-lancrt)lato acuto,  
fohorum caulinatorum abbreviatorum sessilmm lacinns linean-se-  
taceis ramealium setaceis, peduncuhs superni midmsculis vix in-  
crassatis, capituh ilonfens minutis, involucn villo brevi pulve-  
rulento-camphyllis lanceolatis acuminatis extenonbus quadruple  
minonbus demum patentibus, floscubs flavis extus rubelhs exte-  
nonbus iDVolucrum dupld superantibus, achenns palhdis sulcato-  
striatis parte dimidia supenon parce lanatis pappo eis longiori  
superatis

Hab in Armenia propè *Kochapownar* cl Huet du Pavilion Fl  
Fruct que Maio

Planta 4-5 pollicans, folia radica bipolhcSna 5-9 lineaslata.  
Capitula flonfera eis *P lacimati* paululiim minora Species caule  
divancatim ramoso, segmentis fohorum abbreviatis patentibus,  
achenns supernè hirsutisnotabilib, hâc notd accedens ad *P mo-  
sp&rmum* cauibus elatis, lacinns longi^imis fohorum, involucn  
phyllis adpressis oblubis apicc tantùm lanatis sat distmclum

SconzoNERA AUCTIERI Boiss et Huet (Sect *Euscarzonera* )

Sc radice crassi ovatd luberosA suberoso-corticosa^ apice non  
productâ, folus omnibus radicaibus expansis parcè cnspo-pube-  
rahs hneanbus flexuosis margine tenuiter undulatis, scapis pnbe-  
ruhs monocephahs folus vix longionbua, capitulo paucifloro an-  
gustè cyhndnco, involucn phyllis 8-9 palhdè virentibus an-  
gustè albo-marginatis indumento tomonlello ad margines copio-  
sion obsitis liifenonbus brevionbus ovato-oblongis obtusis inte-  
rionbus lanceolatis acutiusculis, floscubs purpureis mvolucrum  
excedentibus, achenus

Hab prope Erzeroum Auch N° 4882, in *Armenid* circa *Kochapounar* cl Huet du Pavilion

Folia 2-3 polhces longa 1  $\frac{1}{2}$  hneas lata Scapus 2-4 pollicans  
Capitulum angustura fert polhcare Affinis *Sc stenocejihali* B quæ  
differt radice apice in cyhndrum products, collo vaginis scanosis  
numerosis vestito, capitulis nunoribus, involucris phyllis angustis.

SCORZONERA KURDIGX Boiss et Noe (Sect *Euswrzoner*a)

S radice minuU ovata subtùs fibnllas tenues edenti, eaulc pu-  
milo medium versùs in 3-5 ramos arcuatos monocephalos diviso,  
folns radicalibus et ad cauhs divisionem copiosis angustè linean-  
lanceolatis margine undulato-cnspis apice longè attenualo-acu-  
minatis glabrescentibus, rameis paucis minutis e basi lation am-  
plexicauh lanceolatis, capitulis cyhndcicis, involucris phyllis 1-9  
glabns pallide virentibus infenonbus tngulan-ovatis multd bre-  
vionbus csetens lanceolalu omnibus obtusis, flosculis pallidè roseis  
involucro loogionbus, achenusbrevibus obconicis sulcalis ad costas  
denticulato-scabns pappo mveo eis dupl6 longion terminatis

Hab in subalpims Persiæ ID *Kurdstanid* propè *Mendeh* cl Noe  
Pfor Maio

Planla 5 polbcans, folia 2 hneas circiter lata, ranu sesquipolli-  
cares, capitulum ferè polhcare. Affinis speciei præcedenti a qua  
sat differre videtur radice minutd non corticoso-squamosâ, caule  
ramoso, folns apice longè attenuatifi, mvolucn phyllis infenonbus  
valdè abbreviatis

SCOHZONEBA STRIACA BOISS et Blanche. (Sect *Ettscorzoner*a)

Sc radice cylindrical tenui squamis fuscis ad colltun modicg  
obsitd, caule erecto ad medium usquè fohoso monocephalo glabro,  
folus radicalibus basi attenuatis gramineis hneanbus plurinerYiis  
apice attenuatis glabrescentibus, cauhs brevionbus basi rotun-  
datd sessihbus, capitulis cyhndnco-obcomcis, involucris phyllis 9-11  
tomento brevissimo tandem ssBpè detersih obsitis infimis brevis-  
simis tngularibus aculis intimis lanceolatB obtusis, flosculis  
luteis involucro sesquionbus, achenus stnatis extenonbus  
parte supenon sparsim et minutè sCabris cffitens laevibus, pappi  
rufescentis achenio longions setis 5 longionbus apice nudis

Hab. in rupes Libani inter *Scandeiouna* et *Jumake* propè *Saida* cl Blanche Floret Martio

Caulis tandem pedalis, folia inferiora semipedalia 2-3 lineas lata secus nervum medium vahlidiora plicata, capitula ea *Sc humilis* aequantia Hujus varietati angustifoliae affinis differt involucri phyllis latioribus obtusis inferioribus magis abbreviate, achemis extensoribus scaberrimis nec levissimis *Sc parviflora* Jacq quam habitu magis refert longius differt capitulis minoribus, flosculis involucri non superantibus, etc *Sc Bcetica* foliis crassiusculis, involucri phyllis acutissimis a nostris specie facile distinguitur

SCORZONERA GILICR BOISS (Sect *Gelasia* )

*Sc* tota adpressè benceo-cana radice crassa cylindrical verticali nigrescente foliorum caulesque laterales ascendentes edenti, caulibus foliosis stans adpressè canescentibus rigidis superne ramos alternos monocephalos elongatos rigidos strictissimos edentibus, foliis radicalibus caulibusque inferioribus hinc inde parallelis plunnervis obtusiusculis, superioribus abbreviate, ramis angustissimè lanceolatis acutissimis, capitulis parvis brevibus, involucri phyllis praeter mediam partem virentem adpressè caescentem late scanosis subconnatis lanceolatis acuminatis extensoribus triplo minoribus, flosculis flavis involucri parte longioribus, achemis tenuiter cyathoidibus striato-sulcatis glabris, pappi rufescentis achemio sublongioribus setis ad medium usque scabris

Hab. in rupes Libani montium *Utsch Deppe* et *Gisyl Deppe* alt 8000' cl Kotschy

Caulis 1-1 pedales, folia 3-4 pollicina 2  $\frac{1}{2}$ -3 lineas lata Pedunculi caulis stricti 1-3 pollicares Capitula magnitudinis eorum *Sc pygmaea* a qua caule elato ramoso involucrique phyllis acuminatis differt *Sc. cinerea* Boiss cui habitu affinis differt foliis multo latioribus, capitulis duplo majoribus, involucri phyllis duplo numerosioribus acutioribus

SCORZONERA CINEREA Boiss var *undulatifolia* B. et Huet

A typo speciei in montibus Persiae borealis crescenti differt foliis margine undulato-crispatis apice magis attenuato-acuminatis



Hab circa *Erzeroum* cl Huet du Pavilion

SCORZONERA GAGEOIDES Boiss (Sect *Lastospora*.)

S tota densè et cnspè albo-villosa, rhizomate Lenui nudo (repen ti?), caulibus tenuibua erectis infernè nudis suprâ medium foliosis racemoso-subcorymbosis, foliis radicalibus paucis lanceolato-linearibus caulis subaequilongis plunnervis infernè angustatis superaè longè attenuato-acuminatis, caulis ad pedunculorum ortum angustissimè linearibus capitula superiora superantibus, pedunculis lateralibus \*ub anthesi abbreviate tenuiori elongato, capitulis minutis, involucri lanati phyllis lanceolatis acutis inferioribus paulo brevioribus, flosculis luteis involucri paulo superantibus, acheniis junioribus hirsutis

Hab. in ditone *Beloutschistan* cl Stocks

Caules tenues 6-8 pollicares in racemum 2-3 pollicarem 4-6 cephalum abeuntes. Folia radicalia semipedalia medium versus 3-4 lines lata ut et caules valdè lanata Folia caulium in a angustissima summa selacea Capitula e minimis generis ovata circiter sex lines longa Species quoad radicis indolem et achenia adhuc imperfectè nota habitu valde singulari *Gagea mytillosa* quodam modo referens, prope *Sc. macrophyllum* Bunge in Lehm (an F et M ?) collocanda.

TARAXACUM DENUDATUM DOISS et Noë

T. rhizomate filiformi elongato ramoso (repenli?) nudo squamuloso magno, collo inter squamas e basi persistenti petiolotum oriundas rufescenti-lanato, foliis ante florum evolutionem jam exsiccatis, pedunculis e collo 1-3 capitulo 2-iplongioribus monocephalibus pulverulento-hirsutis squamulam minimam unam alterave minimam obsitis, capitulis mediocribus, involucri polyphylli phyllis glaucis triangulari-lanceolatis acutis apice minutè ciliatis exterioribus brevioribus patentibus reflexis, acheniis pallidis angulatis striatis supernè squamuloso-mucicatis rostro suo plus minus brevioribus

Hab in Persiâ ad *Kimnd* prope *Kermanehdh* cl. Noë Floret Augusto

Rhizoma in meo specimine 5 pollicares pennâ ansennâ dimidio tenens bifurcata Pedunculi 1 1/2 pollicares Capitula eis *T officinalis* vulgans pediculi minora Achenium 2 1/2 lineas, rostrum 5 lineas longum Species rhizomatis indolis folisque proanthus m-faustô adhuc ignotis ab omnibus ains generis discedens.

TARAXACUM SYHIACUM BOISS

T glaucum rhizomate crasso squamoso saepe caespitoso, foliis rigidulis utrumque indumento minutissimo sparsis pulverulentis costa media alba crassius percursis runcinato-pinnatifidis lobis triangularibus plus minusve aculeato-denticulatis, scapula densè et breviter tomentosis, involucri glabrescentis squamis exterioribus subpatulis triplicibus brevioribus late triangularibus rubellis, interioribus erectis lanceolatis albo-marginatis, flosculis flavis involucri parvis superantibus exterioribus subviolascentibus, achenis flavescentibus a medio sursum valde mucronatis apice abruptè et longiusculè mucronatis rostro eis sesquialongioribus superatis

**Hab in Gebel Baruck Libani inter Rascheya et Deir el Kamr** (Boiss), ad *Wadi el Jiftan* Antilibani inter *Beyrouth* et *Damascum* cl. Gaillardot, circa *Eden Libani* cl. Blanche

Planta habitu, foliis valde affinis *T serotino* W. K. quod differt a nostro capitulis paulo minoribus, involucri phyllis exterioribus dimidiis angustioribus longè caudatis, achenis sparsim et brevius mucronatis *T Libanensis* DC. species adhuc male nota nostrae speciei quoque habitu similis differt collo radice densè lanuginoso, involucri phyllis exterioribus eis *T serotina* Bimilibus.

LACTUCA STOCKSII BOISS. (Sect. *Scanola*)

L. annua a collo saepius pluncaulis, foliis ferè omnibus radicalibus patentibus secus petiolos et costam mediam parvè papillosis runcinato-lyratis segmentis lateribus parvis irregularibus superioribus oblongis repandis terminali majore ovato vel triangulari obtuso vel acuto, caulis basi hispidis caeterum glabris a medio saepius dichotomè ramosis, foliis caulibus paucis hincanibus integris, pedunculis glabris tenuibus bracteolatis capitulo

cylindrico paucifloro longioribus, involucri glabris phyllis virentibus membranaceo-marginatis infimis triangularibus brevibus superioribus inaequalibus lanceolatis acuminatis obtusis, flosculis, achenis atque oblongis basi attenuatis compressis utrinque incostatis tenuissimè transversè strobilatis rostro albo eis duplè longioribus superatis, pappo albo compresso brevi.

Hab *inproyemcdBeloutschistancl* Stocks exs pi. N<sup>B</sup>809 et 830

Folia minuta majora 12-15 lineas longa, caules 6-9 pollicares capitulis paucis laxissimè corymbosis Ex affinitate *L. undulatus* Ledeb quae differt foliis dentatis vel pinnatifidis, caulibus abbrevialis fohosis, pedunculis brevibus, capitulis fructifens 12 nec 6 lineas longis, achenis albidis utrinque uninerviis cum pappo pollicanibus nec 6 lineas longis.

**ZOLLIKOFERIA MUCAONATA. Boiss Diagn.**

Quaedam de synonymis hujus speciei et affinium notanda

1<sup>o</sup> *Z mucronata* synonymon adducendus *Sonchus Candolleanus* Jaub et Sp Illustr pi Or tab. 279 (eximia I) sed inter Locos a cl auct enumerates specimina sub 208 e regione *Hauara* Arabiae Petres a cl Schimper evulgata ad *Z Arabicam* Boiss pertinent Si genus *ZolhkofentB* ad *Sonchwn* reducitur hsec species *S mucronatus* nominanda erit

2<sup>o</sup> *Sonchus Cassmianus* Jaub et Sp. tab 280 a precedenti inter alias notas pappo caducissimo nec persistenti eximiè differt Hujus specimina vidi ex <sup>E</sup>Egypto Auchert Sieber! Kralik f ditione *Beloutschistan* India<sup>B</sup> finitima cl. Stocks t Specimen N<sup>o</sup> 827 collectionis Arabicæ Schimpenans JUDIUS et non satis evolutum<sup>j</sup> a cl Jaub et Spach citatum mihi potius ad speciem sequentem spectare videtur

3<sup>o</sup> *Zolhkofena Arabica* Boiss tandem a cl auctonibus citatis ad synonymiam partim *Soncht Candolleant* partim *Soncfu Casstmanit* citata, ab utraque specie habitu *Picndit* ut jam notan, achenis brevibus a me in specimine incompleto erroneè scribis dictis sed reverà longè villosis-sensibus prorsus abhorret Hujus typus est planta sub N<sup>o</sup> 208 vel 207 a regione *Hauara* Arabia petres a cl Schimper relata Hanc quoque Harte 1846 in Arabia petraest legi et est denique ipsissima planta sub nomine *Soncht Lybtex*

Spach inter plantar cl Balansa sub N° *iOlb* ex arenosis circfl Biskara evulgata Haec species si ambo genera conjungas *Sonchus Arabwus* erit

4° *Microrhynchm fallax* J et Sp tab 276 et *M Arabicus* eorumdem auctorum tab 277 unicam speciem a *M nudicauh* Lessing pappo dcciduo nee persistenti distinctam mihi sistere videntur *M fallaa*i nominp designandam

PTEROTHEGA OBOVATA BOISS et Noe (Sect *Tnchocrepis*)

Pt annua pluncaulis, foliis omnibus radicaibus rosulatis obovatis glabris infernè attenuatis minutè et remotè denticulatis denticulis triangulanbus apice calcareis suprâ vindibus subtùs rubns, caulibus folia 3-4plò superantibus supernè glanduloso-puberuhs semel bisve dichotomis, peduncuha arcuato-patentibus capitulis 3-4pld longioribus, capitulis hemisphaenco-obcomcis, involucri bisenahs phylUs exterms paucis quadrupld brevionbus tnangulan lanceolatis adpressis, internis lanceolatis acuminatis dorso pabescenti-setulosis margine membranaceis fructifens subincrassatis, achenus omnibus cylmdricis costato-stnatis pappo mveo eis subacquah superatis cterionibus ad costas scabns csetens lsvibus, receptaculo longè setoso

Hab in subalpinis ArmensB mendionalis circft *Ardana* cl Noe Floret Maio

Folia sossilia 15 lineas longa 7-8 lata obtusissima Scapi 24 cepah 4-5 polhcares Capitula magnitudinis eorum *Pt Nemausensis* Ab hdc ut et a *Pt bifidd-pT®ter* foliorum formam differt deflecl adj^morum marginalium alborum corticosorum intùs cannatorum vel alatorum *Pt Aralensis* Bunge qua quoque achenus conformibus gaudet ea omnm6 laevia habet et capitula dmiidid nora cjhndnca glabra

ENDOPTERA DICHOTOMA BOISS etBal (Sect *Gatyom*)

E annua, caule erecto team folioso jam paulò suprâ basim dichotomè ramoso flexuoso prapterpilosDonnullos in parte inferiori glabro, folus tenens glabns radicaibus oblongo-spalhulatis obtusis in petiolum longè attenuatis apice excepto acutè runcinato-den-

tatib, cauhs oblongis acutè aunculato-amplexicaulibus, summit ad dichotomies supremas minimis setaceis, pedunculis saepius arcuatis capitulo minuto 3-4plo longioribus, involucri bisenalis breviter cano-tomentosi phyllis extenonibus paucis brevissimis hnear-setaceis interioribus prater indumentum dorso glanduloso-pilosis lanceolatis acutis demùm navicularibus extis obtusè carinatis induratis, receptaculo glabro elevato-punctato, flosculis intensè luteis Involucrum breviter superantibus, acheniis brevibus rufis oblongis apice brevissimè attenuato-subrostratis pentagono iO costis costis 5 sub lente scabris, 5 intermediis minutis prominentibus^ achenis extenonibus curvatis, pappo meo deciduo achenis sublongiore

*Creps dichotoma* Boiss et Bal in pi exs Orient 4854 N° 254

Hab rara in dehvibus umbrosis ad via^ circd *Smyrnam* cl Balansa Floret Majo et *meunte* Jumo

Planta 6-9 pollicans, folia radica cum petiolo 1'/<sub>a</sub>-2 pollicana supernè 6-1 hneas lata Pedunculi 1-1 •/• pollicares Capitula eis *Endoptera asperm* paulo minora brevioraque Achenia tantùm lineam longa ea *Endopterce Dwscondis* referentia sed dimidid minora *E Dioscondt* characteribus aretè affinis quamvis caule folis capitulisque minutis diversissima Forsan cum eis *Crepididi* rursus adsocianda a quod characteribus carpici genence TIX difierunt

ENDOPTERA INTERMEDIA BOISS et Blanche (Sect *Nemauchenes*)

E. radice verticali bienni, a collo ssepè multicaulis, cauhs erectis procumbentibusque ferè a basi dichotomè ramosis internè prsesertim tomentelhs, folis radicaibus et inferioribus oblongo-lanceolatis acutè dentatis vel runcinato-dentatis ceetens mtegtis basi acutè aunculatis hnear-lanceolatis, omnibus puberulis, pedunculis capitulo 4-5plo longioribus 1-2 squamulis linearibus obsitis, involucri bisenalis brevissimè cano-tomentell) squamis extenonibus 5-6 hnear-lanceolatis brevissimis acutis internis lanceolatis membranaceo-marginatis praBter indumentum dorso 3-5 aculeis subaduncis obsitis demùm induratis intus concans dorso incrassato convexis, receptaculo alveolato alveolarum margmibus flmbnato-setosis, achenis marginibus squamis involucri mclusis pappo brevi deciduo superatis basi subcurvatis laBvibus subcom-

pressis obsolete stnatis dorso obsoletè facieque intenon manifestiùs cannatis, achcnus intenonbus laevibus in rostrum eis subaequilongum scabrum sensim attenuatis, pappo albo pcrsistenti rostro achennaequilongum

Hab circA *Beyrouth* et in arenosis inanimis ad ostium fluminis *Bafor AouU* propo *Sidonem* cl *Blanche* Fl *Mai*

Planta ut ex speciminibus binis a me observatis videtur humis caulibus decumbentibus semipedalibus brevioribusque Capitula ferè magnitudinis eorum *E Dwscondis* a quibz acheniorum structure omnin6 aliena est *E aspera* praeter notas ex herbd et capitulis minoribus brevioribusque petitis egregiè differt achenus extensus planis lntiis in alam latam expansis, interms dimidid minoribus costato-stnatis in rostrum multd gracibus eis djmidri longms abruptè abeuntibus

GREPIS SARTORIANA Doibs et Heldr (Sect *Hiemctoides*)

€ perennis acaulis radice verticah squamulosd, folus omnibus radicebus rosulatis expansis parcissimè lurtulis glabnsve ambitu lanceolatis pinnatifldis racibide latd lacmns irregularibus rands tngulanbus saepiùs elongatis linear i-lanceolatis setaceisque acutissimis ahquandd retrorsis terminah triangulan vel saepiis hnean-lanceolati clongatd, pedunculis procumbentibus folia 2-3pl6 superantibus nudis, capitulis parvis pauciflons, involucri bisenahs phyllis exterioribus paucis lanceolatis membranaceis mterioribus infera6 praesertim hirtulis nigricantibus margine membranaceis lanceolatis apice cihatulis, floscuhs aureis subtùs rubelhs, achenus muUistnatis vix apice attenuatis pappo mveo eis subbreuion superatis.

Hab in pascuis montis *Olenos* Peloponnesi loco *Campos* dicto cl. *Heldreich*. Alt 6000' Fl *Julio*

Folia 1-2 polhceslonga 4-7 lineas lala Peduncub 1-3 polhcares Capitula eis *Cr wrentis* vix majora Valdè afflms €r *robertioidt* Boiss quae differt rhizomate cespitoso, collo valdè squamoso nee nudo, fohorum segmentis brevissimis Ambo valdè afflms sunt *Taraxacis bteiirostribus* (*T Bithynico* el *T psychropfolo*) quae forsàn jptiùs *Crepdi* adnumeranda emit

HIERACIUM GHECUM Boiss et Heldr (Sect *Cennthoidea*)

H. folns ferè omnibus ad colluni congestis rosulatis prater unum alterumve brevius subspathulatum lato-linearibus utnquè sed basi longiùs attenuatis acutis margine obsolete repandis integris pallidè virentibus pilis IODgis patulis flexuosis denticulatis villosis, caule flexuoso 1-3 phyllo simplici monocephalo vel rands suprt basin vel medium versùs bifido usdem pilis sed basi mgncantibus sparsissimis setoso, peduncuhs longis prater indumentum setosum sparsum sub capitulo pube brevissimi subglandulosi laxi obsitis, folns cauhs prater infenus radicaibus simile saepè non obvram angustè Uneanbus supremo sub capitulo minimo setaceo longè hispido, involucri squamis linearibus acutiusculis mgncantibus adpressiusculis pilis patulis denticulatis longis albis dein rufescentibus hirsutissimis inferioribus paucionibus brevibus, Intermediis paucissimis, superioribus quadruplò longioribus, corollis apice valdè ciliatis

Hab in rupestribus montis *Chelmos* Achaiae ad fontem *Lera Stygta* cl. Heldreich Jul 1848, in regione alpina montis *Parnam* ad *Triptos Vracket* et *Kedrosasteno* alt 6000-6500' cl. Heldreich et cl. Orphandes

Caulis scaposus 6-9 pollicans. Folia radicata 2 7, -3 •/, pollicaria 2-4 lineas lata. Capitula magnitudinis *H glanduhfen* Hoppe cui species praesertim forma monocephala habitu valdè accedit sed egregiè differt foliis abbreviatis obtusiusculis, indumento multò brevior valdè glanduloso, corollis glabris *H Sartman* forma monocephala *H Grmco* habitu quoque affinis semper dignoscitur foliis latioribus obtusis vel abruptè acutatis dentatis, indumento brevi adpressionem, involucri multò brevior et adpressius hirsuto, corollis albis. Hoc *BL Sartmanum* caule 1 vel 2-4 cephalo ferè a basi ramoso occurrens ferè in omnibus GrscisB montibus crescit *Taygeto* Heldr., monte *Olenos* Peloponnesi Heldr 1 *Parnasso* Reldi t Orph. 1 *Olympo Thessahw* Heldr t Affinitas *H Gran* inter *Cennthoidea*, *H Sartmanum* inter *Palmonartoidea* mihi quærenda vide Uir,

HIERACIUM BOISS (Sect *C&mthm&e\** )

H foliis omnibus radicalibus ad rhizomatis nigri indurati apertem rosulatis ovalo-oblongis obtusis acutiusculisve in petiolum brevem breviter attenuate alas integerrimis a basi dentalis vel etiam submarginatis omnibus utrinque pilis albis longis scabris molliter cano-villosis, collo petiolisque villosissimi. In caule praeter bracteas apertae basi rubello sparsum hirsute medium versus glabrato superius medium ramoso 2-4 cephala, ad bifurcationem bracteis linearis-setaceis instructo, pedunculis erectiusculis capitulo plerumque longioribus pilis brevibus nigris glanduliferis obsitis, involucri submarginati perianthiis adpressis linearibus acuminatis acutiusculis margine albo-marginatis praeter pilos dorsales glanduloso breves pubes breviter tomentellis corollae apice hirsutis, acheniis sternalibus margine pilis pappo sordido eis sublongioribus superatis

Hab in monte *Siet i a de Akaras* Castellae novae Bourgeau pi exs 1850 N° 772 sub *H murorum tar atrotrenti* Coss

Gaulibus longiores pedales capitula magnitudinis eorum *H murorum* Folia 1-2 pollices longa 1/2 pollicem lata iridamento molli *H sertceum* Lap = *phlomidem* Fröhch referenti obsita. Haec species indumentis nature, involucri perianthii marginatis, corollae scissatis, caule inferne prorsus aphylo superne foliis bractealibus paucis obsito meo sensu *Cei mthoidis* prope *H mxtatile* et *senceum* potius quam // *tulgato* appropinquanda An forsitan hybrida inter *H sertceum* et *m* montibus Hispaniae australis obvium et *H murorum* quod tamen ex Hispania australi nondum vidi ?

HIERACIUM HELDREICHII Boiss (Sect *Cerinthoides* )

H rhizomate brevi truncato fibras numerosas edenti, foliis fere omnibus radicalibus rosulatis expansis oblongis obtusiusculis basi attenuatis sessilibus vel in petiolum brevem abeuntibus integris vel inferne repandis et subinde dente triangulari uno alterove aculo instructis substantia tenuissimis pallide virentibus utrinque sed margine copiosius pilis sparsis albis crebre denticulato-scabris ad basin foliorum collumque densissimis villosis, caulibus raris ~~puberulis~~ monoccephalis simpliciter erocii proceri 1-2 folia minima



oblonga sessilia acuta ad dichotomy in fen ores sita nudis stnatis tenuibus vindibus remotè et longè seloso-Inspidib a medio vel supri basin plunès dichotomè ramosis 3-5 cepahs, pedunculis crectis longis squamuhs hnean-setaceis mimmis paucis instructis prater setas longas sparsas pube minutissimè cnspuld là\ft sub lente ob&itis, capitulis mediocnbus, involucri phylls adpressis lanceolato-hneanbus acutis mgncantibus membranaceo-marginatis dorso prater pubem brevissunam pihs longis albis siccitate rufescentibus patulè villosis, infenoribus brevionbus paucis, corollis glabns, aèneous palhdís stnatis pappo sordido eis sublongion superatis

Hab in *Arcadtd* ad rapes in regione sjlvatici propè lacum *Phe-tieon* alt 30CK)'-3500' cl Heldreich, in regione abietind montis *Parties Attica*; cl Sarton, in raonte *Parnasso Spruner I*

Folia in specimiDibus Arcadicis cum petiolo 3-4 polhces longa sesquipoUicem aut pauld ampliùs lata., in Atticis Parnassicisque pauld minora Caulis sa^piùs pedunculis longis snpputatis pedalis Gapitula magmtudinis llorum *H saxalilts* Species distinctissima, foil is substantiál tenuissirais in sicco ferè membranaceis insignis, habitu et pubescentia" *H senceo* et *saxatth* approximanda a quibus lamén prater alios characteres corollis non cilia Us discedil Inter *Andryaloidea* non confandendum cum *H Pamasst* Fries Symb cujus specimina infausto casu amissa non conferre possum sed quod habet folia crassiora majora sinnato-dentata tomentosa, caulem humiliorem, capitula majora, involucnsquamas villodens-ion omnind obtectas, hgulas undiqnè pilosas

HIERACIUM SCAPIGERUM Boiss Oroph et Heldr (Sect *Pseudoce-nnihoidea*)

H foliis omnibus radicalibus rosulatis oblongo-lanceolatis basi attenuates subsessihbus margine undulatis apice plùs minùsve acaUs grossè dentatis vel dentato-lobalis dentibus tnangulanbus atte-nuato-acutissimis sursùm direcbs vindibus utnnquè gktnndnloso-pilosis, cauhbus scapifonnibus 1 -4 folia parñm wperantibas cras-sinscmlis pube duplici alterft brevissimnd glandules\* alterA pihs longis patolis denticulatis conslanti hispuhs simpUdbus monoce-phalis prater 1-2 folia minima linearu bracteiformia eaeoè eranida nudis. capitulis majusculis, involucri phylls vindi-nigncantibun

lanteolalu-liDcanbub acuiis adpressiuscuhs eodem diiphci nidu-  
menlo adpressiusculè ct brevmsculè hirsute, inferioribus paucis  
brevionbus, flosculis intense luteis expansis involucro subduplo  
longionbus glabemmiSj acheniis pallidis abbreviatis stnatis pappo  
albido eis longion superatis

Hab in monte *Kyllene* Peloponnesi alt *ftWO'-QOWy* cl Orpha-  
nides Junio 1851, in rupeslnbus regions alpina? *Parnasst* cl Held-  
reich Aug 1852

Folia inferiora ea *H amplexicauhs* glandulositate et forma refe-  
rentia sed ferè profundius dentata multdque minora 1 \*/>2 pollices  
longa Caules 2-4 pollicares, capitulum eo *H amplexicauhs* fer<sup>^</sup>  
majus valdè expansum Species distinctissima ab omnibus sections  
corolhs glabns caulibusque scapiformibus discedens propè *H Li-  
guslicum* Fries collocanda

HIERACIUM CHALCIDICEM BOISS ct Heldr (Sect *Andryalotdea* )

H phjllopodum caule erecto flexuoso vindi pube minima pul-  
verulcntH sparsd setisque sparsis patulis luspido paulè suprâ basin  
vel 9upcrn6 ramoso 3-4 cephalo ramis elongatis tlexuosis sab ca-  
pitulo praesertuu setaceo-bracteolatis, folks ad collum congestis  
oblongo-lanceolatis acutis basi attenuate subsessilibus obsolete  
repando-denticulatis, caulinis 4-6 remotis oblongis acutis basi at-  
tenuate sessilibus sensim dimmutis supremis ad dichotomias an-  
gastè hneanbus omnibus-vindibus pilis longis denticulatis adpres-  
siuscuhs senceis, involucris imbricati phyllhs adpressis lanceolato-  
lineanbus acutis pallidè virentibus pilis longis ea non occultantibus  
adpressiuscuhs hirsutis, corolhs glabns

Hab in rupibus montis *Korthaii* peninsula *Chaladices* in Mace-  
donia alt 2000' Julio 1851 c] Th deHeldr<sup>^</sup>ich

Planta ferè pedahs Gaules crassiusculi fragiles Folia radicalia  
1 ', -2 '» pollices longa 5-8 hneas Lata, caulina etiam inferiora  
multd minora Rami sea pedunculi 3-4 pollicares Capituia eis *H.  
Taygetet* paulb minora *H Taygeteum* speciei hie desenptae valdè  
afQne et eodem ferè mdumento donatum differt fohis multò mayo-  
ribus, caule ramisque crassioribus, mvolucro pilis densionbus lon-  
gionbusque patulis squamas occultantibus pbsito.

HIERACIUM GAUDR\I BOISS. et Orph (Sect *Andtyaloidea* )

H to turn secus caules et folia pilis longis patulis denticulato-subplumosis dense senceo-hispidum, caule simplici vel supernè bicephalo ad medium usquèfoliato inter pilos patulos supernè pube brevi conspuli obsito, folus oblongis infimis ad collum paucis remote denticulatis basi attenuate acutiusculis, cauhsis basi rotundatS amplexicaubub integris acutis sensim diminutis, capitulis mediocnbus, involucri adpressmsculi squamis lmbncatis lanceolatis acutiusculis ab infimis ad superiores sensim elongatis vmdibus breviter et adpressrascule hirsutis, corollis intensè luteis glabris

Hab in monte *Parnasso* propfe *Kedrozasteno* alt 6500' Julio 1854 cl Prof Orphanides Fl Grsec exs N° 347

Pedale, folia mfima 2-3 pollices longa 7-9 hneas lata Capitula eis *H Taygetei* paul6 minora Huic et prsertun speciei praecedenti indumento et characteribus vald6 affine, propter involucrium eximiè imbricatum squamis manifesto lationibus donatum et brevissimè hirsutum specied distinctum esse censeo Gl Orphanides et Guicciardi plus quam trecenta specimina inter se simillima e *Parnasso* annis \ 854 et 55 retulerunt (Orph in htt)

HIERACIUM VULGATUM L var *abielinum* B et Heldr

Folia utrinquè pilis^dpressiusculis sparsis hirta ovata vel oblonga basi subcordata rolundatave infima obtusmscula longiùs petiolata, caubna 3-4 sensim minora breviter acuminata, summum sessile, omnia Integra vel minute denticulata Pedunculi pube minimi albd conspuld pilisque nigns glandulosi obsiti Capilula laxè corymbosa eis formsB typicae minora. Involiicn squamao obtusmsculaB eddem duplici pube alterd brevi albidd alterd longion nigrd glandulosd obsitae

Hab in faucibus umbrosis regioflfe abietinae *Ikpalamo* in monte *Parnasso* cl de Heldr Aug 1852.

Pnmum pro specie propna *H abietinum* nominandi habueramus, sed specimina e semibus Grsecis culta folia nonnulla basi jam sublobata attenuataque praebuement et sic mxum ad *H vulgatum* a quo ne agmen speciem vel potiùs formarum *H vulgato* et

) *I murorum* finitimarum auferemus speciicè distinctum exhibere nolimus. Nostra planta habet folia subcordata rotundata *H murorum* sed caulem fohosum *H vulgati* et capitula eis utrmsque mmora, inter pnora accedit ad *H anerascens* Jordan, inter postnora ad *H sylvicolum* ejusdem auctons

HIERACILM EIIIOPUS Boiss et Heldr (Sect *Pulmonanoidea*)

H rinzomale brevi fibras longas tenues edenti, caule erecto toti longitudine fohoso supernè praesertim praeter pubem brevissimam tomentellam villis a Ibis patulis ejus diametro multò longionbus hispido apice breviter paniculato-corymboso 3-4 cephalo, fohis radicalibus paucis rosulatis oblongis acutiusculis remotè et acutè denticulatis in petiolum eis breviorē attenuatis, caulinis inter se lemotis 6-7 sensim diminutis e basi rotundata subamplexicauh ovato-triangularibus acutis obboletè denticulatis omnibus sparsim pihs albis longis obsilis<sup>^</sup> pedunculis longè et densè hispidis squamulas plures breves oblongo-lmeares plumosas gercntibus capitulo vix duplo longionbus, capituh mmotis, mvolucn squamis lanceolato-hneanbub obtusis dorso nigrcantibus margine pallidis pilis albis brevibus sparsis obsitis, corollis luteis glabns<sub>t</sub> styjis e sicco nigrcantibus

Hab sparsim in regione sylvaticA montis *Olyrnjn Thessah* cl Heldr fine Julu 4851

Caulis pedahs vel brevior virgatus tenuis, folia radica ha cum petiolo 1 7i-3 polhces longa pollicem dimidium aut pauld amphub lata, caulina infenora squilata sed breviora, pedunculi 6-9 tineas longi, capitula eis *H auncuUe* vixmaiora Aflne characteribus *H cnmto* Smith quod differt collo radice cano-floccoso, fohis radicalibus amplis acuminatis profundè<sup>^</sup> dentatis, corymbo racemoso, capitulis dupld majonbus. Utraque species fohis radicalibus ssepè cito exsiccatis transitum ad *Aphyllopoda* quibus characteribus affimores sunt dem<sup>^</sup>nstrat

## CAMPANULACEJE

### CAMPANULA OHEADUM BOISS et Heldr (Sect *Medium* )

C perennis caespitosa pumila rhizomate crassiusculo verticali aliquandò ramoso, foliis fere omnibus radicalibus oblongo-spathulatis in petiolum saepe longiusculum attenuatis obtusis integris vel obsolete denticulato-repandis utrinque hirtis vel margine tantum ciliatis pilis brevibus deflexis, caulibus caespite 2-3 pedibus tantum longioribus tenuibus flexuosis fragilibus parce fohosis patule lursutis rarissime unifloris saepius a parte inferiori dichotome 2-4 floris, pedunculis elongatis flexuosis unifloris subcorymbosis, foliis caulibus inferioribus radicalibus similibus superioribus hinc acutis, calycis velutino-hirsuti lacini lanceolatis sinibusque tripliciter brevioribus omnibus acutissimis, corollam cseruleam hirtam calyce tripliciter longioribus lobis ovatis mucronatis

Habitat in fessibus rupium regionis alpinae *Olympi Thessalicae* prope cacumina cl. Heldreich Floret sine Tula

Folia in specimenibus majonibus cum petiolo bipollicaria apice tres lineas lata, caules pollicares, corolla 12-15 lineas longa, sed ut in caeteris generis speciebus affinis adsunt specimina scapis et foliis multo minoribus Affinis *I. Bithymica* A DC et in primis *C Biebersteiniana* Prior a nostra differt foliis angustatis hinc angulatis, corollam calyce vix duplo longioribus, posterior foliis majonibus latioribus manifeste dentatis, ambo praesertim caulibus constanter unifloris, lacini appendicibusque calycis angustioribus *C Aucheriana* A DC denique nostrae speciei valde affinis differt caule constanter unifloro, sepalis brevioribus obtusis, corollam non elongatam campanulata sed brevi lata infundibuliformi

### CAMPANULA DEINGULATA Boiss et Huet (Sect *Medium* )

C perennis rhizomate caespitosa multicaulis fragilis tota sub lente breviter puberula subviscidula, caulibus pumilis erectis vel horizontaliter recurvis flexuosis fohosis dichotome et divarcatim ra-

mobissimis ramis pedunculisque flexuosis hisce unifloris flore plerumque brevioribus corymbum laxum formantibus, folus radicalibus cauhsnisc que mferionbus ovalis obtusiusculis basi breviter cuneatis Long6 petiolatis argute denticulatis callo terminalis, floralibus diminutis sessilibus oblongis vel oblongo-lanceolatis acutis basi attenuates, calycis brevissime hirtus lacinus lanceolalis appendicibusque dimidio brevioribus acutissimis apice subulatis tubo brevissimo, corollas e sicco violaceae glabresc lucidae calyce triplo longioribus lobis ovatis

Hab in rupibus ad castellum *Baihoul* Armeniae Maio florere incipienteni legit cl Huet du Pavillon

Folia radicalia petiolo pollicem longo suffulta 7-10 nervas longa 6-8 lata Caulis\* longiores semipedales, floribus eis *C. Alhonn* paulo mmores Species distinctissima folus *C. dasymtham* referens sed ab eis ramositate caulium aliusque notis distinctissima

CAMPANULA REUTEMANNI BOISS et Balansa (Sect *Medium*)

Gr annua tola setis patula stngosa caule erecto mferne fohoso simplicis supernè dichotomè et breviter ramoso corymbosoj folus oblongo-lanceolatis basi sessilibus attenuate mferionbus obtusis superionibus rameisque dimmutibus acutis, pedicellis calyce brevioribus fructifens arcuato-recurvit,, calycis asper lacinus ciliatis lanceolatis acutissimis fructifens erectis non conniventibus, sinubus\* rotundatis lacinus brevioribus, corolla hirta<sup>1</sup> caerulea campanula<sup>^</sup> calyce quartâ parte longioribus

Hab in *Cilicid* Kotschy pi exs 1836 N° 349, in *Cilicid* prop6 *Gulek Boghas* Tauri c\ Balansa Julio fructiferam legit

Planta pedalis *C. stngosce* habitu, florum magnitudine capsulaeque recurvis vis simillima nota sequenti tamen facile recognoscenda In *C. stngosce* in Cilicia hirtioraque quoque frequenti appendices calycis fructifens ejus lacinus longiores bUit ut lacinae ipsae extremilatibus curvatibus ita connivenles ut capsula calyce cincta globosa sit In *C. Reuto tand* autem lacinae calycis fructifens multo longiores et acutiores semper erectae sunt *C. stngosce* corolla minor calycem longius excedit

CAMPANULA TEUCRIOIDES BOISS Diagn<sup>N</sup> 3

Haec species cujus in loco natali I alabastra sola videram ex specimenibus eodem loco a cl Balansa fine Julii 1854 lectis calyces appendiculatos habet et ideo in sectione *Medio* nec in *Eucodon* collocanda et hanc descriptionem addenda Corolla caerulea campanulata calyce triplici longior magnitudinis *C Morettianae* Calycis appendices in flore breves in planta fructifera valde aucti bullalo-inflati obtusissimi laciniis multo latiores sublongioresque Capsula minuta ovato-rotunda

CAMPANULA LEUCOCLADA BOISS (Sect *Medium*)

*C* perennis e radice plus minus incrustata multicauis caulibus virgatis rigidis albis nudi praeter setulas sparsas glabris foveis inferne simplicibus vel ex axillis ramulosis superne dichotome ramosis confertim corymbosis, foveis (saltem sub anthesi) omnibus caulibus setulis albis basi tuberculo insidentibus margine validioribus scabris substingosis sessilibus oblongis basi attenuate obtusiusculis acutius obsolete repando-denticulatis rameis valde diminutis, floribus 2-3 ad ramorum apicem approximatis pedicello brevissimo tandem recurvo suffultis, calycis tubo brevissimo lacinus triangulari-lanceolatis acutis stigmatibus in fructu patulis appendicibus triangularibus obtusis lacinus dimidiis brevioribus, corollae calyce duplo longior tubulosa velutino-scabra, lobis lanceolatis tubo subbrevioribus, stylo longiuscule exserto, stigmatibus tribus

Habit in regione *Beloutschistan* cl Stocks

Caules semipedales vel aliquando ferè pedales, folia inferiora 8-10 lineas longa 4-5 lata Corolla eadem *C. decaisneana* Decaisne vix major Species caulibus rigidis albis, foliis brevissimis stigmatibus, corollis profunde lobatis insignis nulli sectionis arete affinis prope *C. candidam* DC et affines collocanda

CAMPANULA VEXILLARIS BOISS et Balansa (Sect *Medium*)

*C* perennis radice brevi praemorsa, caule simplici elato folioso parce et breviter ciliato-scabro angulato, foveis utrinque setuloso-

scabris cordatis ovalit> grosse et obtuse cronalo-dentalis inferioribus longe intermednis breviter petiolatis superioribus subsessilibus lanceolatis, inferioribus subsessilibus axillaribus terminibusque 3-5 glomeratis rarius soctams, calycis lacinus lanceolatis acutis margine et ad nervum medium stngosis appendicibus brevissimis apice subulatis vix perspicuis, corollâ tubulosâ calyce duplb\* longiori lobis oblongis

Hab in regione montanâ *Tawn Cihact* ad occasum pagi *Gulek Boghas* cl Balansa Fl Julio et Augusto

Planta sasp6 bipedalis, folia inferiora 2-2\*/< polices longa 2 polices lata, glomerati florum avillares folio multoties breviores inter se valde dissiti racemum longissimum laxum formantes Corolla 9-10 lineas longa Valde affinis *C Grosseht* quae differt foliis magis elongatis acutis, floribus majonibus ob folia floraha valde diminuta eis breviora spicam laxam quidem sed continuam terminalcm formantibus, appendicibus calycis multo majonibus. Valde affinis quoque *C Athoce* infra descriptaB quae differit appendicibus calycis plane nullis, racemi terminibus foliis (inferioribus exceptis) flores non superantibus

CAMPANULA ATHOA BOISS et Heldr in Gomm Fl Grac M<sup>^</sup>  
(Sect *Eucodon*)

*C* perennis? tota pilis patulis plus minus stngosa, caule *detecto* flexuoso subangulato simplici, foliis inferioribus petiolatis e basi profundè cordata triangular-elongatis breviter acuminatis superioribus oblongo-lanceolatis basi cuneata sessilibus omnibus grosse et dupbcatur dentatis dentibus obtusis triangularibus, floribus in axillis foliorum superiorum sessilibus 2-4nis spicam longam in-temptam formantibus, calycis tubo hemisphaenco angulato pilis patulis ptesertim ad angulos stngosissimo, lacinus erectis lanceolatis elevatim uninerviis tubo dupld longioribus stngosis, corolla tubuloso-campanulata tubo dupld longior, capsula globosa cernua

*C trachelium* Prodr Fl Graecae non L

Hab in monte *Athd Sibth* Aucher N\* 4863, *Kyllene* Peloponnesi alt 3500'-4000' Heldr ! in umbrosis regionis abietinse *Parfiassi ad Gow na et Dtpotamo* Heldreich



Affinis *C. tiaclicho*, distincta floribus 8-9 lineas tantum longis corollam angustam, racemis magis elongatis. Habitu quoque *C. aant-hnts* sinibus calycis appendiculatis diversae.

CAMPANULA MACROCHLAMYS BOISS et Huet (Sect. *Eucodon*)

G monocarpica, radice incrassata verticali fusiformi simpliciter, caulis 1-3 crassiusculis teretibus pumibus curvatis simplicibus ramis atictis fohosis pilis longis sparsis adpressis setulosis, foliis adpressis et breviter setulosis radicalibus et inferioribus longe petiolatis illis ovato-rotundis integerrimis basi rotundatis vel truncatis his oblongis margine undulato-erosis basi attenuatis, caulibus intermedii et superioribus late oblongo-lineatis sessilibus semiamplexicaulis medium versus subconstricti acutiusculis crenulatis, floribus sessilibus in capitulum terminale densum late bracteatum dispositis, bracteis e basi subcordata oblongis obsolete denticulatis apice attenuate obtusis basi albicantibus superius viridibus flores superantibus, calycis lacini lanceolatis margine longe ciliatis glabris tubo glabro triplo longioribus, corolla tubulosa calyce plus duplo longiori caerulea hinc infundibuliformis lobis oblongis, capsula

Habitat in Armenia circa *Hah* cl. Huet Fl. Maio

Caules 4-6 pedales, folia radicalia 12-15 lineas lata petiolo 2-3 pollicibus suffulta. Capitula terminalia magna bracteis saepe 2 pollices et amplius longis pollicem latis involucreta. Calyx sex lineas circiter longus. Affinis *C. involucreta* A. DC. quae differt radice non incrassata, foliis radicalibus breviter petiolatis-obovato-oblongis, caulibus ovatis, capitulis triplo minoribus, bracteis acutiuscule denticulatis, calycis hinc lacini tubo vix longioribus, etc.

CAMPANULA CELTIDIFOLIA BOISS et Huet (Sect. *Eucodon*)

G perennis caule erecto crassiusculo elevato-striato setulis sparsis hirtello basi denudato dein dense fohoso apice in paniculam corymbosam densam abeunti, foliis radicalibus caulibus inferioribus ovato-oblongis obtusis superioribus oblongo-lanceolatis acuminatis omnibus basi rotundatis sessilibus acutiuscule denticulato-crenatis ulnque seculis a basi brevibus sparsim hirtis, brae-

Icis pams lanceolalis aculis iam<sup>i</sup>\* pedunculi<sup>^</sup>que flore brevionbu<sup>\*</sup>  
~~setulosi~~ caehcia ad nenos et marginos albo-setosd lacuna tnan-  
**gularibus** acuta tubo obcomco subieqiulojig<sup>^</sup>, corolla<sup>n</sup> apimvi gla-  
 bnu-culd cal\ce duplo longion campanulas in lobo<sup>^</sup> oblougo-  
 tngulares profundè fis<sup>\*a</sup> capsuld

Hab suprâ *Kopiubachu* Aimeniae d Huet du Pavilion

Cauhs2-2 <sup>\*/</sup>pedalis Folia intermedia bipollicanapollicem lata  
 Quoad faciem refert C *i homboidelem* caule lameii crassiori densiùs-  
 quefohoso, folus ejusdem ferè figura<sup>1</sup> sed majoribus, pamcula au-  
 tem multu magis compositamultifloraque esl, ca<sup>h</sup>\ diversissimus-1  
 linear ferè longus lacinns latè tngiilanbus nee subulatis, corolla  
 eA C *J homboidahs* minor magisque abbrevuata profundiu<sup>\*</sup>: partita  
 Species quoad <sup>^</sup>eram aflimtalem nobih mcerta

C\MPV>LLV STENOCODO> Boi&s et Rcut (.Sect *Eucodon* )

C perenms glabra rariùs minutissimè et <iparsim puberula CSPS-  
 pitosa caudicuhs tenuiter fihormibus denudatis repentibus fragi-  
 libus, cauhsbus a<sup>^</sup>ccendentibus filiformibus parte nifenon foliosis  
 1-2 flons |e\ dichotome et dnancatim ramosis ramis patulis sur-  
 ssum arcuate uniflons, folus rosularum peliolo eis2-3pld longion  
 >uffultis reniformibus rotundisve basi truncahs A el cordatis obtu-  
 siusculè et grossè 7-9 crenatis, folus cauhnis inferioribus oblongo-  
 lineanbus obtusit<sup>\*</sup> obsoletè denticulatisbasi attenuatis,supenonbus  
 angustè linearibus acutis ssjpè falcate, alabasins nutantibus, flo-  
 nbus long<sup>^</sup> pedunculafis, caljcis glabri lacimis erectly subulatis  
 tubo obcomco 1 Vi~P<sup>^</sup> longionbus post anthesio elongatis, corolld  
 csBruled lubuloso-infundibuliformi a basi ad apicem sursum dila-  
 tatA lobis breviter tngulanbus rectis calyce 3 <sup>\*/</sup>apl6 longion,  
 capsule recta obcornei costata lacinns caljcims coronatfi

Hab in glareosis alpinis et fissuns rupium in Alpibus Pedemontn  
 et Delphinatus m schistosis utet incalcareis ob\ia, alpes *Formosa*  
 dicta? supi& *Limoneet* valhs fodinarum Teudae in Alpibus mant:  
 mis, *Val Maera* supra *Azegho* et valhs Padi circfl *Cnssolo* ad\*mo-  
 nastenum *San Chiaffredo* dictum, jugum *Col de la Cr<nx* dictum  
 inter dalles Yaldenses et Abnès in Delphinatu, mons *Visom* latere  
 Gallico mfrA ca?am pa<sup>^</sup>tormm *Ruine* dictam Boissier et Reuter.  
**Fl Jul Aug**

Species habitu et alabastns nutantibus agmim *C pusillet* affirm sed ab omnibus distinctissima corollj longion non ovato-campatulad lobis recurvis sed anguslatá a basi ad apicem sensim dilatá in nonnulhs formis ferè tubulosa' lobis rectiuscuh\* Folia rosularia saepiùs transversè latiora remformia stint, cauhna supenora longiis hneara Caules in glareosis saepiùs 1-2 Qon, in rupestnbus ramosiores 5-9 pollicares peduncuhs eis specierum affimum longionbus magisque divancalis *C Mathoneh* Jordan differ! folns radicalibus argutè etprofundè denlatis, peduncuhs stnctis, corolla oblongo-campanulfftd ore subconstnetá multd brevion *C rotundtfoha* longiis distal habitu robustion. folns caulinis lanceolatis, alabastris rectis, corollá carapanulatá, caljcinislaciniis tandem reflexis Species distinctissima semper facilè recognoscenda et casu singulan hucúsque praeten'isa quamvis in locis indicatis copiosè occurrat

CAMPANULA PSILOSTACHVA BOISS et Kotschy in pi Taur exs 1853. (Sect *Evcodon*)

C perennis vel monocarpica radice abbreviate caulem flonferum rosalsaque stenles polyphyllas edenti, caule erecto elato virgato simplicissimo brevissimè et sparsim retrorsum scabndo parte infenon folioso supernè in spicam longam aph)llam plùs minus densam abeunti, foliis rosulanbus cauhmsque inferioribus ovalorotundis ovatisqne basi cordatis obtnsis circumcircfl obtus^ crenatis palhdè virentibus nitidis margine et subtiis ad nervos parcè et breviter retrorsum scabndis, rosulanbus petiolo complanato eis 3-4pló longion caulinis petiolo abbreviate suffultis, folns caulinis supenobus oblongis acuminatis basi sessili attenuate, flonbus minutis subsessihbus in glomerulos 3-5 flores basi bracteis brevibus lineansobulatis squarroso-patentibus suffultos dispositis spicam longam laxiusculam fructiferam cylindncam formantibus, caljce glaberuno lacmiis lanceolato-subulatis patulis tubo obconico sulcato nx iongionbus, corollá csrulefl calyce dnplO longion breviter mfun dibuliformi ultrá medium in lobos tnangulari-lanceolatos partitá, stylo exserto stigmatibus tnbus longis, capsulá abbreviate lacinnis calyçuiis squarrosis coronatá profund6 sulcatA valmhs tribus ad medium sitis dehiscenti

Hab ad *Kechhk* propè *Memna* CIICIEB littorals cl Balansa 1855  
in pinetis Taun Cilicici propè *Gulek* Kotschy! 1853, Balansa I

Planta  $i \frac{1}{B} 2^{-1/*}$  peddlis, folia rosularum ea *Violce incolons*  
omn6 refrentia majora polhcem longa 8-9 hneas lata Spica  
alopeкуроidea fiuclifrra ^Tpfè pedalis mfernè laxa Floresemi-  
nimis Corolla vnt 3 hneas longa Species distinctissima nulh aretè  
aflinis prope *C pyamidalemve* \ *C Americanum* collocanda

(A«PAMTiAPinLTiDOraì\xBoi«s rt Noo (Sect *Ewodon*)

*C* perennis glabra l adice repenti stoloniferS, folns palhdfe viren-  
tibns oblongo-lanceolatii) obsoletè cl latè crnatis basi attenuatis  
radicahbus longè potiolaris obtusis caulims sessilibus apice atte-  
nuatis acutis, cdule orecto 3--i (loro, pedunculis erectis flore lon-  
gioribus biaclcolalis fuho florali lanccolato acuto eis multb bre-  
viori suffullis, caljcis tubo hemisphaenco cellulis inflatis albfsprom-  
inentibus dens6 spongioso-crystalhno, lacinnis glabns lanceolatis  
tubo qnadrupld longionbus, corollâ latè ct breviter campanulatâ  
calycinis lacimis trrlia parte longion ultrfl tertiam parlem in lobos  
ovatos partita

Hab in subalpinis Persiae Rurdistanic® propè *Mendeli* et in  
Armeniâ australi circâ *Diatbehr* cl Noe Fl Maio

Cauhs fer6 pedahs, habitus et foha *C perstafolite* sed infenora  
latiora supenora breviora, corolla ferè dimidid minor magis ab-  
bre\iata, caljcis tubus hemisphaencus nee obcomcus non ut in *C*  
*persiafoM* glaber vel pilis papillosis obsitus sed cellulis pustulac-  
formibus ut in *Mesembryanthemo crystallmo* obsitus

GAMPWUIA SIDOMTSASIS BOISS et Blanche (Sect *Eucodon* )

*C* annua ten era seeds caulem ramos ct folionim margines parcè  
et brevissimè setuloso-scabnda cseterùm glabra, caule ascendenti  
a basi alternatim ramosissimo folioso ramis e basi arcuatâ Hexuosis  
erectis ^ folns inferionbus ovatis baa breviter cuneatis peliolatis  
intermedus oblongis basi attenuatis sessilibus summis rameisque  
diminulis omnibus tenens repando-crenatis, flonbus axillanbus  
terminalibusquc paucis, pedunculis longis flexuosis, calycis tubo  
Jire\is<;imo hemisphainco albo-hispido lacinnis linean-lanceolatis

acutis glabris tubo 3-4pl6 longioribus, corollâ pallide caeruleâ late et breviter campanulata calyce tertii parte longior in lobos Inan-galan-lanceolatos ad tertiam partem usque partitiS, capsulâ

Hab ad muros, sepes et vias circa urbem *Saida* (*Stdonem*) Sjiias cl Blanche 1853, cl D' Gaillardot 1855

Caulis in meis speciminibus pedalis et ultra flexuosus Folia intermedia 12-15 lineas longa Corolla ferè dimidid minor eA *C re-trot see* Labill cui vegetationis mdolo accedit sed qua? longè differt folns lanceolatis valdè acuminatis integns, tubo calycis longè ob-conico-cjhdnco, laciniis e basi lanceolate subulatis oorollam \*>uperantibus *C scutellata* Gnseb aflimsquoque differt indiimento hispido, segmentis calycemns tnangulan-lanceolatis corollae suhae-quilongis, etc

CAMPANULA CONTRO\ERSA BOISS (Sect *Podanthum* )

C perennis pallidè et cinereo-virens, caulibus ascendentibus erectisve simplicissimis elongatis virgatis rigidis breviter et patulè albo-hispidis scabrusculis subangulatis parte inferiori foliosis superne in spicam longam laxam abeuntibus, folns rigidis supra scabrusculis subtùs patulè et breviter hirsutis oblongis acutis acutiuscolè denticulatis infimis subpetiolatis intermediis basi rotunda vel subcordati sessilibus, superioribus sensim diminiutis lanceolatis subintegris, floribus sessilibus in fasciculos 3-7nos remotissimos infimos folio florah superatos ceteros eis longiores dispositis, bracteis breviter lanceolatis, calycis pruinoso-scabris laciniis lanceolatis cinnatis sub anthesi tubo aequilongis, corollâ scabridè calyce duplo longior, capsula oblongâ valvulis versùs apicem dehiscenti

**PA *mmpanuloides* 6 *Sibthorpiantum* DC Prodr quoad pi Taun**  
— **PA *Sibthorpiantum* — *C Sibthorpianta* Boi&s Diagn quoad pi Taun**

Hab in *Tauro Ctkcico* Kotschy coll 1836 sub N° 343 et coll 1853 partim sub *Ph Kotschyi* mixta cum specie ejusdem nomini?

Hanc plantam ohm cum cl DC pro eadem ac *Olympica* postea a me sub *C StbthorpumcB* nomine salutata habui sed novis copio-bionibusque speciminibus ab utroque loco acceptis, haec a specie hie descripta certè differt caulehumihoi semipcdah ranus pedali

nec 2-3 pedah, folns pro latitudine brevionbus obtusè crenatis basi magis attenuate, lacinus calycims tnangulanbus abbreviatissimis tubo brevioribus *C controversa* *C CIICICB* = *Ph Kotskyi* Boiss quoque afiinis est sed haec facilè folns supenonbus cordato-semiamplexicaubus, calyce corollflque glabns etspicâ abbreviate *C Sibthorpiam* dignoscitur *C aspera* Boiss Diagn tandem facie similis differt caule folnsque utnquè adpressè tuberculato-scabns cseterùm glabris, Qonbus subsohtanis Nihil csterùm *Pkyteumatis* *Podanthis* difficilus, Willdenowius plures descnpsit species Orientales sed unperfectè et ided auctores posten nomimbus Willdenowiams plantas ommno diversas salutaverunt, indè maxima confusio quam autopsia sola speciminum herb Wildenowiam solve vere posset

CAMPANULA TAUMCOLA BOLSS et Balansa (Sect *Podmthum*.)

*C* perennis caulibus ascendentibus tenuibus foliosis simplicissimis patulè albo-hispidulis in spicam brevem mfernè laxam terminalem abeuntibus, folus ten ens pihs substrigulosus patuhs albis hirtis Infimis oblongo-spathulatis in petiolum attenuatis, intermediis oblongo-lanceolatis obsoletè denticulatis sessilibus basi attenuatis, supenonbus Uneanbus mlgns, florahbus calyce brevionbus, flonbus solitams subsessihbus infenonbus laxis supenonbus confertis, calycis pruinoso-tuberculati 1 acinus lanceolatis tubo squilongis, corolli scabndft calyce triplu longion, capsuia valvulis apice sitis dchiscenti.

Hab in regione alpitià *Taurt Ctliia* supra *Boulgarmadm* cl. Balansa Fl Julio.

Pedahs vel humihor, folia intermedia pollicem vel sesquipollicem longa 1 <sup>1</sup>/<sub>i</sub>-3 lineas lata, spica tenninalis 1-2 pollicans Formam alpinam *C, controversa* esse non credo, caulis multd tenuior, folia non ngida semper angustiora longiora basique atlenuata, flores sohtaru breviter spicati, habitus diversissimus.

Obs *Ph Pestalozzw* Boiss Diagn. a *Pit. gracdx* Boiss. specifiU, non difTerre videtur exspecinunibus intermediis Armenis a cl. Huet du Pavilion lectis et hsc ipsa specunina Armena quoque demonstrant hanc plantam cum *Phyleumate lanceolate* W Desf Cor tab 24 eadem esse Gum autem nomina specifka *graalts* et *lanceolata*

duabus speciebus generis *Campanula* jam adscnpta Bint, hanc plantam nomine *Campanula! Willdenowiancp* desigoare propono **cum synonymis *Ph lanceolatum* W — *P Pestalozzw* et *Ph gracile* Boiss Diagn**

TRACHELIUM ASPERULOIDES BOISS et Orphan

Tr. perenne nanum. densè caespitosum caudice duro crassinsculo ramos numerosissimos brevissimos densè fohosos fragiles edenti, folns minutiS ovato vel oblongo-spathulatis basi attenuate semmplexicaulibus facie superior subcucullatis margine cihato-scabndis caeterùm glabns mtidis, flonbus 1-5 terminalibus fasciculatis pedicellis glabns Tel hispidulis folia suprema TIX excedentibus medium Tersùs bibracteolatis suffultis, calycis tubo ovalo glabro vel hispidulo lacinnis erectis subulatis tubo 1<sup>f/»</sup>-2pló loogionbus, corolla? cameaD tubo tenuiter cylindnco lacmus calycis 2<sup>1/»</sup>pló longion, laciniis lineanbus erecto-patulis tubo tertiA parle brevionbus, anthers lineanbus breviter exsertis flamento subduplo longion suffultis, stylo corolla sesquilongion supernè sensim clavato apice breussimè 2 ranùs 3 lobo, ovano biloculan raritùs tnloculan, capsulá

*Campanula asperuloides* Orph ID Fl Grsca exs N° 248.

Hab in regione media monlis *Chelmos* Peloponnesi propè *Stygem* alt. 5000'-600(X cl. Prof Orphan des Fl Julio

Ramuli 6-15 kneas loogi, tolia 1<sup>1/»</sup>, -2 lineas longa, corolla 4 hneas circiter longa Species pulchella habitu *Asperulam Arcadtm\** **sem vel *Putonam Calabncam* quodam mod6 referens, *Trachelto*** formd corollas et styks longis parte inferiori non pilosis adnumera-  
randa.

Obs I *Trachelium serdtinum* Boiss in pi Kotsch Taur. 1853 acceptis runc a cl Balansa specimmibus flore evoluto est *Tr tunbulosum* Boiss. Diagn

Obs II *Mtchauxiacolumnans* Boiss in Kotsch pi Taur exs 1853<sup>></sup> est if *Tcfuhatchewit* F elM Ann Sc Nat

## ERICACEAE

### **RHODOLENDRON** B L. *Ticum* M. Doi<sup>s</sup>. et Reu<sup>L</sup>

*Rh. fruticosum* in lamis flexuosis glabris junionibus brunneo-virenitibus, foliis glabris conatis oblongis vel oblongo-lanceolatis acutis basi breviter cuneatis breviter petiolatis supra lucidis subtus palhdionibus, floribus terminibus breviter corymbosis, bracteis ovato-oblongis brunneis acuminatis externis glabrescentibus internis breviter albo-tomentosis omnibus cito deciduis, pedunculibus corolla longioribus supernè glanduloso-puberulis, calycis brevissimè sparsim glandulosi dentibus latè et brevissimè triangularibus obtusiusculis corolla rosea campanulato-rotata lobis obtusis basi utrinque albis filamentis ullius medium densè albopilatis, ovano glaberrimo, capsula cylindrica sexsulcata apice truncata

*Rh. Ponticum* auct. Hisp. et Lusitan. non L.

Habitat in praeclivis secis nivos in montibus *Beticis* austrahom. circa *Algerias* et *Tanfa* (Clemente, Boiss. et Reut.) ad *Picacho de Alcalá de los Gazules* (Webb. Bourgeau), in Lusitaniae provinciâ Algarbii in jugo *Serra de Monchique* (Welwitsch. Bourgeau.)

Frutex 6-8 pedum ramis laxis inferioribus saepe patentibus nudis cicatricibus, foliis ad partem superiorem ramorum sub corymbis terminatis plus minusve confertis majoribus pedem dimidium cum petiolo longis sesquipedalibus latis, flores amphisesquipedales vel 2 pedes longi latique. Capsula 5-7 lineas longa diametro sesquilineam aut paulo amplius lata. *Rh. Ponticum* L. quocirca nostra species hucusque confusa fuit specimenibus Armenis Bithynicisque collatum dirigitur foliis crassioribus margine magis revolutis nervo medio validius percursis basi magis attenuatis, pedunculibus calyceque glaberrimis, corolla intus glabra vel latere inferiori parvissime papillosa, capsula oblongo-cylindrica. *Rh. Ponticum* quod in silva colibusque nee ad aquas crescit est insuper frutex elatus. In lectis dumeta lata impervia formans habitu rigidum *Laurum nobilem* referens, ramis rectis crassioribus. Hujus formam foliis



*m* minoribus obtusioribus oblongis insignem aperlis Libanum inter *Zachle* et *Beckfaya* dumos 10-12 pedales latissimos imperios formantem observavi Ab utroque *Rh Caucasicum* in Armenia pinetis a cl Haet observatum ovaris dense tomentosis stamilibus distinguitur

## PRIMULACEAE

ANDROSACET MACRANTHA BOISS. et Huet (Sect *Andraspis*)

A monocarpica tota pilis ramosis brevissimis viscidulis papilliformibus hirta, foliis omnibus rosulatis linearis-spathulatis inferne attenuatis aculis utrumque superne acute 3-5 dentato-laciniatis, scapis plerumque rectis crassisque folia multoties superantibus, umbellis 4-2 floris, involucri phyllis 7-12 ovato-oblongis apice breviter et acute attenuato-acuminatis, pedunculis rectis vel arcuatis involucri triplici longioribus, calyce pilis brevibus ramosis glandulisque rufis breviter stipitatis hirtis turbinatis promioenter 10 angulato inter angulos tandem sulcato dentibus triangularibus acutissimis tubo subbrevioribus, corollae lacteae amplae calyce dupli longioribus lobis spatulatis obtusis integerrimis

Habit in Armenia prope *Gumuchkhand* alt 3500' cl Huet du Pavilion Fl Maio

Folia pollicem vel sesquipollicem longa superne 5/8-1/2 lineas lata, scapi semipedales vel paulo breviores Calyx magnitudinis illius *A maxima* Limbus corollae diametro 6-7 lineas latus Specie pollicem affinis *A Armeniaca* earumdem regionum onundae quae differt foliis glabris, scapis humilibus, involucelli phyllis linearibus, floribus dimidio minoribus An tamen ambo forms ejusdem speciei essent cujus *A. Armeniaca* status alpinus?

## OLEACEAE

FRAXINUS PETIOLULATA Bois9 et Kotschy (Sect *Fraxinopstei* )

Fr arborea ramis cortice glaucescenti vestitis gemmis nigris

brevissimè velutino-hirtis, foil is glabns petiolo longo supernè, piano suffullis 3-4 jugis, foliolis omnibus longiusculè petiolulatis petiolulo supra canaliculalo oblongis acuminatis basi breviter attenuate parte supenon margme obsoletè crenulalis, flonhus , racemis fructifens abbreviatis, pedicellis fihformibus erectis, samans glabns ellipticis ulrmqu6 sed basi magis attenuatis apice acutijsculis mucronulalis longitudinalililer stnatis

Hab in *Tauro CUicico* cl Kotschy pi exs 1853 N° 356 a

Folia majora cum petiolo ferè pedaha, petioluli 4-5 lineas longi, fohola 2-3<sup>1</sup>/<sub>\*</sub> pollicana 1-1'<sup>1</sup>/<sub>«</sub> poll lata Samara 15-16 lineas longs supernè 4-5 latae Species a *F parmfolid* foliolis longiùs petiolulatis magnis acuminatis, gemmis velutims, ab omnibus alus Europeis et Oncnlalibus foliolis petiolulatis distincta

## ASCLEPIADEJG

YINCETOXICUM STELLIFLORUM BoiSS et Kotsch pi CXS 1853

V multicaule, caulibus erectis \olubilibus ei axillis mferionibus saepiùs ramosis undiquè cnspulè pubescentibus, folns ulnnquè praEsertim ad nervos sparsim et brevissimè puberulis petiolo limbo 4-6pld brevion suffultis infenoribus e basi rotundatd ranùs subcordatd ovatis supenonbus oblongo-lanceolatis acutis, floribus in fasciculos 3-8 flores axillares brevissimè pedunculatos saepiùs sessiles dispositis, pedicellis hirsutis inaequahbus flore subdupld longionbus, calycis extus hirsuti lacinus tnangulan-lanceolatis acutis, corolla glabrae purpureae lacinus lanceolate calyce quadruple longionbus, corona staminefl ad gibbos quinque purpureos ad basin gynostegu situs eoque multò breviores horizon tales reductd, stigmatè depresso, fructu

Hab in angustus *Gulek Boghas* Taun Gihcici alt 3000' cl. Kotschy, in parte supenon vallis *Kar Boghas* cl. Balansa Floret fl.; Juln

Gaules longiores pedales, folia mfenora 1-1'<sup>1</sup>/<sub>•</sub> P<sup>o</sup>11 longa 9-11 lineas lata, supenora bipollicana angustiora Flores eis *V ntgrt* manifest^ mmores Planla valdè aflnis *V. parvifloro* D'' quod eâ-

Jem coronjE «\*laminene fabncfi paudel rl ^ppcificè lainen diflerre udelur floribns dimidio minonlius, coiolLtcahcc duplo HOC qua-diuplO longion lacinus abbrcnalis Forsan formic intermedia) ullemV. cas species conjungpnt

## UENTIANE.E

ERMIIREA MicnocMAX Doiss et Reut (Sect *Everylhiaa*)

E annua multicaulis glabra folns inns in ro^ulam confertis hneanbus obtusis intern^ aUenualis tnhorviis, caulnns angustè li-  
neanbus innerviis, cauibus elovalim i hncalis Migatis for«i a ba\*n  
oppositè ramosis ramis la\6 cjinot.o-corjmbosi^, flovibus ad di-  
chotoinias ct secii^ cjma) ramos solUarus brevi^bimè pedicellatis  
minute bracteatis, cal^cis glabri partilionibus qualuor lanceolate  
aculis corollEB tubo 3-iplò brevionbus, corollas e wcco carnete  
limbo infundibuliformi tubo subbrevion partitioiubus o\ato-ob-  
longis obtusiusculib, st\lo apice bifido.

Hab in pascuis ^pongiosis Lusitaniaj Transtaganae propc 1CM-  
das c\ Weh\itsch Aug 1851

Aiiims folns *E tenwfohw* Gnseb qua; differt cauibus non ele-  
\ato-lmeati3 densiùs c>mo«is, caljci^lacmiis tubo corollino dcqui-  
longH, indumento puberulo Planta WelwUschiana m<uper laxior  
major, feri pedalis *E gypsicoia* D c1R affTmis quoque *E mi-  
crocalyx* ab ed differt uidumenlo papillan, flonbus confeitis ferfe  
dnpl6 majonbus longè bractcati^, cal^ce dimidmm tubum co-  
rolls ac quanti

ERYTHH^V G\TSICOLA BOISS et Reut Var major

Tota planta glabrescens Cjma laxaB \el conferlae Flores duplò  
majores amspnè rosei 10-11 lineas longi limbo tubum subapquante

Hab in collibus Xflfuaregni Valentim Bourgeau pi e\s 185^  
sub *Er majonii* Cosson non Liqk et HofTm , ID pi net IS ad *Albufera*  
regni ValenUm d. AVillkomm pi. e\s 1850 sub *E Imeanfohd*

Planta pulchemma flonbus *Er mnjorem* Link tfquans sed cha-

lactenbus JS *gypsicola* ad socianda a qua nobis specificè non differre videtur

Obs Characteres quibus cl. *VJMkomm Erythriammajm' emilloiss* Voy Esp ab *Er major* Link Lusitanici distinxit scilicet foliorum laliturlo, cymaplus minus contracta, etc valde anabile sunt ulert no<sup>l</sup>rlj sontonliâ *E Boiweit* WiUk non servanda est

### (OXYOLYULACE/E

#### C0>0L\!TLub BIMCnYPH\LLUS\_ BoiSS

C suffruticosus totus indumento brevissimo ad ramos albo ad folia rufescenti tomentosus ramosissimus ramulis rigidis erecto-pauli<sup>l</sup> subflexuosis remolmscul6 fohosis tandem denudatis subspinoscentibus, foliis parvis ovalo-oblongis obtusissimis basi attenuatis brevissim6 petiolatis secus nervum medium plus minusve plicalis secus nervos laterales undulatis, flonibus sessilibus capitula lolilana bracteala ad ramulorum apicem fonnantibus, bracteis ovato-roiundis sessilibus calyces subaequantibus, sepalis lanceolate acutii pihis rufi<sup>l</sup> subpatulum hirsutissimis. corollae parvso calyce paulo longioribus tubo glabro limbo hirto

Hab in ditione *Scinde* Indiae borealis beatus D<sup>r</sup> Stocks qui misit sub nomine *C Foi slcahiet*

Suffrutex ut videtur G-10 pollicans ramis diametro sesquialte latis, ramuli 4-5 pollicares, folia majora cum petiolo sex lineas longa 2 la La superiora versus ramulorum apicem diminuta Capitula sphaerica magnitudine avellani B Calyx 4 lineas longus Affinis *C Forskahlei* qui a nostra specie differt ramis crassioribus/ ramulis rigidioribus non flexuosis apice magis spinosis, foliis hinc lanceolati<sup>l</sup> acutii utriusque majoribus minquam undulato-plicalis, norum capitulis axillaribus **confertis**

#### CONVOLVULUS PYRRHOTRICHUS Boiss

C perennis rhizomale duro brevi pluncipiti, caulis erectis foliosis pilis longis patulis nigris hispida, foliis radicalibus angustelinariis-fincrolafis acutis in petiolum longè attenuatis. **caulis in-**

fenonbus brvms peliolatis, loralibus ellipticis basi attenuate sessilibus omnibus mdumeiito duplici rufo (an exsialione?) dltro piliss brvibus nitidis adpressis allero lough pa lulls constanti obsitis, pedunculis 2-3 flons lolus a\illanbus> brevionibus paniculas terminales oblongas fohosas formantibus, pedicellis brevissimis basi bracteoia filiformi hirsutissimi calycem sequanti suffultis, sepalis patu!6 hirsutissimis e basi lanceolate caudato-acuminatis, corolla parvS lacinus calycuns pauld longion alba ? oxttis lnrstissima

Hab in regno *Cabuhco* circa *Khuggur* b Griffith

Caules 6-10 polhcares, folia radica ha cum petiolo 1/4-2 polhcaria 2 hneas lata PGduncuh 4-6 hncas longi, calyx 5 lineas louguSj corolla sex lineas longa tubo angusto Juxtd *C cephalophorum* Boiss collocandus.

CONVOLVULUS LEIOCI LYCINUS Boiss var *Slocks*n

Folia utnquè adpressè sencca angustiora c babi roluiiddlo-subtruncata tnaugalan-lanceolata, caiterum omiia speciei

Hab in dilione *Beloutschstan* supenon cl Gnfilh, in Per&id australi circa *Chiraz* Auchcr N° 4935

CONVOLVULUS SCINDICUS BOISS

C nrbaceus perennis, caulibus a collo plunbus simplicibus prostratis foliosis adpressè hirsutis, folns parcè et adpressè turtle virentibus radica hbus oblongo vel lanceolato-spalliulatit. basi plùs mintus longè attenuatis, caulims nullò minoribus elliptico-lmedribus sessilibus basi altenuatis apice vd acutiuscuhs vel retusis mucronulatis^ flonbus in axillis fohoruni solitarns rariùs buns pedicello calyce brevion suffullis spicas laxas umlaterales formantibus, bracteoia ad basin pediceili lmean-setacea peditcillo longion folio brevion, sepalis adpressè hirsulis lanceolalis acutis, corolla ertusad nervos adpressè hirsute rosca <<il>ce duplb longion

Hab in ditone *Sande* Indue boreahs cl Slocks Caules dcmùm '/>-\*/\* pcdales jam pauld supra basim flonferi

Folia radicalia I 'f>-2 polhccs longa^-5 lincai lala, caulina nullò minora Sepdla A lmcas longa Affims *C miaophyto* Sieboi

caulibus tenuionibus numerosissimis, foliis lanceolatis, iionibus dimidjd minonibus di^tincllo et *C pluricauh* Choisy qui differt caulibus erectis suffruticosis, flonbus 2-3nis, indumento alnsque noUs

COM^OL\UIUS P\LI-STIJNUS Bobs> var *itenophyllus*

Folia a.igustisoiuu<sup>1</sup> hiieaii—agitalia 1-2 linens Idtamapginginsajpfe uiidu'.ato-cnspub, pedunculi unillon semipolhcares, csetera spe-  
**Liei**

Hab inter *Tupoli etDeu Keftin* \\\ Sjnfl cl Blanche

•CO^NOLVULUS CALVLRTI BOISS

C pcr>nus lotus adprusse scnceo-argciiteus, radice Ignos3 pluncauli, cauhbas plunbus erectis puihms subsimplicibus prseter indumentum adyress,um saepm's patulii UirUs, fohis linearibus aculiu^culis bdsi subangustatis, flonbus 1-2 ex. axilhs supenoribus solitams terminabhui 3-4 capitalis subsessihbus folio caljces **superanti** fulcratis, biacLeib paucis lincari-setaceis, sepalis densè **hispidis** oblougis marginc membranaceis abrupt^ acuminatis, corollâ caljce plus dupl6 longion roscâ ad angulos sencefi

Hab in Armenia" propç *To) toivm* cl Calvert, in *Ibend* loco connotato, Parrels I

Caules 4-5 polhcarcs, folia mfenora pollicemlongahneamlata, sepala °L 1/a lmeas, corolla se\ lineas longa Haec species cui ex loco *C lanugwosus* Floras RossicaB non Desr probabiUter adjungendus est a *C saxatih* differt corollis mmoribus et praesertim sepalis abruptè acuminatis *C modestus* differt fohis lationibus, sepalis longe caudato-acuminatis bractcisque elongatib

Co^OI^L^T^HJS R\DICOSUS Heldr et Sart Mss

C ihizomati.<sup>1</sup> >>>ublignoso snperno raino^o Laulei> pumilos caBsp̃itosos piostratos edenti, fohis subsossilibus spathulato-oblongk obtnsiusculis supia gldbris subtus pilis albis sericeo-stngosis, cymâ Inflord in apite siirciilonvrabroiifehiinc pedunculate bracteis folu^ronformibus mulirt hrcviori podicolh^ slngoso-hirtib cal^ce mul-

totiet. brevionbus, sopalis uvato-oblongis. extus senceo-stngosis uifernti coieavis conniventibiis pallidis demum auctis, supernè paleiitibusapicibubfoliaceisaculiusculisvindibus, corolla cahceduplO longiore rubicundâ, intus macuhs, 5 atropurpureis pictii extus in fascus densò senceo-stngobd

Hab in m *Kyllenes* pascuis. siccis *Lic&di* diclis supra *Tnkala* 5000' alt (Heldr die 6 1848, specim unicum )

Rhizoma fere pennam anseñnam crassum, caules brevissimi \i\seuiipollicaresbasi suffrutescentes, folia majora 4-5 hn longa 1-1 »/, hn lata, sepala 3 lin longa demum clongala, corolla semipolhcaria *C Assyncus* Gnseb Spied II, 75, cui species nostra e descnptione affinis videtur, differt fohis parvis obtusis in petiolum duplo longiorein attenuatis, flonbus subsohtanis\* sessilibus et co-IOIIA caljcem acummatum quadrupld superatite (Heldr et Sart desenps Sept 1852 — Hanc speciem non vidi et descriptionem cl auctorum immutatam insero (Boiss )

CONVOLVULUS PARNASSICUS DOISS et Orphamdes

C radice vahdi verlicali hgnosi caules suffrutescentes brevisimos tortuosos edenti, ramis brevissimis caespilom compactum formantibub, folns minutis utnnqu6 senceo-argenteis valde lineatis ovatis acutiusculis basi brevissimè cuneatis sectus nervum medium plicatis petiolo eis subaeqmlongo suffultiu, floribus terminahbus solitarnsin caaspite sessihbus, sepahs hirsutissimis ovatis plus minus longè caudalo-acuminatis, corolla purpurea ad phcas extus sencea calyce duplò longion

Hab in Parnasso suprâ *Carcana* alt 4500' Orphamdes Floret Jan 10 ineunte

Fohoriim majorum hmbus vix treb hneas longus latusque Flores eis *C mhdi* paulò minores ex sicco ridontur, hssc species huic inter alias magis afflnis differt fohis niajoribus facie supenon non liueatisminus plicatis obtusisba^i longiusculè attenuatisnec abruptè in petiolum abeuntibuv

## CUSCUTACEJE

CUSCUTIV (GLOBULOSA Boiss &amp; Heldr el Reulcr

Caulibus tenuibus capillaribus rubellis, capillibus minutis globosis) paucioribus basi bracteis ovalibus aculis suffultis, foliis sterilibus ad basin capituli nonnullis squamiformibus, foliis fertilibus minutis sessilibus, calyce rubello brevissimè obconico-exsertito corollae dimidiatam brevioris ultram tertiam partem quadrifido lobis triangularibus aculis patentibus, corollae albae sub anthesi bicurviter tubuloso-campanulatae vix ad tertiam partem in lobos triangulari aequales crectos fissas fructiferas ob lobos superius apicem capsulae connatas ovato-globosas, squamis nullis filamentis e sinu loborum ortis antheris breviter ovatae luteae aequilongis, stigmatibus rubellis filiformibus capsula quadruple brevioribus, capsula tenuissimis turgida sphaerica basi circumscissis corollae arcuatae biloculari 4 spermatis, seminibus luteis minutis oculo valde armato reticulato-areolatis inaequaliter dorso rotundato, canna acutiuscula axi capsulae, spec. tan. to, liilo ad basin cannae sito

Habitat in valle alpina Bozdağ Turchiae occidentalis, ad ramos Genislarum et Bülansa prope exs. 1854 N° 413

Haec species ex minutie capitulorum et florum nulli alio speciei *C. epithymo* affinis nisi *C. albce* Presl comparanda est sed ab ea et affinis optimè dignoscitur forma corollae breviter pedicellatae nee urceolatae et cujus lobi non ut in aliis patuli sunt sed crecti vel connati. Ex hac corollae forma habitus capituli valde diversus fit nam in eo flores inter se valde distincti apparent nee lobis pedicellulorum patulis et inde confluentibus conjuncti. Filamenta insuper et styli in nostris specie brevissima. Squamas sub microscopio nullas vidi sed esse in sicco et prosertim in nostra specie foliis minutissimis donata propter pelluciditatem **difficile** observanda.

CUSCUTA MACHANTIERA Heldr el SarLon

Caulibus caespitosis, caulibus sphaericis majusculis **densis**



basi bractell minuLl sufTultis, flonbus slenlibus nonnulhi ad basin capituli squamaefonnibus, ferlihus brevissimè pedicclatis, calyce ruhro elongato-obconico corollaB tubo subbreuion forè ultrd medium in lacimas ovato-trianguares obtusiusculas partito, corollaA campanulas albidA vel roseA ad medium usquè in lacimas ovato-lanceolatas expansas acuminatas divisi, squanus ovato-tnangulanbus fimbntis connivcnlibus filamentorurabasin vi\ squantibus, filamentis fauci inserlis, anthcns filamento subaequilongis rubris oblongis acutiuscuhs e\sertis, styhs subdivergenlibus in stigmata fusca subincrassatis capsulse aequilongis, capsula circumscissd, semimbus subglobosis minutissnnè manculatis

Hab in regione supenon *Taygeti el Parnassi* parasitica ad *Daphnem buxifoltam* et *Sidenhdem theezautem* cl de Heldreich Floret Julio, Aug .

Glomeruh etfloreseisC *planiflorw* vix minores Calycis lacima? apice prsesertun pulchrè purpureaB Corolla alba vel rosea Antherae in genere magnae Differt a C *epithymo* calyce longè obconjco in pedicellum brevem attenuate) nee excipuhformi, lacinns obtusionbus, anthens magis exsertis, corollBB hinbo patentissimo C *plamflora* Ten stamimbus quoque cxscrtis (etsi brevitus) donata differt capitulis flonbus stenlibus destitutis, calyce brevissime obcomco lobis apiculatis, corollae lacinns obtusionbus

C *urceolata* Kunze afflnis quoque distmguitur calyce corollaj lubum superante lobis plùs minùs longè et abnptè acuminatis, corolla urceolatâ id est ad faucem plùs minùs mamfescè constricts An tamen illis notae sat constantes el C *plamflora urceolata* et *macranlhera* in unicam speciem in regione mediterraneft C *epithymi* vices agentem potius conjugendae? Autumo species C *epithymo* aflines numero mmis auctas fuisse Sic mco densu C *lencospk&ra* Boiss el Helder eGraecia" est tantumvanetasC *urceolatts* lobis calycinis longiùs acuminalis C *Palmtma* Boiss ^iagn acuration examini subjecta mihi nunc videtur eadem ac C *alba* Presl «?ecies ab omnibus affimibus (praeter C *globulosam*) flonbus mimis, corolla? lobis obtusis, anthens subrotundis facilè distinguenda et cm forsàn quoque C *cupulata* Eng ex doscptione referenda est In eâ nunquam semina discoidea marginato-suhalala a cl Desmoulins indicata videre potui sed rotundato-subtnquetra et omnibus charactenbus etiam capsula circum^cissA gonon C *usmttv* mihi adnumeranda videtur

*C Kotschyana* DCNDioulMii oeLm'im mihi ignola nomen mutre dcbet pioploi anliqiiiioii'Di *C Kohchyanam* Boiss Diagn quai inoploi floiLNpodicellalo^ unibellatos uialiâseclionemihtaL Huic *C kotschyana* DCMIII ^pcciciPjrenaicje cl auctor dubitaiiter añVrl -jnoiņnium *C alpina* hol<di>, sed lisec *C alpina* non e\ Alpibu> sed o Īviirilbtamai nioutibub onunda et hoc nomme specifico manuscnpto ^geogiaplucio impiopiiio) a cl Holieiuutkeio nee a cl Kolscb^ donala, est planla dncrM^sima (lonbus iinnutisetanfhris llavisi siiluotnnd^ aflinis *C tltbw* cii|jis for^an tdiiliim >ancLa» est ol a quâ difiMt capilulr\* paucidoiij laMonbiN, «t\]is bicvionbus, flore toto t̄ub lento dislmcliũ^ areolalo — *C Sehuaztana* Boiss Diagn tandem *C albt?* Pie^l liabilu ct chaiacteribns afflnis ab ei tamoiij lobis coiilloc caħcirque aLUlionbu^ anlhons oLdongis nee ^ubiolundi> ab r̄uiistiicLnuk'ILir

CLSCITA CVS^IOIT^ Heidi ci SaiLon

*C cauhbus* cnpillacns rubelli<sup>1\*</sup>, capiluhs spha3ncis obracleati<sup>1\*</sup>, flonbus stenlibus nullis, foitilibu\* pedicello rubro crassiusculo caħci aequilongo suffulti^, caljce olicomco nibello corollae tubum dimidium fcquaiili ultri medium in lacimas ovato-triangnlares acutiuculas curoll\* coniiguas parlilo, corollâ campanulatâ ultrA tertiam partieu õ fidA lobis liiangulan-o\ahs oblusiusculis patuln demũm rellt?i8, filamenlis fauci insertis antherd breviter exserli oblonga lutea \i\ longionb^, ^qnamis corolluns tnangulanbus fimbrialis basin iilamentorum .suba^quantibus, stjlis duobus parallehs in stigmata hneana abeuulibus o\ano longionbus, capsua circuniscissâ

Hnb ad *Duphnam buxifoliam* in Parnassi regione alpinfu ad *Geronto i radios* cl Orphan , ad *Hagios Loukas* Gmccardi e\ Helder ,

Flores eis *C epitlujm* paulO majores Abeicapilnhsebiacteatis, vflonbus elsi capitals tamen distmctm̄s pedvcellatis ben6 distincta Cum *C w ceolatd* et *macranthe*) d ob caljcemcorollmo tubo mul^ breviorcm et corollam non urceolatam non con fun di potcst. *C major* longitus diatal slamnubub bie>ionbus, corollae formd, squamis mnuniis, etc , *C Kotschyana* qua flonbus qioque pedicellatis gaudet disUnctissima est caħec brevilerlobalo corollae lobis reclis acummatis, etc

## CUSCUTA ELEGANS Boiss et Balansa

G caubus capillaceis rubellis, flonbus minutis pedicellis mae-  
 quahbus calyci aequilongis vel eo dupld longionbus suffultis soli-  
 tarus vel 3-5 glomerato-capitatis, bracted nunutissimft ovata<sup>n</sup> ear-  
 nest rubrâ ad basin pedicelli inferiori obvifl, calycerubro carnosio  
 sub lente tuberculato corollas tubum aequanti obconico apice trun-  
 cato obsoletissimè repando-5 dentato subpentagono, corolla\* albâ  
 basi rubella ferè ultri medium in 5 lacimas lanceolatas acutas valdè  
 patentes divisâ sub lente prasertim margines versus tuberculatâ  
 squamis parvis ovatis denticulato-lacens filamentum basin subae-  
 quantibus, antheris oblongis purpureis e fauce subcxsertis fila-  
 mento eis pauld brevion suffultis, stylis capsua quadruple) brevjo-  
 nbus erectis parallels apice truncato vix incrassato, capsule sphai-  
 ric& maturd medium versus circumscissd, semibus pallidis ovato-  
 subtnquetns dorso convexis latere interiori obtusè cannalis

Hab in *Cmvolvulo compacto* et *Genista sp* parasitica in regione  
 alpin& montis *Masmeneu Dagh* in viâ inter Ciliciam et Gaesarem  
 urbem siti cl Balansa

Flores lined uni vix longiores Species ob flores numerosoru-  
 bro alboque vanegatos pulchella inter *Pedtcellatas* ob calycem  
 truncatum vix dentatum soli *C Babyloncw* affinis Haec differt  
 calyce albo, corolla? lobis ovatis obtusis, coronas squamis elongatis  
 integns.

Obs Inter *Cuscutas* coll cl Balansa e Tauro 1855 *C Ba-*  
*lansa* Boiss ad *C. albam* Presl reducenda videtur et *C hyalina*  
 Boiss non Roth a *C Schkuhnanâ* sat non difTerre videtur

## CUSCUTA CILIARIS Hohenacker in Kotschy pi. Assyr exs-

C flavescens, caubfus tenuiter filiformibus, flonbus in umbel-  
 lulas 3-7 floras basi squamd alM triangulan suffultas disposita,  
 pedicellis calycem aequantibus vel eo vix longionbus, calyce  
 cupola to-campanulato ad medium usque in 5 lacunas ovato-  
 tngulares obtusas corollas contiguas partito^ corolla campanu-  
 las paulâ infrft tertiam partem ui lacimas ovatas obtusas erecta\*  
 partita, squamis brentissimè tngulanbus basi contiguis profundè

fimbrialis coronam sub lauce ad filamentorum Insertionem formantibus, filamentis paulo sub sinibus corollae inserentibus antheris luteis breviter ovatis vix longioribus, stylis 2 subsequantibus ovario subbrevioribus, stigmatibus globosis, capsulis

Hab ad ramos *Allutgi* sp parasitica circa *Mossoul* cl Kotechy

Haec species quam *C pedicellate* Led conjunxit cl Ghoisy in DC Prodr ab ed ut jam monuit cl. Engelmann in Bol Zeit 1846 longè differt etiam quoad sectionem stigmatibus globosis nec filiformibus Flores eis *C suaveolentis* paulo minores, ab ed differt calyce prope corollae longior, squamarum filamentorum et stylorum brevioribus

#### CUSCUTA OXYPTALIS Boiss

*C* tota albido-flavescens caulis tenuiter capillaceis, floribus in umbellulas vel saepius racemulos breves 5-9 litorum saepe compositos dispositis, bracteis hyalinis lanceolatis acuminatis basi amplexantibus ad basin ramulorum racemulosis, pedunculis aequalibus calyce 2-4plo longioribus, calyce campanulato corollam tertio parte brevioribus fere ad medium usque in 4-5 laciniis triangulares acutas sinu lato inter se sejunctas erecto-patulas partito: corolla ultra medium 4-5 partita lacinis lanceolatis acutissimis erectis post anthesin plus minus patulo-reflexis, squamis nullis, filamentis sinibus insertis antheris luteis ovatis sesquialongioribus, stylis inaequalibus ovario longioribus demum divaricatis exsertis, stigmatibus globosis nigricantibus, capsulis globoso-depressis teneris apice inter stylos foramine oblongo pertusis calyce sublongioribus basi irregulariter ruptis incompletè bilocularibus tetraspermis, semibus oblongo-subtriquetris dorso convexis latere interiori carnatis basi truncatis, corolla ad basin capsulae persistenti

*C Arabica* Wight Icon tab 1371 non Fresen

Hab in regione *Scinde* India orientalis *Ajhanthematis* sp parasitica cl Stocks sub *C Arabica*

Hæc species florum magnitudine *C trifolia* vel *suaveolentis* aequans characteribusque corollas distinctissima toto casu differat a *C Arabica* floribus umbellulatis quoque donate sed quae inter species stigmatibus filiformibus militat *C hyalina* Roth, Wight Icon N° 1372 a nostra specie corollae calyce duplo longior squama Walsley differt notis

## BORRAGINEAE

### HELIOTROPIUM GRIFFITHS BOISS (Sect *Catimas*)

H annuum tolum molliter hirsutum, folns ovatis obtusis mfe-  
nonbus longmsculè csetens breviter petiolatis nervis stibtùs pro-  
minentibus, spicis sub anthesi densis crassiusculis, calycis velu-  
tino-hirti partitiombus lanceolatò-hneanbus, corolla tubo an-  
gusto calyce dupl6 longion intiis extiisque densè tomentoso, hmbi  
nunutissimi lacinns tngulanbus margine convolutis intùs re-  
curvatis, anthens supra corollae basin insertis, stylo birtulo stig-  
mate breviter comco sublongion, nuculis oblongis glabns &—  
vibus

Hab in regno *Cabuhco* in ruderatis arcis *Gulgula* cl Griffith

Habitus *H villosi* sed corolla propter limbum minutum fert  
ommd tubulosa angnsta calyce dupld et ampliùs longior. Nuculae  
Illis specierum Onentalmm aharum angustiores et levisimBe qui-  
bas characteribus haec species facilè dignoscitur

### HELIOTROPIUM CRISIFOLIUM Boiss et Noe (Sect *Enhehotro- jnum*)

H annuum caule erecto procero parte supenori dichotomè ra-  
moso breviter velutino, folns breviter peliolatis ovatis indumento  
crasso denso velutims griseis supri eximièlmeatissubtùselevatim  
nervosis, flonbus in spicas terminales tandem longissimas dispo-  
sitis facilè deciduis, calycis dens6 velutim parlitionibus oblongo-  
hneanbus obtusis, corollae tubo calyce subdupld longion exlùs  
breviter velutino intùs glabro, hmbi tubo dinudid brevions lobis  
ovatis sstivatione quincuticalibus, anthens paul6 suprd basin cor-  
ollas insertis, stylo subnullo, stigmate e basi lation longe Jroe\*n  
hirto, nuculis oblongis laeviusculis glabns

Hab in subalpinis propè *Haneky* Persiae austro-occidentahs  
cl Noe Fl Aug Sept

Planta saepè sesquipedahs, folia inferiora sesquipolhcem longa  
Spies fructiferae tandem semipedales longioresve, corolla tres li-

neas loriga Habilus et radix annua *H villosi* sed styh forma\* aptiùs prope *H pallens* collocandum quod differt pube tenui foliorum, tubo corollae carjcem non excedenti, stylo hirsuto stigma subsequanti. etc *II rotundtfohum* in quo stylus quoque nullus et stigma ejusdem formae differt radice perenni, indumento tenmori, corollae tubo brevion

HtLiOTROPIUM coNFERTiFLonuM Boibb et Noe (Sect *Euheho-  
Ilopium*)

H annuum? cauhbus erectis ullosis ramosis induratis, folns breviter petioltdtis ovatib obtusis supra lineatis subtùs elevato-nervosis indumento aspero cinerascntibus, flonbus bisenatim in spicas densas longissunas umlaterales dispositis scssihbus, calycishispidi partitiombus hneanbus, corolla; tubo extùs hirto calycem non excedenti intùs glabro, limbi minuti tubo dimidiò brevions lacinus ovatis aestivatione qmncanciahbus, anthers prop6 basin corollae insertis, stigmatè sessili minuto breviter comco, nuculis ovatis tuberculatis

Hdb in subalpims propfe *Haneky* PorsiaB austro-occidentalis, cl Noe

Partem inferiorem plantae non novi et ignoro an species perennis sit sed earn potiùs ex habitu annuam esse dijudico et *H villosa* affinem cujus stigma sessile habet sed multrt minus et non aded depressum Ab h&c specie praetereS differt spicis longionibus densionibus, flonbus et praBsertim eorum limbo inpltd minon, nuculis dimidi6 minonibus magis tuberculatis

HELIO-TROPIUM NOEANUM BOISS (Sect *EuMiolropium* )

H perenne? totum indumenlo denso asperulo relutino-cinerascens, caulibus erectis ramosis, folns ovato-rolundis obtusis breviter petiolatis supra lineatis subtùs prominulè nervosis, spicis sub anthesi densiuscubs tandem elongatis laxiusculis, calycis lacinjs oblongis obtusis, corollaj tubo calycem non excedenti extùs hirto intùs glabro, hmbi minimi tubo tnpld brevions lacinjis ovatis a3s-tivatione quincuncialibus, anthers pauld infrd medium tubi insertis, stylo hirto stigmatè e basi lation linear hirto pauld bre-, viori, nuculis

Hab in subalpinis *Hcmeky* Persiae austro-occidentalis cl Noe  
Habitus et folia *H rotimdifolu* sed corollaB minores minds ex-  
sertaB, calycis lacimaB latiores et stylus manifestos nee nullus *H*  
*brevihmtn* Boiss styli characteribus affine differt limbo corolla?  
etiam minon, folns multo minonbus oblongis acutmscuhs

NONNEA PULLA DC var *Armena* Boiss et Huet

Planta humihor semipedahs Corolla? tubus pauld longitus e\-\  
sertus Nucul© magis depress© paulo minores

*N Armenia* B et H in pi Arm exs

Specimina intermedia a cl Calvert-accepta nos docuerunt hanc  
plantam tantum vanetatem esse *N pulfa* Inter plantas ejusdem  
ltnens Huetiam *N rosea* F et M per schedulaB errorem sub no-  
mine JV *ahatw* distnbuta fuit

AKCHUSA TOMENTOSA BOISS (Seel *Euanchu&a*)

A perenms caule erecto ramoso pilis albis adpressis longis fle-  
xuosis tomentoso, folus pilis brevionbus adpressis cams linean-  
lanceolatis acutis, racemis laterahbus simpfcibus terminahbus bi-  
fidis bracteatis densmscuhs, bracteis parvis oblongis obtusis calyce  
brevionbus, flonbus subsessilibus, calycis intus et extus adpressè  
tomentosi ultra medium partiti lacinus hnean-lanceolatis obtusis,  
corollae tubo calyce sublongion hmbi lobis ovatis, fornicibus ova-  
tis long6 pemcillalis, nuculis ferè horizontahter rostratis elevatim  
rugoso-areolatis minutèque tuberculatis annula basilan rugosis-  
simo

, Hab in Anatoliâ loco mihi ignoto cl Noe pi. exs sub nomine  
*Alkannm pulnumante*

Habilu *A leptophyllam* referens sed indumento densè tomentoso  
caulis et cano-tomentoso fohorum ab eL et omnibus distinctissima  
*A lextconfoha* Lehm et *A mama* Ledeb mihi ex descriptionibus  
eodem ferè indumento donate videntur sed prior differt caule sim-  
plici, foliis subspathulatis. bracteis basi attenuatis, calyce acuto,  
posterior indumento retrorsum scabro, folus pilis JloEgis patenti-  
bus ciliatis. Color corollas e sicco mihi obscurus probab cameus

ANCHUSA PARNASSICA Boiss et Orph (Sect *Euanchusa* )

A perennib tolapihs albi^ patulis rigidis basi non tuberculatis hispida scabnda cauibus simpliciis erectis, foliis linearilanceolatis integris subrepandis acutis basi subangustalis, racemis conjugatis bifidis brevibus sub anthesi densifloris bractealis paniculam corymbosam formantibus, bracteis lanceolatis inferioribus calyces superantibus caeteris abbreviatis, pedunculis brevibus, calyce adpressiusculo albo-hispido ferè ad basin usquè in lacinas lanceolatas partito, corollas glabrae tubo calyce sesquialongiorum limbi intensè casrulei lacinis ovatis, fornicibus oblongis papillois corollae lacinis *ferè* dimidiis brevioribus, anthesi paulo superius medium tubum inserentibus, nuculis minutis glabris obliquè et acutè rostratis grossè reticulatis sub lente tuberculosis

Hab in monte *Parnasso* propè *Chisto-Zasteno* alt 5000' cl Prof Orphandes Floret Julio

Caulis pedalis, folia 2-2<sup>f</sup>/\* pollices longa & *Q* lineata, racemi florum vix pollicares, flores eis *A offkmahs* ferè dimidiis minores Ab *e&* et affinis calyce profundius partito, nuculis dimidiis minoribus distincta

Obs *A hyalotncha* Boiss in Huet pi Arm exs formis intermediis a cl Balansa in Cihcia lectis in *A Auchen* DC transit et idem non species propria

ALKANNA SARTORIANA BOISS et Heldr

A perennis tota setis et tuberculis ortis sparsis singulosa inter eas breviter hirtula, caulibus procumbentibus ramosis, foliis caulium inferioribus oblongis obtusis in petiolum longè attenuatis margine undulato-crispatis subrepandis, floribus e basi latiori rotundato-cuneatis oblongo-lanceolatis obtusiusculis calyces superantibus, racemis fructifera valdè elongatis vix laxis distichis, pedicellis calyce triplo brevioribus etiam fructifera erectis, calycis stngosi post anthesin parùm accreti lacinis lanceolatis acutis tubum corollae aequantibus, corollae tubo flavo-aurantiaco limbo patulo flavo nuculis parvis in caput anthesis valdè incurvis rostratis areolâ umbilican basilan substipitata rostro opposita instructis



plus minusve tuberculato-reliculatis\* nitidis tuberculis utnquē circa" curvaturse angulos in hneam concentncam confluentibus rostro facie superiori carmato

Hab in arenosis ad vias inter *Naupham* et *Porto Tolon* Gracis rara cl Heldreich

Plunbus no Us *A Graecce* similis, hasc differ! mdumento brevion denso adpresso, folns integris, corolla tubo subexserto, nuculis majonbus uniformiter totfi superficie reticulatis

Obs *A brachysolen* Boiss inKolschypl exs 1853exnovisspecimimbus a cl Balansa leclis ab *A KotschyandDC* non differt

#### ARNEBIA GRIFFITHII BOISS

A annua radice verticah fused, cauibus 1 pluribusve pumilis ereclis simplicibus vel parcē ramosis longē et dens6 albo-setosis stngosis, folus oblongo-lanceolatis obtusis basi longē attenuatis utnquē setis brcvibus tuberculo lato calcareo msidentibus hirsutis, florahbus aDgustē lauceolato-hneanbus calyces sequantibus, spicis secundis densiuscuhs, calyce adpressē setoso fer6 ad basin usquē ID lacimas apice hnean-subulatas partito, corollae flavsb tubo extūs hirtō calyce dupld longion apice sensim in limbum hypocratenformem ampliato, lunbi lobjs ovatis, anthens fauci obsoletē phcatulse insertis, stylo apice bipartite stigmatibus capitatis, nuculis

Hab in regno *Cabultco* propē *Otipore* cl Gnffith

Planta 3-4 polhcans, calyces 5 lineas longi Corolla pollicans Hæc species habitu, corollā longd, et prasertim limbo eo aliarum specierum generis majori accedit ad *A fimbropetalam* Stocks in Hook Joura 1851 tab, 6, earundem regionem onundamet quas differt folus angustionbus brevius et adpressius setosis, calycis partitionibus lationbus et prasertim hmibi corollhm lobis mcisofimbatis, et stylo apice semel nee bis bipartite

#### LITHOSPERMUM MICROS PERMUM BoiSS

L annum siccitate nigrescen's totum Slis brevibus adpressiusculis tuberculo iDmsidentibusasperum, caulibus erectis basi et ssepē ex axilhs ramosis, folns oblongo-hneanbus obtusis basi attenuatis

floribus angustè hnean-lanceolatis albociliatis calyce fructifero brevionibus, spicis eliam fractifens densis umlateralibus scorpioideis, calycis setulis adpressis brevibus hirti et longioribus sparsis ciliatis fructifens valdè accreti lacinus lanceolalis etiam fructifens rectis, corollae parvae casrulese glabrae tubo calyce pauld longior limbo minuto Infundibuliformilobisovatisfauceintis laevi, anthesis ad faucem filamentis hberis eis sequilongo suffultis, nuculis minimis rectis altenuato-rostratis nitidis echinulatis

*L. arvensis* var. *carulescens* Dougeau pi exs Ganar 1845 N° 318

Hab in incultis insuete For tuna Læ *Lancerotta* loco *Montaña* de *Uhigua* dicto Bourgeau

Planta semipedalis vel pauld longior ab omni grege *L. arvensis*, *lentiflora*, etc. cujus flores minutos habet jam pnmA fronte diversissima racemis fructifens non laxissimis sed densis secundis calyceque fructifero non patulo Corollae fauce praeterea lssvis nee plicata, nuculae B minores magis elongates rectae B nee gibboso-incurvae

#### ROCIELIA CANCELLATA Boiss et Balansa

R. annua adpre<sup>^c</sup> Jm ta caule tenui erecto folioso superne in 2-3 ramos furcatim diviso, folus angustè hneanibus acutiusculis pilis basi tuberculatis hirsutis, racemis laxiusculis umlateralibus bracteatis bracteis lanceolato-linearibus pedicello longioribus, corolla , pedicellis fructifens deflexis calyce dupld brevionibus, calycis patulè hispidi ad basin usque partiti lacinis 9-10 lineafesubulatis basi reflexis dein curvatis et apicibus erectis conniventibus fractum cancellatim cingentibus. nuculis duabus tuberculosis in fructum obcomco-pyramidatum bisulcatum connatis, stylo breviter exserto

Hab in locis byeme inundatis regionis montanae supenons *Taun Cthm* supra *Bulgarmaden* cl Balansa, lecta fructifera fine Jumi

Habitu et folus refert *R. stetlulatamque* a nostra egregiè differt racemis densioribus lon<sup>^i</sup>eque bracteatis, calycis ferè dimidiis minoribus lacinis 5 basi patulis nee reflexis, extremitate circinnatio curratis nee rectiusculis apice conniventibus

ONOSMA ciliolobum Boiss et Noe (Sect. *Euonosma*)

0 tola setis densis adpressis e tuberculis glabris **ortus** velutinoscabunda inter eas breviter hirta, caule erecto folioso patulo stngoso parce ramoso, foliis radicalibus, oblongo-lanceolatis acutibin petiolum longitenuis, caulibus abbreviatis e basisesili lineari-lanceolatis, racemis terminalibus sub anthesi brevibus densis scorpioideo-capitatis, floribus pedicellatis, calycis flavo-stngosissimi lacinus breviter lanceolatis obtusis tubo basi attenuato *MIX* longioribus, corolla pallide ochroleuca breviter velutini calyce vix duplo longior tubo basi angustissimo sensim ampliato lobis\* brevissimis triangularibus rectis, tubo intus glabro, antheris filamentis aequilongis apice exsertis, nuculis

Hab. in *Kurdistan* inter *Van* et *Ichert* cl. Noe Fl. Junio

Pedale, folia radicalia 5 pollices longa pollicem lata, calyx florum 5 lineas, corolla 7-8 lineas longa. Species indumento flavo insignis prope 0 *echinoidem* et affines collocanda indumenti colore 0 *xanthochum* referens quod eximie differt caule a basi paniculato-pyramidato, calycis ad basin partiti lacinus corolla, paribus brevioribus, corolla tubo vix ampliato intus margine coroniformi longit barbato obsito, etc

Obs. I. 0 *diffusa* B. et Huet in pi. Armen. exs. 1854 ab 0 *rupestris* MB. von sat differt

Obs. II. 0 *nanam* DC. Prodr. inter plantas Kotschyanae Cilicicas ann. 1853 accepti sub duplici schedule 0 *deapertis* Schott et Ky. et 0 *vemcolons* Schott et Ey.

Obs. III. 0 *scorpioides* Boiss. et Huet in pi. Armen. exs. polymorpha 0 *tellurata* W. K. adnumeranda

ONOSMA FALLIDUM Boiss. Var. *brachyphylla* B. et Huet

Folia abbreviata angustata margine magis convoluta patula, corollae tubus superne valde amplicatus-urceolatus

0 *Trapezium* B. et H. in Huet in pi. Armen. exs.

Hab. in colle *Bostep* prope *Trapezium* Huet du Pavillon

## MniTM\ si MUM ni Roi s

M \ indis tula »»b lend<sup>11</sup> julia >JWI>h IUU-UIJU\* adpre\* Mssimisobsita collo foHis Mlu\*.lis> >c\*^uio cauhbub llonfciw e\ a\ilhs roMilarum radicMmni iia^coniilms a^cendontibus aimphci&siinisfoliosis, folns rosularum elongate lincanbub oblusi> mlciue angus.ilis caulmm hncanbu\* &c>sihljus oblut-ib stuctis ba&i non angU'.tatis, (lonbus in spicam \*coi piouleam leimuialeni dcnsbcm bre\em bracteis cahTCs- supeiantibus mi\tam di>pos>itis, pedicelhs caħce subbreuonbus, caħce \*par«m ot adpie^ksimè hirto lacinns lanceolatis obtu\*is, corolla} m fundibuliformis glabiac llaio-aurantiacsB tubo rahco •e^quiloiiiriori limbo ulli.t medium m lobos tnangulano^itos oblu?o> paililo fiuce nudd anlbcns fauci filamentis ei} ^ubbi Mionbus lusrhs oblongis basi cordalis apicc mucronulali^, shlolonge exscito sligmalc indistmcio, nucule

Hab in *Bosniâ* cl Sendtncr pi e\s 18i7N°4'19

Folia radica ha 2-2 • 4 polhces longa 2 hneas lala, caulina 6-9 lineas longa caules flonlen semipedales, corolla 9-10 lineas longa Kb aln& goners anthers ba^i coidatis M\ o\sctis ipicis simplicibu& di^Uunctissima Etsi fiuctum non vidcnm ob liabilum, coiolla? **formaui**, "l\hini eveiium (llifoimom do gcncrc parùm tlubilo

## MIOSOTIS WEMMTbCIII Boi^s Cl Rcut

M annua radice ^eiUcah bio\i tiuncatâ fibrosJ, caulo crassmsculo a parto mfenoi i amo»o ianu«que densè relrorsiim hispidis, fohis adpre-sè setulos-K oblongo-lanccolatis infenonbus obtusis infernè allcnuatic ^upoilonbus aculmsculis, raccmis. inferni \el totd longitudine biacIcat^ tandem elongatis laxis. pihs ali^ patuhs **alus** adressis hirti», caljce adpre^sè hirto campanuldto fructifero aperto corollaecacralea?limbolubumcaħcesubbiemremaequanti, stjlo breiis^imo, pedicelhs fnictiferis caħce 2-3pld longionbus patulo-subrecun i^

Hab in «tagni\* ^haticis *Ertremaduxp* propèBW/as et in *Sena deCwtra* LusitanifP cl Wei\*itch, in udi\* propè *Gadesherb* Fau-**ché**

**Affinis** if KP^IIOW qua<sup>1</sup> a no-tid difforl <'aulo plahro ^el **pils-**

nonnullis adpressi\* oLoito, corollā dimidiā nunori *M palustis* idice perenni, indumento adpress&o, st\lo longo magis differ!

Mtosons UNCATV Boiss et Buldnsa

*M* armua cauhbus gracihbus nectis feu<sup>d</sup> a basi dichotomy ramosis patult et longō hispidi\* foli<sup>^</sup>, hispidis infimis ovatis in petiolum attenuate cauhnis s-o<sup>^</sup>ihbns ohlongo-lineanbus omnibus obtusiSj raoemis tcimmalibus eliaactcatis dcmuin longis la\is, pedicelhs erecto-patuhis caljce eliara fructifici o brcuonbus, flonbus minutis, caljce brevi fructifero s>ubdupl<l majon feiē clauso, pilis uncinatis albis Infevionbus reflexis extens patulis ejus diametro <equilongis hispidi>simo, corollae minirae tubo cahcesublongion limbo minimo azuieo, nuculib minimis o\atis aculis subcompressis

Hal) m umbro<i> faucis *Guzeldeie'* suprA *Sediclug* in Cihcifi ~~■~~—  
turali cl Dalan<sup>^</sup>a April 1855

Habiu *M colliuam* re foil ot ab oā facile<sup>^</sup> di<sup>^</sup>tinguitur caħce fructifero fei\*6 dimidu) niinon clau<sup>^</sup>o nee apei to pihs raulW longionbu\* luspido, tubo coioll.T paul6 longion limbo minoi

PARACVRMJM MICHOKAKPLM DOISM (Sect *Euparacmyum* \

*P* annum um \el pluncaule cauhbus ereciis angulatis tenuibus pacife ramosis pilis patulis molhuscul£ hirsutis, folus \elutino-hirlis oblongis radicalibus oblongis in petiolum eis acuilongum altenuatissupenonbus basi attenuate sessilibus acuti», racemis **terminalibus** furcatis rariis panictilatis tandem la\fe ebracteatibus, **pedicellis** caljci fcquilongi<sup>^</sup>, caljcis albo-his.pidi fiuctiferi n\ accreti lacinus bre\iter lanceolatis, COF-OMEP intend \iolaceae tubo breviter exserto-limbo parvo erecto-patulo, formcibii\* brcussimis retusis glabnb, nuculis. erectiusculis m p\ranudeni appro\imatis minimis ovatis planiusculis margine IsoMtumido disco echmulato

Hab micgno Gabuhco eircA *UioKij* et in s<sup>^</sup>haticis *Bftaro&ul* cl Gnflith

Caule\* pedales \el humiliores Flores magnitudims eorum *P myosotouUs* Racemi Truciifen giaciles 3-4 pollicarcs Nuculs illis *P iturrantht* multo minore\* lmtfam unam longa; aieoll \*upr<sup>^</sup> m<\*

**dum** venLici siti dliixaj el ldeco pnduld\*, compress et mde doiso planiustuldcmagme disco subconliguo Species nuculis miuimis planiu^cuhb m genere dbUiicliy>inia

Obs I *P denliculatum* in Huct pi Armen e\s 1853et>l.P *enstalluni* Boiss

Oba II Prt/ *cngenfolmm* Schott el Ivy m Kotschy PI Cibc 1833 *citP azureumB* elH Diagn

TmcuoDLSMA STOCKSII BOISS (Sect *Ommatocaryum*)

Tr annum lotuin indumento brevi aspero pihs tuberculo albo oi Us alusqac etuberculatis intermixtis constanti cauescens, cau-hbus ramosis clongatis parte inferiori induratâ prostralis, folus oblongo-ellipticis acutiuscus mfenoribus basi m breveoi petiolum attenuate supenonbus ba^i attenuatâ scssilibus, flonbus in racemos axillares terminalesqac 3-5 floras subcorymbosos bracteis 1-2 lanceolatis parvis donatos pedunculo folus longion suffultos disposiUs calycis lacinns sub anthesi e basi rotundat4 lanceolatis acutis, fructifcris accrcitis e basi obtus6 cordatâ tnaDgulanbus fructu applicatk, corollâ calyce vix longion glabrd mfundibulicampanulatd tubo limbo ajquilongo, limbi erecti lobis latis brevisbimis, antheris long6 acuminatis loto latcre intenori lanatis apicibus subcontortis vix corollam acquantibus, nucuhs laevibus productione margmis in urceolum ovato-rotundum membranaceum pisiformem ostiolo popformi terminal] tantùm apertum mutatis^ disco dorsah intrd urceolum praeler hneam mediam elevatam simpbci sene aculeorum percursam glabro

Hab m regione *Beloutsdmtan c\ D<sup>r</sup> Stocks* (sub T Aucher)

Caules peddles longioresque, folia majora 1-1 'sPoWicana Corolla ferè sex lineas longa Species insignis nucuhs piso paulò mionibus *Tulostomatis brumahs* modo mflatis poro mtus in tubum brevem producto donatis *Tmh Aucher* longè difiert caulibus **erectis** brevibus, foliislinean-lanceolatis, sepalis non cordatjg, **nuculis** margine ele\ato tantùm cmctis

## GESNERACEÆ

### HYBERLEA HELDREIGHII Boiss.

H perennis foliis omnibus radicalibus losulatis ovatis integris sessilibus basi breviter attenuatis superius adpressè et densè senceis subtùs lanfl ferrugine<sup>^</sup> versus basim folii longa<sup>1</sup> obsitis, scapis foliis subdupl<sup>rt</sup> longioribus rubellis pilis crispulis tenuissimis glandulosis obsitis omnin<sup>6</sup> nudis simplicibus vel apicebi vel trifurcis 2-3 floris, pedunculis calyce 3-4pl<sup>6</sup> longioribus, calyce rubello glanduloso-puberulo ad basim usque<sup>'</sup> in laciniis ovatas obtusas partito, corollas tubo a basi ad apicem amphalo calyce dupl<sup>ci</sup> longioribus limbo subbilabiato lobis brevissimis, capsula calyce dupl<sup>6</sup> longioribus tandem bipartite

Hab. in rupibus regionis sylvaticae? montis *Olympi Thessaliæ* Gl Th de Heldreich fructiferam legit fine Junii 1851

Folia pollicem vel paulò amplius longa 8-9 lineas lata Scapi 3 pollices ferè longi *AbH Rhodopensis Frm* —Endl Icon tab 69 differt foliis integris sessilibus nee serrato-crenatis in petiolum attenuatis indumento molli discolori nee brevi stngoso-hirto concolori obsitis, scapis nudis nee ad divisionem bracteatis, calyce ad basin in laciniis ovatis nee ad medium tantùm in lobos triangulares acutos fissis Gorolts formam ex umbo flore obsoleto ritè observare non potuisset limbus eo *H Rhodopensts* amplior et multo minus profundè lobatus videtur Capsula tandem calyce dupl<sup>b</sup> longior nee eum squans

## SCROPHULARIACEÆ

c

VERBASGUM FIETIDUM Boiss et Heldr (Sect *Thapsus*)

V totum lomento tenui flavido in paginâ superiorum foliorum laxo tomentoso, caule elato fohoso ramoso ramis longis tandem m-grescentibus tomento brevi subdetersis, foliis radicalibus ovatis

oblongi>e bieutn po(iolali& obtusè cienalis obtusiuscuhs, cau-  
linis et rameis diminuta oblongis plfts minùs dcummatis infe-  
nonbus petiolali^ caHens. ba^i lolundatâ \el cordatâ sOssihbus,  
flonbu\* in glomorulos 3-5 floroN di\*>po<ilis racemos longos laxius-  
culo& formantibus, bracteis lmi?aribus calmsque pailitiombus  
triangulan-lanceolatis acutis tomento albo-flaudo demùm deter-  
<ili oh^itis, corollaQ fl^aa explanatae c\tùs modicè stellalo-pube-  
lulae dni^ionibnssubiiiEPquahbus, filamentis basi \iolacefesupernfe  
albldo-balbatl^ antliens duabus adnato-decurrentibus, capsula  
oiat.\ pedunculo aqiulongH Idcinus cahcis tnpld longiore

Hab in rrgione abictinâ monli5Parna^iadZ)ij)o/rtmocl Heldr

Planla pturipedali'x Folia railicalm G^ pollices longa Racemi  
flonfcn 1-1 ' s pedale- Corolla diamotio polli<.an> et ultra Odor  
toiiùs plantrc forò *Batiucp btianwnn* ATTinc V *Prusuuw* ab oo dif-  
fert indumento iniiiù? tenui et magi> elongalo, folns magis cre-  
natis filamentis Molacoo-barbatis Mulid magis apline V *epi ran-*  
*thwo* quod in oinmbu\* montibus Peloponnesi et etiam in Parnasso  
(Heldr • Orphan •) *ercacil* et quod e\ floribus mcliùs c\plicatis>  
obs>er\atum ob anlhera:\* duas clsi bie^ iter tamcn raanifcslè adiiiala^  
*Thapso* nee ui olim aiiituma^orainu^ *Lychnihdi* adnumeranduni  
ost V *epuanthimtm* a V *fwtido* uidiimcnlo denso pannoso non  
deterMh lolms planta; folns minoiibus mtegris, anlhci^ duabus  
bie^ius aduads differt sed an i«ta? notae satconstantes? annon po-  
liùs V *fcetidum\** *Inota*> urabi Ota 1" *epiranthw?*

Ota 1\* *Nei adense* c\ speciniinibiiB numeroMs nupcr accepts  
V *Boe)rhatu* ^aldft et forsan minis affine est, ab eo bracteis ab-  
breMatis, racemis lauonbus, capsulis longiùs pedicellatis tantiim  
disUnctum Hujk<i probabiliter ^anetas

>ERBASGLM MUACQTRiciiiiM Boiss et Heldr (Sect *Thapsus* )

"V lotum tomento stellato den&iusculo albo in parte supenon  
planlce demùm in (loccas dctorsili canum, folns obsoletè crenu-  
lalis mtegnave radicalibu^ oblongis vel oblongo-spathulatis basi  
attenuatis -.ub^es^ilib^, caulims oiatis obloDgisvo breviter acu-  
nunalis ln^e^lo^lbu^ basi attenualis csetens basi rotundato-cordatis  
**æapè obtusè aunculatis, caule ramoso ramis urgatis demùm gla-**  
**mati^** (Inrum (rlomerulis di<itw tomento floccoso albo demum



decnluo lauaini\* i acomos. longo\* la\o\*. urgaiol\* funnanlibu<sup>1</sup>: Inacici>>  
breubu^ lanceolate acutis caljci^quc launn\*. liungulaini-laiiccolatis  
pia<sup>4</sup>tei indumentum floccoum bieulei gianduloMb coiolla  
fla\A evliispaicè tomcnlclIJ, filiiraciillS Molaceo-b.irbalis antheii^  
duabus longe Jdiialo-decuiTcnlibus Lapsuhs peditello a?quilongi^  
o\ato-rotuudis caljcislacunas non s-upoianlibu^

Hab in faucibus monlis *Koithmti* pi opè *Thessahmcum* et in re-  
gionc sjlvaticJ montis. *Ohjmpi Theutth* piopè cainobmm *Sancti*  
*Diony&u c\* dc Holdreich

Species affinis *V bombycifei* o Bois-s a quo diffei I mdumento  
multò minùs denso magisque detersih, racemis la\is, land iilamen-  
torum \iolace^ Hoc cliaractere ad *V faiUduin* accedit quod >erd  
indumento fla^ido, capsuhs dupld majonbus oblongi^ alnsque notis  
rgregiè differl

\Fimvsciv HIGIDIM Boi^ ct Heldr (Sect *Thapsoideti* )

V tolum nidmnpilo leimi \oliitiiio cmerascons, cauhibiis erectis  
simpliciter racemose >sepius subconmbosè ramo^is demùm gla-  
Lratis rubelhs, folus infenonbus petiolatis oblougo-lanceolatis  
parc6 grouse et obtusè smuato-lobatis subundulalis, caetensebasi  
sessili cordatd obloogis aculis integris,\* flonbus sessilibus glome-  
ratfe, glomeruhs dissiiis racemos longi^imos virgatos laxos for-  
mantibu?, cal>ce tenuiter tomentello ultra medium ID lacunas Ian-  
ceolatas apice angu^tas acutas partito, corolla (lava\* mediocnextùs  
tomentelU, fiJamentis omnibus sordidcalbo-lanalis, anthers om-  
niLusremformibus, capsulâ o^ata demùm glabröcenti mucronatâ  
cahçinislacinns subbreuion

**r undulatum mtegt ifolntm Gnsch Spicil ?**

Ilab in sa\osis ad pagum *Kojthtati* pi opè *Thessahmcom* cl de  
Heldreich

A *V undtdalo* Lam = *plicato* Sibth cm aflinc differt indumento  
terjui griseo nee pannoso atbo, folus radicalibus remote sinualis  
vix undulalis, cal>cjs lacinus tenuioribus longionbusque, corollhs  
dunidiò minonbus. An tamen cjus varictas e loco elation orla? *V*  
*phcatum* verum Alticx et Argolidis incolam e\ Macedonia nondum  
\idi

VERBASCUM SPECIOSUM BOISS et Heldr (Sect *Glomerata*)

Planta multicaulis caulis usque ad inflorescentiam raris simplicibus racemoso-virgatis spiculis pyramidato-ramosam adpressis cernis foveis hinc, foliis adpressis pannosis cernis inferioribus oblongis obtusis in petiolum brevem altematis margine profunde et obtuse sinuato-undulatis, caetens confertissimis crectis oblongis acutiusculis mlegernm basi sessili breviter decurrentibus, paniculi brevis glanduloso-puberuli, flonibus subsessilibus in glomeribus remotiusculos racemos laxos formantibus, flonibus minutis, calycis ultra medium partiti virentis breviter glandulosi lacinnis oblongis acutiusculis nervo medio elevato, corolla parva lutea extus puberulij filamentis parce albo-barbatis, antheris omnibus reniformibus, capsulis ovalibus neutiusculis mucronatis calyce subduplo longioribus

Hab in saxis vili camcis ad *Coidileon* juxta *Smyrnam* cl de Heldreich Julio 4851

Planta bipedalis Folia inferiora cum petiolo 4-6 pollicana pollicem vel sesquipedalem lata caetera sensim ad paniculae basin usque diminuta Paniculae rami 4-7 pollicares Calyx ferè 2 lineas latus Corolla speciminibus mfauctè jam omnino fructilens exsiccata e mimis generis esse videtur Capsula piso multo minor Species insignis foliis inferioribus eis *V phcah* formae simillimis donata sed hsec species longe recedit foliis superioribus aunculato-cordatis, flonibus quadruple majonibus, calycibus lacinnis lanceolatis elongatis Forsan *Vm basas Leianthis* melitis adnumerandum

VERBASCUM SPECIOSUM Schrad var *megapMimos* B et Heldr

Folia inferiora et rosularum stenlim indumento pannosomultum crassum obsita, folia caulina tenuiis tomentosa omnium nervi subtus valde prominuh Paniculae mgentes, indumentum pulverulentum genseum subdetersile Capsulae oblongae 2-3 lineas longae

*V megapMimos* B et H Mss

Hab in regione abietina *Parnassi* (Heldr)

Hanc speciem quamvis indumentum partis inferioris plantae densius sit a *V speaoso* specified disjungere nunc non audemus

IljpsukB m specinumbus Cauca^iciscjUbdcm magnUudinissuut, in Anatolicis autem mamfe&tè minore\* sed eju-sdem forma?

VMURSCIM ADELL Heldr (Sect *Ljihnitidea* )

V indumento denso stellato lutescenti-gnseo brovi vj\floccoso in caulibus asceudenti-erec Us infernè tantum dete isih Lomentosum, tolns caulinis infenonbus obovato-oblongis in petiolum longè attenuatis acutis subintegris supreims sensim dimmulis flora libusque acuminate sessilibus cordato-aunculatis lal6 ovata^, racemo terminah pyramidato abbreviate parcè ramoso, glomerulis tnflons approximatis, caljcis parvi pcdicellum bracteamque subsequanlis tomentosi lacinnis linoan-lanceolatis aculis, corollae caljce quadruplO lougions e\Lùs tomentellai tubo brevissimo lobis orato-rotundatis, filamentis omnibus usque ad apicem land violacea barbatis, Lapsulâ o\alS apice tmncatS caljce duplA longion demum glabernraâ mtidd

Hab in valle prope Àpe) antos ad radices monlis Zu, insulaj Ncucl « ubi hanc ahasque slirpes ranorcs legit dilectissima soror Adelia cum patre fine Juln 1844 » Heldrich

Caules pennâ anserini ferfe crassiores 1-2 pedales, folia mfenora cum pctiolo 4-6 pollices longa 2 pollices lata Panicula 4-5 pollices longa densa ramis pollicem aut paulo`ampli us longis densd flonfens Calyx flonfer hneam unam vi\ excedens Capsula 2 hneas longa Iuter *Lychmltdea* collocandnm, paniculâ deosâ abbreviatA ab omnibus mihi notis distinctum

VERBASCUM TAuni Boiss etKotschj (Sect *Lychmtuleu*)

V bienne totum indumento stellalo tlavo in caule et ramib subdotersih ad folia panooso persisteiiti obsitum, caule ex ipso collo ramoso-pamculato ramis loogib virgatis laxè Honfens glabrcscen-tilms minutè stipuato-glandulosis, folns radicalibus numerosis caulimsque infimis oblongis acutiuculis in petiolum eis vix breviorcm attenuatts nervis el \enib paginâ inferior! valdfe piominentibus, superioribus ad ramorum ortum valdè diminutis basi cordatâ sessilibus ovatis, flonbus per 2-3 secius ramos glomerulahs, pedicellis maiqualibus per anthe&in caljce sublongionbus **fructiferis**

Hongatis cal\ce lomciilo deieisih pulvcrulonto ad basin usque in lacunas lineoif^ parlilo, filamentis palbdè uolacco-barbatis, an-thens omnibus ic-niformibu>, capsulâ pedunculo duple) longion soiflultâ oblontra mucrnnaia lomeuio^a caheem tcrli«l parle supe-tanti

Hab in rupe&lubiis montis *Gisyldejype* septenlnonem ver&us alt 8000'cl kohch) plant Cdic c\s 1833N°235G EodemlocolegU quoquecl Balansi

Pedale \ el seequipedale, foliorum inferiorum limbu^ 2-3 pollices longiis, pamcukc rami 0M pollKaics, calw llorifer sebqmlineam longu> Inter L\chnitjdoa *V chenanthifolto* alfinis formd cal)cis, indiiTiiriti coltrr <ad boc diJTert foil!\*; longc lanceolati-), pamculft lomplno«l urc jrhilir.iM glandno«>, filaments luloo-barbatis

#### VERBASCUM DLLPIUCIM BOIS cl Heidi (Sect *Lychmtidea*)

\ cauk<sup>1</sup> modiocnler clato albo-lomeiiloso demum detersih m-jincanli in racomum siinphcem vel pamculam parum ramosain abeunti, folus snprft lomcno tenui obsitis tandem glabrescentibus trnuiler luberculalis subtiis niveo-lomentosis petiolatis basirotun-rlat5 cordaiii^e ovali\* obliiMs crcnulatis ad basin limbi abquando lobnlo oblongo auctis, supei loribus sessilibus o^atis integerrimi<sup>8</sup>\* diminutis J)a^i subcoidat^, racemis longis densissimis infern£ali-quando subcompo^ilis, flonbus in glomerulos continuos compo-^ltispedicollis ina?qualibus cahe sa?pius longionbusalbo-floccosis, tal\co eodom indunipnto dtei^ili albo-floccoso minulo in lacinias lanccolatas acutas ad basin usque parti to, corollâ flav^ extus parc6 Mcllato-lomentelld cahe multo majon, filamentis albo-barbatis, (apsulâ domum glabrA oblongd obtusâ mucronatd sulcald cahe riuplo longion

Hab in rupibus ad cacumen montis *Delphi EnbetF c\ Helder* alt 8000' Floret Aug

Planta pedalis ^el sesquipedahs Foliorum inferiorum lim\*ni£ semipedahs 3-i pollices latus Racpmi 4-8 polhcares tenues densi Calyx m besquilmoom corolla 2 lincas longa CQrolla diametro 9-10 lineas lata Species affinis *V mgro* et *V lanato* Schrader, ab ns praetor indumentum densius paginic inferioris foliorum capqilis **minoribus** lil.inionli«quo non pnrpurro-ljiiialis **distinctissima**

VfnuvsCLM inpOLErciJM Boiss. pt Heidi\* (Soil *Li/ehmlulea* )

V caule crasso procero glabrescenti supernè in panicula longam stnctam abeunti, fohis radicaibus caulimsque inferioribus petiolatis amplis suprâ glabrescentibus subtùs cam obloiiis grossè lobatis Integns, vel repando-crenalis basi rotundatis vel breviter cunealis, can Inns supcnonbus valdè dirainutis e basi scssili cordaU ovato-rotundis breviler attenuato-acununati^, flonbus parvis in glomerulos paucidorob di^posiLisracemosloiiigos laxiusculostenucus formantibus, pamculse ramis glabiatas, pedicellis calyce 2-3plò longionbus cañccque ad basin usquè in laciniaa lineares partito mdumento cano socedenti floccobis filamentis e r>icco purpurascntibus

Hab in faucibus umbrosis regions abictintE inter monies *Kyllene* et *Gymnoiouno* Peloponnebi alt A000' cl delieldreich

Planta data Foliorum radicaum limbus 0-8 poll longus 4-5 latus Panicula pedalis longiorquo Cañv hncam longitudine parùm excedens Indumentum pamculde lprfe uv in V *floctoso* et *mtltophoro* Formd foliorum accedit ad formas tomentosas V *ntqn* in monte *Kyllene* quoque crescentes sed in quibus praeter lobJ mfenora cordata miniisque hjpoleuca folia caulina nunquam basi bessili cordata sed basipliis minùsattenualasunt, indumentumque pamculoe tenums non floccosum An forsant V *mgn* et V *midtophori* proles hybnda?

YEMUSCI'M HELDREIGUII DOI'S iSect *Lychnttttdea* I

Y lotuin mdumento brevissimo stellato flao-virenti obsituin caule inferiè fohoso a medio paniculato-ramoso, folns mferionibus breviter petiolatis pmnatilobati^ veU\rato-pinnatiparlilis segmento terminali mult6 majon oblongo lobato lateralibus utnquæ 1-2 oblongis Irregalanbus omnibus crenalo-dentalis, costi media" petioloque complanato cra^sis, nerus albidis pagind inferiori valdè prominentibus, folus supenonbus sessihbus ovato-oblongis acutiuscuhs crenulatis multo mi non bus, flonbus glomelulatis raceraos longtssimos tcnues laxos formanlibus pedicelli^ a\ce mimmo lomentoso ultrft modium in lacim.is .icu(\^ inait-

ular (^ paitilo 2-iiplo longionbus, corolhs parvu > e\lus loniento-  
sit. tilamenlis albo-barbalis anthers omnibus reniformibus, cap-  
suhl ovatS cauce tertiA parte longion

*V muranthum* D el II M's non ahor

Ilab in faucibu-> monlis *Koithiati* Macedonia alt 2000' cl,  
Hfldr

Planla 2-2' /> pedalia Folia inferiora demiini glabrescentia cum  
petiolo sennpeddla -iegnionto supcnori 3-4 polhces longo, latc-  
rabbus 5-10 lineas longis Racemi <sup>u</sup> <sub>ir</sub> { pedales virgati Calyx h-  
neamlongus Capsula *semme Cannabis* fere minor Species distinc-  
tissima a *Leuinfia* partiun floralium minutie magis accedens sed  
tium in illis paucula parte inferior! plantaB glabnor, blc autem  
oa magis lomontos-a o^t

YEntvscuM Giomi'ioniM Boi's CL No? (Sect *Lychmtis mffntlt-*  
*rosa* )

Y LdM uiduiatim pi inciuolo, cauibus erectissimplicibih albo-  
loFnonosis mfermfi folios in racemum simphecem abeuntibus, fo-  
lii^bie\itci tomentellis Infenonbu's oblongis obtiois m petiolum  
veisun atlciiuati^, caulinis niulto minonbus oblongs acutis basi ses-  
sili subcordatd ses&ilibus, floidbbus adpeduncolorumbasinminimis  
lanceolalis acuminate, pedunculis ereclo-patuhs tomentosis me-  
<lium versùs oppositè bibractcaUb tntlons, caljce densè albo-pan-  
noso ad medium usquè in lacinias o\alas acutas divi^ corolU  
llavâ cvtus tomntobj, filamentis sordulè albo-lanatis antliensre-  
nllloimibus .

Hab in Anatoliâ piopè *Stvas* cl Noe Flor Jmno

Pedalu lolia inferiora cum petiolo 4 polhcana 42-15 hneas  
Ijta Kaceinus 0-8 pollicdns, peduncuh polhcares AlabasLra glo-  
bosa indumento *AUhcBaii^Teleientid* Valdè aftlne *V Mesopota-*  
*iniio* Boiss foliuh glabresceiilibus, caule ranioso-pamculato, folns  
lloraiibib basi corddtis, caljce ferè dimidio mmori magis abbre-  
viaio brovilcr lompiiloso-cineiascenli di->tincto

VISRBISSUO GHLGLM Ilcldr ct Sarlon (Sect *Letantha* B<sup>lh</sup>)

V laulecia^o pia'toi ba-Jii albo-loincnlosam lolio^am plahcr-

inno mlulo aphylo brevi ad in paniculam iam<sup>o</sup>issimam elongatara glabram lhlmlara abeunli, fohis densè niveo-tomentosis radicalibus obovatis obtusis vel oblongis acutiusculis infernè mpetiolura attenuatis, caulnns paucis minonbus ovatis sessilibus omnibus integris demùm glabratis, glomemhs 4-6 flons racemoslongos laxos formantibus, pedicelhs tenuibus demfim glabratis calyce 1-2pld longionbus, calyce minimo glabro glanduloso ad basin usquè in lacinias hnean-oblongas obtusmsculas partito, corollâ calyce 5-Cplo majori, filamentis sordid<sup>o</sup> albido-barbatis longionbus parte supenon midis, anthers omnibus remformibus, capsulâ pubescenti demum glabrald cylindncd obtusmsculd calyce triple longiori

Hab in rfgione mediâ et Inferenon montis *Parties* Atticse alt 2000'-2500' cl Heldreich et Sarton Fl Jumo

Planta bipedalis, fqha inferiora magnitudinf valdò vananlia ssepè bipedalia longioraque Pamcula ramosissima saepè sesquipedalis rams pedahbus multiflons Calyx vix lineam longus Corolla diametro 8 lineas lata Ciipsula 2 7\* lineas longa lineam lata Afiine *V. myrwarpo* B et Heldr qaod tliflert folns crenalis subundulatis, flonbus minonbus, capsulâ oblongo-cylindncâ *V. cyhndrocarpum* Gnseb ex description<sup>o</sup> affine differt folus sinualis undulatis supra glabratis

VERBASCUM CILICICUM BOISS (Sect *Leiawtha* )

\*V bienne caule rubro pilis stellatis brevissimis sparsis. pulverulento infernè folioso paul6 suprâ basin in paniculam. ramosam multifloram abeunti, fohis indumento stellato tenuiter tomentelhs tiavidis oblongis obtusis integns in petiolum in inferioribus eis sqmlongum in supenorjbus brevissimum breviter attenuatis, ramis paniculae elongatis aphyllhs virgatis stnctiusculissparsimstellato-puberuhs multiflons, flonbus in glomernlos 2-5 floras apprimatos dispositis, bracteis lanceolatis minutis, pedicelhs flonfens calyce sublongionbus, calycis hirtuh lacimis linean-oblongis, corolla luted minutâ, filamentis omnibus albo-lanatis anthers reniformibus, capsulâ pedicello e recto arcuato eâ 2-3plo longiori sufTullâ oblongo-elhptica obtusâ mucronuiaU caçce term parte loTigion

Hab. circa ruinas castel<sup>h</sup> *Gukk Boghas* in *Tawo&hcito* cl Balansa Floret Junio

Fohorum radica<sup>h</sup> hmbus 2-3 pollicans 15-18 hneas latu<sup><</sup>\*  
Pamcula saipe pedalis stncta, flores in sectione nunuU, calyx flo-  
rifer lineac <sup>3</sup>/<sub>4</sub> longus Capsula 2 hneas longa Species affims V  
*Pmardi* Boiss nobis quoad fructum Ignoto sed quod differt mdu-  
mento pannoso niveo, ramis paniculse glabemmis, folns supeno-  
nbus angustatis acutatis, calycis gtabn lacinns linean-setaceis, co-  
rollis duplò ma]oribu<sup>^</sup>

VENBASCLH LYRATIFOLIUM Kochel var *hneanlobum*\*

Folia radica<sup>h</sup> in lacunas angustè lineares elongatas pinnalim  
|e\ bipmnatim secta, omma cccterùm speciei

Hah ad *Bouloukh* circj *Merstna* Ciliciae Ql Balansa

Lacinije toliorum lincam vel sesquilineam tantùm latac Prund  
fronte a typo speciei diversissimum sed cl Balansa formas inter-  
medias observavit

GEL&I\ ALPINA Boiss et Kotscliy (Sect *Aictuius*)

C perenms basi lignosa csespitosa tortuosa vestigns foliomni  
Tctustoruin vestiLa multicaulib, caulibus erectis simpfcibusfohosis  
pilis moUibus viscidulis patulis hirtis, folus oppositis eisdem pilis  
patulis brevibus molhbus hirtis viscidulis inferioribus petiolo eis  
t<epè longion sufTultis e basi rotundata velbreviter cuneatd ovatis  
sssp6 ob srgmenta bina minima ovata e petiolo orta sublyratis  
obtusis obtusè subduplicato-crenatis, supenonbussessilibus ovatis,  
racemis longis simpfcibus lerminahbus, bracteis e basi sessili cor-  
datl ovatis breviter acuminatis integns, pedicelhs filiformibus  
honzonta<sup>h</sup>tei patentibus calyce 3-4plò longionbus, calyce glan-  
duhs stipitatib sparse obsito ultr<sup>^</sup> medium in lacunas oblongas  
oblu<sup>^</sup>as mtegras pailito, corolla calyce tnplò majori, filamentis  
violaceo-barbatis duobus longionbus parte dimidid supenon de-  
nudatis anthoras adnato-decurrentes ferentibus, duobus brevio-  
nbus totd longiludme lanatis anthers remformibus, capsuld.

Hab in rupestribus pncruptis alpium *Mamchura* An till bam cl  
**Kotschy** alt «800'



Pars mleuoi planlac in pulvinos hgn&os torluosos ramosos ex  
lisbuns rupmm onunda Caules flonfen cum racemo semipedak  
loDgionque pedales, fohorum hmbus 1-1'/a pollicans, pedicelh  
8-10 hneaslongi, flores minores eis *C Archm* cui folns opposite  
habituque valdè accedit sed qua a noslri distinguitur radice bien-  
*m*, folns amphonbus lyratis bijugis, bracteis argutè dentatis, etc

CELSIA DJENZERI Bory et Chaub Fl. Pelop var *lyrata* Doiss et  
Hldr

Folia radicalia ljratasegmento terminalimult6 majon ovato lo-  
bato dentatoque, lateralibus tnangulanbus dentatis ahquandd sub-  
retrorsis Corollas paulò majores Capsula subrotunda

Hab in *Lacomd* ad scpes loco *Kypanssta* dicto propè *Mistra*  
Boiss Apr 1842, circS pagum *AnavryU* Hldr

Potiùs forma loco pinguion feracion nata quam vera vanetas  
Specimen typicum speciei a cl Bory m syM ad *Phigaleam* Pe-  
loponnesi lectum et cum specimimbus e monte *Parties* Attics a  
me ipso et clans Heldreich et Sarton leetis et sub nomine manus-  
cpto *C Boissien* communcatis omnm congruens habet caulem  
demissioem 1-1'/. , pedalem, rhizoma magis mdurato-suffrutes-  
cens, folia pinnatisectapartitavesegmenlis subsBqualibus, capsula^  
ovatas ssepè acutmsculas, sed e seminibus in monte Parnes leetis  
plantam *Lacomcaë* omnibus notis smullimam colui

CELSU. INCANA B<sup>lb</sup> var *oxycalyx* Boiss

G45CIS laciniEe.ovato-oblongae aciitae nee ovatae obtusae

Hab in subalpims Persiae KurdistaniCtB propè *Mendeh* cl Noe

Hssc planta ohm inter plantas Noeanas sub nomine *C fannosa*  
proposita prseter notam indicatam a forma" Ijpici non differre vi-  
dctur

CELSI\ C^LLENEA BOISS et Hldr (Sect *Nefflea*)

G perenms radice crassiusculâ demtun induratâverticali Hbroşâ,  
caule pumilo simplici ferè a basi laxè racemoso sub lente glandulis  
btipitatis minutissimis obsito. folns omnibus radicalibus minulis-

sunū sub Icnte glanduloso-puberulh. petiolo eis sublongion sutful-  
tis. oblongs obtusis obliwu&culè duplicato-crenalis, bracteis trian-  
gulan-lanccolatis pedicello tnplG brc,vionbu& iiifenoribus denti-  
culate caetens wtcgns, pedicelhs glandulosis erecto-patuhs, ca-  
lyqis gtindulosi parLilionibus oblongo-hneanbus obtusiusculis, fi-  
Jamentis violaceo-baibatis, anthem omnibus remformibus

Hib in regione Jlpinfi moutis *KylUms* Peloponnesi alt C500'  
cl Heldreich Julio 1848

Caulcs 3-3 polhcarcs, fohorum limbub 10-12 lineas longus 6  
latus Flores minuU ut in *C aiuuu* Bory et Ghaub quse nostrai  
indumento ct formA toliorum valdò affirm differt caule subnullo,  
pedicollis longissimis t»ubradicalibus, calycis partitionibus lmean-  
bpathulatiSj lilamentis lutco-barbatis'foliisplerumque angustion-  
lms baM magis attcnuatis

ScnopiiUL\niA C\LM:IUI Roiv- (Soct *Scorodoma* )

Sc pcrennib pluificauhs cauibus ^lmphcibus parte infcnori fo-  
lios glabrusculis supernò ut uiflorescentia tota glandulis mini-  
mis stipitatis obsitis in racemum Ion gam angustum aphyllum  
abcuntibus, foliis radicaibus et mfciloribus oblongis breviter  
w petiolum attcnuatis supenonbus sensim diminutis e basi  
bessili oblongo-ldJiceoldtis acummatis omnibus argutè denta-  
tis saepè submcisis subtus prominenter nervosis viridibus, mfen-  
nbus glabris supenonbus parcé et minutè glandulosis, racemi pe-  
duncuhs stnctis approximalim3-&flons, bracteis setaceis,pediccl-  
bs valde glandulosis flore brevioribus, calj cis glabri lacinnis orbi-  
mlaLis incmbrana fuscescenti latiusculd circumdatis, corolla pur-  
purea caljce 2<sup>f</sup>/iplo longion, filamenlis mclusis, stenli remformi,  
capsuld

Hab in Armenia<sup>1</sup> circA *Erzet own* cl Calvert, circfl *Tortoum* cl  
Huet

Gaules cum racomo saBpe semipedah ob pedunculos striclos^an-  
gusto pedales longiorcsve, folia infenora in raeis specuniqibus cum  
petiolo scsqvipolhcaria superiora valdè diminuta Species racemi  
angustie et foliis liitermedns et supenonbus acutis>simè incisis.  
>ublacnatisve notabilih nulli aretè affinis jmtiS Sc *Scopoht* et af-  
(mes tamrn collocanda

SCROPHULARIA SYLVATICA Boiss et Heldr (Sect *Scorodoma*)

S perennis tota valde glanduloso-viscosa pilisque albis sparsis longioribus conspersa, caule obtusissime quadrangulo ex axillis inferiorum ramoso ramis elongatis foliosis paniculam elongatam formantibus, foliis petiolatis amplexibus e basi profunde cordate ovatis circumscissis dentato-lobatis lobis obtusiusculis paucidentatis foliis inferioribus oblongis basi attenuatis acutis acute dentatis superioribus bracteisque lanceolato-linearibus integris, pedunculis axillaribus alternis dichotome 5-9 floris bracteatis folio florali subbrevioribus, pedicellis fructifera recurvis, calycis vinctis breviter glanduloso-hirtis lacinis ovatis immarginatis, corolla flavido-virenti calyce 2\*^16 longioribus genitibus inclusis, filamentis minute stipitato-glandulosis stamini minuto obtusangulis, capsula ovata acutissima calyce vix duplo longior

Habitat in regione sylvatici montis *Olympi Thessali* cl. Heldreich

Planta elata, folia inferiora 4-5 pollices sesquipedalia longa, racemi semipedales. Habitu *S. vernalis* Kotschyanae, sed magis viscida et insuper ab eis staminibus quantitate praesentibus et calyce non marginato discedens. Prope *S. cestwalem* Gussone collocanda quae ex descriptione differt foliis non cordatis cymis subterminalibus, genitibus subsertis. *Sc. lurtidiflora*, *divancata* et affines calycibus membranaceo-marginatis dignoscuntur

SCROPHULARIA EHRHARTI Steud var *Pisidium* Boiss

Inflorescentia crebre glandulosa, flores et capsulae immixtae, alae caulium parte inferiori conspuae

*Sc. Ihidica* Boiss et Heldr Diagn N° 12

Habitat in Asia minore

Observatio ulterior et novae formae hujus speciei ex Oriente acceptae docuerunt hanc varietatem nec speciem esse Altera a *S. Ehrharti* formae varietas est *S. Ehrharti* var *Samantami* Boiss. et Heldr — *S. Samantami* B et H Mss a cl. Com Samantani in scaberrima regione abietinae montis Parnassi prope *Gottina*

lecta, planta 2-3 pedibus flonibus copiosis unicolonibus virentibus, appendice sub mm on lobis retusis

Obs Specimma e Syriá a cl Blanche et Gaillardot *Sc macrophylli* Boiss super accepta docuerunt hujus caulem & si angustissimè tamen petioli decurrentia" alatum esse. Hæc species igitur ad *Scr Bottom* sub nomine *Sc Balbisi macrophyllæ* reducenda est a qua" differt foliis amplis, verticillatis multifloris magis compositis, qui characteres novæ speciei condendæ non sufficiunt

SCROPHULARU LAXA Boiss et Heldr (Sect *Tomiophyllum*)

*Scr* biennis? radice simpliciter, e basi multicaulis glaberrima, caulibus quadrangulis basi tantum foliatis, foliis longiusculè petiolatis ambitu oblongo-lanceolatis in lacinis mimis oblongas acutas integras vel parvè et acutè dentatas bipinnatisectis pellucidopunctatis, foliis 2-3 superioribus sessilibus ambitu ovatis bipinnatisectis lacinis lenibus, pedunculis crassis abbreviatis 2-5 floris ferè a basi caulium thyrsos laxos angustos longos formantibus inferioribus ramis elongatis superioribus unifloris/pedicellis calyce brevioribus ut et pedunculi glandulis sessilibus obsitis\*, bracteis squamiformibus minimis, calycis tacinus vix orbiculatis glandulis paucis sessilibus obsitis margine lato scanoso-membranaceo fuscescenti denticulato circumdatis, corollæ calyce vix duplo longioris labio superioribus brevi purpureo, filamentis vix exsertis glandulosis, staminibus semicircularibus transversè latiori basi truncato, capsulis ovato-rotundis abruptè et longè acuminatis

Habitat in regione alpina montis *Kyllenes* Petropoli inter lapides mobiles alt 5500'-6500' cl de Heldreich 1848, cl Prof Orphanides 1851

Caules 1-1 1/2 pedales virgati denudati, folia inferiora cum petiolo -2 pollicibus tantum longa ut in *Scr Hoppii* sed tenuius dissecta Flores et capsulis magnitudinis *Sc lundm* et *fihcifolice* quibus affinis est et a quibus differt collo multicauli, caulibus basi tantum tenuissimè dissectis, calyce latius et fuscescenti-marginato A *Sc laciniæ* W K formis rhizomate non suffrutescenti, capsulis majoribus non longiusculò pedicellatis optimè distinguitur

SCROPHULARIA PULVEMILENTA Boiss et Noe (Sect *Tomtophyllum*)

Scr perennis iow papillis sphaencis hirsutissimis albis pulverulento-canescens, cauibus obtusè quadrangulis crebrè fohosis simplicibus vel parcè ramosis in thyrsum oblongum densmsculumbrevem folns supenonbus stipatum abeuntibus, Joins petiolatis oblongo-rbombicis Manque- attenuate acutis acute denticulatis denticulis ascendentibus, peduiculis crassiusculis brevibus cymosè 5-7 flons glandulosissimis glandulis stipitatis, pedicellis calyce brevionbus glabns, calycis glabnuscule carnosilacini orbiculatis latè albo-membranaceis membranâ denticulate, corollâ calyce vix dupld longiori e sicco flavidâ, staminibus vix exsertis, filamentostenh semiorbiculato transverse lation, capsuhs subsphaencis depressis calyce subdupld longionbus

Hab in subalpims et ruderatis Armenia mendionahs circâ *Ardana* ubi legilMaio 1852 cl Noe

Folia *Nepetw calarw* sed minora basique attenuata Thyrsus flonfer tnpolhcaris, flores magnitudims *Scr laciniatce* W. K. Indumenta naturfl facile digooscenda, juxtft *Sc nepetcefoham* collocanda, indumentum ferè eundem in *Sc prumosd* caeterum diversissunâ Habitus tandem *Scr canescentts* filamentistenlis formi alnsque notis longè alienae

SCROPHULARIA VERSIGOLOB Boiss (Sect *Tormophyllum*)

S percnnib multicaulis viridis tota sub lente glandulis minutissimis albis stipitatis conspersa, cauibus ascendentibus densè foliosis simplicibus vel parcè ramosis in thyrsum elongatum angustum abeuntibus, Coins subsessilibus ambitu ovatis in lacinias oblongolanceolatas argutè dentato-lobatas pinnatipartitis rachide latiuscua supenonbus dmunutis lauceolatis pin&atilobatis, pedunculo 3-5 flons glandulosilacini crassiusculis, pedicellis brevissimis, bracteis setaceis, calycis glabn lacini orbiculatis latè fusco alboque marginatis, corollâ rubello flavidoque variegatd calyce dupld longiori, filamentis inclusis, filamentostenli orbiculato, capsuld

Hab circâ *Erzetoum* undi misil cl Calvert

Caulis abbreviati cum thyrso 40-12 pollicares, folia vix pollicem longa, habitus et folia *Sc mulUcauhs* Turcz sed folia tenuius dissecta et flores subsessiles nee longò pedicellati Flores majores eis *Sc Hoppii* a quâ felammibus inclusis et appendicibus formè longè diktat Propè *Sc mynophyllum* B et Heldr collocanda quæ differt glabritie, foliis tenuius dissectis, calyce multò minor, etc

SCROPIULAIH DLCIPIENS Boiss et Kotschy (Sect *Tomiophyllum*)

*Sc* perennibus glabra glaucescens mulUcauhs, caulis divaricatis ramulosis, foliis rigidulis in lacunas oblongo-lanceolatas obtusiusculè dentatas pinati vel bipinnatipartitis, inferioribus petiolatis caeteris sessilibus, pedunculis glabris vel parcissimè glandulosis divaricatis cymosis thyrso longos laxiusculos forraantibus, bracteis sessilibus, pedicellis calyce subbrevioribus, foliis minutis, calycis glabris lacinis oblongis angustè albo-marginatis, corollis purpureo-fusculis calyce vix duplè longioribus filamentis inclusis, staminibus orbiculato flavo lobis labii superioribus aequantibus, capsula minimè ovato-rotunda obtusi stylo brevissimè apiculatè calyce duplè longior

*Sc hicolor* Boiss in Kotach p. Taur 42<sup>e</sup> non Sibth

Habitat in jugo *Ketsibele* Taun Cilicici et summo jugo *Metdesis* alt, 8500' Julio 1853 cl Kotschy

Habitu adeò similis formis *Sc canines* ut pro eâ hanc speciem primò fronte habuerim Accuratius investigata tamen habet flores majores, antheras non exsertas, capsulas *Cannalins* semine majores Insignis magnitudine et colore appendicibus Propè *Sc xanthoglossam et deserti collocanda*

SCROPIULAIH TIUCIIPODA. Boiss et Balansa (Sect *Tomiophyllum*)

*Sc* glabra caule rubello obtusè angulato procero parte inferiori simpliciter folioso superne in paniculam amplam abeuntibus, foliis inferioribus pinnatis et segmentibus oblongis dissitis utrinquè 2-3 dentato-lobatis basi quæ sæpè profundè incisus inferioribus minoribus petiolulatis superioribus cum supremo majore basi cuneato inciso lobatoque sæpè confluentibus omnibus acutiusculis acutiusculè

dentate loba Usque, folns supenoribus ad ramorum partem uifere-  
norem breviter petiolatis oblongis acutis dentatis basi incisissimis  
que 2 segmentis minutis auctis, paniculâ ovati amplifi valdè com-  
posita glabrâ vel parçfe stipitato-glandulosi ramuhs trichotomis  
divancatis pedunculisque longis filiformibus, bracteis minimis he-  
nan-setaceis, calycis glaberrimi lacinnis oblongis obtusis latius-  
culè albo-membranaceis, corolla\* purpureo-lutescenti brevissimâ  
calycem vix excedenti, staminibus inclusis, rudimento ovato-ro-  
tundo basi breviter cuneato, capsula ovato-rotundi depressâ bilobd  
bitylo brevi rostrati calyce subduplo longior

Hab in faucibus *Guzel Der4* Cilicise. littoralis supri *Sedichig* cl  
Balansa Maio jam fructifera.

Planta 4-5 pedalis, panicula sesquipedem longa Folia inferiora  
cum petiolo 4-5 pollicana segmentis pollicem et amplius longis Flo-  
res illis *S heterophylla* vel *laantalm* pauld minores Capsula inflata  
piso minor pedicello etiam fructifero tenui 7-9 lineas longo suffulta  
Species inter omnes sectionis et etiam generis distinctissima panicu-  
lâ amplâ versûs basin ramorum tantùm fohosâ ob ramos ramulos  
et pedicellos tenues ferè capillan divancata, corollas tubo brevis-  
simo calycem non excedenti

SCROPHULARIÆ HISPIDULA Boiss (Sect *Tomwphylluvi*)

Scrub perennis pluncaulis caulibus erectis crassis simplicibus te-  
retibus fohosis glabris supernè in paniculam racemosam angustam  
elongatam aphyllam totam glanduloso-hirtam superne abeuntibus,  
folns glabris pallidè virentibus pinnatisectis segmentis lanceolatis  
acutè inciso-dentatis secûs costam mediam saepius decurrentibus  
radicalibus petiolatis petiolo costâque mediâ dilatatis segmentis  
lanceolatis obtusius dentatis, racemi ramis dichotomis cum flore in  
dichotomic flonibusque secûs ramulos omnibus sessilibus, bracteis  
linearibus calyces aequantibus, calycis glanduloso-papilloso lacinnis  
oblongis obtusis latè albo-membranaceis, corolla? purpureas tubo  
calyce vix longior labio supero elongate bipartito, staminibus  
longè exsertis, rudimento staminis quinti ovato-rotundo basi sub-  
cuneato, capsulâ minutâ globosa subsessili calyce terliaparte lon-  
gior acutiuscula breviter rostrata

Hab in schistosis faucibus *Guzel Beri* Ciliciae littoralis propè *Met-  
sim* cl Balansa Floret Maio

Habitus omnifl *Scr camnte* a qua appendicis forma abhorretet  
 procul a qua inter *Tomiohylla* collocanda juxta *Scr \$phoerocarpim*  
 Boiss et Reut in Comm Fl Grac Mss = *Scr filnfoltam var*  
*mnorem* Boiss pi exs et propius etiam juxta *Scr xanthoglossam*  
 Boiss Diagn quae differt glabntiepaniculffi, folnstenuiusdissectis,  
 labio supnore corollae appendiceque maximis

SCHOPHULARIA HELDREICHII BOISS (Sect *Camruv.*)

Sc bienms sgBpius pluncauhs, caulibus rubns obtusè quadran-  
 gulis parte inferiori foliosis simplicibus a mediâ longitudine in  
 thyrsum nudum laxiusculum abeuntibus, folns glabns pnmarns  
 infimis ovatis denticulatis cito evanidis cstens in lacinulas con-  
 tertas oblongas denticulatas bipinnatipartitis, inferioribus petiolatis  
 c<etens sessilibus lacmulis acatis, pedunculis patentibus rigidis  
 divancatim cymosis 7-9 lions minutè et sparsim glandulosis, pe-  
 dicellis calyce brevionibus, flonibus minutis, bracteis oblongis mi-  
 nutis squamiformibus, calycis glabn parcè glaDduloso-punctati  
 lacinnis orbiculatis membranS alM denticulatâ angustt marginatis,  
 corollâ purpureâ calyce subdupld long ion, filamentis exsertis,  
 sterili minuto oblongo-lmean, capsulâ minuta subglobosa calyce  
 dupld longion stylo longiusculo apiculata

Hab in regione inferon montis *Davros dagh* Pisidis cl Heldr  
 Maio 1845 sub *S filnfohd var mmort*

Erroneè ad *S filmfoham* adducta a qua prater minutiem florum  
 formd appendicis staminei longè dilTert Habitu et fohis 5 *Hoppu*  
 refert sed hæc differ! flonibus saltern dupld majonibus calyce tripld  
 longionibus, capsulâ dupld majon p\sum ferè sBquantu Ab omnibus  
*Se canince* formis radice non perenni, fohorum lacmiis minutis  
 confertis, flonibus capsulisque minoribus distincta

ScnoPHULARiA FLoniBUNDA Roiss et Balansa (Sect *Camna* )

Scr bienms a basi pluncauhs, caulibus glabns obtusè quadran-  
 guhs infern6 foliosis simplicibus in thyTsum densinspulum elon-  
 gatum abeuntibus, fohis glabns glaucescentibus pinnatipartitis  
 inflmis longmsculèpetiolatis segmentis ovatis obtusiusculè dentatis,  
 iTermediorum partitionibus oblongis in lacinulas tngulare\*



acutas confertas dissectis, supenonbus se<sup>^</sup>silibus abbreviatis dit<sup>></sup>sectis, peduncuhs numerosis erecto-patuhs bracteishneanbus longmsculis basi stipatis 5-12 floris parcè glandalosis, pedicelhs calyce subbreuionbus, bracteolis hneanbuscopiosis, flonbusminutis, calycis parcè glandulosi lacinus ovato-oblongis membrana alba eis aequilala" denticulate acutiusculâ vel obtusâ margmatis corollU calyce 2 7«pl6 longion extûs purpureâ margine lnttis flavâ, labu supenons lobis rotundatis basi angnstatis rubns lat6 flavo-margi-natis, filamentis fertilibus parte exsertâ corolls saltern sequilongis, appendice minimâ linear breuissimd, capsulis ovato-rotundis longiuscul6 mucronatis calyce subdupld longionbus

Hab. propfe *Smyrnam* m agns derebclis Boiss 1842, ID colbbus calcareis Salansa pi cxs 1854 N° 338, in Asiâ minore loco non notato cl Aucher N° 4777.

Caules pedales vel paulô longiores a parte quarts inferiori flonfen, folionim laciniae eis *Scr canines* mmores etpraBsertim multd magis abbreviate, raim florales magis abbreviati et ided magis confertiflon, corollsB et capsule fer6 ejusdem magnitudims. A *S canwd* et ejus formis prsler folionim divisionem distinctissima calyce latissun6 scanoso, corolls labio superior longion magis porrecto, filamentis saltern dupld longionbus. Species pulchella

DIGITALIS CAHIENSIS BOISS in Pinard pi exs 1843 (Sect *Globiflorm*)

D. perennisbasundurata saepiûs pluncaulis caubbus glâbrisalbidis foliosis crectis simplicibus nervo medio folionim decurrenti tenuiter et elevatim hneatis, folns linear-lanceolatis glabns basi seasih semiampleiicauhbus apice attenuato-acuminatis nervo medio albido subtûs prominenti, racemo terminal! obloDgo-conico densmsculo solitario vel racemuhs minonbus ex axillis supremis stipato, bracteis lanceolatis acumioaUs calycem eequantjbus ut et calyx rachisque racemi sub lente breuissun6 pruinoso-puberulis, flonbus subscsibbus, calycis segmentis oblongo-lanceolatB mucronatis prater indumentum pruinose breviter ciliatulis, corollao pnbescentis calyce subdupld longions tubo supernè ampliato lacinia Inflma oblongo-spathulatâ obtusâ

Hab in Canft (Pinard)

Var *Heldreichu* — Flores ommnti sessiles, racemus paul6 longior laxmsculus

*D Heldreuhu* JaubelSp Illust pi Or ronolâadD *Orientallem*  
Hab in Pisidi«i in monlibus prope *Egirdir* cl Heldr PI exs 1845 sub *C Onentah*

Caules 1 <sup>1</sup>/<sub>i</sub>~2 pedales Folia inferiora 4-5 pollices longa 3-5 lineas lata Racemi 2 <sup>1</sup>/<sub>\*</sub> in vanetate 3 <sup>1</sup>/<sub>»</sub> pollicares Flores eis *D lutecB* breviores, llhs *D Ortenlahs* vel *lanata* dupld saltern mmores Ambo insuper a nostri specie inflorescentiA glanduloso-villo<£ differunt *D leucophtea* florum magnitudine allinis differt folns In-fenonbus latis, innorescentij villosâ<sub>3</sub> bracteis flores superantibus Hanc speciem ohm *D Oriental* nuhi tune fructiferft tantum nolâ pro hujus forma habui

ANTIRRHINUM LINKIANUM BOISS et Reut (Sect *Anthvyn htnastmm.*)

A perenne cauUbus in femê suffrutescentibus erectis flexuosis infernê glabratis sup ernê glanduloso-viscosis, folns oppositis breviter petiolatis ovato-oblongis vel oblongo-lanceolatis glabns obtusmsculiSj florahbus valdê diminutis ovato-rotundis sessihbus, racemis demum elongatis laxis, flonbus pedicelhs glanduloso-hirtutis calyce longionbus sulTultis, calycis densê glanduloso-tomentelli partitionibus Inacqualibus ovatis obtusis, corolli purpurefl tubo calyce mult6 longion, capsulS ovatâ glandulosa calyce tertiS parle longion

A *latifohum* Link et Hollmanscgg Fl Portug tab 50 non L

Hab circâ *Olmtponc* Link et Hoffm , in petrosis circâ *Cntra* cl Guthnick

Affine A *latifoho* ab eo specified distinctum videtur fohis brevionbus, racemis elongatis, et praBsertim flonbus non sessihbus vel subsessilibus sed pedunculis longmscuhs suffultis Corolla color pra3tereâ purpureus nee ut in A *latifoho* flavus capsulaeque a me immaturae visae tamen minores brerioresque esse videntur.

ANTIRRINUM FUGAX BOISS et Noe (Sect. *Oronlium* )

A annuum nanum papilhs brevis sparsis cnsps hirtum, radice fibrosfl, caule brevissimo simplici, folns infimis oblongis caetens

oblongo-linearibus hinc omnibus obtusis basi longè in petiolum attenuatis, foliis 2-3 axillaribus sessilibus, calyce ferè ad basin usquè in 5 lacunas submaequales lineari-lanceolatas inferè attenuatas foliis similes corollam multò superantes obtusiusculas partito, corollam flavam tubo angustiori basi non saccato labio superiore planiusculo bifido paulò longior, palato velutino intensius flavo, capsulam calyce tripliciter brevior apice truncate in rostrum eius tripliciter brevius apice acutius seminibus oblongis muculatis

Habit in alpinis prope *Ardana* Armeniæ meridionalis cl. Noë, Floret Maio

Causis in specimenibus multis, ubi probabiliter sæpè procehor. Folia inferiora cum petiolo 8-9 hinc longa 5 hinc lata. Calyx 7-8 hinc longus, corolla citò decidua 5-6 hinc longa. Capsulee immaturae dehiscunt non obserrare potui. Forma corollae potius *Linace* quam *Anthirrhin* sed calcar nullum. Species distinctissima quoad herbam et radicem arinam *Otontio* adnumeranda sed semina non later? altero concava

LINARIA ~~Bomb~~ **BOMBICMA** Boiss et Blanche (Sect *Elatmotdes*)

L. tota lanft conspicua bombicma caulibus humi expansis, foliis breviter petiolatis ovatis obtusiusculis basi truncato-subcordatis et utrinquè sæpè acutè unidentatis ramis sensim dumnutis, pedicellis calyce vix duplo longioribus, calycis lacinis triangulano-lanceolatis acutis, corollae (e sicco palidè violaceae) breviter extus hirtse calcar tenui corollam ipsam subsequenti, capsulam globoso-subcompressam lacinis calycinis subbrevior operculis laterahter dehiscenti, seminibus ovatis profundè reticulato-alveolatis

Habit in cultis cures *Saida* Syriae hitoralis Blanche! Gaillardot Fl An gusto

Species habitu characteribus et fohomm formam valdè affinis *L. lantgercelies* sed ab ea ut videtur distincta *L. lamgerc* Bindnsnensurf brevius viscidum non bombicinum canum, calycinae lacinae angustiore sed calcar inervum. semina saltern dimidiat) minora minutissimè tuberculata

Li\ut!V ruiALiv Uuiv, ct BaUnsa (Sett *Linanasl'nmiSpe-*  
*ctosw* )

L perennis glaburnma radice crassfi, caule rigido crasso tereU  
fohoso reclo infernō simphci&simo parte suponon paniculato, ra-  
mi«. stuctis virgatis tenmbua longi^, surculis stenlibus longps sub  
anthesi cx.'it-catiss, ioliis> lanceolatis se««silibus basi subatlenuati^,  
caiihnis e bdM &cmiaimple\icauli ovato-lanceolatis acutis a  
basiad apicem diminuLis) uilcivallosuo longionbus, rameis valdfe  
dimmulis, (lonbui. brevi',sim& pedicellatis ad ramorum extremi-  
tatem racemos longos teimes laxisbimos formantibus, bracteis  
tiianguldnbns brevistimLs squamseformibus, calycis glJbn carno-  
suli partitiombus oblongis aniLis, corolU flavd concolon brevi, pa-  
lalo hirto, labio supenon sublongiori, calcaie subinilexo loiigitu-  
dine calycis, capsuhs ovato-rotundw calyce sublongionbus, semi-  
mbus tnquclris minulē tuberculatu.

Ilab in faucc *Guzel Derd* supri pagum *Kechhek* non procul a  
*Menwa* in Cilicii luiorali cl *Balaiiba* Floret Junto

Cauhs cylindncu's crassilie peunae ansennic 4-3 pcdalis Rami ^e-  
mipcdriles, raceim pedom dimidium cl ampliūs lougi Surculi sle-  
nles ascendenlos pedcm et ainplnā longi Folia inieriora sesqui-  
polliccm longa 0-7 hneas lala FJores magnitudims eorum *L*  
*genistaejolKt* sœd brevioicact prdserUm brevis calcarati Capsula  
eis hujus \*»pccu»i minor Huic speciei atiiiiis distmctissima sur-  
culis stenlibus, caule piocero interne hiuplicishimoi folns latio-  
ribus, llonbu'i brevionbuss valde disbilis subsessihbus, calycis la-  
cmiis oblongib nee lanceolatis, calcare brevissimo

Ob'. N° 1 *L Cwlesyruica* Boiss Diagn e\ novis ultenonbusque  
^pociminibas a <I Gaillardot missis, a *I AucUn* non specific  
diffcit, color palati character but hrnu> non videtur *L Auchen*  
a *L fasligiatd* calcare brevissimo semper distincta videtur Folia  
latitudme in ulrflque variant

Obs N° 2 *Unarm* (*nthirrhmoides* Cosson in pi Bourg Hisp  
1852 N« 1633 ost *L Cumnillesn* Ghav Monogr = *I tnphylla*  
Cav IconII,ldb 179 nou Mill

TjN\ nu BVIANSE Boiss nl Reul (Sect *Ltnai taMrum Spenosee* )

L perennis glaberrima a basi mullicaulis caulibus decumbentibus a basi ramulosis, foliis inferioribus lanceolatis subtinnerviis caelens angustè hinc lanceolatis uninerviis omnibus acutis, floribus laxè racemosis, pedicello calyci subaequilongis, bracteisque neari-lanceolatis pedicello sublongioribus lacinis calycinis linearilanceolatis acutis, corolla sordidè flava strus rufescentibus reticulate, palato concolori hirsuto, calcarè obtuso pedicello vix longioribus, capsula subglobosa calyce longioribus, seminibus angulato-subulatis ad faciem tuberculato-corrugatis

Habit in *Tauro* circa *Bulghar Maaden* et *Balansa*

Hanc speciem et specimen sicco pro *L. genishfolia* habueramus sed specimina culta cum *L. genishfolia* vivi collata notas differentiales graviores praebuerunt. Caules diffusi sunt nec erecti, tenues a basi ramosissimi, folia inferioribus exceptis ahgubtiora linearilanceolata saepè subfalcata, liores tertia parte minores, calcarè brevius nec apice attenuatum, corolla fusco-reticulata nec ut in *L. gemstfolia* omnimodò concolor, capsula calycem superans nec eo subsuperata. Stamina angulos habent in alas magis productos

LINARIV PELOPONNESUS BOISS et Heldr (Sect *Linarmstium Speiosa* B<sup>th</sup> )

L perennis glabra vinctis, surculis atenibus nullis, caulibus descendentibus erectisque crassiusculis normalim foliosis superioribus simplicibus simplicibus paniculato-ramosis ramis plus minus stictis, foliis angustè linearibus elongatis erecto-patulis, racemis terminalibus densis oblongis, pedicellis calyce brevioribus basi squamula triangulari suffultis, calycis minimi glabrae partitionibus ovatis obtusis angustè membranaceo-marginatis, corolla lutea palato concolori hirsuto, lobis aequilongis, calcarè recto apice tenui corolla sequilongo, capsula ovato-rotundis parvis pedicello stictico insidentibus calyce subtriplo longioribus apice densibus dehiscensilibus, seminibus nigris angulato-triquetris minutè tuberculatis

Ilab in pa&cuis savors *Taygeli* ad *Megah Zonana* et *Hagios Paraschevy* cl Holdr 1814, m monte *Malevo* Laconiae cl Orphamos. '.

Caulos bi vel Uipedalcs in planlis cuHis eliam procenores, in alpims autem humihores simpliccs Folia iVa-^pollicanal-IVilincam lata Florcspaulf) minores eis *L gemstifoUit* cm accedit et a quà praetor fin mam foliorumetracemosdensissimosneclaxosdifcrt cah co minimo lined dimidift vix; longionlacinus obtusis, capsulac diraidi6 minoros Ilanc piantam pnus habuimus pro *L timfohd* L sod IIIOC species malè nota et omnind dubia dcscriptionibus nostram plantain non refert Cl Chavannes cjus racemum laxiusculum ct.?e dicit, calycfts acuminalos et Icon 422 in Rchb pi Cnt nostro sensu *L Italcam* rfert Noslrse plantae semina sub *L SibthotpmncB* nomine cironco botanicis hortis commumcata fuorunt

LL\AniA PAR>AS!SIUV BOI^I ot Heldr (Sect *Linai lustrum Sprewsip* **B<sup>th</sup>** )

L pcTcmih caulibus plunbus basi procumbenlibus vol ascendentibus glabris confortim fohosi^ surculis stenhbus nullis vel caulibus flonfens similibus brevionbus, folns glabrib Iset6 virentibus anguhte lincanbus JCUUS, raccmis terniinalibus densis ovato-capitatis dcui oblongo-cylindncis, pcdicellis brevissimis bracteis-que oblongis.pubpsc3iiti-hirL^, flonbus pallidò flavis concolonbus, cal>ci!. partitioinbai lineanbub obtusis glanduloso-lnrrib, Iabns subEEquilong^, palatohuto, calcaro recto acuto corollam aequanti, capsiihs ovdti-\* in bpicam densam conferlis caljce dupl6 longionbus, somitubus oblongis triquetn^ tuberculatis,

*L Sillfioipunia* Boiss ct Heldr pi e\s olim

Halt in lcgione alj)ind *Paniassi* Spruncr t Holdrcich ' in regione sjlvalicA ot alpiua *Olijmpi Ihessukcl* Holdreich

Caule^ 'a-1 pcdalca, folia 1-2 poUicana hneam lata Habitus et floiessL *supuuv* \, \v *p'jrenaicce* a quà cseterim seminibusnon discoideis longc diktat A *L Pelopoiinesiard* distmctissima calyce 2 lineas lonjjo **lurto** laciniis lincaibus, raccmis abbreviate, etc Ilnu spnoi tnbiiionrtdin PSSO Iconem 301 Floia<sup>1</sup> Grircae =*Ant*.

*stnclum* a plants sicula ejusdem nomims nostro sensu diversum pnmùm autumavimus el sic *L Sibthorpiana* nomine salulavera-  
mus, sed loci a Sibthorpio citati ab eis nostrae plants diversissimi  
sunt et sic do simihtudine earum plantarum non omninò certi  
sumus

LINAMA ASGALONICA Boiw ot Kotschy (Sect *Linanastrvm* )

L annua glabernma caule erecto ramoso ramis erectis flexuo-  
sis, surculis stenlibus abbreviatis, folns breviter linean-oblongis,  
folns cauhms rameisque sparsis filiformibus elongatis, floribus in  
racemos terminates paucifloros laxissimos dispositis, pedicellis  
reclib calyci sequilongis bracteo!4 linean eis brevion suffullis,  
calyce glabro ad basin usqu6 in segmenta linearia membranaceo-  
marginata partito, corollaB flavae calcare tenui recto calyce sesqm-  
longion, pdlato concolon barbato, capsulâ oblongl calycem exce-  
denti, semmibus mirnmis nigns transversè corrugatis

Hab ad *Ascalon* PaliEstinsc cl Kotschy

Species habitu aflinis *L Hmlavm* Chav , floribus mihutis flavis *L  
flavcB* Desf, propè eas collocanda *L Hcelava* differt floribus dupl6  
majonbus violaceis breviter et densiusculè racemosis, capsuhs  
ovato-rotundis, etc *L flava* distinguitur folns ovalo-oblongis bre-  
vibus, racemis subcapitatim 1-& flons, capsule breviter ovald

VERONICA. LYSIM\CIHIOIDES BOISS (Sect *Beccabunga* )

V perenms glabernma caule ela to recto fistuloso ex axillis etiam  
niferioribus ramigero in paniculam amplam ex racemis longis  
axillanbus oppositis ortam abeunti, folns vindibus oppositis ses-  
silibus cordato-amploxicaulibus lanceolatis acutis mtegnis vel ob-  
soletiasimè crenato-dentatis, racemis ferè a basi floriferis demiim  
longis densis erecto-patulis, bracteis linean-setaceis pedicello bre-  
vionbus, sepahs oblongo-lanceolatis acutis corolla mveft brevion-  
biiB, staminibus exsertis, capsula pedicello stneto subincurvo bre-  
vion ovato-ellipticft retusa† calyce sublongion stylo eBquilongo  
superatâ

V *anagallotdes* Boiss pi Annt oxs non Gu<sup>h</sup> B<sup>h</sup> in DC  
Prodr quoad pi Anatolicam

Hab in Lydia" ad aqua> circâ *Laodteam* Boiss Jun 1842

Planta 2-3 pedalis, folia infcnora tres pollices longa 6-8 lmeas ldtâ hupenora sonsim. diminuta Racemi fructifen densissimj 3-4 polhcares Species pnmo mtiutu a *V anagalloide* quam forma capsule refert racemis longis deiibissimis distincta *V anagalloides* msiipcr hahct bractcas ohlongas, pedicfllos patentes, calyces corollas ajquantcs, stjlum capsulam dimidiara wx EcquanLem Racemi (lonfen et\*n omnibus partibus multd minores eos *Lys dnbve* referunt

Obs *V oTijcarpn* Boiss ost *V Mirhuuxn* Lam monontibus cl Jaub ct Spach — *V pusilla* B<sup>h</sup> in DC Prodr saltern quoad speuraina TFriflitluana c>t *V montwides* Boiss in Kotschy PI Pcrs '1815 DC Prodr

VENONIC\STENonoTn\s Boiss ct Blanche (Sect *Chamadrys Penlasepake*)

*V* percnnis cauhbus a^cendentibus curvatis pills cnspulis **dens6** hirlis, folns breviter poLiolaLis ellipticis ol)tusmcahs acutiusculè inciso-dontatis ad margincs ct subLus ad nervos sparsim hirtis, supremis lanceolatis acutiùs incisis, racemis 2-1 ex axilhs supremis brcviter pedunculatis longis etiam per anthesm laxis cnspulè hirlis, pedicllis cal>cis longitadine basi bracteâ sctaced paulò breviori stipalis, caçcis dens6 hirbuti lacinus quinque lineanbus quintfl multô miiion, capsulâ ovato-elhpticS emarginati stylo longo superalJ lacinus calycinis brevion

Hab in *Libano Benjtemi* circ<i *AmBerM* cl Blanche

Caules 4-8 polhcares Racemi fructifen 6-8 polhcares, folia intermedia polhcem ferè longa 5-6 lmeas lata Ab afflni *V lato-folia* differt folus DOH sessilibus, racemis fructifenslaxionbus, calyce et capsulâ valdè Uirsutis *V leiocarpa* affirm quoque habita et racemis laxit. differt prtctcr glabntiem capsulS rotundato-obcordata nitidâ margine incrassaia

VERONICA AHMENA Boiss et Huet (Sect *Chanupdrys Pentasepal<e*)

*V* porcnnis lln/nrnjlc su(Tniio^centi miilticanli, caulibiw pu-



ramulis procumbentibus erectisque foliosis pubes tenuissima prumosissimis, foliis laevibus viridibus tenuissimè scabridulis\* sessilibus & brevibus. Inflorescentia racemosa hinc inde revoluta ad basim usque pinnatisectis, racemis 2-4 ex axillis supremis breviter pedunculatis\* floriferis densis tandem laevibus semper abbreviatis, calycis lacinis quinque oblongis obtusiusculis parvis baccatis glabrisve praeter quintam brevioribus subaequalibus, corolla in lobis azurca, pedicellis fructiferis filiformibus patentibus deflexisve bracteolae dimidiatae breviter elliptico-lanceolatae suffultis calyce in pediculis longioribus, capsula pedicello apice arcuato erecta glabra obtusè obcordatè transversè latiori stylo longo basi incrassato superata.

Habitat in Armenia montibus *Terhdagh* prope *Erzeroum* alt. 7-8000' cl. Huet du Pavillon.

Planta densè caespitosa 4 pollicans, foliorum lacinae 3-5 lineas longae. Habitu *V. lenutifolium* MB referens quae in Armenia quoque crescit sed ab ea et omnibus affinis distinctissima pedicellis fructiferis tenuissimis patentissimis inflorescentiam *V. acivafolus* quodam modo referentibus. Lacinae foliorum praeterea multò tenuiores *V. parufolia* B. in DC. Prodr. an Vahl? ex monte Sipylo a nostra specie eisdem differunt notis et differt in calyce 4 partito.

VERONICA ORIENTALIS Ait. var. *tenuifolia* Doiss. et Noe

Gaulis et rami inferiores longè denudati lignosi. Folia praeter inferiora obovata obsolete 1-2 crenata longè hinc inde integerrima margine subrevoluta. Bractea et sepalae lineares-siliceae.

Habitat in alpinis ad *Bakker Maaden* Armenia? meridionalis cl. Huet du Pavillon.

Planta pedalis et ultra parte suffruticosa caulis 6-8 pollicans. Folia intermedia 10-12 lineas longa sesquilineam lata. Forma vulgaris differunt caulibus longè denudatis hinc inde rectis, foliis angustis, bracteis et sepalis non lineari-oblongis sed intermediis in eam transit. Varietas glabra et nudata brevi conspuit hirta.

VERONICA AUSTRIACA L var *Assoana* Boiss

Folia in lacrimas tenuiores saepe hinc-setaceas bipinnatisecta.  
Capsula breviter puberula ovata apice emarginata calyce longior  
*V tenuifolia* Asso Arrag tab I non Slev

Hab in Hispania; Arragonia circa Akamz amicis prof Colmeiro, in CastellA prope Villmueva de la Vera herb Pavon

Planta saepe pedalis, folia in speciminibus Arragonicis tenuissimè incisa, in Castellans lacunis sublationibus sed semper eis *V Austriaca* Europaeo-Orientibus et apice non dilatatis donata *V mullifida* L et *tenuifolia* Stev quae probab eandem speciem sis tunc capsula obcordata transversè latiori a rostrata plantis longior dilata

VERONICA NOBILIS DOISS (Sect *Climadryas strictiflora*)

V perennis mullicaulis caulis fohosis glabris supernè tantum pilis minutis adpressis conspiciendis, laxis sessilibus oblongis acutis acutiusculis crenato-dentatis seeds margines subrevolutos et parcius utraque facie tuberculato-lobatis caeterum glabris, floribus linear-lanceolatis integerrimis, racemis 4-6 oppositis ex axillis superioribus corymbosis pedunculatis per anthesin densissimis, pedicellis calyci sequilongis bracteâ squilongâ elliptico-lanceolata suffultis, calicis lacinis quatuor elliptico-lanceolatis acutiusculis margine scabridis duabus minoribus, quintis minimè rarsissimè occurrenti, corolla (pallo caerulea?) calyce sesquilongior, ovano glabro elliptico stylo longo apiculato

Hab circa urbem Iharbehr in Noe Flor Maio

Gaulis 6-8 pollicares, folia inferiora 10-12 lineas longa 5-6 lata, racemi cum pedunculo per anthesin 3-4 pollicares Habitus *V latifolia* a qua praeter folia minorâ diutius indumenta peculiariter tuberculato-scabundo, ovano elliptico uterque nee ut et in *V. Onmlah* et *teimo* obcordato Eadem nota a *V leiocarpa* Boiss. discedit.

VERONICA ALEPPICA Boiss (Sect *Chamadrys Stnctijloue*)

V perennis basi suffrutescens cauhbus parte inferiori procumbentibus asc en den tib usque indumenta intertexto cams , folus oblongo-lanceolatis basi attenuate sessihbus argutè dentato-ser-ratis dentibus triangulanbus ascendentibus, supenonbus lanceolato-lineai lbus minùs profundè dentatis omnibus indumento cnspo canescentibus, racemis 2 ranùs A ex axilhs supenonbus opposilis pedunculo nudo suffultisfractifens longissimis tenuibus, pedicelhs calyci aequilongis bractea hnean eis aequilongfi vel brevion suffultis, calycis canescentis lacinns quatuor lanceolatis duabus brevionbus,capsuia pedicello stricto suffulU hirsutl orbiculatd obtusè emargmatd calyce subbrevion stylo Ion go superaU

Hab in sylvaticis montis *Casm* Boiss a circa *Aleppvmo*,\ P Johannes ex; Blanche

Caules seiru pedales. racemi flonfen bipol lie arcs fructiferi semipedales Folia majora pollicem longa 4 hneas tantùm lala. Species hucùsque confusacum *V pechnatd* L quae dilTert dentibus fohorum lineanbus obtusia&culis regulands pectinatis et praesertun racemis infernè sects pedunculum ut jam Linnaeus rectè observavit fohatis nee nudis, capsulà profundius et acutè emarginatd

VERONICA TEUCRIOIDES BOISS et Heldr (Sect *Chammdiys Stuchflorte*)

V multicaulis cauhbus tenmter filiformibus dilTusis basi procumbentibus laxiusculè fohosis bisenatim et hreviter hirtis, folus glabns breviter petiolatis oblongis basi cuneatis obtusis uLrinquè obtusè 2-3 crenatis glabrmscuhs summis hneari-elhpticis, racemis 1 ranùs binisex axilla intermedia pedunculatis brevibua pauonoris per anthesin densis caulem superantibus, pedicelhs tenuibus calyci aequilongis basi bractea elliptic a eis longion suffultis, calycis glabri lacinns quatuor elhptico-hneanbus oblusiusculis duabus minonbu^ corolla caerule.1 calyce plùs duplò majori, ovario glabro orbiculato apice m rctuso stjlo Ion go superato

Hab in pratis alpinis *Olympt Thr&mh* ad nives cl Heldreich Floret fine Juln

Cdulos nul potius rann 2-3 pollicarc&, folia inferiora 3-4 lineas longa 2 lata Flores magnitudinis eorum *V teucni* Species a *V feiicno el Oentah* prater calycem 4 nec 5 partitum caulibus et raimis tpnniter filiformibus bifanara pilosis, racemispaucifloro, etc distmctissima, propiùs affinis *V Tymphrestece* quae differt ramis crassionbus abbreviatis densis foliosis undiqnè tomentellis, foliis sessilibus tomitellis, bracteis ovatis, ovano lomenlello

VERONICA suncuLOSA Boiss et Balansa (Sect *Chamsdryes Stnctt-flore* )

V pcienms radice fibrosS caules numerosos parte inferiori subterrinoi. vel prostratos nudos tenues surculiformes fragiles edenti, larnis ctspitosis erectis brevissimis dense foliosis dense hispidis viscidis, foil is luspido-lomenteis vi^cidis pallid^ virentibus oblongis vel oblongo-lanceolatis basi cuneatis sessilibus vel breviter petiolatis utnquè 2-3 obtusè crenato-dentatis dentibus subtùs margin e revolutis, racemis ex axillis supremis paucis breviter pedunculatis pauciflons cliam fructifens oblongis densiusculis hispidoglaiuhiosis, bracleis oblongo-hneanbus integns pedicellos squantibus, calycis glandulobohirti 1 acinus 4 oblongis obtusis, corollil azurci calyce dupld longion expanse, capsule pedicello stneto & j bublongion suffulta hirtfl compressd oboordata transversè sublation ba^i cuncatd calyce sublongion lobis rotundatis

**Dab m region? alpmâ Taun Chientahs suprâ Bulgarmaden cl Balansa**

Species prim! fronlc ob racemos ex axillis supremis ortos speciebus alpinis e sectione Veronicastro, *Y cmpitom*, *thymxfoUce* affinis scd accuraliùs inspectis racemi laterales sunt et ideò in Sect ***Chammhy juxta V Tymphresteam, V cuneifoham collocanda*** (audicuh tenups herbacn , rami foliati vix polhcem longi, folia cum petiolo 6-8 hneas longa 3-3 1/5 lala , racemi cum-pedunculo polhcares densi, capsulae apice 2 lineas latse *V cuneifolta* nosirae speciei magis a (inis et Taun quoque incola differt ramis elongatis laxiùs follow minùs fragilibus, folns obovato-orbic^anbus crenis minonbus copiosionbus, racemis longiùspedunculatis tandem la-  
vis, capnmM mm (is profund^1 obcordata, indumentonon viscido

VERONICA UOMDYCINA BOISS et Kolschy (Sect *Veioomcastrum Perennes*)

V. perennis caespitosa caudiculis brevibus conferbs fragilibus tola mdumeDto brevi bombycino mvea, folus minutis oblongo-spatulatis secûs ramos brevissimos confertis, racemis 1-5 floris terminalibus breviter sessilibus basi folus summis suffultis, pedicellis rectis calyce brevionibus basi bractei minutâ ovati suffultis, calyce cano in lacinias oblongas oblusas partito, corollas rubraj calyce plûs dupld longioris. lacimib ellipticis acutiuscahs, capsuU calyce subbrevion tomentosi compressd subrotundd apice obiusissimo retusi

Hab in rupestribus Aquilom expositis monlis *Makmel* Antilibani cl Kotschy

Planta nana fragilhma folus dcn<sup>è</sup> confertis 2 huedb circiter longis *V wspitosce* Boiss affinis a quâ Indumeiilo et forma folioram egregiè differt Flores ut in eJ pro plants minutie magm

VERONICA SARTOHIANA BOISS et Heldr (Sect *Vermicastiwn Annu,*)

Y annua pilis patulis viscidulis hispidula, caule erecto pumilo simplici vel ad basin inflorescentiae ramulo uno alterove aucto, folus brevi&simè petiolatis ovatis obtusis basi subcordatis obtusè crenatisJ flonibus 5-9 terminalibus laxiusculè spicatis, folus floribus oblongo-linearibus integris basi attenuatis pedicello sublongionibus, pedicellis calyce sublongionibus, sepalis elhptico-lanceolatis maequalibus capsulâ sublongionibus, capsulâ obcordatâ margine cihatâ ultrâ tertiam partemsmuacuto emarginatd lobis obtusis, stylo emarginaturâ paal6 brevion, semibus plains

Hab in Graecia Sarton, ID monte *Parnes* Atlicae versûs cacumen in consortio *V arvensis* Heldr. Floret Junto

Taldè affinis *V arvensis* quacum credit ab eâ tamen facilè dignoscenda omnibus partibus majonibus, inprums pedicellis calyce longionibus nee brevionibus, bracteis minûs hncanibus, sepalis magis msBqualibus, capsuU piofunditûs bilobâ

VLUOMLA IXODHS Boisis pi Bdl (Sect *Vvionua&ti tint Annitu?*)

V anima tota pilib glandulosis hispida a basi ramosa, folnt, m-ferionbiis ovato-oblongib nitegommis basi attenuate obtusis sessibus, ramis frè a basi flonfcens racemos longos formautibus, folus> florahbus miononbus oblongis basi attenuate supenonbus lineanbus pcdicellos a^quanlibus, caljc^ glanduloso-hirti lacmiis ovato-oblongis acuti>, corollâ alba miiiunj lacinus ovatis obtusms-cuhs calycem pdrim oxccdenLi, anthens mgricantibus, pedicellis fruclifcn>>> arcuate capsulâ vn lontjionbus, capsulâ margine cilia- tulâ cdljce sublon^iori ullrj medium bipartite transverse latiori loculis obovalis vix divorgenlibus sinu anguslo scjunctis^, stylo locubs dimidiu brovjon, semmibus oblongis utnuquè convexis

Hab in regione alpinâ montis *Masmeneu Dagh* in vii a CihciA ad *Cmaream* sill cl Balansa Fl Julio

Inter *V annifoham* el *V Reutenanam* intermedia Prior differt foliis dcnliculatis, podicellis rectis, stylo lobos capsula) sequanti, toiolhs dupl6 majonbus, posterior pedicellis magis palenUbus, **capsulæ** loculis divaricate

VUIOMC\ GLMIMIRHK Boibb olBalansa (Sect *Yeromcastrum Annuce* )

V anuua nana glbberma simplex vcl e collo ramosa ramis a basi florifens racemos densos brevissimos formantibus, folus versùs basin caulis paucis parvis oblongis integns basi attenuatis, floralibus elhpticis hnearibusque basi angustatis pedicellos fructiferos superantibus, calycis lacinus oblongis obtusis, corolhs. } pedicellis fructifern incurvis capsulM erectâ vix longionbus, capsulU glaljrJ bübcompres<?â didymi transversè latiori calyce sublongion ad<sup>a</sup>/s usqu6 li\*.\$& lobulis contiguis rotundatis, stylo loculis subtripld breviorij semmibus oblongis utnnquè convexis

Hab in regione alpinâ *Taun Cilma* suprâ *Bulgarmaden* in pratis humidis cl Balansa qui legit fructiferam fine Augusti.

Plantula pollicans, capsule eis *V tmnifohcp*, ferè minores et prassertim magis turgidee, ab eA et *V ixode* afllnibus diflerl praiterei gldbntie, racemis densis nee laxis, emargmatursc smu angusLion

**VERONICA** HISPIDULA Boiss et Huet (Sect. *Vetonkastrum An-nute* )

V annua caule pumilo filiformi pared fohoso cum folns glabnusculo supra folia supenora m racemos tres vel plures erectos denwfloros corjmbosè partito, foliis parvis integris in petiolum brevissimum attenuatis inferionbus ovatis supenonbus oblongo-ellipticis oblusis, mflorescentia" omni glandulis stipitatis hispidulfi, flonbus minutissirais, calycis lacimis 4 ellipticis obtusis glandulosis, corollJ azureA calycem vix excedenti, racemis fructiferis elongatis den^is, pedicellis patentissimis apice sursùm recurvatis bractea\* lineari eis subbrezion suffullis, capsula erects pedicello breviori undiquè glandulosi ad <sup>s/</sup>« usqu6 bipartite locuhs oboratis divergentibiis caljce longionbus, stylo emarginaturd profunda ucuta quadrupld breviorc, semmibus oblongis luteis

Hab in arenosis prop6 *Erzeroum* cl Huet du Pavilion Fl Maio

Ab *V ammfolia* differt eisdemnotisac *V Reutmana* Haec nostrsB bpeciei magis atfinis differt capsua dupl6 majon, calycis lacimis ovato-oblongis, stylo dupl6 longion, semmibus duplò majonbus *V perpusilla* differt racemis laxis, capsulis calyci **æquilongis**.

VEROMCJI DIVAIUCATA Boiss et Dalansa (Sect. *Veromtastrum Amuce*)

V annua pumila rariùs simplex saepiii8 a basi ramosa caule ramisque glandulpso-hirtis, folns minutis oblongis inferioribus obsolete crenulatis basi subpetiolato-attenuatis, ramis ferè tots longitudine flonfens laxè racemosis, folns florahbus lmeanbus pedicellis breTionbus, corolla azurea calyce dupld Ion gion patents antheris nigris, capsulis pedicellis capillanbus patentibus rigidis apice sursùm curvatis eis subdupld longionbus suffultis glandulost-hirtis ad <sup>\*/4</sup> longitudims bipartitis locuhs valdè divancatis oblongis apice attenuatis calyce vix longionbus, stylo longissuuo sinum superanti, semmibus oblongis minmus utnnquè convexiusculis

Hab circd pagum *Ala Dagh* sex leucis ad septentnonem portùs *Mersmd* in Gilicid sito cl Balansa. Floret Maio

Pldiila 3-4 polhcario, folia 4-5 lmea& longd, racemi 2-2 '/\* pol-  
hcare% corolla e& V acinifohai major earn V Synacce subacuarib  
diametro tros ferè lineas lata Capsulae locuh angulo valdè aperto  
fere obtuso divergentcs basi linoâ dimidia" vix latiores et apice  
jngustali quo caractere hsec species a duabus suprâ nominatiset  
omnibus affimbus eximiè differt

VEIIIONKA CHAUBUIDI Bois>s el Rcut (Sect *Ompkalospota Sub-  
raceniosce* )

Y annua siccitate nigrescens tota pilis patulis cnspulis hirtula  
viscidula a collo saepms ramosa cauibus laterahbus patulis vel  
ascendentibus centrali erecto parle inferiori iterum patulè ramoso,  
folus ovato-cordalis obtusis radicalibus petiolo eis subsequilongo  
suffulLs oblus6 crenatis, intermediis breviter peUolahs argute den-  
tatis supenonbus sessihbus Inciso-dentatis^ omnibus supernfebre-  
vissimfe et sparsim tuberculato-hirtis infernè ad et inter nervos  
elcvatos papillari-liirsutis, racemis lenninalibus tandem elongatis,  
bracteis erectis oblongo-lmearibus basi attenuatis praeter infima&>  
integns, pedicelhs flliformibus hirsutis fructifens arcuato-de (le-  
xis capsulâ 6-8pl6 longionbus, calycis birsuti segmentis oblongo-  
lineanbus obtusis, corolla caeruleâ amplâ calyce 2-f/pl\*> latiorij  
antheris nigricantibus, capsulâ pendulâ glabrA compressâ ferè ad  
medium usque bilobS, seminibus magnis cyathiformibus

V *pedunmlans* Bory et Chaubard Fl Mor non MB

Hab in Pcloponneso circS *Navann, Modon, Calamata* herb  
Fauche"

Habitu omnind similis V *glauce* Sibth el Sm, — V. *Grecece*  
Sprun Attics mcols quam cl Bentham eamdem ac V *amwnam*  
Stev nobis ignotam esse dicit Ab Me specie V. *Chaubardi* non  
distinxeramur donee specimina fructifera a cl Despr^aux lecta in  
herb amiciss Lenormand nobis semina cyathiformia nee bicon-  
vexa prasbuennt V *glauca* a nostrâ specie insuper differt mdii-  
mento derision brevion glauco-pulverulento,capsulâ in pedicblllo  
refracto erectt1 apice vix retusd, seminibus multd minonbus V  
***Chaubardi* a V *bilobd, campylopodA* et alns sectionis suao longè  
didert V *pedunmlans* MB est planta perennis diversissima ex  
affinilate V *chanuudnfs***



PEDICULARIS AnMRN\ Boiss et Huet (Sect *Cyclophyllum* Bge )

*P. perennis* e collo 1-pluncaulis cespitosa, radice fibris cylindricis elongatis constant!, caulis nanis parce araneosis, foliis anguste lanceolato-linearibus pinnatisectis rachide latiusculi segmentis minimis brevibus oblongis pinnatifidis denticulis triangularibus acutis; foliis radicalibus petiolatis glabris caulinis teretibus vel quatermissis villosulis, spica densa ovata bracteis pilis longis conspicuis villosis nigrescentibus oblongis quippe breviter attenuatis obtusiusculis inferioribus margin e medio versus minute denticulatis integris, calycis oblongo-cylindrici membranacei magro-nervosi subtus praesertim parce et longe expansi laciniis triangularibus lanceolatis acutis obsolete eroso-denticulatis acutis subinasqualibus, corollas albae glabrae tubo vix incurvo labio superiori recto linearibus obtusissimo edentulo labium inferius subsequenti, filamentis supernis barbatis, antheris magis contiguis subprominulis, capsula

Habit in monte *Techdagh* Armeniae alt 7000' -8000' Floret Julio cl Huet du Pavilion

Caules 1-1 1/2 pollicares. Folia 8-14 lineas longa 2 lineas lata segmentis utrinque 5-12 mmulis Spica pollicem longa, calyx 4 lineas, corolla 7 longa Exaffinitate *P. Gadmetp* et *Caucasica* Ambo differunt floribus roseis prior iterum foliis bipinnatisectis latioribus, bracteis incisis, corollae tubo longe nec brevissime exserto, posterior spica interrupta, calyce toto hirsuto laciniis acule denticulatis.

PEDICULARIS RUPESTRIS BOISS et Orph (Sect *Comos*)

*P. perennis*, fibris radicalibus cylindricis tenacibus longis, collo reliquis petiolorum veterum vestito, caulis 1-2 crassiusculis foliosis parte superiori praesertim adpressis arachnoideo-lanatis, foliis petiolatis glabris ambitu oblongis bipinnatipartitis laciniis tenuibus minutis oblongo-lanceolatis dentato-pinnatifidis acutis, foliis radicalibus numerosis, caulinis superioribus subsessilibus, spica fructifera oblonga laxiuscule basi interrupta, bracteis inferioribus bipinnatipartitis superioribus anguste linearibus den-

culatis omnibus calyces superaniibus, calycis adpressè araneoso-lanati dentibus lanccolatis acutis integris latitudme sua<sup>1</sup> longionbu% corolla<sup>1</sup>, (luteo?) labio supenon falcato acuto suberojstn sub apice bidentato , capsuti oblongj acutfi obliquè mucronulata calycem vix cvcedenti

Hab in monte *Kyllene* supra *Livadi* et raonte *Ckelmos* propè *Stygem* cl Orphan 1851 et 1852, in regione alpini *Parnassi* cl Heldreich 1852 et cl Orphan 1854 Fine Junn jam fructifera

Planta infaustè especimimbus imctifens etreliquns imperfects florum descnpta sed speciem inter *Comosas* certè distmctam sistens Caules fructifcn 8-11 pollicares spici basi interrupta 3-5 polhcan terminati Floret 1-2 infenores ad axillas foliorum supenorum saep6 valdè dissiti Folia eis *P Fndenct* breviora sed magis dmsa Huic speciei inter *Comosas* lacinus calycinis elongatis accedens ab efl differt tpic3 interrupts, bracteis non mteger-nnis lmeanbiis sed Inferioribu'i bipmnalis pinnatisve supenon-bus denticulatis, capsula obliqu6 nee recte mucronati *P Greet a* Bunge e\ alpibui Graeciai quoque onunda et nobis descnptione tantùm nota differre videtur folns ambitu ovatis, pctiolo lato, spicfi densâ capitate

Obs *Euphrasia Armena* in pi Armcn Huelian 1853 ad *E Taiancam* Fischer ul vanetas glabnor calycinis lacinus brevius mucronatis capsulam subsupcrantibus reducenda est

#### MELAMPYRUM CILIATUM Boiss et Heldr

M caule supern6 oppobitè et longiusculè ramoso corymboso-paniculato ut et rari relrorsùm hirto, folns angustissimè linearibus integris margine scabndis tandem deflexis, spicis terminalibus Jaxis, bracteis ovatis in lacimas e basi lanceolate ciliato-acuminatas margine valdè cihatas area intermedia" sublongiores par-Utis lacimd intermedia alus mulld longion et lation, calycis tuba glabernmo lacinus e basi lanceolate setaceis subbre?ion, corfillae tomentella? tubo calyce subdupl6 longion

Hab in *Tliessald* Auch N° 1722, inter frutices serapervirentes ad radices *Olympi Thessak* cl Heldreich Fl Aug

Habitu el charactenbus afflnis *M barbato* ab eo differt folns caulinis ct ramei« angustissirai\ spicjs magis elongatis tandem tn-

pollicaribus lacuna bractearum lateralibus non subulato-ciliferis  
inibus ^pd lationbu^ longioribus caehis lubo glaberrimo nec  
hispido, labns corollso longiorim\*; superior infenorem longitu-  
rtine magis **superanti**

ODONTITES LINKIT Heldr et SAI Lori

O perennis. glaberrima caule suffrutescenti denudato ramos  
elongatos floriferos lucido& ahsque abbreviatot> stenos dense fo-  
hosos edenti, foliis anguste lineariibus acutis uninervis margine  
aculeolis lente tantum perspicuis sursum curvalis scabundis, foliis  
ramorum flonferorum patuh-> basi subaltenuatis superioribus dimi-  
nutis in brdreas senaim abeuntibus, ramulis oppositis elongatis  
virgatis paniculatis, flonbus secundis laxiuscul^s spicatis pedicelbs  
cahce dimidi6 brevioribus suffultis, bracteis lanceolatis acutis ca-  
Ivcm BBquiditibus subsaporantibusve, cal^cis glabn lubuloso-  
campanulati dentibus triangulanbus acutis tubo quadruple bre-  
vioribus, corollse lutesc labio ^upenon recto infenons lobib late-  
rahbus retusis, antheris inclusis mucronatis inter se land pared  
coherentibus, capsule glaberrimS

Hab in regione inferiori Parna^si prope' *Rachova* cl' Guicciardi  
o\ Heldr Floret Attgusto

Caulis hgnosus brevis crassilie pennse ansermse Rami flonfen  
J-2pedales Folia 1<sup>1</sup>/<sub>t</sub>-2 pollices longa '» lineam 2 lmeas lata  
Spicse florifera) sesquipollicares dein elongate Species pulchra  
^tatu^4 et caule suffruticoso *E Boceoni* refereni qia? longè differt  
fohis lalioribu^, flonbus confertis, bracteis cib.ilis'apiceincurvis,  
>taminibus rxsertis, antheris glabns



**DIAGNOSES**

**PLANTARUM ORIENTALIUM NOVARUM**

•ENFVA.—TTPIS HAIHhZ FT srMLTCHaftUT

DIAGNOSES  
PLANTARUM NOVARUM

PRÆFRATIM

**ORIENTALIUM**

NONNULLIS EUROPÆIS BOREALI-AFRICANISQUE ADDITIS

SERIES SECUNDA

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**N° 4**

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AUCTOR

**K BOISSIER**

Sci. Phys. (-Soci. Sciant.)

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**LIPSIAE**  
APUD B. HERMANN

**PARISIIS**  
APUD J.-B. BAILLIÈRE

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1859

## DIAGNOSES

### PLANTARUM NOVARUM HIC DESERTIM ORIENTALIUM

#### LABIATE

*MENTHA SYLVESTRIS* L. var *Kotschyana* Boiss.

Planta virens. Caulis erectus. Folia oblongo-lanceolata, obtusa, argute denticulata, utrinque sed subtus copiosius pilis densis brevissimis lente tantum perspicuis obsita, pagina inferior pallidiora. Spicis oblongis terminatis magnitudine eorum *M. sylvestris nemorosae*,

*M. Kotschyana* Boiss. in Sched. pi. KoUch. Taur.

Habitat ad fontes frigidos jugi alpini *Kosthnn Taint CiUan* alt. 7800 ft. Kolschy.

Hanc plantam indumento brevissimo, calyce intense violaceo insignem pro specie propria habueram sed nunc earn libenter polymorpham *M. sylvestris* adnumero.

*THYHUS ANGUSTIFOLIUS* Perle var *Chaubaidi* Boiss. et Heldr.

Caulis elongatus procumbens, rami longi erecti vel ascendentes, stemules longissimi serpylliferae omnes pubes breviter retrorsum pubescentes. Folia vicia, ovata, plerumque glabra, elevatim nervulosa, elliptica vel lineari-elliptica, obtusiuscula, in petiolum brevissimum apicem ciliatum attenuata. Verticillatae florum in capitulum ovatum basi saepe laxiusculum congesta. Pedicelli inferiores florum calyce saepe non breviores. Folia floralia oblongo-elliptica, nervosa, flores sessile, subsuperantia. Calyces plus minusve pilis parvis albis obsiti, labio superioris ultra tertiam partem in dentes a basi triangulari lanceolato-acuminatos partito.

*Th gUibtiiUto* Bon et Cliaub non Link el Hoffm — *Th (Ihau-  
UanhBoi<sup>^</sup> ct Heidi Ms>>-Orphan* Fl Graje exs N<sup>o</sup> 39b Heldr  
VI Gi exs ><sup>o</sup>2li9

Uab in regioue niontanJ et alpinfi totius *Grcectw* a *Taygeto* ad  
*Qlympum Tliessalup*

Caulea pra& trail sape peiiales cl ultra Folia majora 5-6 lineas  
tonga [ «/»-2 lata A *Th angushfoho* Per> differt folus majonbus  
Ijtionbus, Ljpifulis majonbus latiils bracteatis, a *Th Pannontco*  
glabntic, taulibus elongatis, ramis slenibus longfe repeatibas In  
dgmieue difficilUmo *Th serpyllh* novam condere speciem nouduum  
audem<sup>^</sup> propter specimina Turcica et Caucasica Gracte nimis af-  
fiiua, el quai Lransitus ad species suprrt euumeratas prasbere vi-  
detitui — *Th glabiatus* Link ct Hoffm Fl Portug tab 15 est  
ipsissimuis *Th chamadnfs* Fries

**THYMUS** OCHELS Hldr et Sart (Seel. *Serpyllum* BeDth )

*Th* suffrulosus humihs CEBspitosus, caule pro<sup>^</sup>trato ramosis-  
simo ramis radicanribus diffusis, surcuhs adpendentibus numerosis  
slenlibu\* abbreviatis, [ionferis longionbus omnibus inferne gla-  
bratis supernè pube paten to inprimis in flonfens densissimè  
cano-villo<sup>^</sup>, folus plan is ovato-oblongis basi s>pathulato-atte-  
nuatis obtusis utnnque setoso-villosis cinereis parcè glanduloso-  
punctatis subtus nervosis, inferioribus minonbus hinc inde gla-  
bratis, florahbus conformibus urns flores superantibus ca3tens  
caljcem aequantibus, verticilla<sup>^</sup>tns subtnflons in capitula orbi-  
culana termmalia conges tit, pedicelhs ralyce brevionbus brae-  
teolis lmeaibus setoso-ciliatis basi suffnlitis, calyce campanalato  
10-nervi purpurascenti glanduloso setoso-viUoso infra medium  
bilabiato, lobis longitudine subasquahbus supenon nsqud ad ter-  
tiam partem in dentes tres aequales ovalo-tnangulares acnmuiatos  
fisso, infenori verd ad basin usque in dentes duos linean-subula-  
tos, dentibus omnibus longe ciliatis, fauce dense albo-barbald,  
corolla hacinA hirsuta calyce dimidid longion, labiorum lobis  
patentibus rotundato-oblongis, gemtahbus exsertis

Hab in summis m *Ag Elta{Ockes\elemm)pT KarwtoEuhBa*  
d i Jun 1847(Sart)

Frnticlnhs cmspites raro pedales emittens, sarculi flonfen 1<sup>1</sup>/r



3 polheares, folia valdè in <pqualia, liunura 1 '/\* lin longa, ma-  
jora 3 Lin longa et 2 lin la la, capitula uuce atellana" mwora, (lo-  
res raagmtudine *Thijnn htrsU* MB

Species pubescentii selulosa omnium parlium et bracteis foln-  
rormibus flores superanlibus distmclissima 77\*. *Chaubardi* Boiss  
et Heldr in pnnus staturà majon, foliis glabratis racemis elon-  
gatis difterl, *Th Pmnamctu* All foliis hnpari-lanceolatis, labus  
calycims inaequalibus, *Th zygiouies G\Sh* folnsspathulati«; line-  
aribus\*, bracteis difformibus, *Th mteyer Gnh* folu» margine lan-  
tinn cilialis, floralibus dilTormibu^ etc iHeldr el Sart descnps  
Decembr 1852 )

TH\MUS ARGVÆUS BOISS el Ralai^a (Sect *Seipyllum*)

Th totus pilis albis brevibus dens-is vclulino-canescens, cauli-  
bus ramisque tenuibus mlncatis procumbentibus, folns minutis  
se&sihbus brevibus I mean-spa Ihul a Us obtusis prater indumentum  
velutnum parte mfenon cilns nonnullis albis obsili^ axillis fasci-  
culifens, flonbus m capitula terminalia subglobosa congests, fo-  
his lioralibus elhpticis calyces subtequantibus, pedicellis brevibus,  
catycis patuW et breviter albo-hirti tubo labus aequahbus xqui-  
longo, labio supenon lato ad medium in denies triangulares acu-  
tos diviso, infenon in denies subulatos partito, fauce dense pilosJ,  
corollae intensè purpureae tubo calyce sublonpon, filamentis bre-  
viter exsertis

Hab. in regione alpind montis *Argot Cappadocvp* cl Balansa

Gaales sufGratescenes prostrati basi radicanes saepè elongati  
Rami breves 2-3 pollicares Folia ramorum 1 '/\* - 2 line as longa  
V, - '/\* »cea3 lata Capitula avellanà minora Species indumento  
cioereo, foliis minonbns abbrevialis non elevatim nervosis a *Th*  
*amgtutifdn* formis distingue u da

THYHUS CAPPADOCICUS BOISS var *prumotus*

Totus ludumento breviasimo lente lautuiii per-jticuo pruinoso-  
casescens, folia obtraiora parciùs ciltata, calycis denies suprnorca  
vix ciUaU.

*Th pnitHomts* Boi& in PI. Anal Tchihatcli Ann < uaL

Uab in *Cappadond Onentahd* P a Tctuhatcheff

TIYMUS CILICICUS Bou>s, et Balansa

Th suffruticosus sub lente mmutissunè velutinus cauhbus bgnosis abbreviatis, ramis nomerosis abbreviatis erectis crebrè fohosis capitulo sohlano breviter ovato terminatis, fobs mteraudus mult6 longionbus sessilibus angustè lanceolato-subulatis acutis ngiduis subtnquetns margine albo-cihatis, axilhs fascicuhgens, folns florahbus oyato-oblongis altenuato-acuminatis multmerviis breviter-margine cihatis rubelhs corollas sequantibus, flonbus subsessihbus, calycis breviter hirti ultrd medium bilabjati labio supenon vix ad quartam partem tridentato dentibus lanceolatis, inferion pauld brevion in 2 dentes subulatos ad basin partito dentibus omnibus albocihatis, corollsB purpureae tubo calycem non excedenti, filinentis exsertis

Hab in collibus calcareis ad septentrionem urbis *Tarsous* in Ci/?«d sitis d Balansa Floret fine Junu

Suffrutex vix semipedalis Folia 4-5 hneas longa basi hneam dimidiam vel paulO amplms lata, floraha non longiora sed i 7,-2 lineas lata Capitula magnitudinis avellanas Calyx 2 hneas longus Habitus *Th capitah* a quo fohis et calyce a dorso non compresso bicarinato caeterum longè differt A speciebus sectionis *Pseudothpnbrts* tubo corolla? brevi ahena, species distincLissima

TH\MUS BILLARDIERT BOIS<sup>1\*</sup>

Th caulibus suffruticosis procumbentibus, ramis abbreviatis erectis pilis albis retrorsis brevibus hirtis, fohis elliptico-lmeanbus sessilibus utnquè atenuatis margine revolutis ciliis albis ngidis praEsertim margines versus obsitis subtùs glabns, flonbus in capitula terminaba pauciflora subrotunda dispositis, fohis floralibns caetens sublationbus lanceolatis calyces pauld excedentiibus, bracieis hneanbus calyce brevionbus, flonbus sessilibus, calycis violacei secii3 nervos ciliau caeterum glabn tubo labus brevion, labio supenon lato apice brevissimè tndentato dentibus Inangulanbus, inferion equilongo ad basin usquè in dentes

subulatos partito, denibus omnibus albo-dhatis, fauce albopilosa', corollas hirtulse tubo calyce duplo longioribus

Hab. in Libano cl. Labillardière. Ex herb. Billardien comm. cl. Webb sub nomine *Th. tragomontana*.

Suffrutex palmans, folia 2-3 lineas longa lineam dimidiam lata, capitula laxiuscula 6-7 lineas longa. Corolla 5-6 lineas circiter longa. Ex affinitate *Th. integrifolia* Griseb. = *vtlosi* Sibth. non L. quod ex insulis Archipelagi oriundum est. Icoone differt capitulis majoribus, corollae tubo 7-8 lineas longo.

#### THYMUS WELWITSCHII BOISS

Thymus fruticosus, caulis hirsutus ramosus ramisque erectis indumento brevissimo canescenti-pruinoso, foliis pallidis videntibus ellipticis attingentibus attenuatis breviter petiolatis supernè glabris crebre depresso-punctatis subtis margine valde revolutis glandulosis brevissimè hirsutis, axillis omnibus fasciculos foliorum breves edentibus, ramis supernè 2-6 ramulos breves oppositos parvis foliosos edentibus, floribus in capitula bracteata ovato-rotunda ad ramulorum apicem solana congestis, foliis floribus ovato-deltoidibus aculeis nerviosis calyces superantibus, bracteis ellipticis acutis calyce brevioribus, floribus subsessilibus, calyce papillis glandulosis glandulisque sessilibus crebre adperso labiis tubo longioribus, labio superiori ad tertiam partem usque in dentes triangulares acutos diviso, inferi paulo longioribus in dentes 2 subulatos partito, dentibus omnibus albo-dhatis, fauce albo-pilosa, corollae albide hirtulae calycibus dentibus brevioribus.

Hab. in siccis *Algarkarum* propè *Villa nova de Portwario* cl. Welwitsch. Junio floret.

Fruticulus erectus pedalis, folia ramorum 3-4 lineas longa 1-2 lineas lata floribus 3 lineas circiter longa 2-3 lineas lata. Planta odoratissima e grege *Th. mastichmæ* quæ capitulis laxis, foliis floribus lanceolatis et præsertim calyce duplo majoribus plumosis denibus superioribus elongatis distat.

#### ORIGANUM PULCHELLUM BOISS (Sect. *Amarætu*.)

Origanum caulibus decumbentibus dein erectis flexuosis foliosis pilis

Plurimum orientis novarum Ser. sec. N. 4

S

pa Lulls sparsis obsitis superne opposite ramosis ramis leniibu\*  
 foholosis glabns pamculam umlateralem formanlibus, folus cau-  
 linis inferioribus breviter petiolatis ovatis obtusis longmsculè pi-  
 losis cinerascentibus, supremis sessilibus, rameis panis ovato-  
 rotundis glabns, spicjs florum breviter ovatis capituhformibus  
 nutanlibus secùs ramulos plunbus unilateralitfer dispositis vel so-  
 litarus terminahbus, foliis floralibus orbiculatis cucullatis mem-  
 bran aceis rubelhs glabns calyces occultantibus, calyce glabro vi-  
 renti stnato parcè glanduloso-punctato labio superior! apice ob-  
 solete tndentalo, inferiori multo brevion 2 dentibus latis obso-  
 letis constant!, fauce albo-barbatii, corolla purpurea calyce 3 ',-  
 plO longion labns subaequilongis filarnentis long6 exsertis.

Hab. in Onenle loco incerto, accepi semina ex Horto Bot Pan-  
 siensi sub nomine *O dictamnt*, et plantain in hort. Valeyres colui

Folia cauhna eis *O dictamnt* mmora 6-9 hneas longa miDim^  
 orbiculata indumento tenui hirtio nee lanato obsita, floralia minora  
 2 7,-3 Uneas tantùm longa Ab eo praBsertim labio supenon ca-  
 lycis non integernmo sed denticulato differt

ORIGANUM CILUTUM DOIS^ et KoLschy (Sect. *Anatokcon*)

0. cauibus numerosis ascendentibus vel erectis tenuibus folio-  
 si3 simplicibus vel ssepiùs supernè ramulos paucos oppositos bre-  
 ves edentibus indumento patulo hirtis, folus e basi sessili cordate  
 ovatis obtusis ngiduhis crebrè glaoduloso-punctatis suprft glabns  
 subtiis elevatim nervosis ad nervos parcissimè setulosis margine  
 albo-cihatis supenonbus sensim diminutis, spicis florum ad caulis  
 et ramulorum apicem solilams lanusculis ovato-oblongis jum-  
 nbus niitantibus, folus floralibus nibellis oblongo-spatbulatis acutis  
 calyces occultantibus parte supenon margine ciliatis cstenim gla-  
 bns, calyce glabro pilis magnis glaodulosis adperso, labio supe-  
 non tubo sublongion apice tndentato dentibus tnaDgnlanbns  
 acutis cihatis, inferior! quadruple brevion in 2 denies laoceolatos  
 ciliatos partito, fauce albopilosà, corolla earned hirtelld calyce S'/t-  
 pld longion tubo caljce brevion, limbo anticè ad tubi insertionem  
 gibbo> labio supenon paulò longion.

Hab in Fupestnbus et faucibus *Taun Ctlicm*, in nmbrosis vallis

*Agalsch Ktsse* alt 6000 Kotschy, inter *Gtikk Boghas* et *G&lek Maaden Balansa* Fl medio Augusto

.Caulis 8-10 pollicares, folia cauhna 7-9 hneas longa 5-6 lata, Spies 8-12 hneas longs, folia floralia 4 4' /, hneastanlumlunga; species pulchra calycis fonna *Anatolico* adnumeranda, ab omnibus hujus speciebus caetens neglectis corolla ad faucis basin gibbosd discedens, quo characlere 0 *Tourneforttt* ceeterum divprssimum refert.

ORIGANUM ROTUNDFOLIUM BOISS (Sect. *AnatoUcon* )

Or glabrum palhdé virens folis inferioribus .. supenonbus sossibus basi angustissimè cordatis orbiculatis obtusissimis glabenrimis conaceis prominulè 9-11 nervis nervis radmtis, spiel tenninah ovatt densfl, folis floralibus orbiculatis cucullatis fohis cauhnis submajonbus albido-membraoaceis tenuiter reticulatis (lores occultantibus, cauce glabemmo sparcissimd glanduloso-punctato reticulato-nervoso ad tertiam partem bilabiato labio supenon pau.16 longion breviter tndenlato dentibus ovatis, infenon ad basin usque in dentes oblongo-lanceolatos obtusiusculos partito, corollid hirtid calyce S'/i-pld longion

.Hab m *Armenid* circfl *Batoum* cl. Galvert

Planta bracteis amphis msignis cujus infausto casu partem supenorem tantum vidi Folia supenora diametro 7 lineas lata. Bractes transversè snblatiores 9 hneas la tee. Juxta 0 *scabrum* et 0 *pvkhrum* collocaodum

ORIGANUM PULCHRUM BOISS et Heldr (Sect *Anatolicon* )

Or. glaberrimum palhdé virens mulbcanle cauhbus ascendentibus imA basi nudis suffrnticosis parte erecli fohosis supernè opposite et breviter ramoso-pamculalis, fohis sessilibus e basi cordati ovato-rotuodatis acutiusculis apicem versum sub lentemargiDe-scabrusculis csterum glabns glaDduloso-punctatis subtus elevatim multinerviis, rameis multO minionbus, spicis florum ovatis nutantibus ad ramulorum apicem sohtarns rariis biois, foliia floralibus purpureis ovatis obtusis snbcucullaUs calyces occultantibus, calyce glabro sparsim glanduloso-punctato ad tertiam partem bilabiato, labio snpenon ultra tertiam partem tri-

dentato dentibus tridngulanbus, infenon vix brevion ID dentes lanceolatos partito, fauce parcé pilos5, corollse hirtulae purpureaa calyce subtriplfl longions tubo in hmbum sensim amphato, flamentis longè exsertis.

Hab copiosè in lapidosis mobilibus regions supenoris montis *Delphi Eubece* alt 4600'—5000', cl Th deHeldreich Floret medio Augusto.

Caules 8-12 polhcares Folia intermedia 7-9 Uneas longa, 6-8 lata, spicae s\*pe magnitudinis nucis, folia floralia 4-5 Uneas longa Species elegantissima habitu et fohorum forma aretè affinis *O scabro* quod ab efi facilè distinguitur foliispaulò magis attenuatis circumcirci et manifesto scabns, spicis brovissimè pedunculalis subrotundis et pra&ertim calyce loDgitudinahier et elevatim nervoso labn supenoris dentibus rotundatis, labio infenon quadruple brevion, corollse tubo angustato

In coasortio hujus speciei amic Heldreich legit *Or hirtum* Link copiosè crescentem et inter ea plaotam cunosam absque dubio utrmsque hybndam et charactenbus exactè intermediam Hujus caules breviter hirtuh sunt, folia subcordata eis *O h%orti* non majora SpiciE eis *Or pulchn* multo imaores, ssepè (etsi multd mioùs quani in *Or. hirtu*) confer to, Folia iloraha eis *Or hwsh* multO majora 2 lioeas circiter longa amaenè purpurea. Calycesutin *Or kirlo* aequaliter quinquedentati sed dupl6 majores Corolla ea *Or hirti* major, purpurea.

#### ZATARR DRACTEATA BoigS.

Z fruticosa cauibus erectly ramosis, ranus tenuibus virgalis foliosis sub lente brevissimè hirtuhs supern6 angustè ramuloso-paniculalis, folns carnosulis breviter petiolalis ovatis obtusiusculis crebemmmè punctatis glabns palhdè virenlibus, flonbua ID spicas angustè oblongo-lmeares ad ramulorum brevium paoculs apicem dispositis, flonbus minutis tnbracteaLis bracteis persutentibus hirtulis ciliatulis calyce subkmgionbus dorsali sublation oblongo-lmean laterahbus hceanbus, calyce membranaceo 5 nem ovato angnhs elevatis quinquangulan dorso et facie subcompreaso fangihs cihatis cilua angulorum lateralmm longionbus) ad quartam par tern loogitudinis in 5 dontot. lanceolatos acutos subcon-

oiventes nervorum productione canaliculis parvulis, corolla calyce sesquialongior et sicca alba vel rosea, filamentis corollae subbrevis, antheris transverse ovatis loculis subdivergentibus.

Hab. in regno *Cambuco* circa *Ottipore* cl. Griffith

Frutex *Z. multiflora* Rami nigri tenues 8-12 pollices longi Folia forma eorum *Z. multiflora* sed paulo majora 5-6 lineas longa Flores non ut in *Z. multiflora* in verticillata sessili axillari disposita sed spicas terminales solitarias vel 2-3 aggregatas 5-7 lineas longas sesquialineam latas formantes Calyx vix hinc longus. Antheras in specimenibus *Z. multiflora* e regione Belouchistan a S. Locks acceptis eadem structure et forma donatas observavi

Obs. *Micromena Sphaerocarpa* Boiss et Heldr. cum specimenibus *M. nucrophylla* B<sup>th</sup> et *Meht* et *Sicth* nuper acceptis collata ab eis non specificis differt et ideo species est delenda.

MICROMERIA SERPYLLIFOLIA Boiss (Seel *Pseudomelissa* B<sup>th</sup>)

M. tota indumento denso brevissimo compacto cana, caulis basi suffrutulentibus erectis elongatis caulis ramosis superne angustis paniculatis, foliis ovato-oblongis breviter petiolatis acutiusculis integris vel obsolete repandis utrumque subconcolibus floralibus minutis utrinque attenuatis subsessilibus, cymis brevibus multifloris laxiusculis divaricatis dichotomis, bracteis linearibus brevissimis, calyce ovato-obconico ob indumentum canum obscure nervoso dentibus rectis triangularibus tubo sextuplo brevioribus, faucis villis dentibus quantibus corollae calyce triplo longioribus manifeste bilabiatis labio inferiori sublongioribus.

*Nepeta serpyllifolia* HB. f. **Taur. Cauc.—R. lib. Ic bot tab 219**  
*Mentha martiana* B<sup>A</sup> **quoad locos Orientales.** — *Calamintha spmgera* C. Koch.

Hab. in Tauria ex MB. *Albania borealis* Gussone in *Armenia Turanica* Caker! regione montana T. V. Kotschy Balansa! Syria borealis ad *Seleuciam* Boiss! et australe circa *Sidonem* Blanche in *Libano* circa *Eden* cl. Blanche. Fl. Junio Aug

PI an la *i* V<sup>2</sup> pedalis Folia eis *M. multiflora* paulo majora Calyx. Imeum vel paulo amplius longus, corolla hirsuta in 2 lineas longa. Jf. *mnfolia* B\* = *Nepeta manfoka* Cav. Ic. lab. 576

(*Mamutha Utspanica ftutescens man folio* Tourn planta merè Hispanica a nostril differt mdumento tenmori cinerascenli, cyinis pauciflons abbreviaCissimis slnctis racemos angiistos fonnantibus, calyce non longion sed magis attenuate) cyhndnco conico sulcato-stnato, corollas labio supenon elongato infenus aequanti *M martfolta* est species vulgò in hortis Botamcis culta.

Var *microcalyx* Calyx dimidiò minor. Corollas calycis proportione longions vix % hneas longaa hmbus obscurè bilabiatus Crescit cum tjpo

MICROMERIA CARBATA Boiss el Kot«chy (Sect. *Pseudomelma* )

M tota mdumento denso brevissimo compacto canescensobscur<sup>^</sup> virens, cauibus e basi saep<sup>^</sup> ascend en li erectis strict<sup>^</sup> ramosis, folus breviter peliolatis ovato-oblongis obtusis, florahbus elhptico-lineanbns, cymis pauciflons brevissimfe pedunculatis paniculas angustas spiciformes breves ad ramorum extremitatem fonnantibus, bracteis lineanbus, calyce tubuloso breviter hirtio Digncanti elevatim nervoso dentibus lanceolatis extrorsùm arcuatis tubo tripld brevionbus, fauce densè albo-viUosfi villis denies scqaaDtibus, corollte calyce vix 2 Vrplò longions labio mferion sublODgion

Hab ID jugis infenonbus regions *Dame Antihbani* cl Kotschy alt 5500' Iiujus frustulum cum *M. serpyllhofd* mixtum et in sylvd propè *Eden* Libam lectum a cl Blanche accept FI. Julio-Augusto

Caul is sesquipedalis saepè autem multo brevior Folia speciei prsecedentis Calyx sesquihneam longus, corolla cnsple" hirta 2 '-lineas longa A *M. serpyllfoltd* cujus faciem habet differt inflorescentia magis condensatd, calycibus majonbus nigncantibus in dentes longiores acutiores subpatulo-recurvos abeuntibus, faucis barbâ copiosissima *M. LibanoUca* Boiss. disLinguilur mdumento molh, caulibua fragilibus simpheibus, cymis in verticillaslra remotmscula dispositis, flonbus longmscuiè pedicellalis, calycis dentibus brenssmus, etc

CALAMINTHA BETULIFOLIA Boiss etBalansa (Sect. *Encalaminthn.*)

C perenniS', cauibus ascendentibus basi radicanibus subsim-



phcibus supernè praesertim patulè et molliter hirtis, fobis petiolo eis 2-3-pld brerion suffultis OTato-rhombeis acutis basi truncatis vel breviter cuneatis utnnquè acutè 4-7 dentatis glandulis sessilibus adpersis indumento brevissimo pilis sparsis longionbus sectis nervoa et margines mix to utnDque velutino-hirtis, floralibus similibus angustionbus, cymis breviter pedunculatis 5-7 flons densis folus axillanbus subbrezionbus, bracteis angustè oblongo-rhombeis longè acuminatis integns calyce tnplti brevionbus, flonbus brevissimfe pedicellatis, calyce cylindnco brevissim6 papillan-hirto vix bilabiato dentibus subaequalibus rectis o?ato-tnangulanbus breviter acuminatis tubo quintupld brevionbus cilia tis, fauce subnudft, corolla breviter hirtid calyce S-V.-pld longion.

Hab in rapestribus valhs *Guzel Deri supra'* *Sedichtg* in regione cahdà *Ctliiae* littorahs cl. Balansa Floret Apnli

Gaules subpedales, folia lufenora 9-11 lineas longa basi 7-9 lata, calyx flonfer 4 fructifer 6 lineas longus Corolla 10-11 linear longa.

Haintu valdè affims *C grandiflorw* qure eximiè differ! mdu-mento e pilis longionbus sparsis constant], folus majonbiis obtusionbus, cymis ob flores longiùs pedicellatos laxionbus, bracteis hneanbus, calycis profundè bilabiati dentibus lanceolato-subulatis tubo tnpld brevionbus supenonbus sursùm curvatis

#### PEHOWSKIA ARTEMISIOIDES BOISS

P tola indumento brevissimo pilis stellalis constanti denso non secedenti incana, cauibus erectis foliosis simplicibus supernè pamculalo-ramosis, folns circumscriptione ovato-oblongis bipionatisectis elevatim nervosis segmenlis pnmanis ad folia mfenora latioribus secùs coslam longè decurrentibus ad folia supenora obloogis angustionbus profuiddiùs sectis basi angustè decurrentibus lacmiis abbreviatis obtusis, pamculs ramis 3-4 poUicanbus erecto-patulis, flonbus subsessiUbus ID verticillastra remotiuscnla 2-6 flora seeds ramos dispositis, fohis florahbus calyce multa brevionbus lanceolato-liueanbus bombyoe occultatis, calycis land albâ densè bombycini breviler bilabiati labio supenon tndenliculato mfenon bidenticulato, corollse limbo breviler e>

>, *GTlo*, labio superior! ob lobi intermedh dmsionem profundam 4 lido, staminibus infenoribus exsertis declinaliSj supenonbus rudimenlanis brevissimis inclusis

Hab in prov *BeloutscJastan* frequens cl Stocks.

Planta 1 V»<sup>2</sup> pedalis, panicula 8-40 polhcans stncta, foha mfenora tripollicana lacinus primanis basi 2-3 lineas latis, mJlorescentia et flores *P afootanoidw* qua? differt indumento nou stellato tenuion secedenti, foins in lacinulas tenuissimas lineaj vix tertiam parlem nee {etiam in folus supenonbu9) nnam hneam el ampliùs latas partitis, calycibus glabrescentibus nee laoatis obsolete nee manifesto denticulatis, labn supenons lobo mtermedio emarginato

Ex not.1 manuscripts cl et iieati D'» Stocks, corolla hujus generis hucùsque erronefe desenpta fuiL. Labmm tri vel quadnfidum est supenus dùm labmm inferius mtegrum est Stamina fertilia basi labu inferioris inserts anlica sunt dechnata, stenlia autem utnnque ad basin iDternam loborum lateralium labn supenons inserta postica sunt et brevissima Haec corollae forma mihi ex specimimbus siccis cùm *P artemmoidis* tùm *P abrotanoidis* recte desenpta visa est et ided locos hujus generis in online adhnc valdfè mcertus.

SALVIA LIBAHOTICA BOISS et GaiUardot (Sect *Eusphace*.)

S cauhbus fruticosis ramisque lodumento subfloccoso griseo tomentosis, folus supr& rugosis hirlis subtùs pihs araneosis griseis longiusculè petiolahs parvis e basi truncate ovato-obloDgis ob-lusis, verticil)astns secùs ramos virgatos inter se remotis 4-6 flo-nis, folus florahbus persistentibus sessilibus oblongis breviter acuminatis calyce subbrevionbus, pedicelhs florum calyce paulò brevioribus, calyce tubuloso-campanulalo patulè hirto viscidulo dentibus subsequialibus tnangulanbus acutis tubo quadruple bre-vionbus, corollid hirtid calyce dupl6 longion.

Hab in demissionibus collibus *Libam* suprd *Smda* inter *Haramd elBaramitcl* D<sup>T</sup> GaiUardot Floret Maio.

Folia mfenora polUcem longa 6-7 lineas lata. Rami aimpliciusculi parte flonfer& pedem dimidium longi Calyces 4 lineas longi, corolla<sup>1</sup> 7-8 longec cseruleff' albo-punclats AflnisS, *tenmm* Desf

= *S. offktnali sylvestn* aucl Gallic quae eximiè differt indumento adpression, verticiUasLns approximate, flonbus majonbus, calyce eximiè stnati dentibus subnlatis. *S. trtloba* calycis forma magis affinis differt indumento adpression cano, folus divisis, paniculis ramosis, folus florahbus deciduis, corolhs violaceis ferè pollicanbus calyce triple longionbus

SALVU VANENSIS BOISS. et Noe £ e c t *Euspkace* )

S cauhbus suffruticosis procnmbentibus, ramis asceodentibus simpheibus glabris tenuibus quadranguhs rubellis foliosis, folns petiolis suprd canaliculatis ciUatis suffultis pmnatisectis segmeotis utnnqui 2-3 sessilibus obloogo-lanceolatis remote denticulatis subtùs sparsun et brevissimd birtis inDmis mmimis terminali majori obloogo-spathulato, verticillastns subternis 2-4 flons tenninalibus remotis, folus florahbus herbaceis e basi ovata *longb* acuminatis calyce subbreuionbus, bracteis lanceolatis aciinunatis, pediceltis calycem dimidium fequantibus, calyce campanula to demùm rubello stnato brevissunè pruinoso-hirtulo ad medium usquè bilabiato labio supenon breviter tndenticulato denticulo iDtermedio longion anstulato, labio mfenori bilobo dentibas anstalis, corolla hirtâ calyce 2<sup>1/2</sup>» plòlongion labio supenon recto.

Hab ID *Armenid* inter *Van* et *Ischn c*) Noe. Flor JUDIO.

Rami cum mfiorescientiâ 8 polhcares, foliormn segmeata 10-15 hneas longa 2-3 hneas lata, calyces flonfen 5 lieas longi, coroll© pollicares. Characteribus et formA fouorum affinis *S. suffruticose* B M et Auch. cujus pelioji longius ciliati, folia floraha pedicellis flonim vix loogiora, calyces densè papiUoso-birsnti 3 '/, hneas longi. An nostra plaota esset *S. suflruttcosa* 3 *glabrata* B<sup>nl</sup> in DC. Pro dr., e Kurdistamâ quoque orianda?

SALVJA UCROSTBGIA Boiss. et Balansa. (Sect *mfaopis*)

S. caule erecto glanduloso-viscido quadrangulan supernè palulè ramoso-pamculato, folus radicaibus utnnquè sed subtùs saepiùs intensiùs tomentoso-cams breviter pebolabs ovatis oblongisve obtusis basi rotundatis vel trancalo-subcordatis grossè lobato-dentatis crennlatis, caulmis paucis sessilibus parvis oblon-

gis acutis vel breviter acuminatis cernis saepe vinctibus viscidis, verticillatis subsexfloris sectis ramulos paniculae dissilis, folis floralibus triangularibus rotundatis mucronatis calycibus multo brevioribus, calyce breviter campanulato papilloso-hispidulo viscido, labio superior] breviter indentato dente intermedio brevissimo submucronato caelens anastulatis, labio inferioris dentibus anastulatis, corollae albae calyce triplo longioris labio superioris eximie curvato

Hab. in monte *Ahdagh* prope *Emaream Cappadociae* si to alt 1600 metr. cl. Balansa, in *Libano* ad Cedros (Boiss) superi *Eden* cl. Blanche, Aucher n° 1544, in monte *Herman Anhhbam* cl. Kotschy n° 92T.

Hae species quam olim pro varietate canit *Tmolece* habet ab eis et a *S. argentea* L. differt folis floralibus minutis nec magnis calycibus squamulosis. Planta praeterea minor pediculis vel sesquipedalis, folia radicalia 1-4 pollices longa. Flores magnitudinis ferè eorum *S. argenteae*.

SALVIA ATOMARIA BOISS (Seel *Mthiopsis*)

*S.* tota folis radicalibus exceptis vinctis breviter glanduloso-tuberculata viscida, caule erecto parte superiori paniculato-ramoso ramis paucis virgatis, folis radicalibus utrinque adpressè araneosis cernis breviter petiolatis e basi subcordatis oblongis grossè et obsolete lobatis crenulato-erosis, folis caulinis valde diminutis sessilibus oblongis, verticillatis 4-6 floris dissitis, folis floralibus minimis rotundatis transversè lationibus breviter mucronatis pedicellos florum aequantibus, bracteis nullis, calyce breviter campanulato luto viscido bilabiato lobis obtusis superioribus breviter indentato dentibus ovatis muticis intermedio multo minoribus, inferioribus breviter bidentatis triangularibus submucronatis vel brevissime mucronatis, corolla alba calyce 2-3 plo longioris labio superioris angulo arcuato pustulis violaceis cylindricis minutis obsito

Hab. in *Synd* cl. Kotschy. Ex schedulo anassa locus dubius

Gaulis bipedales, folia inferiora 4-6 pollices longa 2-3 lata. Rami paniculae 8-40 pollicares verticillatae 6-10 dissita ferentes. Flores eis *S. pambolae* vel *S. argenteae* paulo minores. Corolla 9 lineas circiter longa. Species inter *Ethiopes* calycis dentibus ob-

tusatis muticis insignis hæc nota" j usld *S compressam* Valil collocanda quæ caeteris neglectis differt folus floralibus tatissimis concavis calyces aequantibus, bracteis membranaceis, calyce dilatato multd majon

SALVIA CILICICA Boiss et Kotschy (Sect *Ethiops* )

S caulibus subherbaceis infernfr densè tomentosis foliosis dein denudatis brevissimè prmnoso-hirtis in pamculam parcè ramosam abeuntibus, foliis inferioribus 4-6 petiolo limbo brevion suffultis crassis rugosis utnnquè adpressè tomentosis e basi rotundalS Tel subcordata orbiculalis obtusis breyiter acummalis vel muticis circumcircS eroso-denticulatis, csetens subitd diminutis sessibus ovatis mucronatis paucissimis, floralibus lanceolalis mmutissimis, ramis pamculaB Tirgatis elongatis verticillastra remota 2-4 flora ferentibus, pedicelhs brevibus, calyce campanulato exinuè stnato-nervoso aspero bilabiato, labio supenon brevion obbuso surstüm subcurrato minutissime mdenticulato denticulis acutis conniventibus intermedio brevion, infenon bifldo dentibus lanceolatis anstatis, corolla hirta calyce 3 Va-P^ longion labio supenon longion falcato, gemtahbus exsertis.

Hab. in schistosis vinetorum pagi *Anadscha Tauri Gihcia* alt. 4000' Kotschy, ID calcareis ad fluvmm *Bosante tchai* in vià inter *Tarsous* et *Cmaream* Balaosa Fl Aug.

Gaules ascendentes parte folnferA breves dein elongati denudati cum ramis bipedales Folia inferiora diametro 2-2 '/\* pollicana plùs minùs pannosa Rarai pamculae pedales, calyces sub anthesi tres liueas longi, corolla 9-10 lineas longa. Species formft foliorum et chaYactenbus soli *S. hypoleucce* B\* comparanda qua differt caulibus longè foliosis, fohis teouionbus supra glabns, pamculfl composita, folns floralibus orbiculatis, calycis labus divancatissimis utroque recurvo

SALVIV CYAÆSCEN9 Boiss et Dalansa. (Sect *Mtopts.*)

S. caulibus subherbaceis erectis parte infenon foliosis adpressè canescentibus dein denudatis glanduloso-viscidis pyramidalo-paniculatis, folus parvis tomentoso-canis petiolo ots aequilongo suf-

fulis c basi rotunda 1& vel subcordata ovatis acutiusculis crenato-denticulatis, verticillatis sub 6 floris secus ramos paniculae approximatis, folis floralibus membranaceis rubellis triangularibus abrupte et tenuiter acuminatis calyce multo brevioribus reflexis marcescentibus, pedicellis brevissimis, calyce cyaneo piloso-aspero nervoso bilabiato, labiis aequilongis superioribus sursum subcurvato breviter indentato dentibus aequilongis acutis inferioribus bifido dentibus triangularibus instulatis, corollam palmarum violatam calyce triplo longioribus labio superioribus falcato parvis et brevissimis hirtulo, genitalibus exsertis

Habitat in collibus secus fluvium *Kamechly Tckai* ad basin Ouh Mameneu dagh Cappadociae inter Tar sous el Gesaream et Balansa Floret Junio

Petalis sesqui-petalisve Folia 8-10 lineas longa Rami paniculae abbreviati Verticilli 6-10 nervis distantibus Calyx florifer ferè 4 lineas longus. Ex affinitate *S. candidissima* quae differt foliis sessilibus elongatis floralibus minutissimis, verticillatis paucis floris magis dissitis, calycis palmarum tertio parte majoribus labio superioribus dentibus anstatis donato, corollam albam labio flavicanti.

SALVIA LEUCONEURA BOISS (Sect *jeithopsis*)

S. caulis crassis elatis indumento lanato tomentosissimo demum detersi ut obsitis superius patule piluloso-bilobis viscidis pauculatis, foliis oblongis acutis basi rotundatis grosse lobato-subobovatis eroso-crenulatis superius araneoso-canescutibus subtus secus nervum medium secundariosque villosis albo-bilobis subreticulatisque inferioribus petiolatis superioribus sessilibus, superioribus videntibus viscidis oblongis dentatis acuminatis, verticillatis distantibus subsexlineis, foliis floralibus concavis breviter ovatis abrupte acuminatis calycibus sequantibus, pedicellis calyce dimidio brevioribus, calyce brevissime campanulato papillis longis ensiformibus videntibus obsite obsolete bilabiato labio superioribus triplo, inferioribus bidentato dentibus omnibus triangularibus anstatis, corolla calyce vix 2/3 plus longioribus labio superioribus rectiusculo vix hirtulo

Habitat in Axysynd prope Mardin et. Aucher. N<sup>o</sup> 1546,

Caules ut videtur elati, folia inferiora in meo specimenne semipedalia 2/3, pedicelli lata, panicula forma florum floribus met-

gnitudine florum *S. Juthiopem* referens sed multo laxior minusque ramosa et viscida nec canaliculata Calyces sub anthesi tres lineas tantum longi ferè aequilati in *S. JStkiopide* mlem 5-6 lineas longi albolanati, corolla e sicco alba vel pallidè carnea Species folis albo-lineatis ins ignis quain cl Bentham (qui probabiliter specimen nufcis Imperfectum vidit) consociavit *S. Verbasafokce* quod longius distat folis floralibus calyce multo brevioribus, indumento albo-lineati defectu et praesertim calyce distinctè et divinalun bilabiate nervoso, corolla multo majore labio superiore

DRACOCEPIALUM SETIGERUM BOISS et Huet (Sect *Moldamca*)

Dr perenne e basi hgnosca multicaule pallidè virens totum sub lente pilis brevibus retrorsum curvatis puberulum, caulibus erectis simplicibus fohosis, folis mfenonibus petiolatis ovatis crenulatis caBtens basi attenuate sessilibus lanceolatis acutiusculis Integemmis, axillis fasciculatis, flqrahbus calyces sequantibus vel subsuperantibus lanceolatis ulnquè 2-3 dentatis dentibus loogissimè setaceo-aristatis, calyce glandulis sessilibus setulisque adpressis hirtis ad medium bilabiato, tubo striato, labio superiore latione tridentato dentibus ovatis inferne bidentato dentibus ovato-lanceolatis omnibus longè setaceo-aristatis corollae lanato-hirtis tubo e calyce breviter exserto

Hab. in incultis circa *Erzeroum Armentwcl* Huet du Pavillon. Floret JUDIO.

Gaules semipedales, folia caulina intermedia 7-9 lineas longa 2-2.5 vilata Aacemus terminalis ovatus densus Flores pollicem longi Valdè affine habitu et characteribus *Dr. multicaulis* M et Auch quod differt folis omnibus lanceolatis, floralibus Integemmis, calycis dentibus mtfcronulatis nec setigens

LALLEHANTUCINESCENS ELM var *brachystegia* Boiss et Huet

Caules procumbentes vel ascedepes. Flores paululum minores. Folia floralia minima cuneata brevissimè 3 vel 5 anstulata. *Dracocalum azwreum* pi Arm exs. 1853.

Hab. in *Armentd* Huet da Pavillon.

;SE;PETA OuviaUMUt-v Bois> (Sect *Pymonepetai lane* )

N tota indumento tenui adpresso lauata cana, caulibus erectis vel ascendentibus supra basin opposite ramosis ramis elongatis erecto-patulis, foliis petiolo inferioribus *en*, subaequalibus in caetens multo brevioribus basi cordatis ovato-oblongis acutiusculis crenato-dentatis. rugosis subtus magis cavis, verticillatis lobis 10 secunda ramos diuisis racemos longos formantibus loricatis sedes loricatis subtus, bracteis hinc subulatis calycinum tubum subaequantibus calycis patulis lobis striatis recti dentibus sequantibus lauceolatis nervis acuminatis tubo subaequilongis, corollas (e bico caine.c) bilobis curvatis sublongioribus apice ampliato, nuculis minute tuberculatis\*

Hab in regione media et superior! montis *Malevo (Parnon) Lacom* (*epvopii Kasl*) (*miUa, a*) 4300'-5000' Cl Orphanides Fl Graecae s. n. 84 Fl Jul Aug

Planta bipedalis raceme simplicibus longioribusque Folia inferiora pollicem et amplius longa Aflimis *N camphoraltr Boiss* et Hetdr quae differt indumento patulo-crispo viscido, foliis minoribus margine crispis., lobis minoribus, calycis dentibus tubo dimidio brevioribus *X AigoUca, N Iialua* et affines bracteis dilatatis longioribus differt

NEPETA PARASSICI Heldr et Sart S. s. (Sect *Pymonepra B*<sup>th</sup>)

N multicauis tota pilis patulo-crispis viscidulis caesceutibus villosa-sublanata, caulibus basi frutescentibus prostratis ramosis, ramis ascendenti-erectis ramulosis, foliis breviter petiolatis triangularibus basi cordatis virentibus supra rugulosis margine crenato-crispis, floralibus subsessilibus diminutis triangularibus-oblongo-lanceolatis mucronatis, summis integris, verticillatis numerosis, inferioribus remotis breviter pedunculatis, superioribus in spiculis oblongis interruptis approximatis, bracteis hinc lanceolatis subulatis calycem subaequantibus angustis scanoso-marginatis nervo indiviso percursis, calycis vinctis tubo striato ciliato fructifero ovalo ore subobliquo dentibus aequalibus hinc lanceolatis subulatis nervis tubum aequan-



tibus, corolla} albidai villosa tubo exserto wicuiwo hirsuto prae-  
sertim in labio supenon, lodo medio inferens ad basim barbaLo  
ad faucem purpureo-punctato v hinc *indit* loto roseo, nuculis  
tuberculato-scabns

Hab freq in m Parnassi reg mediS 3-5000' alt Augusto flo-  
rens(Safl 4846 Heldr 1852 pi exs nM872)

Tola planla odorem camphoraceo-aromatjcum exhalat Dumoso-  
raulticaulis, ramis-i »/9 ped , folia 6-14 hn longa, 3-7 hn. lata,  
calyx 3 corolla 5 lin longa Species niter A<sup>r</sup> *camphoraia*m ct  
*N. Sibthmpn* quasi media Prior recedit verticillastns fere dupld  
lninonbus, bracteis angustionbus calyce quadrupld brevionbus,  
calycis ore erecto dentibus tubo dimidio brevionbus, corolla  
minore *N Sibthorpit* differt inpnmis indumento adpressè cine-  
reo-velutino, folns margine non cnspis, verlicillastns in apice  
ramomm spicato-congestis, bracteis oblongo-lanceolatis longiùs  
anstatls et latiùs scanoso-margiuatis (Heldr et Sart descnps  
Nov 1852)

NEPETA SpnuNeni Boiss. (Sect *Pycnonepetu Laxce* )

N. tota indumento brevissimo velutina canescens, caulibus erec-  
tis vel ascendentibus parte inferon ramosis ramis slnctis, fohis  
breviter petiolatis e basi truncato-subcordata aogustè oblongis  
oblusis crenulatis subrugosis cocolonbus, floralibus verticil-  
lastra subaequantibus integns oblongis vel elhpticis acutis, verti-  
cillastns inferonbus longè distantibus supenonbus confluentibus  
racemos longos formantibus, bracteis angustè hneanbus acumi-  
natis calycmo tubo brevionbus, calycis breviter pubenili ore  
subobliqm dentibus lanceolatis tubum dimidium sequantibus, co-  
rollaB puberulx lubo mcurvo calycem sEquantr, nucuhs

Hab. in glareosis torrentium *JEtohce* cl. Spruner

Planta multicaulis i <sup>1</sup>/<sub>f</sub>-2 pedalis, racemi centrales ferè pe-  
dales. Folia inferora polhcana 5 hneas basi tantùm lata Flores  
eis iV. *Stblhorpn* subminores. AfOnis indumento *N. Stbthorpn* B<sup>th</sup>  
= *N. Argoluw* Bory et Chaub. qua3 differt, verticillastns ferè  
omnibus in spicam oblongam confertis, bracteis latissirnns JV *Par-  
nasstca* Heldr. etSarlon differt indumento patulo-cnspo viscidulo,  
Tolus tnangulan-ovalis margine crispuhs, bracteis caljcimsque

dentibus nullò longius. aLleriuLo-ansLalis, hibce talycis lubum icquantibus *N Orphemtdea* longius distat indumento lanato adpresso, bracteis subulatis, etc *N Sprunen* est h<sup>BC</sup> species quam olim (Diagn 7 1° Ser p 50) pro *JV. Argolicd* Bory et Chaub. habueram sed *JV Argohm* ex specimimbus loci classici *Nauplm* est ipsissima *JV Sibthorpn*

NEPETA SPECIOSA BOISS et Noe (Sect *Pycnonepeta Betoniroidei*B)

N pereimis caulo erecto acutè quadrangulo glabnuscule superne sub lente pihs brevissimis curvuhs hirtis, fohis vmdibus utnquè sub lente pihs brevissimis adpressmsculis hirtelhs cordatis ovato-oblongis obtusè obtusè crenato-denlatis inferioribus brevissimfc pctiolatis caelens sessilibus, verlicillastns 6-9 mfenonibus discus fob is Uoralibus elliptico-lanceolatis eis subbrevionibus snffultis cEetens contiguus basi subnudis, bracleis subulatis hirtis caiyce 2-3-pld brevionibus, caiyce densè et cnspulè hirtello cyhdnco tubo subcurvato sriato ore suboblquo deDtibus breviler lanceolatis acuminatis tubo quadrupl6 brevionibus, COFOIISB violaceae hirtae lubo caiyce dupl6 loogion curvato apice sensim et valdè ampliato labio infenon longiori.

Hab in subalpm. *Persia Kurdistanicts* propè *Mendeh* cl Noe Floret Maio.

Planta sesqmpedahs, racemus 4-5 pollicans. Folia inferiora sesquipolhcem longa pollicem lata, csetera sensim diminuta, flores circiter 7 lineas longi Aflinis *N betomccpfoluje* G. A Meyer quae differt fohis molhter canescentibus. spied brevion vix interrupts, caiyce villosa, corollae fauce minus amphotd

NEPETA HAHIFOLIA BOISS. et Huet (Sect *Catena*)

N perenms multicaulis tola adpressissimè cinereo-canescens, caulibus tenuibus erectis flexuosis simplicibus runùs et parcè ramosis, fohis minutis breviter petiolatis e basi truncati oblongo-lanceolatis obtusis minutè crenatis utnquè rugosissimis, floralibus diminutis calyces non squantibus, verticillastris subsessilibus pauciflons racemos termmales laxos formantibus, bracteis lineanibus brevissimis vix perspicuis caiyce violaceo-lanato subincurvo

ore obliquo dentibus Irian gulanbus, superioribus longioribus, corollae hirtae calyce duplo longioribus tubo breviter exserto, nuculis sub lente obscure tuberculatis

Hab. ad radices montis *Techdag Armenus* alt. 7000' cl. Huet du Pavilion Fl. Junto

Var. *SCalverti*. — Calyces violacei breviter et adpressè hirti nec lanati. Corollae tubus magis exsertus, caeterum omnia speciei,

Hab. circa *Erzerawm* cl. Calvert

Caulis 10-12 pollicares. Folia majora 5 lineas longa basi 2 1/2 lata. Racemi 2-2 Vi pollicares, flores paulo minores eis *JV racemosai* cm valde affinis est el qua differt folia multo majoribus viridibus vix rugosis basi cordatis ovatis

NEPETA CALVERTI BOISS (Sect. *Macronepeta*)

N. perennis vjndis sub lente indumento pilis brevissimis retrorsis adpressis coarctanti obsita, caulibus erectis virgatis, foliis inferioribus . . superioribus breviter petiolatis e basi subcordata triangularibus obtusis utrinque grosse et obtuse 5-6 crenatis, racemis laxis elongatis, florum fasciculis oppositis inferioribus pedunculatis superioribus sessilibus, foliis floralibus pennis subpetiolatis oblongis acutis integris, bracteis anguste lanceolatis acuminatis calyce multo minoribus, calyce robello (setulis) revissimis aspero anguste cincto marginato in limbum sensim amphato, ore obliquo dentibus ovatis acuminatis superioribus sublongioribus, corollae hirtulae calyce 2 Vi-plo longioribus tubo curvato exserto labio inferioribus longioribus, nuculis . .

Hab. circa *Erzeroum* cl. Calvert

Planula huic quoad partem inferiorem ignota, habitu, loflores\* -cedit depauperata *N. teumifoliam* W. referens ab est corollae? tubo multo brevioribus discedens et forma dentium calvae mt^r affines insignis

NEPETA TRICHODONTA BOISS et Noe (Sect. *Oxynepeta*.)

N. perennis iota indumento brevissimo conspiculo caesca, caulibus erectis jam paulo supra\* basim paniculatis, foliis brevissimis petiolatis sessilibusque oblongis integerrimis obtusis, floralibus

lanceolatis hneanbusque acutis cymas aequantibus, cymis densiusculis pedicellatis patuleetmolhter hirlellis, bracleis e basi lmean t,etaceis patulo-subcurvalis calyces aequantibus c&rulescentibus, calycis pilis crispnlis hirsuti denlibus caerulescentibus e basi lanceplatâ setaceo-acuminatis tubo sub&qmlongis, corollâ rubro-violaceâ hirtâ calyce longion.

Hab. circâ *Diarbekt* Assyria cl Noe Floret Maio

Aflims *N. hehotropifohcB* Lam eodem mdumento eâdemque formâ fohorum donatse et quse differt cymis laxis breviter pûberuhs, calycisque corollam sequantia dentibus lanceolatis tubo brevionbus. An lumen nostra u [terîns ad vanetatem *N. heholropifohcB* reducenda ?

NEPETA GURVIDENS Boiss et Balansa (Sect *Oxynepet* )

N perennis pallid6 vireos tota mdumento brevissimo obsita, cauhbus ereclis ferè a basi latè paniculatis, folns inferionbus breviter petiolatis ovatis obtusis crenatis rugulosis, intermediis subsessihbus oblongis lanceolatisve integris vel obsolete crenatis supenonbus et florahbus lanceolato-lineanbus acutis mucronatis, cymis densis peduncillatis, bracleis hne%n-lanceolatis acerosis squarroso-patentibus calyces sequantibus vel superantibus, calyce vindi mhs cnspuhs hirtò dentibus lanceolatis squarroso-recurvis tubo brevionbus, corollâ violaceil calyce brevion, calyce fructifero oVato, nuculis lsBvibus

Hab. in coihbus et agns otiosis *Cappadocin* circa *Karahi&sar* alt 4200 metr cl Balansa Floret Jumo

HEBC species quam pnûs pro forml *N. hehotropifolus* habui ab eâ differt folns magis crenatis rugosulis, calycibus vindibus nee vtolaceis fructifens brevioribus ovatis, bracleia et dentibus calycinis squarroso-recurvis acerosis albidis, corollâ ìminon

NEPETA HISPANIGA BOISS et Reuter. (Sect *Oxynepet* )

N perennis tota mdumento brevissimo cnspulo canescens cauhbus paniculatis, foliis inferionbus breviter petiolatis csteris sessilibus oblongis obtusis obtusè crcnulatis, supenoribus acuuusculè serratis, florahbus lanceolalis integris, cymis densiusculis breviter pedunculate, bracteis anguslè lanceolato-lineanbus

calyces aequantibus, calyciscani dentibus lanceolatis tubo subsquilateralibus post anthesin erecto-patulis, corolla adpressè hirtà albà. Terminalis calyce sublongior

Hab in Hispaniè incultis, Arganda propè Matritum herb. Pavon., in provincià la Mancha Rodriguez, in arvis propè pagum Marta regni Grmatensis Orientate Bourgeau 1851. Fl. Jumo

Planta pedalis sspè autem humilior, a *ID* n is *N behotroptifolius* a qua differt indumento magis cano, foliis superioribus aculeis serratis nee integerrimis, calyce brevior, corollis albis nee violaceis

NEPETA VIOLEFOLIA Boiss. et Nod. (Sect. *Micronepeta*)

Annua vix sub lente pubescentia brevissimè glandulosa pubescentia, caule erecto parvè ramoso, foliis breviter ovatis cordatis obtusissimis obtusè crenatis laciniis longè ceteris breviter petiolatis tenens, floribus lanceolatis mucronatis integris, florum fasciculis densiusculis ad ramorum lateralium extremitatem subsolitaria in caule contra racemum interruptum sessilibus inferioribus pedunculatis superioribus sessilibus, bracteis lanceolatis acerosis violaceis strictis calyces lequantibus, calyce apice violaceo angustè tubuloso subcurvato papillis elongato-coarctatis pubescentia brevissimè glandulosa adperso ore subobliquo dentibus lanceolatis mucronatis nerviis superioribus paulò longioribus latioribus, corolla violacea calyce subduplo longior hirta tubo recto breviter exserto sensim ampliato

Hab. in subalpinis Kurdistani Persia versus Mendeli el. Noë Floret Maio.

Planta vix pedalis, folia inferiora pollicem ferè longa latiora Gymnospermorum capituliformes 6-9 floris inferiores pedunculate in racemo centrali verticillatae 5-6 formantes Corolla 6-7 lineas longa Species elegans ex affinitate *N. Isphahamica* et *Schtraztanica* a qua differt indumento et floribus multò longioribus differt.

SCUTELLARIA PEREGRINAL B<sup>th</sup> var. *adenotricha* Boiss. et Heldr

Gaulibus fere glabra. Eucnemii florales calycesque praeter indumentum brevissimum cespitium pilis glandulosis sparsis obsiti,

*Sc atfcnoincfaiBoibsetHeldr* Mss mHeldr et Orphan Cenlur, Florae Graecae exs

Hab m colhbus *Bceotus* Spranert *Parnasso* Heldreichl ,Orphanides Fl Grac n° 430, monte Parties *Alticcb* Orph t

Yar *Sibthorpn* Boiss, el Reut Gomm ad Fl Graec Mss

Caules et folia plus minusve -veintin o-hirta Raceini florale& catycèsque pilis cnspulis pilosi praitereâque pilis loDgionbus glandulosis patulis obsiti.

*Sc Sibthorpn* Boiss et Reut Mss — *Sc. peregnna* Sibtb. FL Graeca, tab 582 — *Sc Column\** G *Sibthorpn* B\* in DC Prodr

Hab *Byzantn* Sibth I Auch. I *Cand* et *Phrygtd* Boiss t *Cypro Sibth* ; *Synd et Ltano* Boiss I *Tauro Cihcico* et *Cappadoad* Balansa I Graeciâ in monleifo/«;o *Lacomm* Orph Fl Grascaexs. n° 66, in monte *Kyllene* propè *Trikala* Heldr t

Var. *Parnassica* — Planta plerumqae humilior breviter puherula Racemi et calyces indumenta brevi sparso cnspo pilisque glandulosis longionbas obsiti, coroll© labmxa supenus apice extus pilis longionbus hirsutum

Hab in regione supenon *Pa/massi*, ad *Carcana* Guieciardi I in parte supenon montis *Parnes Attica* Heldreicli I

Yanelates hie enumeiatae transitus manifestos etiam in eodem loco exhibere videnturet characteres communes babentid est indumentum duplex racemi, corollas breves intensè violaceas, folia floralia calyces fructiferos subaequantia aut etiam superantia. Var *adenotrcha* est vera *Sc peregnna* B<sup>th</sup> e Sicilia et Italia" Var. *Sibthorpii* omnm d 5 *peregnnce* nee cum cl B\* *Sc Columnar* adnumeranda est nam heec longius differt corollis etongatis purpurascensibus, braceis semper minutis.

SCUTELLA.RU STOGKSII BOISS. (Sect *Lupuhnana*)

*Sc* lota tomento molh brevissimo patulo cana basi suffrutescens caudicibus proslratis abbreviate tortuosis, ramis brevissimi^pB\*-tulè hirsute approximativ foliosis, folns Integra oboyatis elhpticisve obtusis basi in petiolum brerem longiusculè attenuate, spicis tenninalibus densis bretissinus pauciflons, foliis florahbus ellipticis acuUusculis tomentos herbaceis calyces occultantibus eisque sub anthesi 3-4-pld longionbus, calycis truncati minuti

**labio** superior! longè hirsuto, inferiori paulò breviori glabro, corolla hirta calyce rotundioribus longioribus, calyce fructifero .

Hab. in *Uone Beloutschistana* et *Chehel Tunc* et beatus Stocks

Habitus *Ajugasakafoluevar* et *tomentosm* Caulis prostratus lignosus. Rami fragiles 2-3 pollicares erecti vel ascendentes Folia majora 7-8 lineas cum petiolo longa 3  $\frac{1}{4}$  lata, floralia 4-5 longa 2 lata Spines breves folis occultatis. Calyx sub anthesi lineis 6, longus, corolla 10-11 lineas longa. Species nulli sectionis propria affinis

#### TAPEINANTHUS BRAHUIGUS BOISS,

T. annuus pumilus e collo saepe ramosus caulibus erectis foliosis parte inferiori breviter hirtis parte floralibus patulis hirsutis, folis lanceolatis acutis basi longè angustatis inferioribus glabrescentibus floralibus diminutis densè tomentoso-hirsutis floralibus duplè longioribus, calyce longè et patulis hirsutis per anthesin obcordatis cylindricis dentibus inaequalibus lanceolatis subulato-acuminatis tubo triplici brevioribus superioribus sublongioribus fauce intus hirsute, corolla rosae parvis calyce sublongioribus, calyce fructifero accretis dentibus latè campanulatis dentibus subpatulis.

Hab. in diticis *Beloutschistan* ubi detexit cl et beatus D<sup>r</sup> Stocks.

Plan. tula 3-4 pollicaris habitu, characteribus valde affirmat. *T. Perstco* qui differat indumento brevissimo viscidulo, calycis dentibus brevissimis inaequalibus sextuplè brevioribus, corollas tubo longè exserto

#### SIDERITIS CILICICA Boiss. et Balansa (Sect. *Empedoclea*)

S. caulibus ascendentibus vel prostratis vix suffruticulis, ramis erectis stentis inferiè albo-lanatis parte floralibus flavidis patulis glanduloso-hirtis, folis inferioribus et ramorum stentium elongatorum albo-lanatis oblongo-lanceolatis obtusis basi attenuatis superioribus breviter glanduloso-hirtis flavidis reticulatis e basi cordatis oblongis acutiusculis, verticillatis numerosis distinctis racemos longos simpliciter sessilibus e basi ramosos paniculatos formantibus, folis floralibus flavidis reticulatis breviter hirtulis ovato-cucullatis breviter et obtusè acuminatis calycibus ob-

tegentibus, calyus breviter glanduloso-pilosi dentibus lanâ sparsi  
obscitis tubo ferè dimidid brevionibus elevatim trinerviis latè hinc  
nibus obtusiusculis, corolla lutea adpressè hirta tubo brevissimè  
exserto limbo minuto

**Hab in Cihctd htorah inter pagos Bouloukt et Alia dagh propè  
Menma cl. Balansa. Flore L Junio ineunte.**

Bipedalis, racemi suspè pedales, folia pro plants non magna,  
intermedia pollicem vel sesquipedalem longa 4-5 lineas lata, ver-  
ticillas in pollicem dimidiata distantes, superiores magis approxi-  
matis Calyx florum 4 lineas tantum longus Species in grege  
difficillima dentibus calycinis lanceolatis obtusiusculis nee lan-  
ceolatis acuminato-spinulosis insignis.

Sideritis RJESEM Boiss et Heldr (Sect *Empedoclea*)

S. basi suffrutescens caulis prostratis vel ascendentibus ra-  
mosis ramis erectis simplicibus lanceolatis adpressè canaliculatis  
abbreviatis florumque basi densè fohosis, foliis inferioribus  
oblongo-spathulatis in petiolum attenuatis albo-lanatis subintegris,  
caulis sessilibus oblongo-lanceolatis acutis subrecurvis obsolete  
crenulatis rugulosis adpressè canaliculatis, verticillatis 5-6 re-  
motis, florum floralibus membranaceis flavidis Tel. in bello-magn-  
cantibus breviter ovalis cucullatis abruptè et breviter mucronatis  
calyces non squamatis, calyce tubuloso-campanulato exte-  
rioribus lanceolatis acutis tubo brevionibus glanduloso-hirtis,  
corolla lutea exte-  
rioribus et ad faucem hirsutae tubo calyce brevionibus,  
labiis aequalibus inferioris lobo intermedio latissimo.

Hab in regione intermedia et abietina montis *Parnassus* Heldr et  
Orph I Guicciardi Fl. Augusto.

Rami pedales vel paulo longiores. Folia e minutis sectionibus,  
inferiora cum petiolo ferè pollicem longa 3-4 lineas lata, caulibus  
longiora angustiora, verticillatis inferioribus pollicem et amplius  
distantibus, bractee 4-5 lineas longae 5-6 latae Calyx 4 lineas  
*longas* Species elegans nulli arctius quam *S. Lycm* Boiss. affinis  
fohis etiam minoribus et magis canaliculatis don a las et quas inter alias  
notas fohis floralibus herpaticis duntaxat mucronem duplo longio-  
rem patulo-recurvum abeunlibus differt *S. Simla* Ucr. cujus habi-  
tus et inflorescentia similes sunt differt fohis omnibus longioribus



densè albo-pannosus, folus floralibus membranaceis ejusdem formæ sed calyces aequantibus, calycis dentibus brevioribus.

SIDERITIS SYRIACA L var *condemala* Boiss. et Heldr

Rami plerumque humiliores, verticillastra omnia præter inferiora 1 vel 2 in spicam terminalem densam oblongam approximata, ceterum indumentum albo-pannosum et omnia speciei

Hab in regione superior] montis *Delphi Eubece* inter lapides alt 4500'-5100' Spruner I Heldreich I Floret Augusto

SIDERITIS FLOMIDA Boiss et Heldr. (Sect *Empedoclea*)

S basi suffrutescens tola adpressissimè cana caulis abbreviatis ascendentibus, ramis erectis quadrangulis simplicibus vel ramis parvis ramosis, folus integris concoloribus subtus rugulosis inferioribus in petiolum attenuatis oblongo-subspathulatis obtusis superioribus oblongo-lanceolatis acutis, floribus in spicas terminales solitarias vel subterminalibus cylindricas densas dispositis, folus floralibus pube glandulosi brevissimi hirtellus margineque breviter ciliatis vix tenuiter reticulatim nervosis ovatis in cuspidem teneram, patulam abruptè attenuatis calyce longioribus, calycis adpressiusculè et longiusculè hirsuti dentibus lanceolatis tubo aequilongis, corollae luteae flavæ limbo majusculo e calyce exserto

Hab. in regione sylvatici *Olympi Thessali* prope castrum *Santæ Dionysii* Heldreich. Floret Julio

Rami pedales vel sesquipedales, folia caulina inferiora 2-7, pollicibus longa 4-5 lineas lata Spica 2-3 pollicares aequantibus fructiferae semipedales 0-10 lineas latae Calyx 5-6 lineas, corolla 8 lobata Species spicis compactis longis crassis insignis hoc caractere dt foliorum formi et indumento nulli accedens propius quam *Sc. Scardicæ* Gussone cuius specimen junctum tantum comparare potui sed quæ? habet bracteas minutè glandulosas longè et adpressè hirtas et insuper e descriptione corollas calyce breviores *S. Taurica* indumento albo-araueso bracteis minutis spicisque multò tenuioribus longius differt

SIDERITIS ARGUTA Boiss et Heldr (Sect *Empedoclea* )

S. basi suffrutescens tota tenuiter araneoso-sublanata gnsea, ramis ascendentibus elongalis, folns oblongis breviter acuminatis spinuloso-mucronatis apicem versùs argutfe el tenuiter denticulatis reticulato-venosis inf^nonbus in petiolum brevem attenuatis supenonbus conaceis sessilibus, verticillastns omnibus praeler summos distinctis remotis racemos longos simplices vel basi ramosos formantibus, folns floribus adpressè et breviter hirtis ciliatis virentibus ovato-rotandis abruptè et breviter acuminatis caljces ad medium usquè occultantibus, calyce brevissimè glanduloso-hirto dentibus triangulan-lanceolatis ciliatis dimidio lubo pauld longionibus, corollaB luteaB adpressè hirtse tubo apice subexserto limbo minuto

Hab in saxosis apncis *Taun Pamphyhci* in valle *Maria* ad radices montis *Ghmdagh* 10 Julio 4845 legit cl de Heldreich

Planta sesquipedalis, folia infertora sesquipolhcem longa 6 hneas lata supenora sensira diminuta, verlicillastri parvi mfenores 1-4 V« pollicem distantes, calyx 4- Uneas longus Foliorum dentibus et indumentii naturâ refert *S. condensatam* B et Heldr earumdem region urn ormdam cujus verticil lastfa in spicas oblongas valdè compactas approximata sunt calycesque longè hirsuti 5 hncas longi Doleo effiterium limites vanaUonum in hie sectione difficili nondùm datis notas esse

SIDERITIS pELorowINESiACA Boiss et Heldr. (Sect *Empedoclea* )

S basi suffrutescens enspè et laxiusculè lanata flavo-virens, ramis ascendentibus, folns brevissunè petiolatis sessihbusve oblongo-spathulalis oblongisve obtuus obtusè crenulatis margineque ssepè obsolete cnspulis, supenonbus oblongo-lanceolabs a^utis, verticillastns inferioribus distinctis supenonbus in racemum densiusculum brevem approximatis, folns floribus birsutis submembranaceis flavidis e basi ovata acuminatis inermibus calyces occultantibus, caljcis albo-hirsuti dentibus lanceolatis acutis dimidio tubo longionibus, corolla luted adpressè hirta" tubo incluso.

Hab in regione supenon montmm *Olenos* et *Kyllenes Peloponnesi* alt 5500'-6500' cl. de Heldr

Species aflinis *S theezanh* pro quafi earn primum habuimus, hsec tamen quam tantum ex montibus *Malevo* et *Taygeto* Lacomse gemnam vidimus sat differre videtur indumento dension tomentoso, folns Infenonbus ovatis, praasertim bracteis crassionbus magis berbaceis longissimè acuminatis corollisque nunoribus calycem vix superantibus

SIDERITIS PHLOMOIDES Boiss et Balansa (Sect *Empedoclea* )

S cauhbus suffruticosis prostratis tota mjumento brevi papillan-glanduloso pihsque longis adressmscuhs hirsuta flavo-vireos, ramis erectis abbreviate simplicibus, foliis oblongo-spathulatis obtusè crenulatis obtuaia Infenonbiis longè supenonbus brevitus petiolatis, verticillastris 4-5 remotis, folns floralibus reticulatonerrosis submembranaceis e basi ovato-subcordatS longè acuminatis calyces suboccultantibus inferioribus longissimusj calycis minute glandulosi adpresseque hirti dentibus lanceolatis longè spinuloso-acuminatis dimidio tubo longionbus corollam flavam hirtam subasquaDtibus

Hab in montl" *Mameneu Dagh* in *CappadaaA* inter *Taurum* et *Casaream* sito. Fl Augusto cl. Balansa

Rami semipedales vel pauld longiores Folia inferiora pollicem circiter longa 5-6 hneas lata petiolo polhcan vel longion suffulta, bractes laflmaB 12-15 hneas, cestera 9-40 longs Galpc 6 lineas longus Species a *S Pelopome&iacd*, *Pisidicd* etaffinibus inter abas notas folns longè petiolatis et calyce longion QOO tantum acuto sed longè spiDuloso-acuminato insignis

SIDEMTIS VESTITA Boiss (Sect *Eusidmtis* )

S suffrutescens decumbeDs caespitosa intricate, ramis brevibus erectis ngidis angulatis simphcibus basi densè supenùs laxè foliosis folns parvis senceo-lanatis oblongo-linearibus acntis mtegnis vel utnquè minutfe umdentatis, supenonbus saepè glabrescentibus, verticillastris parvis 2-4 distinctis ranùs subdistantibus saepiùs in spicam ovatam aggregabs, bracteis villosis ovato-rotun-

dis cilycc dimidid bruvionbus ad medium ferè usquè in denies, lanceolatos tenucs iissis, calycis densè albo-villosi dentibus tnan-gulanbus longiusculè spinulosis tubo triplò brevionbus, corolla flavjc tubo caljci aequilongo

*S scoi diotdes* var *testita* Bom Voy Esp pag 508

Hab in regione supenon montis *Sierra Nevada* Boiss I Fnnk t Bourgeau f

Var *iu ens* Folia brevius et adpresse'' hinula

*S scordtoides* var *alptna* Boiss Voy Esp

Hab in parte calcared *Sierra Nevada* Boiss I Bourg exs 1851 N° 1425 a

Hacc species quam in opere citato cum *S Pyrenaicd* Poiret—*S scordioidi* var D<sup>h</sup> combinaveram ab et specihcè mihi distincta videtur 5 *Pyrenaica* habel folia longiora et pracserLim spicas terminalea crassiores semper valdè compactas, /olia floralia calyces icquantia, denLcs calycinos dimidio lubo sublongiores

SIDERITIS BOURGEANA Boiss et Reut. (Sect *Eusidentu* )

S breviter et cnspulè hirtella griseo-virens caulibus erectis sulfruticosis dumulosis, ramis tenmbus virgalis erectis simpheis-simis, folns angustè lineanbus aculis integemmis, axilhs fasciculos foliorum abbreviatorns jumorum edentibus, verticillastns numerosis dissilis 2 ranùs 3-4 flons, folns florahbusherbaceisob-longo-lanceolatis patulis caljce subbrevionbus basin versùs utrin-què 2-3 den tans, calycis glandulosi adpressèque albo-hirti denti-bus laoeolatis aculis dimidio tubo sublongionbus, corollaB e sicco albidæ hirto tubo breviter exserto

Hab ID *IhspanicE* auslro-onentahs collibussiccis, circà oppidum *Tovarra Mwnam Begm* herb Pavon, circà *Hellin*, et propè *Ekhe de la Sierra*, ad radices montis *S. Segura* cl Bourgeau snb nomine 5 *leucantJuB* var. *ntegnfohas* Gosson

Planta pedalis, folia infenora 4-6 lineas longa aogusia, verd-cillasln 7-10 racemum semipedalem formantes, calyx vix tres li-neas longus, *S leucantha* Car in eisdem quoque regionibua cres-cens el quæ a noonullis *S. hirsute* [onma sgrè distinguenda est a nostrâ dilTert folns oblongo-spathulalis dentatis, verticillastns

multiflora et praesertim foliis floralibus rotunda Us squallier dentato-spicosis oec in cuspidem attenuate

SIDERITIS BALAHISJE BOISS (Sect *Hesiodta* )

S. annua patulè hirsuta caule erecto humili a basi paniculato-ramoso ramis erectis ferè tota\* longitudine florifera, foliis breviter oblongo-lanceolatis obtusiusculis obsolete crenulatis basi attenuatis, floralibus angustatis acutis calyces subsquantibus, verticillatis omnibus contiguis simplicem elongatam continuam formantibus, calycis patulè hirti nervosi tubulosi basi subgibbi labio superjuncto indiviso dentibus aequilongis oblongo-lanceolatis aristato-mucronatis, fauce brevissimè hirtulfl, corollas albas tubo incluso limbo membranaceo calycis dentibus subbrevis labio superjuncto hirsute, nuculis ovatis caninato-compressis sparsim tuberculatis

Hab. ad *Gulek Boghas* in *Tauro Cihaco* cl. Balansa piess N' 569. Floret Juno.

HBK planta quam prius ex caractere labii calycini superjuncto indiviso pro *S. Romand* habui ab ea differt verticillatis in spicam continuam condensatis, foliis floralibus florea non superantibus, calycis dupli majoris dentibus aequantibus nee valde inaequalibus fructifera minus divaricatis, fauce hirtulfl nee longè pilosa Corolla} Umbra ex Sicco minor videtur Nuclei dupli majores sunt sparsius tuberculatae. Cl Gasp *S. approanmatam* descripsit plantam Siculam mihi ignotam et floribus in spicam approximate quoque gaudentem sed ex cl Gussone haec species cisterium ornes *S. Roman*® characteres habet

SIDERITIS LYCAONICA BOISS et Heldr. (Sect. *Hendfoa* )

S. annua caulibus plumbis paniculis erectis vel ascendens patulè hispidis, foliis parvis radicalibus confertis bombicino-lanceolatis ovato-rotundis breviter petiolatis apice obtusè crenulatis, caulis oblongis sessilibus brevius lanatis, verticillatis distinctis superjunctis simplicem elongatam continuam formantibus, foliis floralibus oblongis mucronatis calyces aequantibus, calycis longè et laxè laevibus labio superjuncto indiviso dentibus omnibus lanceolato-spinulosis, corollam albam extus hirtam calyce subbrevis

Hab in collibus topiaceis andis inter *Bei/thefti* et *Komah* cl Heldreich anno 1845 Fl ineunte Junio

Caules 3-5 pollicares, folia radicalia tres lineas caetera 4 la La, flores magnitudinis eorum *S Romance* cui affinis est et a qua m-dumeoto laxè bomhycino partis inferioris planlae, formae et minutiae foliorum, corollae sicco albis nee fusco-citnibus specificè differre videtur

STACHYS PINBTORUM BOISS et Balansa (Sect *Enostachys* B<sup>A</sup> )

St perennis caule quadrangulo elato vixi dispute tomentoso medium versus saepe viscidulo, foliis amplex tenens superius vixibus breviter hirtis subtus albo-tomentellis e basi cordata ovalis vel ovato-oblongis circumscissis crenatis crenis ovatis inferioribus longè superius brevius petiolalis, verticillatis 6-7 remotis racemum longum simplicem vel basi 2 ramulis auctum formantibus, foliis floribus herbaceis oblongis breviter acummatibus sessilibus inferioribus verticillo longioribus caeteris angustis et brevioribus, calycis subincurvi basi longè hirsuti superius breviter glanduloso-hirti dentibus sequalibus lanceolatis acutis spinulosis dimidii tubi longitudine, corollae (e sicco carnes?) labiis sequilongis superius integro utroque extus longè ciliato, tubo supra basin annulo nodice piloso valde obliquo instructo

Hab in sylvis *Pint kmcionis* ad septentrionem *Pylanm Cthaarum* situs cl. Balansa. Fl Augusto

Planta 2-3 pedales, folia intermedia 3-4 pollices longa 2-2'« lata, flores eis *S alpinae* ferè minores Species corollae pemcillatis subtus oblique annulatis quodammodo affinis *S Heracleae* quae longè differt foliis angustis longè ciliatis concoloribus bracteisque longioribus latioribusque Ab omni grege *St Germann et Creim* differt nostra foliis tenuioribus amplioribus non rugosis et bacnoto accedi ad *St spectabilem* Choisy e Persia borpali, Armenia et Kurdistan onandam, verticillatis subcontiguis, bracteis calycis subaequantibus, corollae extus breviter hirtae labio inferiori longior distinctam

Obs *St Cassia* Boiss in montibus *Macedonia*; v. gr *Korthah* prope *Thessaliam* quoque occurrit, Heldreich ex 1851 sub

*St. Italica* var *chondrostachyde* Hue quoque<sup>1</sup> Auch<sup>2</sup> r N° 1707 a Thraciâ

STACHYS PENICILLATA Heldr et Sartori (Sect *Enostarkys*)

St. tota lana laxiuscula albicans, caulibus quadrangulis erectis simpliciusculis modice elatis, foliis e basi truncate vel subcordata oblongis Tugosulis minute crenatis obtusis Tacie inferiori paulo magis canil inferioribus longe crotens brevibus petiolatis, verticillis ternis inferioribus distinctis superioribus confluentibus, foliis floralibus sessilibus oblongis obtusis crenatis inferioribus soils, verticillo longioribus, bracteolis hincan-setaceis plumosis calyce dimidiis brevioribus, calycis dense albo-hirsuti dentibus triangularibus acutis tubo triplo brevioribus, corollae carnea; labellum subaequilongis superioribus retuso longe albo-penicillato, labellum calyce longioribus intus oblique annulato

Hab. in Gnmwferè totius montosis et alpinis, *Taygetus* Heldr. mons *Delphi Eubecis* Heldr, *Parnassus* Sartori Heldr Orphan, **montes Chelmos et Kyllene Peloponnesi Heldreich**

HBBC species a botanicis graecis sub nominibus *St. Italica* var *alpina* vel *St. dasyanthes* var *alpina* quoque communicata, ex copiosis speciminibus comparata, a. *St. Halted* cujus indumentum adpressè canum, folia angustiora et praesertim dentes calycini longe lanceolato-spinulosi demum patuli longius distat et propitius 5. *dasyanthes* Rafin et praesertim *St. Germanica* affinis est, sed ambo differunt a nostris, foliis floralibus longioribus angustatis acutis verticillastra superiora etiam saepius superantibus Cl de Heldreich legit in umbrosis prope *Lebadeam BCBOIUB* et in campis prope *Katanne ad radices Olympi Thessah speciem S penicillatae* characteribus affinem sed caule ramoso donatam et qua; probabiter faujtas est e loco caudion orta

STACHYS MERSINEA Doiss (Sect *Enostarkys* B<sup>1h</sup>)

St. perennis tota lana adpressuscula canescens, caulibus elatis virgatis paniculato-ramosis, foliis oblongo-lanceolatis tenens rugosulis oblongo-lanceolatis in petiolum brevem basi longe attenuatis minute irregulariter crenulatis acutiusculis, glomerulis infe-

riccinorum pedunculate celsis lobis verticillatis  
remota formalibus, folia floribus anguste lanceolata acute  
mucronulata subtus subaequantibus obsolete denticulatis, bracteolis  
linearibus longis plumosis calyce paulo brevioribus, calyx  
levis lanatus subincurvus lobis lanceolatis longe spinulose  
demum palulis tubo d'quilongis, corolla minora calyce vix  
longioris lobis exclusis longipilosis superioribus integro inferius paulo  
longioribus, tubo lobis obliquis annulato

Hab. ad pagum *Bouloukli* prope *Mersina Cilia*® litoralibus in  
arvis vicinis ad Djilansa prope ex 1855 N° 583

Tripetalis procerior, folia inferiora 3-3 V, pollinibus longa  
8-10 linearibus laevibus, superiora angustiora, flores e sicco purpurascen-  
tes cernitur in sectione Pinnis bane plantam habueram pro  
vanclate *St Cassia* cujus quoque calyces longe anstati sed haec  
differt itidummodo omnium desinitur bruisimo adpresso, verticil-  
las in capitulo oblongo-cylindrico confertis, donbus ferè duplo  
longioribus Nosra species facie refert *St Itahcam* Mill foliis an-  
gustis (quoque donjam sed cujus caule temper simplicissimus,  
folia linearia clycet. superantia, corolla: multo majoribus notas  
differtiales graviores praebeant

STACEJYS THAPLZUNTEA DOISS. (Sect *Slachyotypus* )

SI caule ramoso ramisque tenuibus papillis brevibus retrorsis  
scabundis ciliatis glabris, foliis breviter petiolatis ovalibus cor-  
datis obtusis crenatis pile sparse brevibus adpresbe obsolis, ver-  
ticillas 4-5 floris ramosis distinctis racemum axim  
brevissimè glanduloso-viscidura formantibus, foliis floralibus  
parvis oblongis utrinque attenuatis acutis integris, bracteolis  
nullis, calycis breviter campanulati breviter et parvo glanduloso-  
hirti dentibus tanguian-linearibus spinulosis demum patentibus  
tubo brevioribus, corollae rubrae breviter lobatae, tubo calyce sub-  
duplo longioribus labio inferioribus paulo longioribus.

Hab. circa *Tiapezunlem* in *Ponlo* ad divert

Species mihi fragmentum tantum nota et ideo ulterius recognos-  
cenda sed ut videtur a *St. sylvatica* cui affinis est distincta in-  
dumentis hispida patuli defleu, rariis scabundis, folia minoribus,  
bracteis calycibusque minoribus brevibus arwtalibus.



STAG ins LONGIFLORA BOISS el Dalansi (Sect *Stachyotypus* )

St perenoib tola indumenta patulo molli viscido longè hispida caulibus tenuibus fragillimis foliosis secùs aDfractis rupium curvatis pendulisve, folns petiolo eis jjquilongo suffultis e basi cordatâ ovato-rotundis acutib circumcircâ grossè deDtatis dentibus tngularifms acutis, flora lib us minutis peliolatis ovato-flabellatis acutis utrinflue argute 1-2 denliculatis calyces supcrantibus, flonbus oppositis avillanbus sessihbus racemos laxiusculos terminales et etiam ex axillis supenonbus ortos formantibus, calycis campanulati vindis sparsim et patul6 hirti dentibus e basi tngulan longmsculè spinulosis tnbo fer6 dimidid brevioriDus, corollae viscidulaB purpurascenia tubo calyco plus dupl6 longiori I a bio superfon retuso, niferions duplo lougions la Ho risque lobo intermedio multo raajon

Ilab in speluncis faucis *Guzel Deri* supra *Sedichg* in *Cilicid Uttorah* propè *Memna* cl. Dalansa qui specimna rursus (lorcentia inilio Octobns legit.

Folia niajora diametro 1-1 1/2 pollicana, racemi polhcares vel sesquipolhcare, calyx 5 hneas corolla 15-16 longa Species cunosissima fragihtate et babilationo propè *St ctrcinnalam* et *Guyontanam* collocanda a quibus corolla tubo longissimo, formfi- que foliorum egregiè differt.

STACHYS VIRIDIS Boisa et Heldr (Sect *Stachyotypus* )

St. perennis vindis pilis brevibus glandulosia alusque longionbus patulis plus minusve Inrsuta, caulibus erectis elatis paniculato-ramosis, foliis sessilibus oblongo-lanceolatis acutis lat6 et obtusè crenulatisSj verticillastns 6-8 flons numerosis praster inflmâ subcontiguu spicas t^rminales^r elongatas forraantibus, folus floralibus lanccolatis acununatis calyces aeqnantibus T^I superantibas, bractcolis minutissimis pedicellos brevissimos florum non aequantibus, calycis camponulati glatidulis stipilalis crebns pilisque sparsis patulis obsili dentibus laoceolatifl longè acero«iis xquahbus tubo aequilongis, corolls cameae purpureo suffusis tubo

calyce brevion, labio supenon uxlfc piloso pauW brevion integro, nucuis tenuiler puuctulatis

Hab in regione inferiori montis *Korthiatt* propè *Thmalonicam* et *Olympi Thessah* circi JAfofAt cl dc Ileldr alt 2000' Fl Jnnio Julio

Plauta bipedalis, folia mferiora 2-2 \*/« pollicana polhcem lata, epical terminalcs ramorum saepè semipedales Flores magnitudinis eorum *St spmulos*® cui habitu accedil sed quas longfe differt radice annul, calycis dentibus ovatis, corollJ ochroleucft, etc *St. menihwfoka* cui amiciss. G Reichenbach noslram speciem comparat eodem habitu donala differt cal>ce ob denies supenorcb langiùs coalilos bilabiato, corolla" ochrolcucfi, nostra potius justu *St Sprnnert* collocauda

STACHVS TEUcniifOLR Boi^s cl Kotschy (Sect *Stafoyotypus*)

St basi suffrutescens, cauibus procumbenlibus numerosis mncalis, ramis crectis virgatis quadranguhs vmdibus sparsim et laxè sublanatis demùm glabns simplicibus vel basi ramosis parte inferiori praesclim foliosis, folus pctiolo eis paulo" brevion suffultis inferioribus c basi Iruncald vel subcuneatS ovatis oblusis obtusó crenatis breviter hirtis suprâ vmdibus subtùs canescenbus, folus supenonbus remotissimis minutis subsessilibus ovato-oblongis, verticillastns 34 in parte supenon rami denudati aepiùs conferlis iflfenon sacpè distantly folus floralibus ovatis acutis flores vix sequantibus, bracteolis oblongis mucronatis calyce ferè dimidi6 brevionbus, calycis breviter glanduloso-hirti campanulati dentibus tnangulanbus acutis tnbo ferè dimidid brevionbus, corollâ

Hab inrupestnbusargillosisprope£de»L«fomi alt 5500', Julio jam dcfloratam legit cl Kotschy

Rami pedales longioresve, folia mfenora 9-10 lineas longa 6-7 lata, calces tres ferè lineas longi Iffinis *St distanti* 13<sup>th</sup> dlrfert folus raiDonbus obtusè crenatis, glabrescenM et pnesertim calycis dcnlibus brevibus nee longè acuminatis divergentibus

STACHYS CIAMÆSIDERITIS BOISS el Balansa. (Sect *Stachyotypus*)

St perenns tota adpressissimè tomentoso-flavescens, caulibus prostratis denudatis suffrutescentibus, ramis erectis vel ascendentibus pumilis simplicibus Imà basi confertim foliosis foliis crassis rugulosis ovatis oblongis ellipticisve petiolo eis ssepè aequilongo suffultis basi rotundatis vel cuneatis ranùs subcordatis obtusis obsoletissimfi crenulalis integrisve, foliis supenobus 2 vel 4 remotis sessihbus ellipticis mtegnis, flonbus in capitulum terminate bractcatum densum saepè 1 vel 2 verticillatis distinctis remotis subtùs auctum confertis, foliis florahbus oblongo-ellipticis acutiusculis calyces squantibus, bracteohs hanean-setaceis calyce dimidiO brevionbus, calycis flavido-virentia cnspulè hirti dentibus lanceolatis acutis tubo plus dimidid brevionbus, corollaj sulphureae exlùs tomentosae tfibo calyce vix longion mlùs suprà annulum horizonlalom toto papillan-hirto.

Hab in regione alpind supenon montis *Asian Bach Antitmm* 12 leucis ad onentem *Ceesarete* cl Balansa Floret ineunte Augusta

Rami C-8 polhcares Folia inferora 1 vel i 7,-2 polhces longa latitudinc vanabilia Capilula terminaha magnitudinis nucis. Calyces sub anthesi 4 dein 5-6 lineas longi. Species pulchra prop6 5/ *atnam* B etll collocandaquajdiffertiridumentodensomolli, calycis dentibus tubo quintuplifminoribus

STACHYS LEUCOGLOSSÁ Griseb var *Anatohca* BOJ

Caules pane inferiori pihs longis adpresaiuscalis hispidi, calyces non tantim taberculati sed papilhs brevibus exasperali Corollac galea non puberula sed longè el adpressè hirsuta

Hab in *Tauro Cihetco* Kotschy t Balansa I *Tauro Pamphyhco* suprà *Tourchalar* Heldreich I

STACHYS STENOSTACHYA BOISS (Sect *Chamtestdmits.*)

St. perennis e collo indurato pluncaulis, caulibus ascendentibus Virgatis foliosis aimphcibus mfernè praesertim longiusculè et cris-

pule lursuti^ foliit longA jtlpn^siusciilu<sup>1</sup> at fipdmin hirsute sessi-  
 IIII> infenonJiis olil<tii^o-sp.itluil.it^ obiiiHis parlo supcnorl  
 oblnt<sup>1</sup> Lren.nli-, si'p<noribii<> lim.iii-l.iiin-ol.jii>, jculiu^culis den-  
 ticulis ascendentibus .n IIIIIMHII\ fulii> llur.iiil)ii!> lanceolalifi luie-  
 gris molius florea superantibus ceteris brevioribus, **verticillastis**  
**4-5** floris i rinifliH spiui in nun iles ,ni((i)si, is longiis grdnles for-  
 m.iiijil\*n>. \*.ily i^ (.irnpiiiiil.ih %Ji\*Jis sp.iiMin lnrl nervosi denU-  
 IM>> III,III(;III.IIIIII> l>n \IIT ijniiiiiii-i-, lulio brevionbus posl an-  
 ilii'bin <M\*(o-piiiiilb, HIKJIL.I' .ilhi(t,i> IJIHO siipcnori paulo bre-  
 vmri limp' hit .iito lulxi IK IIII OIHI nr'r amtil.ito fauce Inrtuld,  
 HIM ihiii iil^1^ icinil^IIM<sup>1</sup> i L olouir tillirrtllljtis

Ilili in p.nlc mfriion nioiilit (*turn Syia borealu Boisst*  
 [ lord Jiimn ilirillir

.Si-Mjuipi'il.il^, foh.i infrrior,! ^quipollirnrria 4. Imrai lata,  
 v<Ttn III^IM IU-T2 in vpiL.iiisi'jlL Minipcaloni (lispimij| cal)x  
 rrudifer :i Jim'.it tjiilum lou^us IUK, specicin luiciiM]ue ha bin  
 pro \jnel.iti<sup>t</sup> S U-wnqitimc V,r|^v|| >(l li.rc dilTerl c.nilo r.iniosiv  
 nmo, TOMH hiipiTiuriliiH inanisjnnu>t.iii loiiKionbus iriiegermnis,  
 dentibus CIM H siinil,ilo-iri>Utis tubuni .cqiLintiljus, corullji  
 multi) m.ijnrii lubo tiibiini (JJCIS siipiTdiid, LJLIO infenon **gale4**  
 dupld longior

STAMIIH (In ICILI Fluisi 11 Itil (Si-cl Olma)

St numifli ciule recto |nli^ |MUIIS apicc glandulosis molhtor  
 lurHiito snnplici vel ,IK'C iLiiitiilalo-rjiiusu, folns vindibus  
 induiiKMito bruvi p.itulu \iscidulo obsilh pctiolalis ovalo-oblonysis  
 obtus<sup>4</sup> hd\*>| mlundilis n-nulariter et oblus<sup>o</sup> trrnatis, verticillas-  
 tris >G lions si'ciis radios approximate st'd distuirtis, folns flo-  
 rnliilus I'lliplico-oblrngis MSMILUS aciliuscutis uilogru calyces  
 p,nilo siipi'Uiililtis, cjlyce breviler cimpanulato pilit vibcidu  
 p.itentibus ol^ito (IIIIII<> irimigiii.iri-ljiiccol.itis breviter spinu-  
 Insis ICLH4 ilimilifl IMII<sup>1</sup> lulu lon^ionbus, corollii) pallidi- luloic  
 Inrt.r 1 ^ uiljtc loii/ion LIUU Miperion pauly brtvion

Hub *tn* fjucu (*nizi-hlen\** Mipri *Setlufug* m *CittaA Uttoralt* d  
 Balansa pi C^ IH.V^MIlt >' fINNfff!

Ifite plaul qtiani piimuin pro *St minud* habnimus ab efl nolus  
 sequentibus rilTerl Indiimeciilini r.inlid PI fedKmum pnulum VIR-

cidum e»l nee brevissimum u-l milluiu, folia caulnu lu»i rolun-  
djtj sunl HOC cuniMla, breuorj ublusio\*. crenala, lloralia elliptica  
IX'L lincariJ, calycis lation-> drnles hrcMyimA nee long\* tuhulali  
recti DLC Cilciti, corolKc pauld nujorh, tubus px^erlus nee dcilo\*  
calyciuos non superans

**STACHYS** AKMA L var *ummoplula* Duiss ot Illaiiclic

Sjspiús a collo nmosa rami> iuinitia creclis vcl ascendentibus,  
indumentum breve ramorum si-jni'ii papillaro cn^puin fulioruin  
spar^uin jdpressiuMiulum, folia niinor.i, LJJCCS paUili el molliler  
liirti denlibus baepi cis fonn.i' ijpicu brevionbu-\*

*St. ammophila* Hoiss. el Itlanclie Mss

flab in areno>is ojepe nunluuis circi *Beyrouth* el Tn/)o/i *Syria*  
cl UJiictic

Planis pnmfl faciu a *SI nunwl* obrJinosjljbrL'vijlosprosLr.atos,  
tal>cc'b miuort's breuius sjunulo^O^ jbhurroih H-J ub <1 nun spc-  
ciflet separanda.

Obs *St monosperma* llois.s Diagn esi « *Aralnca* Ilornem,  
quam eo lcmpor« non novernin si'd enm lia»c species ex Sjnas cl  
raloslinaj CUUIH lautum nola sit nee in Arabia occurijt noiuen  
**aptissimum** *St. macronperma* forsan Hcrvandum

**STACHYS** OBSCURIW Dois-. el Ualansa. (Sect (WI«M.)

St. annua loU pilu paluhs JIH brevionbiH glandulosis alns  
olongalm hirsuta obscuri nrens caulu credo quadrangulo sim-  
plicivcl medium versùs panicul.Uo~ramo<»o, folns lireviicr hir^utib  
oblongb basil bubcordatis broviter pctiolatis obLusò oi profundius-  
cnlA crenalift, vcrHciHasin<sup>1</sup>\* nunuTosls subsexflons distinclis, folus  
floralibus scssilibufl oblongo-lanceolalm jLummatis acutè scrru-  
latis serraturib ascendenlibus caljcu longionbus subrecurvis,  
bractu elliptico-Hnoanbus acuimiulis inlogns calico brovion-  
buù, flonbus pediccllatis, cal)tc patul& l)l«pido coatfanulato  
fructifero non accreto dentibus oblongo-lancoolatis obruptè ol  
liroviter spiuolosift tubo terliA parle brevionbus aequolibufl, co-  
rollo purpurascntis extiis long6 rt adpressA hirffi lubo caljce  
breviori labio supenon brevion rotuso, nuculis parvi\*.

Hab in arvis derelictis ad *Metsma Ctlaw* cl Bldusa Floiet Ma 10

Specimma majora sesquipedaha, folia mfenora ferè bipolhcaru pollicem lata, cal>\ fructifer 4 lineas tantim longus, corolla limbus caljcem parum e\cedens Species habitu et folus *St maetospermm* Boiss vald& aflbnis sed in hAc calyces fructifen valdè ampliat 7-8 lineas longi, corolla) limbus amplus c cal>ce valdè *exsertus* extus breviter et sparsim hirtus, nuculae tandem quadruple majores

LAMIUM PICTUM Boiss et Heldr (Sect *Lamiopsis*)

L p ere line caubus fihformibus diffusis ramis ascend enlibut. abbreviatis simpheibus, folus glabns vel sub lente pilis adpressis iparsis brevibus obsitis inferioribus minimis ovalis basi rotundatis vel truncalis longè peliolatis supenonbus pauld majonbus breviter peliolatis basi latè truncato-cordatis sabreniformibus omnibus obtusè crenato-dentatis obtusis, verticillastns 2-4 flons ad apicem ramorum 2-3 approximate folus suppratis, calycis adpressstj hirtuli dentibus Iriangularibus acutis tubo dimidid brevionbus demtum anlrorsum curvatis, corollae hirtulai roseffi purpureo-stnatae cahcc 3 Va-P<sup>1</sup>^ longions tubo recto sensim amphato exannulato, labio supenon bilobo, anthens hirsutit.

Hab in regione alpind *mmt\*s *Parnasst* Heldr t Orphan f Guicciardi t Fl. Augusto

Rami tenues 3-6 polhcares, folia infenora 4-6 lineas longa lataque, supenora pauld raniis duplò majora Calyx flonfer 4 lineas looguSj corolla 13-15 longa Affine *L nuah* Boiss et Heldr quod in eodem jugo crescit et a quo cl Botamci suprfl laudati dislincum esse autumaverunt. *L mvale* habet folia velulino-cineiea majora, dentes calycinis tubo asquilonos lanceolatos *L veronicafohum*JP<sup>1</sup> nostra? speciei forsan magis affine differre tamen satis videtur folus omnibus latè reniformibus crenis paucionbus, profundionbus<sub>3</sub> cal>cis dentibus apicelongius anstatis, corolla majon sesqui-bipollican, labio supenon profundius-bilobo Cl Heldreich legil in alpinis *Parnassi* supra *Dipotamo* formum minorem graciliorem *L picti* sub nomine *L fihcauhs* per errorem scheda? diMnbutam

UMIUM STHIVTUU Sibtli vur *Cylleneum* Boiss et Orphanides

Folia acutiora acuhusque dentata Corolla paulo minor labio  
supenon minus profunde bifido

*L. Cylleneum* Boiss et Orphan Mss

Hab in monte ff^frnefZiriaJ propè FJ^om\*tea cl Prof Orphanides alt 3500'.

Obs *L. plebemm* Boiss in Huct pi Arm exs videtur tan tum  
vanetas *L. lemformis* Montb et Audi dentibus caljcinis longio-  
nbus.

LAMIUM MILCRODON DOISS et Huet. (Sect *Larmopsus*)

L annum pube brevi adpressd hirtellum cinerascens a basi  
ramosum pumilum, folns Infcnonbus petiolatis a basi truncate  
ovalis grossè et obtusè crenalis, floralibus majonbus sessihbus  
amplexicauhbus lobato-crenatis flores superantibus, verticillastns  
2-3 approximate densis, calycis hirsuti dentibus a basi lanceolaU  
longè et tenmter setaceis sub anthesi rectis tubo dupld longion-  
Lus fructifens erecto-patulis tubo tripld longionbus, corollae  
hirtae roseae tubo recto apice parum amphato caljce vix longion  
intus obscurè annulato^ labio supenon indiviso, anthesbarbatis,  
nucibus oblongo-triuctns virentibus eleganter albo tuberculato-  
vermiculatis

*L. orthodon* Boiss et Huet in pi Armen exs.

Hab in *Armenid* propè *Tortoum* Huet du Pavilion, et *Erzeroum*  
Calvert, in regione infenon montis *Masmeneu dagh* et inter sege-  
tes montis *Argm* alt 2000' melr cl Balansa

Planla 2-4 pollicans habitu et foln *L. amplexicaule* cui affinis  
estreferenssedhumihor, verlicillastns magis condensatis *L. am-  
plexiawle* insuper valde dffert calycis dimidio brevions denti-  
bus<sup>1</sup> tubo sequilongis, corolla tubo calyee tnplo longion, nucubs  
leTibus Calyx flonfer *L. macrodontis* A hneas fruclifer 6 longus  
Nomen specificum mutavimus ob specimina fructifera po^tea ob-  
servata in qmbus denies calycis subpatuli fiunt

PHILOMIS CAPITATIL Botes (Sect *Gymnophlomis*>)

Phi basi suffrutescens, ramis erectis abbreviatis simplicibus indumento adpressissimo stellato canescentibus, foliis eodem indumento adpressissimo lomentosis canis vel {praeserUm paging superiori) flavidis supra laevibus subtus reticulato rugosis cordatis ovatis oblongisve obtusis inferioribus longè petiolalis superioribus sessilibus, verticillatis in capitulum terminate foliatum ovulum confertis, infimo aliquando remolmsculo, foliis floribus ellipticis utnqu6 attenuatis acutiusculis calyces superantibus, bracteis paucis subulatis brevissimis, calycibus adpressè tomentosis flavidis pentagonis angulis elevatis\*dentibus hinc rectis muticis subinsequalibus tubo triple brevioribus, corolla flavida tomentosa

Hab in regione alpina vallis *Gusguta Tatm, Cihcici* alt 6500' Kotschy pi exs N° 1511 Balansa t Fl Julio

Planta 8-12 pollicans, folia pollicem aut pauld amplius longa, 8-9 hinc lata Capitula terminata magnitudine ovi sed breviora Hsec planta quam hucusque pro *Phi Armeniace* vanetate habui ab ed sua inflorescentia mihi distincta videtur

PHILOMIS LINEARIS BOISS et Balansa. (Sect *Gymnophlomis*)

Phi rhizomate indurato caules basi procumbentes radicantes alios stenos alios flonferos simplicissimos erectos edentibus, foliis indumento stellato tenaxo canescentibus rugulosis angustissime linean-lanceolatis obtusis in petiolum longè angustatis, verticillatis 1-4 distinctis, folia floralibus sessilibus conformibus acutis flores superantibus, bracteis linean-lanceolatis tubo calycino sublongioribus, calycis densè et adpressè pannosi dentibus lanceolate tubo subbrevioribus, corolla flava extis densè tomentosi

*Phlomis angustifolia* Bal pi exs 1855 (per errorem Sched) non Mill

Hab in regione inferiori montis *Masmeneu dagh Cappdociw* cl. Balansa, eadem speciem nondum flonferam in regione superioris *Tmoh* supra *Philadelphia*™ ohm observavi

Var 6 *plumosa* Calycis tubus lanA densa patula obsitus



Hab. in regione alpinS montis *Aslan-dach Cappadocice* 121ucas ad onentem *Caaurm* cl Balansa

Caules V,-! pedales, folia cum petiolo 3-6 pollices longa 3-4 hneas lata, flores magmludims eorum *Phi. ArmemactB* sed calyces profundius dentati Affinis huic et praesertim *Phi lanceolate* Boiss. et Hohen differt angustie fohorum, calycibus minus manifesto pentagoms profundius dentatis dentibus coarctatis

PHLOHIS LONGIFOLIA BOISS et Blanche (Sect *Dmdrophlmts.*)

Phi fruticosa ramis glabratis rubellis junionbus pube stellatfl spared obsitis, folns virentibus supræ parcè subtus copiosius stellatQ-pubens rugulosis breviter petiolatis e basi truDcatA longd lanceolatis acutiuscuhs crenatis, verticillastns 1-3 distinctis multifloris foliis floralibus sessilibus lanceolatis superatis, bracteis numerosis basi curvatis ngidis lanceolato-linearibus subpungentibus calyces sequantibus, calyce brevissimè stellato-puberulo apice truDcato dentibus e basi brevissimè ovato-truncata laid abruptè et breviler subulatis, fauce margine cihatd cilns dentes aequantibus, corolla\* aureæ tomentosfi

Hab in *Libano Benjthensi* propè *Solma* cl. Blanche. Fl. Julio

Planta ex unico specimine descnpla etut videtur distinctissima. Folia 3-3'» pollices longa Basi 7-8 hneas lata Calyx 6 hneas longus Affinis videtur Inpnmis *Phi vtscosts* quise quoque virens differt mdumento viscido, folns lationbus brevionbus, Tercicillastns majonbus et inprimis calycis dentibus sensim et longius subulatis

PHLOMIS MESOPOTAMIA BOISS. (Sect. *Oxyphloms*)

Phi. herbacea, caulibus erectis ramosis tomento sparso stellato floccoso obsitis, folns radicalibus, , cauhnis brevissimè petiolatis oblongo-lanceolatis obtusis basi breviter cuneatis obtusè crenatis suprâ sparsim hirtis subtus pallidionbus rugulosis stellalo-tom«fltosis, floralibus sessilibus elhptico-lanceolatis acutis subintegns verticillastra dupld superaatibus, verticillastns nnumerosis difflinctis, bracteis tenuissimè subulatis ngidulis calyce 2-3-pW brevionbus, calycis stellato-tomentosi angulati dentibus

e basi ovata lineari-subulatis reclinatis dimidiatis subsequantibus corolla tomentosa" e sicca flava

*Phi. pungens* submutica B<sup>11</sup> in DC Prodr

Hab in Mesopotamia inter Orfa et Suerek Kotschy pi exs 4843 N°49

*Phi. pwigens* W = *Phi herbavenh v. tomentosa* Boiss Voy Esp cui cl Bentham nostram speciem associavit meo sensu speciem differt indumento magis adpresso, bracteis duobus calyces aequantibus, calycis brevibus dentibus tenuibus patentibus Nostra species inter *Gymnophlomidem* et *Oxyphlomidem* habitu est intermedia.

EREMOSTACHYS STOCKSII BOISS

E procera caule inferni glabrescenti supra densa et breviter velutino bimplici vel saepius parce ramoso, foliis oblongis grosse lobatis vel saepius pinnatisectis segmentis incisus vel pinnatifidis terminatis majoribus omnibus breviter papilloso-velutinis glabrescentibus petiolis basi lanato in costam mediam crassam abeuntibus, 9-15 verticillatis 6-8 floris omnibus distinctis racemos longos formantibus, foliis floralibus ovato-oblongis dentatis calyce brevibus acutiusculis, bracteis minimis subulatis, calycis campanulatis densis et breviter albo-tomentosis apice non dilatatis dentibus breviter ovalibus abruptis vel breviter spinulosis, corolla densa tomentosa

Hab in provincia *Beloutschstan* alt 3000'-4000' cl Stocks

Species affinis *E laciniata* a qua differt foliorum segmentis quamvis variabilibus tamen brevibus et minus dissectis, idem ioha ambitu lanceolata nee oblonga vel infima saepe tantum lobata Flores eius *E lanata* dimidiatis minores et inde racemi tenuiores et magis elongati, plerumque ramosi sed simplicissimi, verticillas longe remotiores, bracteis minimalibus ferè obsolete lanceolatis linares tubum calycis ferè sequentes *E lasiofolia* B\* eandem regionum onunda ex descriptione indumento nigro borragineo foliorum differt.

## EREMOSTACHYS ACANTHOCALYX BOISS

*E. procera*, caule glabrescenti in racemum simplicem elongatum abeundum, foliis ambitu oblongo-lanceolatis pinnatisectis plunjugis segmentis lanceolatis inciso-pinnatifidis terminatis parvis majoribus omnibus glabrescentibus vel secus nervos subtus parvis setulosibus petiolo costaque media\* patulis et subretroscissis hispida tandem glabrescentibus, 6-8 verticillatis 6-8 floris distinctis inflorescentibus valde distantibus, foliis floralibus triangularibus ovatis incisatis, inflorescentibus verticillatis Jongionibus supponibus brevissimis subintegris, bracteis numerosis oblongo-lanceolatis hinc hinc acerosis rigidis calyces subsequantibus calycibusque dense et minute tuberculatis tuberculis sub lente stellato-pilosis setis terminali longioribus, calycis dentibus brevissimis truncatis retusis dorso in dentem vix dum basi connatis divergentem produclis, corolla exilis pilosissima

Hab. in regione *Belouchistan* prope *Doobund* et *Stocks*.

Species foliorum divisione *E. laciniatam* referens, indumento brevissimo tuberculato-stellato pruinoso inflorescentie et dentibus calycibus eis specierum affinium validioribus 2 hinc longis notabilis. *E. lasiolepis* a *E. procera* ab ed differt inflorescentia longe densa et molliter pilosa *E. superba* verticillatis densa lanatis, **folius** bipinnatisectis etc

## MAMUJBIUM DEPAUPERATUM BOISS et Bal

*M. tomentosum* adpressum et tenuiter tomentosum cinereum caulibus parte superioribus anguste paniculato-ramosis, foliis parvis leniter rugulosis inflorescentibus ovatis superioribus oblongo-cuneatis omnibus minute et obtuse crenulatis, floralibus deflexis calyci aequilongis vel longioribus, verticillatis bifloris approximate spicas longas graciles formantibus, calyce campanulato nervoso-sulcato dentibus 5 muticis brevissimis exterioribus binis paulo longioribus, faucibus longe albo-pilosis, corolla alba parve tubo breviter exserto

Hab. in collibus saxosis *Cappadocia* ad pagum *Ekrek* inter *Cappadocia*

*saream* urbem el lluviuni *Zamanta sou sttmn* all 1500 ineLr cl Dalansa Floiet Augusto

Indumentum *M pcregnni*, folia eis hujub specici multò mmora, spir<D 2-3 pollicares basi laxse, calyces vix 2 hneas longi dentibus exterioribufe e]us diametro triple brevionlms Species InflorescentiJ suâ dislinctissinia

**MARMJUIUJf FAIGIDLNS IJoisS tit BdlaiIN]**

M caulibus ascendentibus simpheibus breviter tomentello-lutescentibus, folus omnibus donsissimfe pannosis albo-lutescentibus obovatis vel obovato-cuneatis supern6 crenatis floralibus verticillatra superantibus, verticillastns 2-3 terminalibus multiftons inter se remotis, bracteis subulati? tubo calycino pauld brevionbus, calycib pilis flavidis, brevibus hirti dentibus subulatis apicc glabnstubo mpl6 brevionbuSj faucc densè pilosâ, corollas parvae albidde vel carneaB tubo incluso galeâ bifidâ

Ilab in montibus ad septentnonem *Pylarwm Cthciawm* sitis cl Dalansa Floret Julio

**Species affinis** *M. Kotschyi*, *M. micranlho* et *Libanotico*, ab eis prater indumentum densms etiam. m folus floralibus pantiosum differt dentibus calycinis longionbus gracihonbus apice glabns, *M Astracamcum* et *M brachyodon* mdumento brevi vel laxo caetens neglectis longiùs differunt Nomen e gibbis dentiformibus faucis caljcis a cl Balansa obsrvatis sed haec nota in specimnibus exsiccatis pent

**MA.IVIVIJDIHM CEPHALANTHUM BoiSS et Noe**

M lanâ albida demum flavescenti pannosum, caulibus pumilis 2-A phyllis, fohis parvis ovatis in peliolum atenuatis obtusè crenatis floralibus oblongis flores Eequantibus velpauldsuperanlibus, verticillastns 2-3 in capitulum terminale praeter inferws aliquandò distinctum condensatis, bracleis tonniter subulatis calycis tubum tequantibus, calycis tomentosi dontibus a basi lanceolate subulatis apice nudis tubo tnplô brevionbus, fauce pilosâ, corollac lubo breviter exserto, galci bifidâ

**Ilab in rupestibus Armenw mendionalu Jd Bahher Maaden**

cl. Noe, in regione alpina montis *Masmeneudagh* inter *Tarsum* et *Ccpsareamd Balansa pi* exs 1855 (sub *M micrantho*)

Caules longiores etiam post anthesim semipedales, folia caulium stenilium 3-5 lineas longa, caulina pauld majora Species mflorescentia peculiars propè praecedeniem ex forma dentium calycis collocanda

Obs *M condensatum* Boiss in pi Nou exsicc a *M globose* M. et Auch. non specificis differt cujus forma micrantha est magis condensata

MARRUDIUM CYLLENEUM BOISS\* et Heldr

M totum indumento albo-cinereo senceo pannosum, caubus erectis vel ascendealibus simplicibus, folns rugosis mollibits infonibus ovalo-rotundis subcordatis, floralibus ovato-oblongis breviter petiolatis omnibus obtusissimis obtusè crenatis, verticillastns 2-3 remotis multiflons, bracteis subulatis calycino tubo plerumque brevionibus, calycis breviter tomentosi atriato-aulcati denlibus subulatis tubo tnplo brevionibus erecto-patulis, fauce pilosd, corollisB tubo incluso, galea elongata bifida

Hab. in saxobis montis *Kyllenes Peloponnesi* Heldr alt 3500'-7000'. OTphan ,F1 grac exs N» 299, montis *Chelmos Achaun* Heldreich

Species *M veluho* e Parnasso quocum eam diu conjunximus affinis tamen characteribus sequentibus distincta Indumentum minds flavidum, bracteis breviores, dentes calycim tubo tnplo breviores neceum subaequantés minus paluli

MARRUBIDM THESSUUM BOISS et Heldr

M cauibns ascendentibus simplicibus infernè laxè lanatis superoè tomentosis, folus rugosis Indumento albo-cinereo senceo pannosES ovato-cuneatis petiolatis, floralibus oblongis sessilibus verticillastro sublongionibus omnibus crenatis, verticiUastrjs 2-5 distinctis multiflons»Ian ato-hirsutis, bracteis subulatis calycis tubo sobbrenoribus, calycis tubo stnato glabrescenti <dentibus snbulatis tubo xqmlongis basi hirsutia apice glabris, fauce parè albo-hirsatâ, corollae albiae tubo incluso galeâ bifidâ

Hab. in pascuis alpibus montis *Olyfipt Thes&ah* cl Heldreith Floret Julio

Species affinis *M. velutino* et *M. rotundifolio*. A priori differunt indumento florum lanato calyces et bracteas subrecondenti nee brevi puberulo, a posterioribus dentibus calycibus multo brevioribus ab utroque foliis floralibus angustatis nee rotundis *M. globosum*. *M. cl* indumento et habitu simile habet flores mm oves et praesertim dentes calycinos brevissimos.

#### M. ANNUBIUM HETERODOX BOISS et Bal

*M.* adpressè cinereo-tomentosum, caulibus erectis vel ascendentibus simplicibus, foliis rugosis acutiusculè crenatis caulium strobilium oblongis, caulibus et floralibus ovato vel oblongo-spathulatis his verticillata superantibus, verticillatis 2-3 distantibus multilobis, bracteis eleganter latis subulatis calycem aequantibus, calycis strobili longè hirti dentes lobus tenuiter subulatis tota longitudine ciliatis duobus tubum aequantibus castens brevioribus, omnibus rectis.

*H. velutinum* var *heterodon* Blh in DC Prodr

Hab. in regione alpina *Taun Ciliaa* Kotschy' Balansal Species a *M. velutino* specificè distincta indumento tenui minus pannoso, foliis tunonum angustatis, foliis floralibus minus amplis praesertim bracteis tenuibus ciliae septem lineas longis, calyce ferè longissimo genens cum dentibus 6-7 lineas longo, dentibus insequantibus non rigidis nee patulis.

#### MARRUBIUM ALBUM BoiSS et Bal

*M.* totum adpressè albo-tomentosum secus partem inferiorem caulium et folia tunonum meo-lanatum, caulibus erectis simplicibus vel ad basin inflorescentiae 2 ramulis brevibus acutis, foliis tunonum oblongis minutis subtus praesertim dense niveis, eadibus oblongo-spathulatis minutè creulatis rugosis subtus magis cavis, floralibus deflexis oblongo-linearibus verticillo aequilongis vel brevioribus, verticillas 5-7 globosis multifloris inferentibus distantibus superioribus approximate, bracteis subulatis muticis calycino tubo triplo brevioribus, calycis tomentosi brevia dentibus

5 lanceolatis muticis tubum dimidium aequantibus sub anthesi patulis dem sguarrosis subrecurvis, corollas albae tometosee tubo incluso gale4 breviter bifidd

Hab in *monte Alidagh* cl Balansa pi exs 1856 et propè *Kamechh Khan ad basin montis Karanfil dagh Cappadoace Bal pi* exs 1855 sub *M parvifloro* var Floret Augusto

Pulchra species habitu *M parvifloro* F et M adeo similis ut pro eo earn habuenmus sed hoc in Cappadocii quoque obviumprselar partem supenorem plants glabrescentem differt denlibus calycis 8-10nis longionbus acerosis

MAHRUBIUM PESTALOZZA BOISS (Sect *Eumamibiwn*)

M. caudicibus prostratis radicanibus, cauibus erectia elongatis supernè parcè ramosis adpressè et teouiter albo-lanatis folns rugosis supernè breviter hirtis palhdè virentibus subtus canescentibus oblongis obtusis oblusiusculS dentatis basi cuaealis mferionbus longmsculè petiolatis supenonbus subsessibus, florahbus Terticillastro pauld longionbus, glomeruhs verticillastn densis 5-8 flons, bracteis subulatis calyce dimidid brevionbus, calycis breviter steHato-tomenLeh dentibus 5 rectis tubo dimidid brevionbus 1-2 accessorns brevibus saepè adjectis, corollae albae tomentellse tubo dentes calycinos vix superanti

Hab. in montibus propè *Elmalu Lyctce* cl D<sup>r</sup> Pestalozza<sup>^</sup> circa *Owhdk* cl Balansa

Afflne habitu et charactenbus *M albo* B et Bal. quod differt dentibus calycinis longionbus eximiè patulo-recurvis

MAHRUBIUM BALLOTOIDES BOISS et Balansa

H cauibus floccoso-lanatis supernè parcè et breviter paniculato-ramosis, folns snprà rugosissunis gnseis subtus lanA floccosd albicaelibus inferioribus orbiculatis, supenonbus parvis obloDgocuneatis verticillastro brevionbus, vertioillastns approximalis, bracteis oblongo-cuneatis obtusè 3-5 dentatis dimidium calycem vix BBquantibus, calyce tubuloso-subcampanulato brenter tomentoso gnseo stnato apice irregulariter 5-7 dentato dentibus alus tnlobis lobis ovatis obscurè mucronulahs extenonbu? mino-

nbus alns indivi&is ovalia omnibus ereclo-patulis, fauce parcè albo-villosd, corollas albae limbo mnnilo brevissimè exserto

Hab ad *Balamout Kawd* inter *Smyrnam* et *Magnesium* ubi crescit in consortio *Marrubii vulguts* cl Baiaisa Jun 1854

Planta mdumenlo fohis et habiLu *M vulgare* omnm6 rferens sot] jb co et omnibus alns geuens bracteis non sctaccis formflque dentium calycis *Ballotas* quasdam refrenti long6 discedens Species propter hos characteresi vakle singularans et quam pro formi liybnda mter *Marrulnum* et *Ballolam* forsan habuissem sed nucas omniu<l normales fert *M dewitt* de Noc casterira calycis dcDles quoque ovatos hdbot bed mdivisos

BALLOTA MARMONONTA Boiss et Balansa (Sect *Benngena*)

B caulibus suffrutescentibus procumbentibus ssp6 lorluosis, ramis ereclis vel ascendentibus palul6 hirtis simplicibus vel parcè et breviter ramosis, fohis cordatis ovato-rotuadis circumcircà crenato-dentatis dentibus ova Us acutiusculis snpri vmdibus hirtis aubtùs adpress^ cams elevatim nervosis inferioribus petiolo eis MIL brevion suffultis supenonbus breviterpetiolalismimUisflores non aequanUbus, vorlicillastns 1-4 muHidons sapiùs in spicam oblongam approximatis ranùs disjunctis, bracteis linean-subulatis ngidis calyces aquantibus, calycis tubo cylindnco sulcato patulè hirto limbo patulo tubo seqnilongo in denies 10 a basi laUon subulatos patulo-recurvos ^æpò subinseuales Tcè ad basin usqu6 parlilo, fauce parcèbirta demùm subclausS, corollae e sicco purpurascens tubo e fauce brevissimè exserto gale& hispjda labio infenon sublongion

Hab in regione montand supenon montis *Masmeneudagh Capadocia* ad fines *Cihcia* siti cl Balansa Fl Jul Aug

Rami 8-12 pollicares, folia inferiors diametro 9-10 lineas lala, verticillastra magmludine nucis, calyx 7-8 lineas dentes tres lineas longi Species calyce longè dentato msignis nulh arclè\*afilm» propè *B Itahcam* collocanda

BALLOTA ARMENA BOISS

B caulibu-, erectis simplicibus patul6 et molliter hirsutis, folus



e basi subcordatâ ovato-rolundis subangulatis acutiusculis obtusè vel acutitisculè crenato-dentatis breviter petiolatis floralibus flores superantibus, omnibus breviter et molliter hirtis subtus canescentibus prominenter nervoso-reticulatis verticillatis multifloris 5-7 distantibus, bracteis subulatis lobum calycis aequantibus, calycis patule et breviter hirti sulcati limbo patulo tubo in parte breviori ad basin ferè usquè in 10 dentes e basi lanceolatâ subulatos apice glabros subinseuales partito, fauce pilosâ, corollam tubo incluso galeâ hirsutissima bidentatâ labio infero sublongior

Hab. in Armenia Calvert

Species habitu accedens ad *B. Aucher* quæ differt indumento densiore, bracteis hincanibus, foliis plusquam in partem limbo calycino tubo vix breviori multo minus profunde partito. Magis affinis *B. Larmdanc* cujus caules ramosi, indumentum patulum viscidulum longius et imprimis hincanibus calycis dentes breviter triangulares breviter fissus.

TEUCRIUM AROANUM Orphanides (Sect. *Teucria*.)

*T. n.* suffrutescens ramosissimum caespitosum caulis caudiculisque filiformibus denudatis prostratis radicanibus, ramis brevibus herbaceis foliosis adpressis, foliis utrinque adpressissimis sed subtus intensius canis ovalo-oblongis obtusissimis integris in petiolum brevem attenuatis, racemis terminibus secundis paucifloris, pedicellis calyci aequilongis vel brevioribus, foliis floralibus sessilibus ovato-ellipticis acutiusculis pedicello saepe longioribus, floribus magis, calycis campanulati vix minute stipitato-glandulosi dentibus tubo aequilongis aequantibus oblongo-lanceolatis aenuato-acuminatis nervis lateribus marginantibus, corolla laciniis lateralibus oblongis glabris inferiori majore oblonga cucullata subtus papillis longis crispis hirta, staminibus longissimis.

Hab. in montibus *Chelmos* (montes *Aroarn* Pausan.) *Achau* regione superius ad *Stygm* ubi rapae laetis vestit tapetibus. Alt. 5800'. Floret medio Julio Cl. Prof. Orphanides.

Ioaigne Flora Graecae decus. Caules et rami subterranei plus minus elongati saepe semipedales, ramuli foliferi 4-2 pollicares

**numerosissimi** sed pauci in racemum floriferum abeuntes. Folia cum petiolo 9-10 lineas longa 3-4 lata. Racemi 4-7 florum pollicares vel paulo longiores. Flores e sicco albidii forsitan caerulei eos *T. fruhemii* referente forsitan paulo majores. Calyx ejusdem format sed non canum et lacinae acuminatae nee muticae.

TEUCIUM PROCERUM Boiss. et Blanche (Sect. *Teucns*)

T. caule erecto procero quadrangulo praeter pilos nonnullos secus lineas transversas mserlionis foliorum glaberrimo superne in paniculam longissimam pyramidatam abeunte, foliis glaberrimis semel vel bis pinnatisectis laciniis in us longis integris latiusculis lineariobtusis, foliis floribus in partitis laciniis brevissimis, pedicellis glanduloso-hirtulis calyce glanduloso sublongioribus, calycis breviter campanulatis laciniis lanceolatis acutis tubo subfoveolatis, corollae caeruleae extus valde barbatae laciniis inferne oblonga acuta, filamentis longis hirtulis.

**Hab. in Libano v. gr. ad Sohma Libani Berythensis Blanche et Merdji Bern supra Saida Gaillardot.** Hue quoque referendus 14° 4599 Auch ex *Synd*.

Planta saepe tripedans a *T. Oncitah* Anatolico et Caucasio distincta statura, defectu indumenti patuli caulium et foliorum, foliis minus dissectis laciniis latioribus. Corollae subtus longioribus et densius barbatae filamenta lura nee glabra.

TEUCRIUM LANCEFOLIUM BOISS (Sect. *Scorodoma*)

T. caulis subherbaceis erectis virgatis steterunt paniculato-ramosis, foliis lanceolatis acutis basi in petiolum brevissimum breviter attenuatis obtusiusculis crenatis crenis approximatis ascendentibus utrinque breviter puberulis subtus canescentibus glandulis sessilibus adpersis rugulosis, florum pedicellis effecto-palulis calyci sequilongis vel longioribus suffultis oppositis racemosa laxiusculos forraantibus, bracteis lanceolatis integris pedicellos et inferioribus flores superantibus, calycis brevissimae campanulati non reticulato-nervosi hirtuli dentibus ovatis superne

sublalion mucronato caeions anstatis, corollas purpures hirtula?  
tubo subexserto laciniA mfenon transverse lation truncate

*T Lusitanicum* Bth mDCProdr—*Scorodomalanafolia* Moench.  
*T. Asmhcum* Jacq Hort. Vind III tab 41 Camb Bal non L

Hab in insula *Bdleanca* *Majore* in fissuns rupium *Puig Major*  
Cambessèdes

Species hucusque confusa cum *T Lusitanico* Lam\* — *Y. salviastrum* Schreb Link et Hoffm. Fl Portug tab 2, summorum jugorum monlis *Serra de Estrella Lusitamce* loco *Cantaro gordo* dicto incolae (Welwitsch) et quod cat fruticulus cauibus hgnosis lortuosis ramis abbreviatis, Tolns ovatis rugosis subtus petiolatis, calycis reticulato-Dervosi dentibus inferionbus lanceolatis Hoc *T Lusitanicum* magis et valdè affine est *T. Massihensi*, tamen prseter caulcs lignosos ab eo distinctum folns minoribus obtusioribus, flonbus majonbaSj calycis dente supenon mucronatonaj mutico, corollaB tubo exserto et inpnmis lacinid infenon oblonga acutd nee obovatd obtusissimd, statione alpinfl nee cahdek

TEUCRIUM ODONTITES BOISS et Balansa (Section *Chanuedrys*.)

T ramosissimum cauibus tenuissimè fihformibus brevissimè hirtellis simplicibus vel parcfi ramosis decumbentibus vel erectis flexuosis, folns minutis brevissimfi petiolatis ovatis vel ovato-rotundis vindibus suprft glabrescentibus subtus pallidionbus pubescentibus glandulis seasilibus adspersis elevatim nervulosis utrinque breviter el obtusiusculè 2-4 denticulato-crenatis denliculis ascendentibus, flonbus oppositis pedicelljs calyci aeqmlongis vel pauld longioribus suffultis raceraos terminates ssepius simplices rarius paniculatos laxos formantibus, bracteis integernmis oblongo-lraeanbus utnnquè attenuate pedicellos aquantibus, calycis campanulas brevissimè hirtuli dentibus tubo dimidio pauld longionbus supenonbus ovato-tnangulanbus acutiusculis inferionbus" bims pauld longioribus lanceolatis, corolla purpurese hirtic tubo vix exserto, laciniA infenon ovatfl, cactens angustè lanceolato-acuminatis

Hab in flssuns rupium verticahum faucis *Guzel Deri* supra *Sedctktg* non procul a *Mersma* in *dlmd httorah* cl Balansa  
Fl Jurno ineunle

Species Glcgantissima caulibus innumeris caespitosis 4-6 polh-  
canbus tenuissimis erectis vel saepiùs decumbenlibus mlicatis  
constans Folia majora sex lineas longa sed pleraque multd mi-  
nora Racemi laxi 1-2 pollicares ea *Odmittis* sp. referentes Flo-  
res ois *T ckakwdrys* dimidid mmores Nulh ahæ speciei sectionis  
affine, nonnulhs notis accedens ad *T Montbrelu* quod aptiùs in  
Sect. *Polio* militat et a nostro difTert ramis crassionbus fragilli-  
mis, mdumétito tomentoso, folns majonbus, racemjs ovatis densis,  
oaljcis dentibus brevionbus ovatis, etc

TEUCRIUM STOCKSIANUM BOISS (Sect *Pohutn*)

T suffrulescens ramosissimum totum pube brevi velutind ca-  
num, ramis erectis pumilis oppositè ramulosis subfragilibus, folus  
sub&essihbus parvis ovabs basi subattenuatis parte saponon  
utnnquè obtusmsculè 3-5 denticulatis, flonbus in capitula ad  
ramorum apicem solitana ovaio-rotunda congestis folus Jloral-  
ibus elliptico-lineanbus integns eis aeqmlongis intermixes, caly-  
cis ovato-campanulati breviter tomentosi albidì dentibus tubo qua-  
druple brevionbus tnangulanbnsbreviter attenuate acutis duobus  
Infenonbus paululùm longionbus supenon obtusion saepè bi vel  
tndcniculato, corolla e sicco flavidae tomcDtellæ tubo mclnso  
lacimâ mfima oblongA intermediis dinudiò brevionbus angustlo-  
nbusque.

Hab in ditione *Beloutschtstan* supenon ad cacumen colh *Hur-  
bab* in montibus *Ma* alt 5000' cl Stocks

Suffrutex semipedahs Folia inferiora 4-5 lineas longa 3 lata,  
capitula magnitudinis avellanse, calyces 4 lineas longi Species  
mdumento brevissimo cano formflque fohorum referens *T. leuco-  
cladum* quod cfeterùm longè differt ramis duns ngidis divaricatim  
ramulosis, capitulis plùs dimidid minonbus, calycis sesquilineam  
vix longi deutibus rotundalis ferè obsoletis

TEUCRIUM ALBIDUM Muivby (Sect *Polmm*)

T caespitoso-ramosissimum caulibus filiformibus fragihbus  
decumbentibus simplicibus vel parcè ramosis cnspulè hirtis,  
folus minimis ulnnquè tomentoso subtùs cjms ovato-rotundis

basi rotundatis sapè subdelloideis utnquè 3-4 crenatis crenis rotundatis regulanbus, flonbus capitula lermihaha pauciflora bracteata densa formantibus, bracteis folns similibus sedmajonibus calyces occultantibus, calycis campanulali Tindis hirtidentibus tubo tnpld brevioribus ovatis obtusis subsequahbus, corolla e 9icco albs tubo incluso lacinnis suprcmis oblongo-hneanbus ciliatis longis, caetens glabns Intermedns abbreTiatis^afenori cullata sursdm curvata

Hab ID fissuns rupmm suprâ *Tlemen* Boiss. April 1849 (sterile), ad rapes *Oued Mafrouch* suprâ *Tlemsen* cl Munby Junio 1849.

Ranu tenen 3-5 polhcares, folia cauiina vix 2 hoeas longa lataque, floralia 3-3\*/\* hneas lataj calyces 3'/i-4 lineas longi Pulcbra species ex afflitate *T Pyrenam* et *Granatenm* a qmbus folns PARTIS hypoleucis, calycis dentibus non long6 acuminatis alusque notis egregiè differt *T ramosissimum* Desf. tab 118 distinctum videtur caulibus erectis fruliculis, flonbu9 axiHanbus, folns angustionbus oblongis, calycis dentibus acutis tubo vix brevionibus

AJUGA GHIA Schreb. var. *angnstifoUa* Boiss

Tola planta breviter cilia la Dec ut ID typo sects paries florales laxè laoata. Folia floralia ferè ad basin usquè in lacimas hneares partita. Corolla flava calyce tnpld longior fohis floralibus pau!6 brevior.

Hab. in *Armenia* Auch. N° 5150, Huet du Pavilion et Calvert {sub *A. cihatd* Boiss et Huet), in *Georgtd Caueasicd* Hohenacker pi. exs. (sub *A. Chid*), in *Cappadoad circa Ccssaream* Balansa 1856. (sub *A. Chid*).

Haec planta ab *A. Chid* foliorum lacinnis Ion gi on bus plerumque angustionbus discedens cum efl flonbus et charactenbus bene congruit et ab *A. chamwpity* cujus folia habet corolla mult6 majon discedit

## LENTIBULARIACE

### PINGUICULA HIPTIFLORA Ten

Huic speciei referenda omnino videtur planta ex varus Græciæ Jocis sub nomine *P Megaspilece* Boiss et Heldr distributa Specimina a cl de Heldreich primo hujus stirpis in Græcia detecta in rupibus madidis Achaïas supra conventum *Megaspilceon* lecta et illa qua cl Orphamdes ex monte *Chelmos* propè *Stygem* relict folia habent eadem Italicis longiora angustioraque sed specimina ex Parnasso a Guicciardi et Heldreich Neapolitans omnibus notis similia sunt In *P grandiflora* et in *P leptocerate* quoque specimina in stillicidus rupum verticalium crescentia folia habent elongata angustata — *Pmg crystallina* Sibth ex Cypro, mihi icono tantum nota, *P huliflorae* a quo lobo lotermedio labi inferioris profundè bifido nee retaso alisque notis differre videtur

## CTLOBULARIACE

### GLODULARIA STYGIA Orphamdes

Gl. suffruticulosa fragilis, caudicibus diffusis tenuibus inferne denudatis radicanibus parte exserta brevissimè ramulosis fohosis, folus uninervis ovato-subrotundis obtusissimis rariùs subretusis basi cuneatis in petiolum subsequilongum abeuntibus carnosus glaberrimis siccitate nigrescentibus, capitulis ad ramulorum apicem solitans pedunculo eis subaequilongum nudo vel folia squamiformi sessili oblongo obsito suffultis, involucri squamis oblongo-lanceolatis acumatis margine ciliatis ceterum glabris herbaceis corollis brevibus, receptaculo paleis angustè linearilanceolatis acutis glabris calyces aequantibus, calyce pauld supra basin usque in 5 lacimas vix inaequales anguste lanceolatas apice

subulatas tolâ longiludine long6 albo-ciliata\* partito corollj bilabial lab 10 infenon ferè ad basin usquè tripartite partitiombus lineanbus tnnervus nervislaterahbus ad \*U longitudinis productis, labio supenon tertid parte brevion ad basin usquè in 2 lacimas lineares angustiores uninervias parlito

Hab in monte *Chelmos Peloponnest* ad fontem *Stygis* ranssima Fine Junn 1852 flonferam detex.it cl Orphamdes

Gaudicuh parte subterranecl filiformes, parte foiosd vi\ pomcares, folia majora diametro 5 Uneas lata, saep6 autem minora, capitula eis *Gl cordifolice* pauld majora ut in *h&c* specie termina dicenda, calyx 2 1/4 hneas circiter longus A. *Gl cordifohd* distinctissima caudiculis multd tenuionbus miniisque suffruticosis, folus majonbus forms diverse, peduncuhs brevissimis; involucri squamis angustioribus longionbu's, calycis non bilabiati longions albo-ciliati nee glabnusculi fauce uudi nec villis clausâ, tubo brevissimo nee lacinns subaequali, labn inferioris lacinns ad 3/4 longitudiois nee vix ad tertiam partem Irinervns *Carradona w-canescens* A DC. nostram speciem pnm frontc fohorum form A et capitulis albo-ciliatis referens longiùs differt cauhs erectis simplicibus fohatis, receptacuh paleis angustè subulatis, calycis diniid minons quoqne 5 partiti partitiombus parte inferior! tantùm albo-ciliatis et Inpnmis corollas labio superior! indiviso

## PLUMBAGINACEJE

ACANTHOLIMON LATIFOLIUM Boiss et Noe (Sect *Glumana* )

A densè casspitosum ramis brevissimis folus vetustis mgns vix pungentibus densè obsitis, folus annotinis rosulatis patulis glaucis plants latmsculè lineanbus albo-marginatis margino scabndulis apicè attenuate acerosis, scapo folus 3-4-pld longion apice monostachyo, spicâ ovato-oblongfl distichè et approximatim 5-6 spiculatd, spiculis triflons, bractefl extenon ovato-lngulan apice attenuate acutâ dorso vindi latf albo-marginaw interioribus pauld longionbus lationbus amplis oblunn^F lati^imè sea-

nobii oblongis dorso anguste<sup>1</sup> herbaceo oxcurrente breviter mucronatis, calycis glaberrimi tubo in lunbum sensim dilatato, limbo rubello apice obtusè et breviter lobato nervis rubens ad margmem usquè productis, corollâ rose!

Hab in Persid Mesopotamia finitimâ propè Mendeh cl Noe Floret Julio.

Species e distinctissimis, caespites humi adpressi, folia 12-15 lineas-longa 1/2 - 3/4. Ineam lata nigida sed illis generis mintis dura facie superon (an siccitate?) subcanaliculata Scapus 5 pollicaris, spica cum floribus ferè 2 pollices longa pollicem ferè lata Flores amph, calyx cum limbo ferè 10 lineas longus Species inter *Glomanas* spied brevi densiusculum Transitum ad *Armenopsis* praebens

ACANTHOLIMON PUDERULUM DOISS et Balaosa. (Sect *Statuopsis* *Imbecata*.)

A. Cespitosum pallidè virens, ramis brevibus foliis vetustis retrorsis XIX pungentibus obsitis, foliis annotatis rosulatis brevibus lineari-nervatis utrinquè patulè velutinis margine laevibus spinulâ tenui brevissimâ terminalis, scapis brevissimis velutinis spicâ breviter ovata fasciculiformi densè distichâ 5-7 spiculatâ folia apice vix superanti terminalis, bracteis acutè candelatis inferiori vix angustè marginali carinata parvè hispidulâ ceterum glabra in mucronem brevem rubellum abeunti, interioribus paulo longioribus praeter candelam herbaceo-rubellam omnino hyalinis albis glabris candelâ sub apice in mucronem excurrenti, calycis tubo limboque ad nervos hirtellis, limbo albo tubo breviori patulo eroso-sublobato nervis rubens paulo antè margmem evandis, corolla rosâ

Hab in regione alpium montis *Alandack Cappadocem* ad orientem mentis *Argem* sib. Augusto ineunte jam defloratum legit cl Balansa

Habitus *Ac. androsacei* a quo indumento, foliis margine laevibus, bracteis interioribus sub apice mucronatis alisque notis egregiè differit Affine *A. tomentello* quod differt ramis elongatis foliis vetustis longioribus et multo vahlionibus horridissimis, spicâ abbreviatis capitato-scorpioneis, bractearum forms



ACAISTHOLIMOK LONGIFLOIUM Boiss (Sect, *Laxiflora Pleiostachya*)

A dumosum glaucescens, ramis fruticosis tenibus parte inferioribus spinis vetustis sparsis horridis parte annotina elongatis paucifolus, foliis inferioribus brevibus minus duntaxat patulo-reflexis supra basin vaginantem attenuatis breviter mucronatis cespitens acerosis erecto-patulis angustifoliae hinc subtriquetris supra planis subtus convexis omnibus margine laevibus, scapis foliis vix longioribus subcorymbosè 2-3 stachyis rachide valde flexuosa, spicis laxè 2-4 spiculatis spiculis tenibus longis. unifloris, bracteis inferioribus ovato-triangularibus vix albo-marginatis acutis, internodiis plus duplo longioribus dorso herbaceis rubellis subnatis latis marginatis muticis, calycis tubo glaberrimo tenui bracteis longioribus subcurvatis in limbum erectum album sensim abeuntibus, limbi valde plicati lobis 5 triangularibus submuticis lobulis 5 brevissimis rotundatis intermedii, nervis rubris, petalis roseis limbo magno exserto.

Habitat in regno Cabuco circa Choky et Kuehlah vulgare cl. Gneiffel, in regionibus Belutschistan circa Doobund cl. Stocks.

Habitus *A. tragacanthini*. Folia superiora 1-1 1/2 pollicem longa sat tenuia spicis fragilissimè laxa? paucifloris flexuosa. Calyx cum limbo parum dilatato 7-8 lineas longus quo character et etiam spicis dissitifloris haec species ab *A. tragacantho* egregie differt. Species ex sectione *Loan flora Pleiostachya* v. gr. *ilohanthum* et *teniflorum* habitu, folio dense rosulatis et floribus brevius foras magis distant.

ACANTHOLIMON STOCKSII BOISS (Sect *Laxiflora Pleiostachya*)

*A. fruticosum* ramis elongatis-spinis et vaginis foliorum veterum obsitis parte annotina elongatis, foliis glaucis longis validis acerosis tereti-subcompressis supra plano-convexis subtus convexis margine brevibus basi in vaginam tenuissimè denticulatam abruptè dilatatis, scapis foliis brevibus 2-3 stachyis spicis brevibus laxis 2-4 spiculatis rachide flexuosa, spiculis unifloris, bracteis inferioribus triangularibus acutis herbaceis albo-marginatis superioribus

penonbua dor&o augusiè herbaceib auDcjnuatis Ial6 marginalia mucronulalis duplò longionbns, caljcis infernè glabn supern6ad costas hirsuti tubo bracteis tion longion limbo demùm patulo albo tubo paulò brevion phcato marginc eroso obsoletè lobato mutico

Hal) in ditione *Beloutschislan* propè *Ispmglee* cl Stocks pi cxs N°1091

Fruticulus ramis 0-8 pollicanbus folns terminabus bipolhcanbus basi lmeae a/«<sup>latls</sup> sP<sup>lcaB</sup> VIX pollicares. Caljcis lubus tres hncas longus A praecedenti folns vahdionbus longionbus calycis tubo brevi et limbo palulo distinctissimum Collocandum quoque propfe *A ohganthum* a quo differt ramis annolinis elongatis nee rosulatim foliosis, folns nullft vahdionbus, bractcarumformft,etc

AGANTTOLIMON ARMENUM EOISS et Huet (Sect *Imbncata* )

A ramis abbreviate densi caespitosis infernft folus vetustis patulis nigns dens6 obsitis parte annotinâ rosulatim fohosis, folus glaucis lalis planis brevibus punctatis margine scabndis, scapis folus aoqmlongis paulO supri basim abeunlibus in spicas sunplices distichas laxiusculò 12-15 spiculatas elongatasreclas, bracteis parum macqualibus elongatis apice aceroso-mucronatis albo-marginatis extenon latiùs herbacei, calycis lubo hirto sensim in limbum eo sublongiorem dilatalo, limbo eroso obsolete lobato mutico nervis rubns pauld antè niarginem evanidis

Hab. m *ArmmuA* prop6 *Etzetoum* cl Iluct du Pavilion

Foliâ eis *Ac Kotschyi* ferè simiha sed paululùm longiora minusque glauca Spicae longiores 1 «/i-2 pollicares majon sprcularum numero constantcs, bractcae magis elongatao longius mucronatae et limbus calycis major nervis non ut in *Ac Kotschyi* decoloratis *Ac androsaceum* et *Lycaomcum* spicis densis abbreviatis subfasciculatis nee longis distichis magis distant

Yar 3 *Balansm* Folia paulo longiora magis caruiata minis glauca Spic» subbreiores Bractcae pauld brevius mucronataB

A *Balanm* Boi\*s in Bal pi exs 4856

Hab m jugo *Asian* (*lacc Avhimm* 12 leucis ad onentem **Сарватер in Cappadocia**) cl Balansa

Inflorescentia et calyces aded plante Armeuae similes ut plantam Cappadocicam va specific^ disLiocam judicarem

ACANTHOLIMON CALVBHTIBOISS (Sect *Imbncata Pleiostachya*)

Ac. csBspitosum, ramis brevibus tenmbns infernè vestigiis foliorum circmnatim recurris vestilis, folus an no tin 13 rosulatis longis tenuibus planiuscubs margine scabriduhs in mucronem brevem tenuissimum abeuntibus, scapis folia pauld superantibus breviter pubescentibus apice 1 vel 2 slachyis, spicis densd disUchis ovatis 5-7 spiculatis, spicuhs uniflons, bracteis lierbaceo-stramineis prater basin puberulam glabns latis subaeqmlongis extenon attenuato-mucronatâ cstens abruptfe et breviler mncronatis prsceter nerrom medium membranaceis, calycis tubo obsolete puberulo sensim in limb am roseum eo sequiloDgum margme erosulum obsolete lobatum abeunti nervis nigns ad marginem nsqu& perdtctis, corolla rosed

Hab. in monle *Techdagh Armenia* cl Galvert

Folia tenaia sesquipolhcana Calyces 5 /\* hneas longi. Inflorescentiaommndetcharacteresflorum^ *glumacei* Jaub etSpach tab 91 a quo sat differre videtur foliis dapld longionbus paràm pungentibns, bracteis pauld amplionbus, calycis limbo roseo nee albo

ACANTHOLIMON HUETII Boiss (Sect *Imbrtcata Pleiostachya*)

A radice lorgi verticali, collo caudiculos nudos et ramo#brevissimos procumbenles edenti, fohis paucis laxè rosulatis glaucescantibus patolis herbaceis brevibus lineanbus margme et etiam facie scabndis obtusmsculis mucrone brevi tenuissimo abrupte termioatiSj scapis folns 2-3-plfl longionbus pubescenlibus distachyis, spicis sessilibus densè distichis ovatis 5-9 spiculatis, spicuhs uniflojft, bracteis amphs breviter velutims extenon latè herbacea oblongA longè attenuato-mucronatA, alus vix longionbus nervo exceptd membranaceis abruptnisculè mucronatis, calycis tubo hispidulo sensim in hmbum album aequilongum margine erososub-40-lobulatum abeunti, nervis intensè rubns ad marginem usquè perductis

Plant orient novar Ser sec N° 4

Hab in Armenia supra *Maimansour* cl Huet du Pavillon.

Caudicuh in ramos brevissimos paucifohatoa abeuntes Folia G-7 lineas longa hneae 1/3 lata, inflorescentia omnmd *A glumacet* sed bracteae majores Calyx sex linear Ion gas. Ab *A glwnaeo* distinclum ramis basi denudatis paucifoliatis, foliis vix acerosis minùs quam in ullâ alid generis specie rigidis, bracteis densè et breviter velulims

ACANTHOLIMUN CŪSAREUM Boiss et Balansa (Sect *Imbnkata Pleiostachya*)

A ennaceo-caespitosum ramis infernè folns vetustis patuhs brevibus horndis parte annotina" subelongatis, folns tenuibus patuhs planis apice subulato-attenuatis margine obsoletè scabndis, scapis puberuhis folns 4-5-plo longiOnbus apice monostachyis vel distachyiSj spicis brevuer pedunculalis distichè et densmsculè 5-9 spiculatis, spicuhis uniflons rachide hirta, bracteis glabns extenon brevion vindi cannatd angustè membranacei apice longè attenuato-mucronatd intenoribus praBter nervum omnind membranaccis rubelhs mucrone longo rubro abruptè lerminalis, calycis lubo inter nervos hirtulo, limbo tubo dimidi6 brevion erectopatulo eroso-sublobato, nervis intensè rubris ad marginem usqu6 productis, corollfi roseA

Hab in regione subalpinS montis *Ahdagh* prope *Cwsaream Cappadocice* cl Balansa Floret medio Julio.

Kami ferè tnpollicares, folia 9-11 lineas longa tenuia Scapi 2 1/2 pollicares SpmsB 1-1 1/2 pollicares. Calyx sex lineas longus Ab *A Armeno* quod spicis quum simplices sunt refert distinguitur foliis multd tenmonbus, scapis longis ssepè distachyis **bracteislong6mucronati3** Ab *A.Hohemckm,subulatQifestucaceo* et alns speciebus pleiostachyis quibus affine est differl spicis elongatis, flonbus saltern tertiâ parte majonbus

Obs. *Acanthohmt* species in pi Kokchyanis e Tauro anno 1853 sub nomine *A Pinardi* var et a cl Balansa etiam e jugo *Taun* sub *Ac Kotschy* djsnbuta folns brevibus glaucis ad *Ac Kotschy* reverb accedit sed ab eo spicis elongatis remotiflons plùs minùs flexuosis recedit el probabilitcr forma brachyphylla est *Ac. Phrygn* quod forsàn ab *A caryophyllaceo* non satis differt

## OOMOLIMON SARTORII Boiss

G perenne glaucum. radice verticali caudices densè caespitosos breves hgnosos squamosos edenti, folns omnibus radicalibus minutis oblongis vel oblongo-rhomboideis acutis mucronulatis basi cuneatis plus minusve longè petiolatis, scapis humihbussimplicibus angulatis prater squamas lanceolatas acuminatas nudis, flonbus ID spicas breves fasciculiformes dispositi9 pamculam terminalem densam oblongam subumlateralem formantibus, bracleis conaceis vinctibus latè basi albomarginatis, inferior! brevion deltoidei acuminatd, in tenon ad tertiam partem usquè tricuspidatd cuspidibus subrecurvis, tubo calycino bracteas squanti sub lente obsolete glanduloso lobis brevissimis triangulanbus obtusis

Hab in arenosis mantimis lusulee *Mycom* Archipelagi ad SIDUQI *Phteka* cl. Sartori Fl aestate

Gaudices numerosi 1-2 polhcares pennd an senna crassiores Fohorum hmbus 3-4 lineas longus. Scapus bipollicans, panícula pollicans spicis 5-7 constans Flores eis 6 *colltm* pauld breviores Species vegetatione et folns distinctissima

STATIGE MACRORRHADDOS BOISS (Sect *Schizopetalum* Boiss)

St. perennis glaberrima glauca rhizomale crassmsculo squamato, fohis omnibus radicalibus rosulatis obovatis obtusis mucronulatis in petiolum brevem vaginantem attenuatis sub lente ireberrimè punctulatis pustulisque calcareis mult6 inajonbus conspersis carnosis crassis prsBter nerviim medium vahdiorem obscure 3-5 nervns, scapo praDter squamas vag>nantes ovatas rubellas acuminatas nudo tereti erecto longissimo virgato jam mfrd medium subdichotomè pamculato-ramoso ramis longis erectis virgatis, spicuhs 3-5 floris secùs ramos ab eorum basi laiè et subdistien^ dispositis spicas longas laxas formantibus, bracteis latis ovatis conaceis rubellis latè albo margmatis, extenon et intermedia mucronulatis intima saspitùs muticS paulo longiori, bracteolu> ad florum basin praeter nervum medium rubrum albo-membranaceis plicatis apice tmncatis, calyce bracteis tertid parte longiori basi obliqno infundibulifonm dense hirtulo tubo angusto.

conaceo 10-costato spars mi el breviter sub lento lurlulo rubello in hmbum albo-membranaceum plicatum Iruncatum obsolete nervis excurrentibus mucronulatum sensim abeunti, petalis h-bensungue in hmbum sensim dilatato hmbo profund6 in lacimas oblongo-hneares bipartito, lilamentis libens, anlhens oblongis, stylis a basi libens ovanum oblongo-lineare superantibus, stigma-tibus oblongis

Hab in prov *Beloutschistan* supenon beatus D<sup>T</sup> Stocks.

Folia cum petiolo brevi lalo 2-3 polhces longa 4-2 lata Scapus cum ramis 2-3 pedalis, spies 's-1 pedales Spiculae una ab al-terfi saep6 plus quam earum longitudo distantes Calyx 5 lineas longus Species cunosissima folus *Limonn* et inflorescentift *Acan-iholimomsdonata*,stigmatibusbractearumque dispositioneomnin6 *Statici* adnumeranda sed ab a his speciebus generis petalis bipar-tilis nee in teg r is vel retusis discedens, propnam seclionem *Schi-zopetalum* post *Jovibarbam* constituens sic defimendam Calyx basi obhquus mfundibuliformis limbo valde plicato truncato obsolete dentato Corolla polypetala petalis sensim ab ungue in hmbum profund6 bipartitum abeunlibus Filamenta lmis petalis adnata Styh distincti Utnculus — Inflorescentia *Acmilhoimoms* sect. *Glumarw*

ST\TICE LILACINA Boiss et Balansa (Seel *Ltmium*)

St folus glauco-virentibus in rosulani umcam congestis ovatis vel oblongis acutis in petiolum brevem attenuatis, scapo elato sub-angulato jam paul6 supra basin ramoso ample pamculato, squa-mis caulims herbaceis tnangulan-acuminatis, spiculis biflons in spicas breves secundas subscorpioideas densmscul6 imbncatis, bracteis inferioribus obtusiuscuhs omnino membranaceis nervo rubro pcur^isinlermcddid dupld longion, bracted superior exte-non plus dupld longion dorso herbaceS rubrd margins late albo-membranaced obtusfl, calycis tubo ad et inter costas lcnge et dense hirsuto, limbo patulo lilacino tubo vix brevion plicato erosio obsolete denticulato

Hab in salsis inter *Indj6sou* et *Casareum Cappadociw* alt. H00' cl Balansa. Fl Julio

Habitus *St Gmrtini* a quft rtiffert caudicc (in specimimbus a **me**)

**visis**) moucephalo rosulam solam et scapuni unicum emilenti, folis muionbus cam petiolo 2-3 pollices longiusacutis, pamculft magis elongate non corymliosft, spicis magis ramosis, bracteis inferioribus obtusionibus mipqualibus, calycis tubo longius et quoque inter costas piloso, limbo tubo aequilongo nee eo dimidid brevion

Obs *Stattce Euphratwa* Boiss in Calvert pi. Armen exs est tantum *St Gmehm* Willd. var *Euphratwa* Boiss Braciea mtenoi spicularum latius membranacea saepe fer& ex toto hyalina, nee plus minds herbacea

STATIGE BALANSJE Boiss (Sect *Limomum* )

St folns glaucu ID rosulam unicara congestis ofclongis acutiusculis in petiolum attenuLia, scapis plunbus teretiusculis corymboso-pamculatiSj spiculis bifloris in spicas breves valde scorpioideas dens^ lmbncatis, bracteis inferioribus mmimis membranaceis ovalo-rolundis acutiuscuhs lntenon tnpl6 majon ovata obtusa late albo-marginatft, calycis tubo basin versus latere mlerion sparsim hirtulo, limbo albo tubo brevion ferè usque ad basin in lobos tngularos acutos parhlo

Hab. in salsis ad occasum urbis *CasaretB* in *CappadonA* cl Balans^PiSret fine Julu

Species mihi ex unico nota specimine Folia sesquipollicana 4-5 lineas lata Scapi 3-5 pollicares, spicae vald^ scorpioideae brevesque subcapitatae in corymbo pleraeque inter se subcontiguae Flores e minimis Habitu *St Gmelmi* vel speciem precedentem relerens ab eis praeter spiculas multd mi n ores distmctissima forma hmbi calycim qm oon erosus vel obsoletè 10-lobus sed acutè et profundè quinque partitus est

STATIGE GORINTHIAGA. BOISS et Heldr (Sect *Limomum Denst-florwj'*

St glabra, folus dense rosulatis crassis obovato vel saBpiis oblongo-spathulatis basi longè atenuatis obtusis brevissimè mucronulalis, scapis erectis flexuosis alternatim et subdichotomè ramosis paniculatfs slenlibus nullis, spiculis 2-3 (lon^ vix curvatis

in spicas erecto-palulas saepè subrecurvas longmsculas unilate-  
rales densiusculas bifanum Imbricatis, bracteis rufescentibus  
margine angustè membranaceis infenoribus tnangulanbus acu-  
tiusculis J a tenon tnplO longion dorso convex^ obtusissimii, tubo  
calycis parte inferiori secùs costas pilosmsculo supernè glabro,  
hmbi minuti sordidè albi lobis tnangulanbus obtuaiuscuhs

*St congesta* Heldr pi exs non Lfedeb

Hab in saxosis mantimis ad *Sinum Connthiacum* in promon-  
tono *Macro Nicolaos* dicto cl Heldreich Fl Augusto

Folia sensim attenuata nee dislmctè petiolata seBquipolhcem  
longa vel breviora supernè 4 lineas lata Pamcula 3-7 pollices  
longa Spies 6-9 lineas longs prater basin ssepè laxam densius-  
culao Spiculae eis *St oxylepidis* manifesto minores et praesertim  
breviores *St gxylepis* habitu nostram referens egregiè tamen dif-  
fert spicis crassionbus lationbus arctiùs imbneatis, bracteis m-  
fenonbus spicularum magnis dimidiam longitudmem interioris  
ferè asquanlibus, caljcis limbo longion *St occyrmfoha* Poiret e  
Graficià quoque onunda habet folia latiora obovato-spathulata,  
spiculas dapld majores spicas rectas breviores formantes, calycis  
tubum densè et adpressè pilosum *St bellidifolia* Sibth tandem  
cujùs (lores quoque majores sunt spicuhs dissilis etiam dillert

ARMERU THESSAXA BOISS et Heldr (Sect *Plagiobasis Pleuro-  
tnchce.*)

A glabra rosulis multifohatis foliis angustè hneanbus grami-  
neis uninervns flaceiduh attenuatis acutis, scapo elato, involucri  
paucisenati phylhs iniimis ovato-triangulanbus acutis intimis ob-  
tusis scanoso-marginatis vix brevionbus, spicuhs inira" Involu-  
crum stipitatis, pedicellis tubum calycinum asquantibus, tubi ca-  
lycini foveolâ basilan oblongo-hnean^ costis hirsutis intervallis  
glabns, limbo apice breviter eroso-lobato nervis in anstas bre-  
ves usqu6 ad apicem scabridas excurrentibus.

Hab in pascuis alpms summi *Olympi The&saU* cl. de Heldreich  
Floret fine Juln

Folia ferè uniformia lineam lata vel angustiora 3-5 polhcana,  
scapi pedales Habitus *Arm elongate* a qua<sup>l</sup> spicuhs in capitulo  
podicellalis, foveolâ basilarilongion limbo longiùs anstulatoalns



que differt notis Foveola e longioribus inter *Plagiobasides* transi-  
tium ad *A. Biimehcam* et *Canmsem* inter *Macrocentra* prabens  
Corolla rosea Ob characterem spicularum propè *A. Kochn* collo-  
canda

ARMERIA ORPHANIDIS BOISS (Sect *Plagiobasis Pleurotncha*)

A glabra palhdè virens caudicibus duns petiohs vetusLis latis  
densè squamosis, foliis trinerviis latè lmeaibus basi longè atte-  
nuatis apice breviter attenuatis acutis antenonbus brevionbus la-  
tionbus omnibus erectis planis, scapis elatis, m-volucn paucisenati  
squamis ab mfimis ovato-tnangulanbus mucronulatis ad interiores  
oblongas angustfc ^canosas scnsim acutis, spicnhs subsessihbus,  
pedicello tubo calycino brevion, calycis foveold basilan oblongo-  
hnean, tubo ad costas mtervalhs glabns angustiores hirsuto,  
limbo tubo longion apice truncato lobis 5 bmiteT tnangulan-  
ovatis in anstas longmsculas scabndas excurrentibus, corollâ  
roseâ

Hab ID monte *Chelmos* Peloponnesi Prof Orphandes Fl Jun  
Jul.

Folia 2-3 polhcana 1-2 lineaslata vix ngda. Scapi 12-16 polli-  
cares, capitulamediocna Yaldè affinis *A. Majellmsi* ab e£ differre  
videtur fovcolft basilan calycis oblongo-hnean nee ovats, capitulis  
pallidionbus, ssepis elatis, foliis planionbus non patulo-subrecur-  
TIS Specimina a cl Heldreich ex *Parnasso* et *Oleno* montibus et a  
cl Sarton ex monte *Hagios Eha* & Eubeas missa quanms *A Orpha-  
nidi* habitu simiha habent foveolam basilarem ovato-oblongam et  
potuis ad *A Majellensem* spectare videntur Litem componant qui  
eas plantas in loco natah inter se conferre possunt

## PLANTAGINEJE

PLANTAGO PIIGOSTOMA BOISS. et Heldr (Sect *Psylhim*)

P) anoua tota setuloso-papillans scabnda a collo pluncaulis  
caulibus naDis, foliis oppositis lmeaibus integernmis, spicis ter-

mmahbus 1-3 oblongis densih ppdunculis eis brevionbus suffullis, bracteis tngulan-oblongis calyce brevionbus, sepalis viscidulo-birtis oblongis obtusiusculis subaequahbus adgu&te\* albomarginatis, corollae lobis calyci gsquilongo, limbi patuh lotus albis ovatis breviter mucronatis fauce fused

Hab in AUgypto prope Aleawndnam cl Samantani Floret Marte

Caules bipollicares, folia 1/2-1 polhcem longa \*/B-i lineam lata Spicce 6-8 Uneas long® 3 latae. Species disinctissima *PI psyllw* pt *squarrosie* affinis Prior differt spicis breviter ovalis longfi pedunculatis, corollae lobis atenuatis, sepalis lanceolatis, posterior folus carnosus, spicis globosis basi involucralis, etc

PLANT AGO SAXATILIS MB var, *Karakabamca* Boiss et Huet

Folia abbreviata 1-1/2 pollicana adpressè senceo-canesceniia, scapi asceodentes folia pariun superantes, bractee omnes truncato-retusaE brevius ciliatae.

*PI Karakabamca* Boiss et Huet Mss

Hab in monle *Karakaban* Armems cl Huet

Planta typo minor adpressiusque laeata sed discnmioa specifica vera nulld repen et transitus in spccimimbus Caucasicis observavi. *PI saxatilis* vanat quoque folus angostioribus, Auch. pi. c\s 5247 *Erzeraum*, Kotschy *Persia* aust N° 703

PLANTAGO STOCKSII BOISS in DC Prodr XIII, pag 720

*PI* annua acaulis, radice tenui verticali, foliis Unean-lanceolatis 3-5 nervis inferoè attenuatis apice longè angustato-acuminatis uLnqut indumento adpressè patulo longo senceo-lanatis, scapis parcè lanatis plunbus ascendentibus parte nudâ folia eequanubus vel supcrantibus in spicis longastenuis sparsifloras abeuntibus, folibus 10-12 dissitis, bracted ovato-pland obtusiuscula" calyce subbrevion dorso herbaceo lanato vel glabralo margimbus membranaceis angustion, folioliscalycimssqualibusplanis ovato-oblongis obtusis hirtis vel glabratis dorso herbaceo margimbus scanosis subsBquilato, corollae glabrae lobis reflexis lanceolatis acutismargine parcè cihatis, capsula oblongo-conicâ calycem excedenti dispermâ, se-

minibus ingris mtidis obloDgo-hnearlbus extùs convexis intùs profundè sulcatis

*PI remohflora* Stocks in Hook, Journ. 1852, p. 479.

Hab in collibus ditionum *Sande* et *Beloulschistan* usquè ad 5000' cl. Stocks, in regn.0 *Cabuhco* ad fluvium fiotaw (Griffith) m *Persid* propè Taif cl Buhse

Folia 2-3 V« hneas lata 1-2 polhcana Spies 3-8 polhcares flo-  
nbus 3-10 lineas distantibus Semina matura 2 hneas longa Cap-  
sula junior basi septo rudimentano donata Species insignia  
quam ex radice exili et scaporum emortuorum deGcientifl an-  
nuam esae autumo, inflorescentiAPf *remotam* Lam referenssed  
potiùs *PI ctliatiB* vel *albicanti* appropinquanda Hanc loco indicate  
sub nomine speciflco citato am. Decaisne commuaicaveram nescius  
cl. auctorcm earn posted descnplurum esse

## CHENOPODE^

ATBIPLEX STOCKSII BOISS (Sect *Teuthopsts* )

A. tota lepidoto-cana cauibus parte inferiori sublignosis ascen-  
dentibus patulfe ramosis, fohis submtegris obovatis obtusis basi in  
petiolum brevem attenuatis, floribus in glomerulos 3-5 iloros sub-  
distantea dispositia racemos terminales breves aptiyillos seepè In-  
fernè ramosos formantibus, bracteis fructifcns ferè ad medium  
usquè coalitis remformibus obsoletè repando-5 anglatis basi  
abruptè et breviler attenuate mcrassatis brevibus dorso tenuiter  
reticulatis.

Hab in ditiombus *Beloulschtstan el Sande* cl. D<sup>r</sup> Stocks, in *Per-  
sid austrah* Aucher N° 5268

Gaules 8-10 polhcares, folia inferiora cum petiolo 8-9 lineas  
longa\* 5-6 lata, racemi fruclifen 3-4 polhcares, bractea fractifete  
4 hneas longs latsque Habitus *Atr. diffuses* Ten a qua\* fohis  
integns et prsertim fructu multd majon non rhombeo differt  
Specimina Aucheriana incompleta a Stocksiams fohis basi obso-  
letè ntrinquè angulatis tantum differre videotur

ATRIPLEX LEPTOCLADA BOISS et Noe (Sect *Tenihomis* )

A perennis mullicauhs, cauhsbus ascendentibus vel procumbentibus ramosissimis ramisque tenuibus albidis glabrescentibus, folis mmutis pulvenilento-canescensibus oblongo-subrhombeis obtusiusculè dentato-lobalis mferionbus basi brevissimè attenuatis subpetiolatis caetens sessilibus, florum glomeruhs dissitis racemos breviusculos aphyllous ad apicem caulis paniculatos forraanlibus, fructu.

Hab. in ruderatis circa *Bagdad Babylonia*\* cl Noe Fl estate

Gaules pedales longioresque patulè ramosissimi Folia inferiores 6 lineas circiter longa cffitera minora, racemuli flonfen 1'• 4 polhcarcs; ab *A. diffusd* et *A. leucoclad* cui presertim allinis differt ramis multd tenuionbus longionbusque glabrescentibus, fohis magis denlatis, fructus ignoti

OBIONE TIUNDERGLEFOLIA BOISS. et Noe

Ob annua cauhsbus erectis glabrmsculis albidis parcè et breviter ex axilhs mferionbus ramosis, folis mferionbus breviler petiolatis rotundatis cordato-sagiltatis acutiuscuhs auncuhs latis divergenlibus rotundatis, supenonbus subsessilibus aunculato-tnanganbus acutis subrepandis auncuhs acutis, omnibus utrinquè sed subtàs intensiùs tenuiter pulverulentis camis, flonbus 5-7 in glomerulos "subdislantes dispositis, racemis infernè breviter foliatis paniculam elongatam angustam laxam formantibus, bracteis fructifens ad apicem usquè in involucrum mmutum e basi angubli brevi coriacefl sensim dilatatum obtnangulare apice obtusissimo denticulatum reticulatum puberulum coactis, radiculi erectil breviler prominenti

*Atriplex thunbergiwofoha* BOHS et Noe mss

Hab in pascuis propè *Kuit Babylonia* cl Noe Floret acstale

Planta M7, pedalis, folia inferiora polhcem ferè longa lataque ea *Thmbergice* vel *Polygoni convolvuh* referentia Panicula saepè semipedahs laxè spiciformis Fructus sesqmhneam longus apiceque latu^ Species fohorum formd distinctissima

**SUÆDA** BALANSÆ Boiss

S annua glaberrima a collo pluricaulis, caulis ascendentibus brevibus ferè a basi alternatim ramosis, ramis tenuibus sticulis, foliis carnosis glaucis teretibus basi subattenuatis abruptè apice attenuate mucronulatis sensim in bracteas eis similes sed usquè ad summos ramulos abbreviatis abeuntibus omnibus suffraginis curvatis, florum glomerulis densis 5-9 lons numerosissimis ad axillas foliorum et bractearum sitis racemos tenues inferè interruptos formantibus, bracteis superioribus glomerulo non longioribus, calycis basi breviter obconici 5 partiti lacimis oblongis caccullatis mucronulatis carnosulis, pericarpio tenermo, semine horizontali rostellato margine obtusiusculo brevissimo margine rotundo

Hab in salsis interioribus ad occidentem urbis *CasarecB Cappadocw* silis sub *Chmopodvnd sahvd* Bal pi exs 1856.

Gaulis semipedales, folia inferiora 5-6 lineas diametro longa sesquilineam lata, semen dimidii hinc brevius. Habitus *Chenalsce* vel *mantimm* sed semina horizontalia nee verticalia, flores præterea magis glomerati et folia calycesque mucronulata

SALSOLA STOCKSII BOISS. (Sect *Kali* Moq )

S perennis, caulis fruticosus glabris obsolete tuberculatis teretibus oppositè ramosis, ramis iterùm ramulos floriferos oppositos crebros paniculas oblongas formantes edentibus, foliis oppositis teretibus breviter et crassè hinc obtusissimis, foliis floralibus patentibus ovatis obtusis, bracteis ovatis apice subcannatis acutiusculis fruclu folioque florali brevioribus, floribus oppositis spicas fructiferas densas formantibus, sepalis medium versus alis patentibus transversè latioribus obtusissimis brevibus obsitis apice connatis

hab. in ditionibus *Beloutschistan* et *Sands Indus* fortissimis cl D<sup>r</sup> Stocks

Gaulis rigidiusculi pedales et ultr&. Paniculis fructiferis semipedales spicis lateralibus 1-1½ pollicem longis. Folia vix 2 lineas longa crassa. Antheris sepalorum vix lineam longè sepalorum apici

Subaequilongae Species ex affinitate *S. longifoliae* Forsk folus longioribus, fructibus longissimè alatis, spicis laxiusculis, etc distincta.

NOEA MINUTA Boiss. et Balansa

Annualis caule tenui erecto nano simpliciter albido sub lente patulo et breviter luteo, folis glaucescentibus e basi dilatatis membranaceo-marginatis longe et tenuiter subulatis subnatis margine scabris minutè albo-mucronulatis spicis axillares aequales vel superantibus, flonibus alternis bractealis spicis densas breves terminalem et plures jam a basi caulibus axillares formantibus, bracteis ovato-oblongis membranaceo-marginatis acutis carinatis flores sequantibus basi subulatis ceterum glabris, sepalis dorso infra medium alatis parte hinc angustè lanceolatis acutis, alis flavescentibus tandem purpureis cuneatis truncato-subulatis

**Hab** in collibus andis inter *Karahissar* et *Arapleukice Cappadociae* (alt 1300 metr) septembri florens cl Balansa.

Habitus *Polycnemi* vel *Cruaanellae*, bipollicans, folia 6-9 lineas longa tenuissima, fructus juniores 2 lineas circiter longi Species distinctissima.

## POLY-GONE.aa

ATRAPHAXIS CALVERTI BOISS (Sect *Ettatraphaans*.)

A. glabra pallidè virens, ramis horisotimis gracilibus elongatis cortice albidè vestitis ramulos annuinos numerosos breves erecto-patulos inermes flonferos edentibus, ochreis brevibus albis, folis ovatis vel oblongis obtusiusculis basi breviter cuneatis brevissimè petiolatis nervulosis, racemis multifloris folis intermixtis, pedicelli supra medium articulati articulo superiori sepalis extenonibus paulè longioribus, sepalis anterioribus bimis cordato-orbicularibus reticulatis achemo ova to apice subulato subdimidiè longioribus tripliciter latioribus

Hab *Armmi* & Calvert.

Folia lofenora 5 lineas longa  $3\frac{1}{2}$  lata, calycis valvae interiores  $4\frac{1}{2}$ -5 lineas latae Valdè affinis *A. spinoscs* a cujus formis calyce fructifero duplè majon, pedicellh articulo supenon brevion specificè differre videtur An *A. densiflora* C Koch quam Meisoer dubitanter ad *A. spinosam* refert? sed sepala intenorain descriptione basi cordato-subcuneata dicuntur quod nostrae speciei non convenit

## CALLIGONUM GRINITUM BOISS

G ramis leniiter virgatis albidis stnatis subflexuosis, annotims tenuissimis elongatis, achenio angustè elhptico apice attenuato, setis 8 senatis rufis achenio tnplò longionbus basi dilatatis distinctis supra medium, bis vel ter dichotomè ramosis ramis ranùs tnfurcis vix ngiduis

Hab in ditone *Beloutschstan* c\ D<sup>r</sup> Stocks.

Rami hornolini elongati lineam aut vix ampliùs diametro lati non lorluosi, stnati qua notà hsec species a caetens differt, annotini fihformcs fragiUimi Achenmm (absqae setis) tres Uneas aut pauh ampliùs longum sesqmlineam latum, setso sparsae undiquè patentes tenues 4-5 lineas long© Species distinctissima.

POLYGONUM CEDRORUM BOISS et Kotschy. (Sect *Amculana* )

V glabrum perenne, rhizomate lignoso supernè ramoso ramis abbreviata, cauibus decumbentibus herbaceis alns brevibus simplicibus ochreis omnmò tectis, alua elongatis sspè ramosis inlernodns folia superantibus, ochreis niveis oblongo-lanceolatis folio brevionbus basi 7-8 nervns supernò enervns usquè ad quartam partem fimbriato-lacens, folns basi breviter attenuatis elhptico-lanceolatis acutis ngidis ulnnquè adpressè et elevatim nervulosis, racemis terminabbus basi laxiuscuhs plùs minùs •elongatis, folns florahbus obtusis Qores subaequantibus, axillfs 2-3 flons, ochreohs campanulatis apide dentatis, pedicello apice articulate flore sublongion, pengonn carnei enervn ultrd medium lobati lobis obovatis obtusis, antheris luteis, achenio. ...

Hab. in *Libano* ad aquaedactus in regione Cedrorum alt. 5800' Legit (lor fine Juln cl Kotschj

Caules annotmi numerosi 1-2 pollicares sterile\*, vel apice (lores paucos condensates folns floralibus superatos ferentes, caules alii 6-9 pollicares parcè ramosi racemis pollicanbus vel longionbus basi laxis terminate folia caulina majora 4-5 lineas longa lineam vel pauld amphùs lata Flores magmtudims eorum *P Bellardi* Ex affinitate *P radicosietKotschyam* ab eis caulibus elongatis et prsertim fohis angustatis nervis lateralibus elevatis adpressissimè hneatis distinctum

POLYGONUM CAPPADOCICUM BOISS et Bal (Sect *Aviculana* )

P annuum, radice simplicis scua verticali, collo caules plures rigidulos erectos simplices vel parcè ramosos angulato-stnato albidos nitidos sub lente parcè et minutè papillosos edenti, mternodus fohis sublongionbus, ochreis argenteis folio subbreuionbus ad vel ultrà medium in lacimas apice tenuissimas fimbriatis enervns, folus citd deciduis carnosulis elhptico-hnearibus basi attenuatis acutis margine subrevolutis lente subpapillosis prater nervum medium subliis elevatum enervns, flonbus sessilibus in racemos breves terminates vel laterales axillares subsessiles condensatis, folus floralibus abbreviate rubelhs flores superantibus, axillis bitlons, ochreolis profundè fimbriatis flores superantibus, pengonio breviter ovato albido-virenti nervuloso ultrà medium in lacimas oblongas obtusas partito, achemo pengonio incluso minimo acute tnquetro subcompre^so acuto mtido nigro

Hab in *Cappadoad*, inter segetes propè *Ekrek* ad margines fluvu *Ensurum Tcliai* alt 1450 metr Legit fructiferum mitio Aug cl Balansa

Caules 5-8 pollicares, internodia inferora 6-8 lineas longa, folia 5-6 linear longa 1 \*k ^ata<sub>3</sub> racemi *l-b* lineas longi, florea e minima Ex aflinitate *P pobjcnemoidis* et *Olnien* (quaB forsan specific^ non differunt) et a nostrd specie caulibus fihformibus prostratis, internodiis brevissimis, **folus** subulato-hnearibus, achenio pengonio aretè incluso majon elongato facilè distinguuntur

POLYGONUM B\L\IVS^: BOISS (Sect *Aviculana* )

V ppiennp glabernmm glauco&cens, radicep repenti durft sub-



hgnosâ, cauibus numerosis pumihs erectis simplicibus vel parcè ramosis ngidiusculis substnatis, internodiis foliis brevionibus, ochreis folio dimidid brevioribus basi fuscescentibus pluriDervus profundi bipartitis lobis fimbriato-lacens, fblus obovatfs obtusis in petiolum brevissimum attenuate margine subundulatis subtùs prater nervum medium nervis secundanis prominentibus percur-siSj racemis termmalibiis brevibus densiusculis, foliis floralibus ellipticis flores subsuperantibus, axilhs 3-4 flons, ochreolis profundfe bifidis pedicelh longitudine, pedicello flore sublongion apice articulado, pengonio subenervi ovato basi \irenti supernS albido-roseo profund6 partito lobis obovatis obtusis, achenio pengonio mcluso triquetro pallido opaco puncticnlato

Hab propS *Batna ArgentB*, cl Dalansa Fl Julio

Rhizoma repens pennâ ansermâ tenuius. caulcs 5-6 pollicares parte inferiori ~~sepe~~ subterranei ochreis brevibus fuscis vestiti Folia majora 5-7 lineas longa 2-3 lata Habitus omnin6 *P alpestrns* C A M pro quo pnmum habui sqd quod eximie differt foliis uninervus avenns longiùs petioiatis, ochreis binervns, caulibus totâ longitudine floriferis, ache mis nitidis

RUMEX TURCICUS Boiss et Baiansd (Sect *Lapathum*)

R perenms glaber, folns radicaibus , cauibus breviter petiolatis angust^ lanceolato-hneanbus elongatis basi subundulatis breviter attenuatis apice attenuatis acutLs, caule elato simplici tenm sulcato-stnato, racemis abbreviatis paniculam longam angustam foliosam niferoè mterruptam formantibus, foliis floralibus angustissimè hneanbus elongatis tandem reflexis, valvis fructifens oblongis basi truDcatis apice obtusis reticulatis omnibus granifens, grano altero maximo valvald vix angustion.

Hab ID *Lydtw* pascuis montanis humidis *Yaila* dictis ad pagum *Bozdagh* in monte *Tnolo* cl Balansa Julio 1854

Species affinis *R cnspo* a quo (saltern ex spec urnci observationejTeam distinctam aulumo Planta tnpedahs et ultrâ, pamcula simplex 12-15 pollicans, folia cauibus inferioris semipedaha longiorave polhcem lata vel angustiora, floralia 2-3 pollicaria 1 1/»-2 lineas lata, valve ei« *R cnspi* dimidid angusliores basi truncataB nee cordate

\*

RUMEX GRIFICUS Boiss et Heldr (Sect *Lepalhum* )

R perenns glaber, loins radicalibus oblongis basi cordatis margine grossfi subundulatis obtusis, cauhsis breviter petiolatis oblongo-lanceolatis obtusis basi subcordalis truncatisve, caule erecto sulcato, racemis longiusculis densis paniculam longam inferaè foliosam formantibus, folus florahbus lanceolato-lanceolatis obtusis basi breviter attenuatis, pedicellis valvis sequilongis, valvis orbiculatis basi cordatis reticulatis obtusiusculis margine grossè obtusè et breviter repando-dentatis, callo umco crassiusculo

Hab in regione inferon *Taygeli* propè *Anavlyti* cl Heldreich, in umbrosis propfi *Trikala Admins* alt. 3500' (Heldr') Eadem plantam fructu nondum maturo legi in pratis alpinis *Tmoh* ad *Bozdagh* in Lydii Jan 1842

Folia radica 7-10 polhcaria 3-4 polhces lata, panicula 15-18 polhcans ramis inferioribus semipedibus Valvæ fructiferae 2 hneas longa? latscuae Differt a *R patientid* folus basi cordatis valvis denticulatis, a *R Oventah* folus minoribus obtusis, valvis minoribus grossè nee minute denticulatis *R. confertus* W. e descriptionibus differt folus ad nervos sublus et petiolos pubescentibus amplis basi profundè cordatis, panicula subaphylla, valvarum 3-4 hneas longarum callo minuto

RUMEX MACRANTHUS Boiss in Kotschy pi Cihc exs — DC. Prodr. XIV pag 71 (Sect *Ijipathum* )

R perennis glaberrimus, rhizomate crasso vaginis fuscis stnatis tecto, caule erecto angulato-stnato subflexuoso modicè fohoso, folus radicalibus oblongis nunqu6 attenuatis obtusiusculis in petiolum eis squilongum vel breviorum crassum basi vaginantem abeunlibus integris obsolete repandis, caulinis lanceolatis acutis integerrimis omnibus laetè vridibus penninervis nervo medio crasso lateribus tenuibus, panicula terminali brevi oblonga simplici ramis abbreviate basi fohosa folus angustè hnearibus elongatis, flonibus hermaphroditis, pedicellis fructifens recumbens

suprā medium articulatis, valvis maximis conaceis pallidS vi-  
rentibus subdiaphanis exquisite et elevatim reticulalo-nervos-  
sis orbiclanbus obtusis basi cordatis margine eroso-denticu-  
latis pedicello longionbus ecallosis, achenio acutè ovato-tnquetro  
palhdè rubello-fuscescenti

Hab in regione alpina *Taun Cxliia* Kotschy t Balansa t

Platita pedahs vel pauld longior. Foliorum mfenorum hmbus  
2-2 V, pollices longus\* 42-15 hneas latus Folia cauhna saBpius  
longiora sed angustiora, floraha 1-2 polhcana 2-3 líoeas lata.  
Panicla terminalis 2-4 ramulosa ramis racemus simplex tenrn-  
nalis Valvulae fructiferum 9-12 lineas latae et paulisper minis  
longa? Achenmm 3 '• lmeaslongum breviter attenuato-rostratom.  
Species insignis me iudice *Lapatho* nee *Acetosm* ob flores ut vide-  
tur omnes hermaphroditos, folia Integra, valvas conaceas totum-  
que habitum adnumeranda et propè *R angushfolmm* Cañpd.  
collocanda

## SANTALACKE

THESIUM DIVARICATUM Jan var. *expamum* Boies, et Heldr.

Pamculse rami magis patentes, bracteas frudum squantes vel  
superantes, caetemm omnia speciei

Hab in regione abietini *Eurytanus* d SamantametGuicciardi.

## EUPHORBIACE^

EUPHORBIA C^LADENIA BOISS (Sect. *Tithymlus*.)

E. annua palhdè virens e collo simplex vel pluncaulis, canlibus  
erectis tenuiter stnatis tnfldis dmsionibus pluriès et stnctiusculè  
dichotomis, fobis caulinis sessihbus linoaribus obtusis arguti et  
Temotiusculd denticulatis, mvolncellis e basi lation subcordata  
rūomboideo-obloDgis obtusis integns, çapitnlia multistamlneis

glaEdulis transversè ovatis integris parvis cymbiformiter concavis, involucri propra dentibus 2-3 dentatis, capsulè longiusculè pedicellate ovata obtusè tngona, semine albido oblongo brevi, carunculâ elongato-conica latere raphes fissd basi subplicato-lobulatâ.

Hab. ad *Khozdar* regions *Beloutschtstan* cl. D<sup>f</sup> Stocks

Pedalis, folia caulina 8-10 hneas longa 2 lata, involucella basi latiora. Species formS glandularum florum distinctissima *E cornuta* Forsk a nostril caeterum radice perenni et involu-  
celh phylls caudatis denticulatis discedens habet glandulas supernè quoque concavas sed appendicibus instructas semilunatas

EUPHORBIA ODONTOPHYLLA BOISS (Sect *Tithymalw* )

*E. porenis* glabra caulibus striatis tenuibus fohosis ascendentibus a basi Tamuloais, loins sessibus lineanbus obtusrasculis tenmter et acutè denticulatis, umbellis terminalibus breviter triradiatis radiis bifidis, involucri involucellique phylls e basi latior longè triangulan-lanceolatis argutè denticulatis, capitulis in dichotomis et terminalibus pedicellatis multistamineis, glandulis integris transversè ovatis latere supenon rectiusculis, involucri propra dentibus bifidis, capsulâ....

Hab. in ditione *Beloutschtstan* propè *Kuam* cl D<sup>f</sup> Stocks pi. exs N°1069.

Habitus *E. megalanthw* folis integris, glandulis appendiculatis etc. et *E. cornutcp* glandulis semilunatis cymbaBformibus, involu-  
celhs abruptè caudato-attenuatis, flonbus bb ramulos extremos brevissimos confertis distinctarum

Obs *E Ispahamca* Boiss ad *E megalantham* ut varietas foliis latis umbelisque pluriradiatis referenda est *E megalantha* involu-  
cellii propra dentibus elongate et anlh formâ insignis habitu ceterum valdè vanabilis est.

EUPHORBIA BERYTHEA BOISS. et Blanche. (Sect. *Ttthymalus.*)

*E. annua* caule simplici ant ex collo ramis 1-2 aucto patulè hispidulo folio so, folns idfenonbus obovatis obtusiusculisubintegris

in petiolum brevem attenuates superioribus basi attenuate sessibus oblongo-ellipticis acutis argutè denticulate denticulis ascendentibus omnibus praeter pilos nonnullos sectis nervum medium glabris, nervis 5 radiata radibus brevibus bifidishispidis, involucri phyllis foliis summis similibus, involucelli e basi truncate vel obsolete cuneatis deltoideis aculis subdenticulatis, glandulis cernis transversè ovatis, involucris propriis dentibus truncatis brevissimis ciliatis, capsulae globosae profundè sulcata tunicata pilis patulis hispidis, semine sphaerico rufo rugis tenuibus prominentibus tuberculatis reticulato, caruncula minimè globosa-composita.

Hab. circa *Beyrouth* et *Sidonem* cl. *Blanche* FI. *Aph.*

Habitus *E. helioscopiae* quas a nostra specie differt foliis sursum sensim auribus omnibus obtusis, capsulis glabris, semibus profundè alveolatis apice compresso-acutis caruncula compressa verticali *E. calendulaefolia* longius distat radiis elongatis, semine laevi.

**EUPHORBIA PHYMYTOSPERMA BOISS et Gaillardot (Sect. *Tithymalus*.)**

*E.* annua glabra perennans, caule erecti filiformi saepe flososo, foliis sparsis minutis obovatis integerrimis obtusis, umbellae terminales brevissimè 2-3 radiata densè corymbiformis radibus simplicibus vel bifidis, involucelli generalis phyllis ellipticis, partialis ovato-rotundis mucronulatis, involucris in dichotomis sitis brevissimè pedicelatis glabris, glandulis transversè et angustè oblongis integris, capsula ovata stipite erasso brevi insidenti coccis punctatis glabris dorso auribus, semine obtusè tetragono tuberculis minutis densè obsito praeterea sulcia transversis subterme ad unamquamque faciem obsito, caruncula stipitata depressa.

Hab. in monte *Jabal*, *al-Lun* ad septentrionem *Damasci*, medio *Aph.* legit cl. *D<sup>r</sup> Gaillardot*.

perennans, folia canaliculata 3 nervis vix tonga, umbella capituliformi-corymbosa diametro in specimine meo majore pollicans. Capsula et semen pro planta magna, hinc hinc longum,

EUPHORBIA GAILLARDOTI BOISS et Dianche (Sect. *Tahymalus*)

*E. anna* glabra glaucescens, caulo crassiusculo sinato fohoso sub umbelia saepè ramuloso folns elhptico-lanceolatis basi attenuatis acutis minutè serrulatis dcflexis mfenonbus ciló evandis, umbelia quinqueradiaU radus elongatis erectis plunes dichotomis, involucri phyllis folns simihbus elhptico-lanceolatis acutis, involucelli phyllis basi rotundaLis ovatis obtusis mucronulatis minutè denticulatis, glanduhs cennis transversè ovatis subtnangulnbus, involucri propni dentibus bre\ibus ciliatuhs, capsula" minuta globoso-tncoccfi profundè tnsulca ISVI glabra, semmibus tusco-lutcis ovatis obsolet6 quadranguhs, carunculfl nulld

Hab in agris versùs *Ouadi Barrada Antilibam* cl Gaillardot, prop6 *Rascheya* alt 4500' cl Kotschy, in *Mesopotamia* ad *Besch Abut* prop6 traieclum *Tigridis* cl Kotschy Floret Julio ineunte

Planta habitu *E akenocarpam* valde evolutam referens Folia cauhna pollicana aut longiora 4 hneas lata5 radii plunes dichotomi semipedalet> longioresvc, involucelli phylla 6-8 hneas longa, capsuloe unâ linefi breviores et angustiores subsessiles coccisrotundatis NuUi mihi notss aifins

EupnoRWA RHYTiosPENMA Boiss et Bal (Sect. *Ttthymalus*.)

*E.* perennis ramis virgatis elongatis stnatis parcè ramosis parte inferiori induratis glabns, folns utrdque paging laxè tenuiter et longmsculè hispidu'is lñfenonbus elliptico-lanceolatis aculis supenoribus elhpticis obtusmscuhs mucronulatis omnibus a tertid parte infenon bub lente minutè serrulatis denticulis ascendentibus basi sensim attenuatis subsessihbus, umbelia terminah qmñqueradiatâ radus elongatis tñchotomis divisionibus interùm semel vel bis dichotomis, involucri phyllis oblongo-ellipticis involucellorum e basi truncate vel obsoletissimè cuneatâ ovato-rotundis transversè sublationbus obtusissimis mlegris, glandulis flavis transversè ovatis, involucri ovati dentibus truncatis erosulis ciliatis, capsua sphsned tngonâ profundè tnsulcd verucis conico-cyhndncis exasperatfi, semine fusco ovato-rotundo rugulis tenuibus elevatis subreticulalo, carunculd parvd depressissimd

**Hab 10 fauce Guzel D6r6 CIICICB htorahs suprâ Sedtchig non** procul a *MersincuA* Balaosa Floret fine Man Fructus maturat Junio.

Rami 1-2 pedales, folia inferiora 15-40 lineas longa 6 lata Umbellac radii 3-4 pollicares Involucella 4-5 lmcas longa lata-que Species habitu *E rupicolam* vel *dumosam* quodam modo referens ab eis et omnibus aflimbus seminibus rugulosis distinctissima

EUPHORBIA ALGERIENSIS BOISS. (Sect *Tilhymafas*)

E perennis, cauibus erectis glabns stmtis sub umbelld terminah 4-3ramulosis, folns inferioribus breviter oblongis basi attenuatis superioribusovato-rhombeis omnibus obtusiusculismargme rubello argutè denticulatis subtùs sparsim et longiusGulc pilosis supernfe glabrescentibus, umbellâ longiusculfc 5-7 radiatJ radns bifidis, involucri involucellique pliyllhb rotundis oblusisque basi truncatis, glanduhs transversè ovatis mtegris, involucri propriu dentibus ovatis apice 3-4 dentatis involucri ipso dnpld brevionbus, ovano glanduhs hemisphencis densè obsito

Hab. propè *Algenam* loco *Maison cat ree* dicto cl Munby.

Species *E verrucosa* afims a quâ ex spccimine umco quod vidi distincta mihi videtur *E verruco&ie* cauhs vix stnatus, umbella ob radios breves compacta, involucellorum phylla elhptica, involucri propriu dentes subintegri, ovanum junius demque verrucis cylindricis obsitum *E Welwitschn* aflnis quoque differt folns ejusdem formæ sed amploxicaulibus majonibus, involucelli phyllis basi cordatis, capsulis magnis parcissimè verrucosis pilosubs.

EUPHORBIA SGHOTTIANA BOISS (Sect. *Tithymalus*)

E .perennis rhizomate nigro crasso ramoso ramos plurimos herbaceos breves basi denudatos caudiculosos dein foliosos erectos edenti, folns ovatis basi rotundatis brevissimè petiolulatis obtusis obsoletè mucronulatis margine cartilagineis obsoletè denticulatis integnsve, umbelld ad florem terminalem in dichotomic et 2 laterales valdè approximatas aliquandò deficientes omnesbre-

viter pedicellatos 2 involucellis folns simihbus bracteatos reductâ, glanduhs ovato-remformibus, involucri dentilms brevibus pilosis, ovano verrucoso

*E densa* Scholt et Kotschy in Ky Sched pi. Taun Cihcici 1853 non Schrenk

Hab in summâ valle *Metdesis Taun Cihaci* alt. 10,000' cl Kotschy Floret Julio, Aug

Kami 3-4 pollicares caespitosi tenues herbacei erecti vel decumbentes, folia 3-4 hneas longa 2' /»- 3 lata Involucrum 5 dentatum, 5 glandulosum Affinis *E capitulate* Rchb. quâ differt caudicibus longioribus repentibus radicantibus, folns obovatis, flonbus semper solitams, involucro propno 8 dentato, etc.

EUPHORBIA AGANTHOTIAMNOS Heldr et Sarton (Sect. *Tithymalus*)

*E fruticosa* densè dumosa glaberrima ramis torluosis cortice cinerascenti obtectis, annotinis luteis densissimè foiosis rigidis, folns crassiusculis minutis glaucescentibus basi attenuatis subsessilibus oblongo-lanceolatis obtusiusculis mucronatis, umbellâ terminatâ divancatim 3-4 radiatâ cum flore in dicholomis radiis semel bisve divancatim dicholomis fructu maturate nudatis in spinas acutas mutatis persistentibus, involucris involucellisque phyllis obovatis, flonbus omnibus pedicellatis, glanduhs aurantiacis transversè oblongis subpentagonis, involucris propriis dentibus brevibus rotundato-subretusis margine cuspulatis, capsula depresso-globosa profunde insulcâ verrucis cyhndricis maequalibus densè munitâ, seminibus lsvibus

*E spinosa* Fl Grace, tab 463 Dory et Ghayb. Flor Mor. — Genseb Spicil. non L.

Hab in regione sempervirenti totius *Grmcue*, *Bithymd* et *Bcema* Genseb, insulis *Leucadid* et *Corcyra*, Mazzian

Suffrutex 2' /» pedibus caespites densissimos convexos foijnans, ramuli cum umbellis 2-4 pollicares, folia 3-6 lineas longa 1-2 lata, radii umbellis 1-1' /• pollicares; ramuli subindè ex axillis supremis sub umbellâ nascuntur *E spinosa* L. eximiè differt ramis gracilioribus demùm in spinas simplices vix pungentes nee planes dichotomè furcatis divancatis pungentes mutatis, flonbus subsessilibus, glandulis subrotundis, capsula vix insulcâ



EUPHORBIA ERINACEA BOISS. et Kotechy. (Sect. *Tithymalus* )

*E. humilis* fraticosa dumosa ramosissima ramis rigidis rectis crassiusculis apice dichotomis cum flore pedicellata in dichotomia, dichotomiffi ramulis divaricatis rigidis foliolosis flore terminatis maluratione peracta ut et pedunculus floris centralibus radialis spinescentibus, foliis oblongo-lanceolatis utrinque attenuatis sessilibus acutis secus ramulos superiores et laterales diminutis angustatis, glandulis transversè ovatis, involucri proprii dentibus brevibus hirsutis, capsula<sup>1</sup> longè stipitata magna ovali trisulca verrucis depressis obsita, semine ædvi pallidè brunneo

Hab in valle *Martsch Anhhbani* propè *Zebdani* alt. 5000' cl. Kotschy, Junio in tertia parte superioris montis *Djebel Cheikh*, cl. D<sup>T</sup> Gaillardot, Julio.

Suffrutex ut videtur semipedalis ramis intricatis rigidissimis ramulos laterales foliosos breves sæpè edentibus, folia strictiuscula inferiora circ. sexlinea longa 2/3 lata, superiora multum diminuta Pedunculus floris vel exactis capitulis centralibus ramulis dichotomiae vix tenuior, 2-4 lin. longus, ramuli biseri non exactè oppositi sed subalterna 8-10 lineas longi. Species curiosissima foliis angustis acutis, inflorescentiæ depauperate, capsula verrucis vix prominens ab *E. sinnosa* cui affinis distinctissima

EUPHORBIA FOSSUATA BOISS. et Gaillardot (Sect. *Esula* )

*E. annua* glabra caule nano folioso, foliis minutis obovatis in petiolum brevem attenuatis, umbellâ breviter triradiatâ radius bifidis, involucellis ovatis mucronato-attenuatis, glandulis bicornutis cornibus setaceis elongatis, capsulae ovatae profundè insulca coccis dorso rotundatis, seminibus ovatis concoloribus griseis longitudinaliter late sexsulcatis sub lente areolato-punctatis

Hab\* in lapidosis ad radices montis *Gekl Khailoun* propè *Damasctum* cl. D<sup>T</sup> Gaillardot.

Similis *E. aulacosperma* differt seminibus dupli crassioribus sulcis latioribus minus profundis ut et tota superficies seminis griseis nec coloribus nigris An hujus speciei forma notabilis?

EUPHORBIA CILICICA BOISS et Gaillardot (Sect *Esula* )

E annua glabra nana a collo saepe ramosa, foliis subsessilibus minimis orbiculatis, umbellulis trifidis ramis brevibus bifidis, involucellis ovalis, glandulis bicornibus cornibus setaceis, capsulae ovatae coccis dorso rotundatis, semibus cylindrico-hexagonis ad utrumque lalub raphes bisalcatas, ad facies raphes oppositas 5foveolatis ad laterales 4 foveolatis, carunculi rotundato-depressi

Hab circa Hierosolimam Boiss et Damascum Gaillardot!

Habitus *E. peph. com.* valde allinis sed omnibus partibus minor, semina angustiora longiora cylindrica nee ovata, facibus 5 nee 4 foveolatis

EUPHORBIA CILICICA BOISS (Sect *Esula* )

E perennis glaberrima, rhizomate indurato pluncipiti, caulis erectis vel ascendentibus crassis dense fohosis brevisculis, floribus basi citius denudatis, foliis limbo catis sessilibus patulis vel deflexis ovatis acutis saepius abruptis et breviter mucronatis margine angustis cartilagineis integris scabundis, umbellae 5-7 radiata) radius bis bifidis, involucellorum phyllis orbato-rotundis obtusissimis inaequaliter glandulis rubris transverse lationibus margine inferiori truncatis breviter multidentato-pectinatis, capsulis brevibus oblongis trigonis, semibus ferrugineis oblongis obtusis tetragonis hinc elevatis longitudinalibus dense subgyroso-vermiculatis anillo stipitato depressis conico superatis.

Hab in Tauro Cilicico ad Guleje Boghas et in collibus incertis circa Cmsanam Capptdoace et Balansa

Affinis *E. aiiarampseroti* cui primum retuleramus, haec a plantulae descensu differt foliis superioribus involucellisque maximis concavis nee planis folia caulis magnitudine non superantibus, glandulis bicornibus nee pectinato-multifidis, capsulis minoribus, semibus laxis nee contiguis verrucoso-gyrosis.

EUPHORBIA TIUNSTAGANA BOISS. (Sect *Esula* )

E perennis glabra ramosa leni elongato 1-2 caules fihfor-

mes erectos pumilo\* subsimphces pauld Miprà basiin densè foliosos edenti, folns^silibus integris basi attetiatis ab Intimis minimis obovato-c^Pàtis retusis ad superiora obovato-oblonga obtusa sensim auctis, umbellae 3-5 radiatae radns brevibus breviter bifidis, Involucn generahsphylls ovalo-rhombeis, involucelli phyllis ovato-rotundis transversè lationbus sub lente margme erosuhs, involucris propni glandulis transverse et latè oblongis brevibus margine inferiori truncatis el obsoletè utrmquè breviter cornutis, capsulfl oblongft glabrS laavi coccis dorso rotundatis, semmibus ovatis foveolis paucis punctiformibas sparsis obsitis

Hab in pinetis andis *Lusitamce Transtaganm* circa *Coma* cl Welvitsclipl exs N°323 Floret vere

Gaules 3-4 pollicares, folia superiora 5 lineas longa apice 2 lata, umbellEB radu vix pollicares, capsula pro plants mumtie magna Quodammodo affinis *E saocahhfocq* quaediffert folusmultd longionbus forma? diversee, glandulis manifest6bicornutis, semmibus brevibus impunctatis

#### EUPHORBIA ORPHANIDIS DOISS (Sect *Esula* )

£ perennis glabra glaucescens radice durā ramosfl brevi, caudicibus pluribus denudatis tenuibus n̄erbaceis procunibentibus subterraneis abeunlibus in caules erectos crassiusculos breves fohosos apice umbelhferos etsub umbell^ssepiūs ramulosos, folusobovatis obtusis infernè attenuatis obscure mucronulatis muticisve integernmis confertis citd deciduis, inflorescentiã hemisphaenca, umbellfl 5 radiata -radns breviuscuhs bis dichotomis, involucn phyllis breviter ovatis, involucellis e basi subcordatd transversè lationbus deltoideis obtusissimis, glandulis semilunatis crunbus subulatis subdivergentibus glandulae longitudine sublongionbus, involucris propni dentibus brevissimis hirtis, capsulft magnd ovatd. nutanti obtusè .tngond, semmibus ovatis plumbeis lsevibus, carunculd ovato-rotuudd radiatim lobulatd

*Euph Hohenacken* Orph. mss non Hochst. et Steud

Hab. in regione media *Pamassi* propè *Lugan* alt 5000'-6000' Orph I Guicciardi f

Gaudiculi 2-4 pollicares, caules cum inflorescentia diametro 2-3 pollican 3-4 pollicares, folia 5-6 hneas longa apice 3 lata,

Plant orient novar Scr sec N°4

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inferiora minora, involuelli phylla demum 6 lineas lata 4 longa. Capsula magnitudinis illius *E. Nicotianae* suavis distinctissima caulis basi caudiculis ad *E. deflexam* accedens sed ab ea semibus non scrobiculatis remota et melius prope *E. Nictentem* et affines quae caulis elongatis rigidis, semibus minoribus subangulatis, etc., longe differunt collocanda

EUPHORBIA HELDREICHII Orphan (Sect. *Esvla*)

E. perennis rhizomale nigro verticillata pluncaulis, caulis erectis vel ascendentibus elatis teretibus crassis binis inferne nudatis superne remote et verticillatim foliosis simplicibus 2-5 umbellas superpositas laxis terminalibus formantes ferentibus foliis verticillo 8-10 linearibus basi sessilibus attenuatis apice obtusis mucronulatis utrumque breviter velutino-hirtis tandem glabrescentibus umbellas involucentibus, verticillorum superiorum valde abbreviatis ovato-oblongis, umbellis in omnibus verticillis praeter 1-2 inferiores axillares 7-13 radiatis, radibus verticillis inferioribus brevioribus verticillo superioribus omnibus bis bifidis, involuelli phyllis obovatis transverse latius margine inferiori liberis superioribus plus minus interse connatis glandulis semilunatis transverse latius cornibus curvatis apice convergentibus, involucri prope dentibus brevibus villosis occurrentibus, capsulae mediocriter levis glabra ovata obtuse\* trigona, semibus levis

***Euph. verticillata* Orphan non alior**

Hab. in monte *Malevd Laconus* prope *Kastamtza* cl. Prof. Orphanidis, in regione sylvatica *Objmpi Thessalia* cl. Th. de Heldreich. Fl. Julio

Var. 3 *Rmsen*, — Humihor, folia omnia abbreviate elliptico-oblonga, radii umbellarum pauciores abbreviati

***Euph. Rtesen* Orphan**

Hab. in regione superioribus *Parnassi* ad *Carcana* Orphanidis Guicciardi

Planta saepe tripedalis, caules annotim anno insequenti floribus breves foliis apice confertis sed sparsis. Folia caulium inferiorum inferiora 2-3 pollicibus longa 6-8 lineas lata integra margine subrevoluta, superiora sensim diminuta, superiora pollicem dimidium

longa vel etiam breviora, verticillim vicem 3-5 pollices dralantes. Umbellarum radii 2 pollicares. Involucella in unum latere interiori ad basim usque fissum superioribus minus profundò emarginatum 6-4 lineas diametro latum connata. Capsulae eis *Echara* vel *Kotschyana* multo minores. Species insignis inter *Esulas* connatas collocanda ab omnibus foliis verticillatis, involucellis minoribus uno latere tantum connatis distinctissima.

## ORCHIDEJE

OPHRYS ARACHNITES Hofm var. *Attica* D et Orph

Gauis pumilus, flores minores, perigonium virens, labellum basi valde attenuatum obovatum lutescens brevissimè. Telutinum maculis basilanibus brunneis glabris. Calycis speciei.

0. *Attica* Boiss. et Orph Mss.

Hab. in *Attica* prope *Stadium* rarissima cl. Prof. Orphanides. Hanc plantam ob labellum basi valde attenuatum ab *O. arachnites* specificè diversam credidimus sed caetera bene conveniunt et ex specimenibus paucis exsiccatis hanc ut varietatem ei conjungere aptius autumavimus.

Obs. 1. *Orchis Synaca* B et Blanche pi. exs. e *Syria* specimenibus pluribus acceptis est tantum forma micrantha *O. mortoni* labello obscure trilobo albido.

Obs. 2. *Eptactis condensata* Boiss. in Balansa pi. exs. e *Smyrna* videtur forma insignis *E. latifolia* foliis caulibus abbreviatis multinodiis saepe brevioribus, spicis densifloris, bracteis flores aequantibus.

## IBIDEM

IRIS ATTICA BOISS et Heldr (Sect. *Barbatce*)

I. caespitosa oana rhizomate repente brennifero, foliis ensi-

formibus acutis angustis falcato-curvatis, scapo cyhndnco brevity-  
simo nudo vel bracteam herbaceam rectam ^atham aequantem  
ferenti, spathaj valvis membranaceis subinflāP obtusis pengonn  
tubo brevionbus, flore in spathā subsessih, pengonn tubo ovano  
quintupld longion apice dilataLo lacinns paul6 longion, lacinns  
violaceis vel luteis aequilatis oblusis extenonbus subbrevionbus  
recurvis obovatis obtusis basi longè attenuatis intenonbus rectis  
obovato-oblongis basi breviiis attenuatis

Hab in partc supcnon monlium *Hymett*, *Pentehci*, *Parties At-*  
*ticce* Sprunerl Boissicr! Hldreich! in *Parnassi* regione inferiori  
Guicciardi 1 Fl Maio

Species *J piimila*; aflinis ab co disincta folus angnstionbus non  
rectis scd rcurvo-ialcatifa, pcrigonn tubo quoad ovanura longion  
Flores paul6 minores sunt et lacinwo externa3 proportione inte-  
riorum breviores et magis reflexe

GLADIOLUS IMIUCATUS MB Var *Libanoiicus* BOISS et Kotschy

Spalhae valv,c laLiorcs-clcvaLim nervoso-stnatae, pengonn la-  
cunae magis ovalae

*G Lihanoticus* Boiss cl Kotschy ohm in Kotschy pi Syr exs.

Hab in humidis vallis *Martech* Antilibani propè *Zebdam* cl  
Kotschy. Ad *Gl imbriratum* panter rferendus videtur *G hygio-*  
*philus* B ellluetinpl HuetAim exs

TmciïONEMA NIVALE Boiss et Kotschy

Tr tunicis radicalibus fuscis membranaceis vix conaceis, folns  
hneanbus phcatis patulo-recurvis sub anthesi flores parùm su-  
perantibus,vagmib meinbrjnaceisnervoso-stnatis infenon obtusa  
supenon acutiusculâ, scapit. 4-2 uniflons vaginam supenorem  
parùm superanlibus, spathas valvis linean-lanceolatis herbaçeis  
margine angustè membranaceis obtusis alteri subangustion, pe-  
ngonu phjllis basi aurantiacia supernfe violaceis spatha dupld  
longionbus ellipticis multinerviis, stamimbus pistillo brevionbus,  
stylo apice tnfido, capsulâ ovati^ seminibus angulato-globosis  
niguloso-itiborcnlalis

Hab ad margines areolarum Dive obtectarum vallis *Martsch Antihbani* alt 6500 Fl Junio cl Kotschy

Species florunAagnitudine et stylo anthers longior *Tr bulbocodio* affinis, hoc a nosro differit foliis longioribus, bulbi tunicis magis conaceis, perigonis lacinis angustioribus interioribus tinnervus, stylo apice sexpartito, seminibus Isevis

CROCUS HYEMALIS BOISS et Blanche (Sect *Nudi*)

Cr tunicis radicibus tenues membranaceis in fibras parallelas inter se anastomosantes tandem solutis, vaginis 2-3-elongatis inaequalibus, foliis synanthus angustis glabris demum patulis, scapo elongato nudo, spathe diphylla apice acuminata, perigonis tubo limbo longior, fauce aurantiaci glabra lacinis ellipticis acutis albis exteius praesertim basin versus violaceo-striatis vix suffusis, styli divisionibus laciniis angustis profundè fissis

Hab in Syria; hinc in collibus prope Beyrouth et Saida Blanche, Gaillardot, ut etiam in Libano ad 000 metr alt prope Scanderoun (Gaillardot) et in Antihbano prope Wadi Barrada cl. Gaillardot Floret a Decembri ad Martium

Species a *Cr Boryi* corolla non alba con colon vaginisque in fibras solutis distincta *Cr Invigutus* Bory a nosro differt vaginis crassis internè in squamas acutas solutis, stigmatibus divisionibus crassioribus, adest forma foliis tum carum paulo crassioribus et stigmatibus ramis aliquando paucioribus quam sub nomine *C Gaillardotii* pennis distincti sed quae non specificè differt

CROCUS OGHOLEUCUS Boiss et Gaillardot (Sect *Nudi*)

Cr tunicis radicibus tenuiter membranaceis fuscis, vaginis terms elongatis inaequalibus, foliis synanthus latiusculis glabris, scapo elongato nudo, spathe diphylla acuminata vaginis plerumque inclusis, perigonis tubo limbo duplo longior fauce flavida glabra, lacinis ellipticis obtusis pallide ochroleucis, antheris albidis, styli divisionibus longis apice dilatato breviter denticulatis.

Hab. in cultis argillosis Libani prope Scanderoun supra Sidonem cl. Gaillardot Fl medio Decembri

Planta 6-10 polhcaris, folia hneam ferè lata Nulh propiùs aflims quam *C Boryi* qm praBter folia tenuiora differt eximiè slyh divisionibus profundè multifidis *C. Pesta&szce* styh divisio-nibus apice indivisis Insignius habet flores tnplò minores, folia angustissima

Cnocus SYRIAGUS BOISS et Gaillardot in coll exs 1853 (Sect *JSudi*)

Cr tunicis radicalibus membranaceis fuscis demùm in fibras latas parallclas basi solulis, vaginis membranaceis terms elongatis valdò maequahbus, folns latis clongalis glabns synan thus,, scapo elongato nudo, spatlij diphylU acuminata" st&piùs exsertS, pe- ngonu tiibo limbo tnplti longion laciniis aureis ellipticis acu- t^isculis infernò magis atlcnuatis, anthers flavis, styh ramis in lacinias lin cares profundò mullilidis

*Cr Balansce* J Gay in Bal pi Smyrn exs. 1854

Hab circà *Scanderoun* Libani et in valle *Barghoutib* suprà *Saida* sitis cL Gaillardot Dccembn, Febniano 1852, in colhbus *Koukouloudja* propc *Smyrnam* cl Balansa Martio 1854

Folia tandem 2 lineas lata flores saipfi superantia, scapus 3-4 poll Stjli ramis mullipartitis soli *Cr Auchen* inter flavifloros comparandus nam omncs caeten stigmata incrassata crenulata nec[mullipartita habent *Cr Auchen* ex AsiJ minon et in Grae- cift quoque vulgatus differt flore dimidio minon intensiùs auran- tiaco, styh ramis bi nee multiparlitis

CROCUS SIEBEW J Gay var *Atticw* Boiss et Orpù

Bulbus crassior, tumcae extenores crassiùs reticulataa supernè in fibras setosas longiores basin vaginalum involucrantes productae Folia plerumque latiora, faux penggn pallidiùs auranliaca

Hab m montibus *Parties* et *Pentehco Attica, Delphi* in *-Eubced* ad nives Spraner, Heldreich, Orphanides PI. a fine Januaru ad Martium

*Cr Athens* ohm in litt

*Cr Sieben* J Gay = *mvahs* Bory et Chaub in ompibns Graeciae montibus occumt aed non commutandus cum *Cr Veluchenst* Her-



bert in alpibus montium *Veluchi* et *Parnassus* onundo et qui bulbo minimo, fauce perigonii violacei concoloris aliusque differt notis

CROCUS MIGRANTHUS BOISS (Sect. *Nudi*)

C bulbo parvo, tunicis radicalibus numerosis reticulato-cubris apice in fibras setosas non productis, vaginis membranaceis elongatis valde inaequalibus, foliis synanthus angustis glabris, scapo nudo longo, spatula diphyllo angustius aculeata, perigonii tubo limbo parvo quadruple longior, fauce nudus concoloris, laciniis ellipticis violaceis extus lineis saturationibus notatis, stigmatibus breviter infido lobis subdilatatis denticulatis

Hab in faucibus *Tauri Cihici* Aucher N° 2127 Fl ineunte Martio

Planta 4-5 pollicans, folia sub anthesi perigonii tubo **breviora** vix lineam dimidiam lata Perigonii laciniis 8-9 lineas **longae** Characteribus stigmatibus et tunicarum structurae *C Siebert* J Gay = *mvah* Bory sed hic differt foliis latis antheseos tempore iam elongatis, fauce perigonii aurantiaca, flonibus fere duplo majoribus Habitus *C pulchricotyns* Herbert ex Olympo et ArmeDia tunicis tenuiter membranaceis statim distinguendi

CROCUS PELOPONNESIACUS Orphandis Fl Graec exs. N° 68 (Sect. *Involucratum*)

Gr tunicis radicalibus tenuibus ext prioribus tenuiter parte superioribus reticulatis parte inferioribus parallelis fibrosis apice in fibras setosas productis, interioribus membranaceis omnibus ad varias altitudines peripheria bulbi insertis, vaginis tenuibus amplis inaequalibus, foliis hirsutius sub anthesi vaginis inclusis scapo involucrato 1-2 florum parvis longioribus, spatula diphyllo acuta apice inserta, tubo perigonii limbo duplo longior apice e spatula exserto, fauce nudus, laciniis ellipticis e sicco albis concoloribus, antheris luteis, stylo infido laciniis apice incrassatis integris tandem subrecurvis

Hab in regione inferiori montis *Malevo* *Lefcoma* prope *Ajanm* alt 3000'cl Prof Orphandis Fl Oct Nov

Aflims *Ct PaWmi* ab eo thfferl foliis. hysteralhns, perigonn albi lacmus aiigustionbu^, adinis quoquo vidclur *Cr Cartvmgh-tiauo* Herbert in Bol Reg 1843 ex insulâ *leno* quem e descnpliouc tautum novi et qm differre videtur fauce barbata, folns que synanLhiis

## AMARYLLIDEiE

NARCISSIJS GADITAMII BOISS et Reut {Sect *Jonqudla* )

N bulbo parvo tunitis membranaceis fuscis vestito, folns angustissim6 linearibus bcnucjlindricis 3-4 ms scapo longionbus, spallii monophyllâ acunnndtâ 1-4 ilori, pedicclhs pengonio subaequilongis, prigoiiui aurei concolons Lubo angustfe cylindrico, ldcinns ovatis abrupto et breviler mucronatis tubum dimidium ffiqdiitibus sicllatim palentibus, coronâ poculaiformi lacinns pengoini icquilongi ob&olele lobatû, anthers inclusis

Hab circâ *Gades* cl *Medina Sidomain* s^lvaticis, Monnard in herb Fauoho, in arvis circi *LouU Algmhiarum* Bourgeau medio Martio 1853 N' 201-2 sub A<sup>T</sup> *Junafolu* Lag var

Scapu^O-10 polntaris, loha 1/a-3/\* ^ne^ lata, flores magnitudinis corum JV *juuafolu* i\w. coronâ lacums pengonu dimidi6 brevion eximiô dilTort

NARCISSUS S\IIACUS Boiss et Gaillarclot (Sect *Tazelta* )

N bulbo tumcis membranaceis fuscis involucrato, folns viridiglaucisceotibus linearibus obtusis supernfe subcanaliculatis mfern6 obtusè cannatis scapo ancipili elato brevionbus, spathd membranaceii dcuminati 2-4 flora demum apice fissâ, flonbus longè pctiolulatis, pengorin albi lawnns patulis ovatis discretis vel Sfi2piû3 elljpLico-lanceolatis tubo subbrevionbus basi laogustatis longiusculè mucrooatis margine subundulatis, corona aurantiacfi rectA ob&oletò lobdtâ lacinus 4-5 pl6 brevion, anthers luleis corona multd brevionbus

**Hab in rupestnbus *Synx httoralis* circa *Berythum* ad *Nahr el Kelb* Blanche, *Si don em* Gaillardot Fl Novembn, Decembri**

Folia 2 rands 3 Uneas lata. Scapi pedales et saep̄ longiores, pedicelli 1 '»-2 pollicares Afflms *N. tazette* differt folns angusjao-nbus, pengonn lacinus m sicco magis papyraceis angustionbus basi discretis, corona cumlacinnis comparata" brevion

STERNBERGU PULCHELLA BOISS el Blanche in pi exs. 1854.

St bulbi tumcis membranaceis fuscis, folns 3-5 coetaneis ad medium usquē cum scapis vagina tenniter membranacea apice truncate mclusis angustē lineanbus obtusis aculisve margine scabnduhs patulo-subcurvatis sub antliesi flore saepiūs loogioribus, scapis 1-2 unifloris, spathd albo-membranaced apice *longb* attenuate pengonu tubo sequilonga, pengomi tubo limbo sequilongo \el longiori, hmbi parvi lacimis angustfe oblongo-lmeanbus, 5-6 nerviiSj, anthers oblongis, filamentis pengomo terti& parte brevLonbus, stigmatē capita to anthers subbrevion

Hab. in declivibus humilionbus *Libam* inter *Tripoli* et *Eden* c\ Blanche Floret medio Novembn

Species a formis angustifolns *St lutea* tubo pengomi elongato 4-8 lineas Ion go exunie distmcta Limbi laciniae 6-7 lineas longis lineam aut pauld ampliūa latae Folia sub anthesi sesquilineam lata.

## ULIACEM

EREMURUS LIBANOTICUS Boiss. et Blanche.

Er radice fasciculato-fibrosfl, collo extūs fibroso mtiis mem-  
^rams tenbus rubelhs vestilo, folus lineanbus margme laavissimis acuminatis scapo tereti l&vi brevionbus, racemo tentii elongato \*[n<iltifloro, pedicellis stnctis flore vix longionbus, bracteis anguslē lmean-lanceolatis acnminatis valdē cihatis pedicello sublongionbus, pengonn (e sicco flavidi) lacinnis linean-oblongis - demūm convolutis, stamimbus exsertis, capsuli pedicello stncto mcrassato ed sesquilongion Insidenti globos& l»vi locuhs subtnspermis, semmibus acutē tetraedns nigns margine subulatis

**Hab in Antthbano suprâ Zebdani Boiss, Libano circâ Eden**  
R P Reygasse ex Blanche

Scapus sesquipedalis, racemus fructifer pedalis angustus Folia 5-7 lineas lata, pedicelli semipollicares, pedunculum paulo minus eo *E. Caucasia*. Capsula pedicellata major Affinis *E. Caucasia* et *Taurico* qui differant racemo ob pedicellos longiores minus distinctos crassior, pedicellis fructiferis sursum arcuatis, prior magis super capsula minori transversè rugosè foliis margine asperis, posterior pedunculo albo, seminibus pedicellis maculatis Semina aliquando angustè alata unde genus *Ammohandn* Kar et Kir. vix legitimum

HENNIKIA AUCHERIAN\ BOISS.

H. radice fasciculato-fibrosa, collo membranaceo-marginato, scapo tereti laevi, racemo demum longissimo sulcato, foliis linearibus triquetris-cannatis acutis margine scaberrimis, bracteis albis scanosis lanceolatis acuminatis nervo medio rufo percursis pedicellis floriferis brevioribus margine ciliatis, pedicellis erecto-patulis flore sublongioribus apice oblique cum pedunculo articulatis, pedunculo laciniis obovatis acutiusculis, filamentis recurvis pedunculo paulo brevioribus, capsula obovato-oblonga 4-6 nervis sulcata, seminibus in unoquoque loculo 4-6 nervis latiusculis et minusquam alatis

***Eremurus Anchenanus* Boiss. Diagn VII**

Hab in *Persia* Aucher et D<sup>1</sup> Buhse.

Hæc species ob semina alata in loculis plura *Hennikia* generi adnumeranda est sed ab *Henn. anisoptera* ut videtur distincta. Hæc e specimine Tatanco florifero mihi a cl Bunge benevolè commutato et aliis Cabulicis Stocksianis differt collo radice longè libroso, capsulis ferè duplè majoribus globosis, seminibus majoribus latius alatis

TULIPA BUNGEANA Boiss

T. bulbi tunicis fuscis intus lanatis, caule humili unifloro fere ad mediam longitudinem bifido, foliis anastomosis linearibus canaliculatis margine subundulatis patulo-recumbentibus glabris, flore mi-

nulo, pengonu pallid<sup>^</sup> lutei fohohs extenoribus lanceolate acutis glabns extus nibro-suffusis intenoribus lationbus concolonus oblongis basi abruptiusculè attenuate ciliatis, filamentis basi dilataia ciliatis pengonio dimidid brevionbus anthers oblongis duplo longionbus, ovano oblongo-cylindrico apice attenuate, stigmatè hirtello parvo,

Hab propè *Yezd* Persia cl Buhse

Habitu, folns aogustis et florum magoitudine affims *T. Bieberstemani* B pro qu4 earn primùm habm et quæ differl bulbi tumcis glabns, pengonu phyllis extenoribus minùs angustatis mtenonibus acutionbus basi glabns *T. Sogdiana* fiunge aflnis quoque differt filamentis glabernmis, bulbi tumcis hirsutis

TULIPA ARMENA BOISS.

T bulbi mediocris tumcis pallid<sup>^</sup> fuscis intus setoso-hirsutis, caule sub quadnfoho unifloro, folns glaucescentibus margine cihatulis glabnsve inferioribus oblongo-lanceolatis acutis margine undulatu patenti-recurvis. subcanaliculatis supenonbus binis angustd lmeartibus attenuato-acuminatis pedunculum subffiquantibus, pengonu lutei phyllu obovatis basi subattenuatis obtusis extenoribus apice breviter et obtusè apiculatis puberulis, filamentis glabemmis antherft oblongâ pauld longionbus, ovario Jblongo-cylindrico

T *mmтана* var. *flava* Huet pi Ann exs.

Hab, in *ArmeniA* inter *Setchanck* et *Gdkdagh*. alt 6000' cl. Huet du Pavilion. Fl Junio.

Planta 8-10 polhcans, folia infenora 8-10 hneas lata 4-5 polhces longa supenora angustisaima. Flos magnitudims et colons Illius *T. sylvestns* sed petalis mult6 obtusionbus A *T. Persicd* Lindl. cujus Tanetas chrysantba occurrit tUDicis pilis ngidis setifonmbus nee land longâ enspâ obsitis dilTert.

Ti%if»A B(EOTICA Boiss. et Heldr

T tumcis bulborum glabns, caule infernè denuaiao superne 3-4 phyllo pubescent!-scabndo<sup>^</sup>, folns inferioribus latis oblongo-lanceolatis margine valdè undulatis glabns auperioribus angustè linean-lanceolatis omnibus acutis, pengonu intensè purpurei

phyllis obovatis omnibus sed interioribus abruptius longè caudato-acuminatis basi macula obovata nigra flavido-marginati majusculè notatis, staminibus pistillo sublongioribus.

Hab in agnis prope littus *Eunpi* inter *Oropo Basotup* et *Chaladem Eubetp*, non procul ab ostio fluvii *Asopos* Boiss Apr 1842, Heldr fine Marlu 1844

Pars, caulis subterranea longa, folia inferiora canaliculata sesquipollicem la la 5-6 longa, flos magnitudinis eorum *T. stragulata* et *vanopicta* quibus tunicis glabris et scapo pubescent! affinis est Prior a nostra foliis vix nee valde undulatis, pennis phyllis acutis quidem sed non longè caudatis, posterior foliis ciliatis marginè obsoletè undulatis, pennis phyllis basi maculâ minimâ notatis multè minus abruptè et longè acuminatis differunt.

#### TULIPA EUNANTHIA Drphamdes

T bulbi mediocriter tunicis fuscis glabris, caule medium versus trifolio, foliis margine scaberrimis undulatisque patenti-recurvis phyllis inferioribus oblongo-lanceolatis terminali angustioribus acuminatis, pennis purpureis phyllis obovatis basi attenuate apice breviter acuminatis glabris macula basilari obovata ruga flavido-maculata punctatis, antheris oblongis liliaceis filamentis glabris sublongioribus, stigmatibus stylo tripliciter latis

**Hab in regione media montis Malevo Lacmatis juxta Xerocampo**  
cl Prof Orphan Fl Apr Maio

Foliis et characteribus affinis *T. Bosottice* Boiss a qua differt petalis latis breviter nee longè caudato-acuminatis, stigmatibus dupliciter latis

#### FRITILLARIA STENOPHYLLA BOISS et Reut

Fr glabra vix caule teretibus recto elato basi nudo unifloro, foliis 7-15 angustissime linearibus sparsis rectis ab inferioribus longis ad superiores flon approximatos abbreviatis angustisque, pennis campanulatis phyllis extensibus oblongo-linearibus internis sublongioribus obovato-oblongis omnibus obtusis purpurascensibus medio sulco variegatis e sicco non tessellatis supra

basin nectano ovato mstructis, stamimbus pengonio tertifl parte brevionbuSj filamentis totd longitudine parcẽ papiUosis e basi dilatata\* attenuatis antherA oblonga obsoletẽ apiculatã subdupia longionbus, stylo anthers sublongion ferẽ ad tertiam partem usquẽ tnfido, capsulU ovato-rotunda apice truncaU

Hab in encetis sabulosis *Transtaganis Lusilanm* Welwitsch pi exs N° 161, sub *Fr meleagn* Brot, in sylvi3 arenosiu *Algarbia circi Faro Bourgeau pi exs 1853, in Bceticd Gaiitandcnoh Chiclana* el *Puerto Real Bourgeau* Fl Mart Apnh

Caulis sæpfe sesquipedahs, folia inferiora 3 polhces et amphùs longa lineam lata Flos llo *F meleagns* ferẽ dimidid minor Synonjmon *Fr meleagns* Brot dubium est inter hanc speciem et *Fr lusitumcam* Wickst ex descriptione I circa *Olyssiponem* G Hochst N° 253 et in dumetis montis *Sierra di Cmtra* Welwilsch crescentem et summoperẽ distinctam folus brevibus inferioribus 34 hneas latis, pcongou phjlhs subaequalibus, slylo ad quintam partem tan furn tnpartito, capsula oblonga Hsc scñus floret a fine Apnh ad Maium

#### FRITILLARU HISPANICA BOISS et Reut

Fr glabra glauca caule mediocn crassiusculo 1-2 floro, fohis 7-13 sparsis infenonbus latẽ linearibus obtusiuscuhs supenonbus supernẽ valdẽ attenuato-acuminatLs flori appronmatis^ pengonũ campanulali phyllis subaequalibus obovato-oblongis obtusis rubns medio fasciã vindi-lutei rubro-maculatã laid obsillLs suprã basin foveolã oblongã mstructis, filamentis breviter papillosis a basi lation sensim attenuatis antherã oblongã mueronulalã pits duplõ longionbus, stigmatẽ antberas superanti ad 'S-'J tnfido, capsulã obovatã apice truncate

*Fr Messanensts* Boiss Voy Bot Esp non Guss.

**Hab in omni Hispamd mterion et austraU, Castella nova in** collibttis *Aranjuez* A de Rayneval! Reuter' usquẽ ad partem supenorem montis *Sierra de Guadarrama Bourgeau!* S" *de Mijas* pror *Malacitana* Boiss., S<sup>B</sup> *Nevada* u^que 'ad *HOOCf* Boiss ! Reuter, Bourgeau I *Regnum Jenense* ad *Gontar Blanco!* Fl ab Apnh ad Juhum

A *Fr stenophylld* sat differre videtur folus glaucis infenonbns

lationibus superioribus apice valde attenuato-acuminatis, pentagonio late vincto-vittato, stylo profundius fissis, foveolarum formi  
*Fr. Messanensis* cum eam penum retuleramus certe differt foliis summis multo longioribus non acuminatis saepius verticillatis, flore majore, stylo vix ad tertiam partem infido

## FRITILLARUM GUICCIARDII Heldr et Sartori

F. glabra graeca, caule humili robusto ascendente basi nudo superne 7-11 phyllo, foliis omnibus alternis valde approximatis carnulosis, inferioribus oblongis obtusis, reliquis oblongo-vel lanceolatis acuminatis sursum gradatim diminutis, florum raris solitarius plerumque 2-5-nis nutantibus, pedicellis basi et hinc in medio umbractatis florem squaribus v. paulo excedentibus apice reduncis, perigonio cylindrico-campanulato basi rotundato diametro suo longior, phyllis non tessellatis fasci longitudinali late vincto-lutescenti percursis ceterum rubris venis saturationibus apice puberulis spatulato-oblongis, exterioribus adglossatis acutiusculis basi obscure gibbis interioribus rotundatis, staminibus perigonio medium subaequantibus, filamentis e basi dilatatis attenuatis glabris antheri apiculata vix longioribus, stylo glabro ovarium aequante stamina superante fere ad medium usque infido, lobis patentibus.

Hab. ad cacumen *Parnellos* montis *Attas* 4500' alt. d. 20 Maij 1852 {Orphanides! Guicciardi! Heldr D}

Bulbus majusculus, caulis semipedalis v. paulo altior basi fere permixtae anserine crassitie, folia inferiora 2 poll. circ. longa 6-9 lin. lata, summa 1-1 1/2 poll. longa 1 1/2 lin. lata, perigonum phylla pollicem longa, exteriora 3 lin. interiora versus apicem magis dilatata 4-5 lin. lata Differt a *Fr. Grisebii* caule robustiore plerumque pluniflora, foliis crassis valde glaucis sursum magis approximatis, perigonio campanulato-condiventi, nec breviter campanulato-patenti, phyllis angustioribus inaequalibus, antherarum: longitudine, etc (Heldr et Sartori desinps. Oct. 1852)



FRITILLARIA CRASSIFOLIA Boiss et Huet

Fr pallidè virens, caule brevi crasso 1-2 floro, pedunculis crassis, folns 4-6 crassis rectis approximate sparsis mfenonbus latè oblongis acutiusculis supremis angustfe Uneari-lanceolatis attenuato-acuminatis, pengonii phyllis badio-lutescentibus rubro-striatis intùs rubro-maculatis subsequibus oblongo-ellipticis obtusis, staminibus dimidimn pengomum vix sequantibus, filament) s glabris e basi dilatata sensim attenuatis anthera oblonga lutea submutica subdupld longionbus, stylo staminibus sablongiori ad tertiam partem usque tnfido, capsula (junion) oblongo-clavata exalata.

Hab in Armenia collibus agillosis prop6 Baiboul Aucher n° 5376, ID lapidosis montis Techdagh prop6 Erzerotim Huet du Pavilion

Planta 3-5 pollicans, folia inferiora bipollicana 6-12 lineas lata, flores Illis Fr. meleagrts minores. Species folns brevibus latis, caule pumilo a Fr luted MB , cujus folia lineana sunt distmcta. Fr. lahfoha W. habet folia longiora, flores duplo majores purpurescentes tessellatos

FRITILLARIA KURDICA Boiss. et Noe

Fr. virens caule pumilo umiloro, folns qumis sparsis tenuibus Inferionbus oblongo-lanceolatis supremiB an gust è hneari-laoceolatis florem ffiquaotibus omnibus acutis, flore parvo brevissim6 campanulato, pengonii phyllis purpureis tessellatis extùs fascia viridi-lutescenti percursis oblongis subconformibus apice pui>e-rulis obtusis extenonbas acutiusculis interioribus foveola ovata supra baain mstructis, staminibus pengonjo tertia parte brevioribus, filamentis papillois a basi dilataU atteifiatis anthera oblooga luteaEiucroaafaplis duplo longionbus, stylo anthera sublongiuri ferè ad medium usque tnfido, capsula.

Hab. ID subalpmis propè Van cl Noe. Fl Maio.

Species pulchella 2-3 pollicans, folia inferiora 1-1 1/2 pollicana 4-5 lineas lata. Flos magnitudiois speciminum minorum Fr mm-tana Hoppe sed magis abbreviatus Ab eà quse eadem ac Fr te-

*nella* MB es\*e dicitur, differt staturfl hnmili, folns latis nee angustè hneanbus

**Obs** *Fr gibbosa* Boiss Diagn V, esl*Rhmopelulum Karehm* F et SI forma pedicellis elongatis

FRITILLARIV MINUTA Boiit. et Noe

Fr vindis, caule pumilo umfloro, folns subquaternis tenuibus Infenonbus oblongo-lanceolatis acutmsculis supremis oppositis angustè hneanbus apice altenuatis florem aequanlibus, pengomo minno bie\itcr campanulalo plullis e sicco pallidè rubellis concoloubus lmmcnlalis omnibus conformibus elhplico-lanceolatis **ba**^i longuìs apicc hiilello obtusiusculo brevius attenuatis, slami-  
**nibus** pengonio pjrùm breMonbus, filamentis papillosis a basi sensim allcnualis aullicrj oblongâ lute.1 iauticd duplo longionbus, shlo

Hab cum precccdenti m subalpinis *Kurdistanue* cl Noe

Bipollicans, folia infciiora sesquipollicana4 hneas lata, insignis flore omnium mimmo cuju;> phjlla >i\ G Imeas longa 2 lineas lala omninò concolona sunt slnala in MCCC pellucida, omma apice breMtr attenuaLa

FRITILIARLV TRISTIS Heldr et Sarton

Fr glabra caule elato basi nudo superne 6-9 phjlllo, folio radicali membranacco caulcm \aginante lmean-oblongo 5 nen I obtusiusculo, folns cauhnis pluimcnnis omnibus alterms, ranus infimis oppositis, mfenoiibus approximatis Infimis oblongis obtusis, medns oblongo vel linean-lanceolatis longfè acuminatis, summis 2-3 angustè Unean-acuminatis inter se et a ilore remotis, flonbus sobtarns ranus bims nutantibus, pengonn conico-campanulati basi non gibbosi attenuali phyllis non tessellalis atropurpleis extus prumosis oblongo-obovatis basi angastatu apice rolundatis obtusis puberuks, staminibus pengomum medium paul6 superantibus, filamenlis e basi dilatatd attenuatis papillo-  
&is anthera apiculatd fere dupld longionbus, stylo glabro ovano Ion gi ore stamina superaute ad tertiam par tern tnfigido lobis recurvis

Hab m *Atlicd* ID declmbns septenlr supri Ag *Olykana* pr *Patisha Athewuum* d 26 Mart 1851 (Heldr et Sart), et inter frntices ad rad. m *Parnetfios* suprà *Markopitlo* d 23 Mart \*844 (Heldreich)

Cauhs •/,-! pedalis tenuis quidquam flexuosus, folia infima 3-5 poll longa 5-8 hn lata, summa saopè 1-1 7, poll longa basi \i\ hneam lata, pengonu ph^lla 8-12 hn longa plerumquè 4 lin lata Differ! a *Fr Gicscd* inprimis staturA allion, folus longionbus inembranaceis vindibus, nee crassmscahs glaucis, pengonit form.1 el colore, a *Ft cornea* folio radicali scarioso-membranaceo *can-* lem longe vaginante, nee petiolato, folus cauhnis longioribus nervosis, filamentorum et sljli longitudine (Heldr et Sari de- senps Oct 1852)

FRiTiLLAnr\ EiraiiAim Boiss et Orphan

Fr glabra caule humili unilloro, Folus suprà medium caulem G-8 ipfenonbus confertis oblongo-lanceolatis acutis inflmis oppo- sibs supenonbus sparsis angustè lmeanbus acuminatis llori nu- tanti approximatis, pengomi pbconici basi vi\ gibbosi ph>lhs m- tens6 purpureis^pice flavis çihalis obtusis, staminibus pengomo tertia parte brevidnbus, anthers luteis filamento glabro apice nx altenuato subbreuionbus muticis, stylo indiviso stamina subsu- peranti, capsuU

Hab. in insuia *SyrA* sqpri *Coimoa* ubi legit Apnli 1649 et 1356 cl Prof Orphamdes.'

Affinis *Fr Ptnardi* quae differt folns magis sparsis, filamentis pubescentibus apice valdè attenuate, anthersmucronulatis, stylo stamina non superanti

GAGEA DAMASCENA BOISS et Gaillardot

G Jfilbis aggregatis ovato-obloDgis ex apice folium radiale angustè lineare elongatümetexbasi scapum flonferum edentibns, tuDicis fibrosis crassis in reliculas vix solutis suprà apicem bulbi t>æpius productis, scapo 1-2 floro 3-4 folioso, folus angusl6 lmean- bus patulè hirlis sparsis inferiori flores superanti c&teris brèvis- simis, peñgonu phyllis lmean-oblongis obtusis luteis eitfts vi-

renti-luticibus, bracteis brevibus antheris oblongis, stylo staminibus superantibus, capsula truncata pedicellata, semibus planis compressis in angulis

Hab. in declivibus circa *Damascum* cl. Dr. Gaillardot Floret Febr., fructus maturat Apr.

Affinis *G. reticulata* quae differt pedicellis acuminatis, capsula brevior latior phyllis pedunculatis

GAGEA nuno-vmiDis Boiss. et Kotschy

G. bulbo ovato folium radicale angustum lineare scapumque floriferum apice edenti membranibus nigricantibus superne reticulato-fibrosis ad basin scapi subproductis vestito basi ad fibellam radicalem originem bulbillos crebros nigricantes sub membranibus edenti, folia caulina 3-4 glabra sparsis hinc lanceolatis attenuato-acuminatis inferiori elongato superioribus valde abbreviatis, floribus 2-3 longe pedicellatis pedicellis saepe supra fascium foliorum brevior et angustius lanceolatum ferentibus, pedicellis elliptico-hinc basi alatis obtusis vix nervis a medio sursum liliaceo purpureo-marginatis, staminibus pedicellatis parte brevioribus basi dilatatis, antheris luteis ovatis, stylo staminibus longioribus stigmate subcapitato, capsula oblonga-clavata basi attenuata apice truncata

Hab. in jugo orientali montis *Hermonts* Syriae cl. Kotschy alt. 7000'—SO. Junio, in fissuris calcareis ad occasum *Damasci* Gaillardot Martio.

Species distinctissima radice characteribus et colore pedicellis caulibus 4 pollicibus folium caulinum inferius 2-2 pollicibus basi 3 lineas latum, pedicelli saepe pollicares pedicellis phyllis 5 lineas longa interiora latius purpureo-marginata Nulli propius affinis

ORNITHOGALUM LIBANOTICUM Boiss. (Sect. *Myogalum*.)

O. bulbo ovato non profero, folia lanceolata (e sicco) planis basi attenuatis scapo longioribus glabris, racemo longo densiusculo, pedicellis liliaceo-purpureis tenibus flore 2-3 pollicibus bre-

vionbus, bracteis scanosis lanceolatis longè acuminatis flore vix brevionbus, pengonn phyllis oblongo-hneanbus obtusis obsolete vindi-fasciatis, filamentis pengomo tertiâ parte brevionbus alternajm simplicibus tncuspidatisque cuspidè intermediâ anthenfcrâ

***O plantfohum Mss olim***

Hab circà *Eden Libani* R P Reygasse ex am Blanche Fl fine Man

Planta cum racemo tandem semipedali d-1  $\frac{1}{2}$ , pedahs Folia 9-12 lineas lata Flores magmtudmis eorum *O nutanhs* quod quoque filamentis alternatim minonbus (*O prasondrum* Gnseb Helvetia I Grsecia t Asia miDor!) occurnt sed in quo folia multo angustiora perigoouque phylla non subconcolona sed fasciâ vindi laid in specimimbus siccis persistenti percursa sunt

**OukunoGALUM FUSGEGENS Boiss et GaiU**

O<sup>^</sup>caule elato m racemum thyrsoideum multiflorum elongatum abeunti, folus latè hneanbus canahcnlalis, bracteis scanosis lanceolatis infrâ apicem longè acumioatum utnnquè lacmifi setaceo-attenuata<sup>^</sup> auctis, pedicelljs bractea duplò longionbus erecto-patulis, pèrigonu fuscescencia phyllis ellipticis obtusis, filamentis pengonio quartè parte breyionbus apice abruptè attenuatis, ovano ovato, capsulâ ..

In cultis *Antihbam* inter *Rascheya* et *Am Hata* cl GaillaTdot Fl fine Man

Cauhs pedahs et longior, racemus flonfer semipedahs, folia 6-8 hneas lala Ab afflni *O Narbmmsi* differt bracteis laciniatis, pengonii brunneo-fusci nee albidi phyllis minonbus basi et apice minus attenuatis, staminum cum pengonio proportione diversd

**OUNITHOGALUM DENSUM Boiss et Blanche**

*O* bnlbo umco ovato non prohfero, folns 2-3 lanceolàlo-hnea-ribus margioe cihatis concolonbus, caule hipiili in racemum ihrsoidmn brevem densmsculum abennti, bracteis lanceolatis attenuato-acuminatis scanosis, peditello subarcuato pengonio et bractea aubrevion, pengonii phyllis ellipticis obtasmsculis albis

fascia extus vindi palhdA percursis, filamenUspengoiio vix quart parte brevionbus apice attenuatis, capsuld oblongl phylls pengonn brevion

Hab in *Synd* ad promontorimm *Raz Beyrout* cl Blanche, circi *Sidonem* et in *Libano* inter *Berythum* et *Danuiscum* cl Gaillardot

Afiine *O comoso* differt folus brevionbus evidentiùs ciliatis, racemo thyrsoido nee corymboso, peduncuhs abbreviate

#### OnKITHOGALUM HUETHI DoiSS

Orn bulbo unico breviter ovato non proifero, folus 3-4 rectis latmsculè linean-lanceolatis atenuato-acuminatis e sicco plants scapum subscquantibus, corymbo paucifloro, peduncuhs Lenuibus erectis infenonbus longissimis, bracteis scanosis angustfe hneanbus-acuminatis canaliculate pedicello dimidi6 brevionbus, flonbus mediocnbus, pengonn lacinnis elhptico-lineanbus oblusis lat6 vmdi-fasciatis, filamentis hnean-lanceolatis pengonio subtnplO brevionbus, capsulQ

Hab in *Kurdistanid* Noe, in *Armenid Turned* Huet pi exs, sub *O gracihfloro*

Scapi 4-6 polhcares, folia 3-4 lincas lata, pedunculi semper recti inferiores sa3p6 2-2 »• polhcaros, flores eis *O umbellah dw* midid minorcs Affine *O monto.no* Cyr quod differt folus humifusis corymbum multiflorum superntibus, pengonn tertiA parte longions phyllis acutionbus, filamentis dimidium pengonmm sequantibus. *O graahflorum* C Koch pro quo hoc habueramus e descnptione est planta diversissima

#### OnNIHOGjVLUM TiucnopiiYLLUM Boiss et Heldreich

O bulbo ovalo non prolifico, fohis glabns fihformibus patulis scapo humili longionbus, llonbus 3-7 densè corymbosis, peduncuhs infenonbus Uorepaulti longionbus supenonbus brevi'onbus omnibus erectis, bractcis scanosis acuminatis pedicellos superantibus, pengonn phyllis elhptico-lanceolalis acutmscuhs vittft lata vmdi percur^is, filamentis lanceolatis pengonio diraidid brevioribus, capsulâ

Hab inherbosis propè *Alexandnum* ad GasLrnu *Man* ubi medio Martio flonferum legit cl Samantani

Scapus 1<sup>4</sup>/<sub>\*</sub>-<sup>21</sup>/<sub>i</sub> pollicariSj foha tenuissima, floresferèfl *lenm-folu* cui affino est et a quo sat differre videtur folus tenuionbus, pedicelhs brevionbus

MUSCARI PULCHELLUM Heldr etSarton (Sect *Botrymthits*)

M bulbo mediocn breviter ovato tunicis extenonbua fuscis in-tenonbus albis vestito, folus suprâ glaucescentibus angustè linea-nbus scapum superantibus, racemo etiam per anthesin laxo, llo-nbus pedicello nutanti eis brevion suffultis supremis mmoribus stenhbus, pengonio ovalo-oblongo caeruleo-violaceo dentibus albidis ovatis obtusis rcurvis, capsulaB valvis ovatis apice retuso-cordatis

Hab in collibus saxosis *Lycabetto* et *Turcovoum Atlicce* Hldr Fl Febr. Mart

Sipecies aflinis *M racemoso* a quo differre videtur folus latio-nbus rectis non junciforraibus, racemo laxo, pengonu magis dis-colons dentibus pauld majonbus magis rvolutis *M neglectum* longiùs differt bulbo magno, folus la Us, ilonbus dupl6 majonbus, capsulsD valvis apice non retusis

MUSCXRI HELDREICHII BOISS (Sect *Botryanthus* )

M bulbo majasculo ovato tunicis fuscis extùs vestito, folus vi-ndibus lineanbus profundè canaliculatis patuhs scapo longion-bus, racemo ovato densmsculo, flonbus pedicelhs eis dimidid bre-vionbus suffullis inferioribus nutantibus summis minimis ovato-globosissLenlibus, pengonio caeruleo obovato-urceolato superne sub fauce inQato sub angulalo-gibbo dentibus albisovato-tnangu-lanbus acutmsculis recurvis, capsulâ

Afitscart *hymenophorum* Heldr Herb Graec Norm N° 062

Hab in regione inferior! montis *Parna&si* inter lapides mobiles nive nuper obduclos suprâ *Rachova* alt 3000' fiae Apnlis 1857

- cl Guicciardi. — Descr e specim vivis e bulbis Parnassicis verc 1858 enatis

Folia e\|s*M botryoirtis* longioraet angustiora magis patula, flores

inajos minùs peuduli, pengomum formse diversre non **globo-o-**urceolalum sed magis elongatum angulato-costatum sub apice incrassatum, denies duplò majores magis revoluti. In specimini-bus Parnassicis exsiccatis epidermis\*paginae supenons foliorum versus apicem soluta unde nomen Ilclrcichianum sed haec nola jjllax ote\ cxsiccalioms modo probabililer ormndanam m planla<sup>1</sup> vivi uon ampliùs occurnt

BELLEVALIA rsEUDOMUSc\ni Bois<sup>1</sup>\* ct Buhse

B bulbo majusculo tumcis fuscis vctito, folns hneanbus canaliculalis scapo longionbus, rdcemo ovato tlenso, pedicellis cernuis\* ilore caerulco dimidi6 brevionbus, pengomo campanulato apice non constnclo lacinn<sup>^</sup> ovato-oblongis tubo subtriplo brevionbus, hlamenlit>bi!>cnalibn<sup>^</sup> paulo infrà medium tubum msertis antheifi iugncanliovato-rolundâvi\longioiibus, capsule jumon rotunda to-irigonâ apice retusd

Hab m Persia propc *Kelal* cl Bulise

Habitus et magniLudo ttorum *M neglecti* Guss sed pengomum nullo modo apice corfslrictum sed campanulatum dentibus magms *Belleuahce* potiui quam *Hyacmlho* ob valvulas capsulac bi nee niulli ovulaLas adnumcranda et prope`*B leucophueam, lineatam* et alfineb collocanda

BLLEVALIA MVALIS Boihs ct Kotschly

B foliib lanceoldtis uudulatis attenuato-acuminatis basi atte-nuatis margino scabrmsculis, scapis folns brevionbus apice race-mum ovalum den sum spiciformem T-9 floram ferentibus, bracteis ovatis membranaceis minimis, pedicellis brevissimis, pengomo campanulato-c<sup>^</sup>lindrico ad tertiam parlem usquè sexfido laciniis oblongis, fllamenlis subunisenahbus summo tubo mserlis com-planatis tnangulan-lanceolalis, anthens violaceis inclusis ,

Hab in humo argilloso ad mves Alpium *Mandsihura* Syruae alt 6500' cl Kotschy Fl ineunle Junio

Folia 3-4 pollices longa versùs medium 3 lineas lata Flores pauld mmores eis *B dubtw et Romance* quae pedicellis elongatis, pengomo ad medium partilo diiterunt *B flexuosa* magis afllnis



dtflert racemo laxo, pediceths clongalis *B demifloia* quai racemum subspicatum quoque habct differt anlhens flavis alusque no Us

BELLEYALU ALEPPICA BOISS

D bulbo tunicis membranaceis albidis veslito, folns binis lanceolato-linearibus acutis parallel<sup>^</sup> multincrvns margine papilloso-scabns subphcaLis patulo-subrecurvis, scapo folns sublongion, flortbus 7-9 sessilibus spicam ovaliim densam termmalem formantibus, bracteolis minutissimis, pengoma cjljndnco caeruleo ad quarlam partem usquē in lacunas oblongas fissio, filamentis a basi tubi hberis filiionnibus anthensviolaceis subexsclris, capsuli parvft rotundato-lngonA coccis dorso rotundatis

Hab. in collibus calcareis prop6 *Aleppum*, Kotschy pi Alepp Kurd N° 15 sub *Mmean cihato* Ker Fl Martio.

Folia 2-3 polhcana tres luicas circiter lata Scapus 4-6 pollicans, pengomum tres hneas longum Habitu et characteribus affine *B hnmw* quse prseter folia latiora (lonbus longē pedicellate differt *B micranfia* quoque sessiliflora differt folns angustis nervis obtusis<sub>3</sub> flonbus vix sesquilineaju longis *B sesaliflora* — *Hyacmthus sessihflorus* Viv qpniqufe pro qua hanc speciem divi habm ex specimimbus ^gypliaticis collata prseter folia lata, filamenta complanata trtangan-lanccolata summoperg differl capsulae magnae carpellis dorso-compresso-carinatis

BELLEVALU HELBREIGHII BOISS

B bulbi tunicis interioribus tenuiter membranaceis, folns 2-3 lanceolatis vet oblongo-lanceolate altenuatis acutis abbreviatis parallelē nervosis glabns, scapo folns longion, racemo terminah oblongo laxiusculo ob pedicellos bre\issimos florum spiciformi, pengonro intensē cseruleo violaceo cylmdnco ad quartam partem sexiido lacinus ovalis, til amen tis fliformibus ab apice tubi hberis, anther]s rubro-violaceis subexsertis, capsulō •junion ovaLo-rotundā tngond loculis dorso rotundatis

Hab inter *Adaha* et *Yemdge Khan* in herbis inter frulices cl H>ldr Fl medioMartio

Ilanc spcciem diii habui pro *D hneatd* K<sup>h</sup> quse proxima diffeit folus ciliatis, flonlms pallidis pedicello eis subajquilongo suffultis, pengonio brevisssnno et oblusissimè sexdentalo

ALLIUM COLCHICIFOLIUM BOISS (Sect *Molium* )

A bulbo simplici ovato tumcis interioribus pergamaceis vestito, scapo Jumihi bifolio, folus glabris oblongis utrinque attenuatis imbellam superantibus rargme laevibus, umbell. 1 multiflorâ capsahferâ, spatulae bivalvi rellexi Talvis breviter ovatis breviter acuminatis, pedicellis gracilibus aequibus flore multo longioribus, pengonu albidi plianthe oblongis aculis a medio sursum eroso-denticulatis nervo medio vindi percursis, filamentis pengonum subtornarilibus a basi monadelphis dilatatis sensim attenuatis simplicibus, antheris flavidis, Lapsus a globoso-innocil nervis elevatis relictis

Ilab in subalpinis prop6 *Ilakkm Maaden Armenue* cl Noe Fl Maio

Gaulis 3' pollicans medium v. cr. s. diphytus, fohorum hmbus 4' pollicis Jongus 1-1' latus Pedicellus pollicares vel pauld inferiores Ulexuor Umbella diametro 2' pollicans Affine *A Akakc* et *Caspio* a quibus pengonu phyllis denticulatis distat, prms differt insuper folus denticulate, pengonu phyllis lincan-oblongis stamina duplo superantibus, poitenus stanibus longè exsertis

ALLIUM LACCIATUM BOISS et Noe (Sect, *Molium* )

A bulbo ovato non prolifero, scapo supra basin tripbyllo folis plants laliifolius, hnearibus apice attenuatis scapo brevionibus margine sparsim et longè ciliatis, umbel Id multiflorâ capsahferâ, spatulae diphylla phyllis membranaceis breviter ovatis breviter acuminatis si epibitidis, pedicellis subxqualibus flore sub duplo longioribus, pengonu nilidi e sicco straminei roseo suffusi phyllis cymbaeformibus oblongis acutis apice fimbriato-lacens, filamentis sublatis pengonio subfiquilongis, antheris badnis subexsertis, capsulifl

Ilab profit *Van Armenw* c\ Nod, FJ Maio

Scapus sesquipedahs, folia 4-5 lmeas lata Umbella et flores  
*A rosei* a quo differl folus longe' cilia Us, pengonu phyllis sub  
 apice fimbriato-lacens.

ALLIUM UMBILICATUM Boiss (Sect. *Mohum*)

A bulbo . caule erecto elato tertiã pane inferior! foliato foëffis  
 hneanbus fistulosis supra canaliculatis ad nervos scabndis scapo  
 brevionbus, umbellU bulbifera" flonbus paucis pedicellis crassis  
 eis 3-4 longionbus suffultis, spalhA brevi ovaU fissã, pengomo  
 roseo basi ad pedicelli apicem truncalo-umbilicato phyllis oblon-  
 go-lanceolatis acutis, filamentis triangulanbus ima basi monadel-  
 phis pengomo plûs dinudi6 brevionbus, ovano globoso depresso.

Hab in ditione *Beloutschistan* cl. Stocks

Pedale vel sesquipedale, folia diametro hneam circ lata, flores  
 tertiã parte minores eis *A rosei bulbifen* quod aliine differl folus  
 plains, flonbus basi non umbilicatis, filamentis apicc longè atte-  
 nuate tertiã parte tantum pengomõ brevionbus

ALLIUM ZEBDAKENSE BOISS et Noe. (Sect *Mohum* )

A. bulbo . scapo qubdiphylllo erecto tenuj, folus lanceolalo-  
 hneanbus plaDis scapo Drev^nbus acutis uiargioe sub lente bre-  
 vissimè denticulato-ciholatis, umbells pauciflors pedicellis pen-  
 gomo noa longionbus, spathd monophyllS inflate ovaU brevissimè  
 acuminatã, pengonu aHji concolons phjllis oblongo-linearibus  
 apice obtusmscuhs erosulis, filamentis pengomo quartã parte  
 breyionbus, anthers badus .

Hab in *Synd* circa *Zebdam* cl *Ku»uuj*

Subpedale, folia 2 Uneas tantum lata, flores magmtudims eorum  
*A. ro&et* etpemujft'aedlongiores pliyUis magis attenuate et apice  
 erosis iTecinlegns; umbella 3-5 flora. A *PHftistmim* differt scapo  
 humih, umbelli multiflort, pengonn phyllis magis elongatis in-  
 tegns, anthers luteis subexserfis *KAll Cassium* umbelld dutusS,  
 pengonu pbylhs o?ato-oblongis, ^tc r

**ALLIUM AFFISE** Uoiss et Heldr (Sect *Porrum*)

A bulbo simplici ovato vaginis fuscis membranaceo-subfibrosis saepe supri bulbum elongatis veslito, scapo erecto usque ad 1/2-3/4 longitudinis inphyllo foliis fistulosis subcylindricis apice attenuatis glabris, umbellae valde bulbiferae, spathae monophyllae inflatae ogalo-rotundae abruptae et longiusculae caudatae, pedicellis flore plures longioribus, perigonii perianthii oblongis aculeis virescentibus medio dorso rufescentibus, staminibus alternatim truncuspidatis cuspidatis antheriferis filamentis parte infera lanceolata brevioribus cuspidibus lateralibus setaceis multo brevioribus, antheris breviter exsertis

Hab in pascuis alpinis *Græci* (B alt 3000'-7000' *Parnassi* Heldreich Guicciardi, *Cyllenes* Orphanides, *Veluchi* J. E. H. Samantam et Guicciardi Fl estate

Species affinis *A. tineae* plantis robustioribus, floribus roseis, perigonii perianthii angustioribus, cuspidatis antheriferis lateralibus brevioribus filamentis oblongo sublongioribus distinguendis Umbellae in nostra specie omnino bulbiferae evadunt

**ALLIUM BREVICORNIS** Boiss. et Buhse (Sect *Pomm*)

A. bulbo ovato minuto composito vaginis fibrosis circa scapi basin productis veslito, scapo erecto ad tertiam partem usque 3-4 phyllo foliis angustis linearibus planis canaliculatis scapo brevioribus margine laevibus, umbellae capsulae globosae bracteis hyalinis brevibus intermixtis, pedicellis flore 2-3-pluribus longioribus, perigonii rosei perianthii oblongis aculeis, staminibus alternatim truncuspidatis omnibus inclusis cuspidibus brevissimis lateralibus vix longioribus antheram subaequantibus

Hab in *Perside boreali* Buhse.

Valde affinis *A. alrovtolaceo* Boiss. cujus varietas forsitan tantum est ab eo differt praesertim staminibus inclusis, cuspidibus lateralibus brevissimis nec longis contortis

**ALLIUM PATERFAMILIAS** BOISS (Sect *Porrum*)

A bulbo rotundo bulbillos numerosos magis longis stipitatos

edenti, caule erecto ad medium usque 3-4 phyllo, foliis planis canaliculatis hinc inaequalibus glabris, margine scabundis, umbellae multiflorae capsuliferi bracteis hyalinis brevibus Intermixtae subglobosae, pedicellis flore multo longioribus, perigonio purpureo phyllis oblongis acutiusculis canaliculatis scabundis, staminibus alternis truncatis cuspidatis cuspidate antheriferis lateribus setaceis multo brevioribus, antheris flavis apice subexsertis.

Hab. in horto Mendiotrahadfl. *Wolgam* Becker in Wolg. ex n° 160 sub. *A. rotundo*

Gaulis subbipedalis, folia infera circ. 2 hinc lata, pedicelli umbellae 10-12 hinc longi, flores magnitudinis eorum *A. atrovioleae* quod differt bulbo unico vel bulbillos sessiles flavos edenti, cuspidate antheriferis filamentum aequantibus alisque notis *A. rotundum* diversissimum est floribus duplo majoribus breviter pedicellatis, staminibus inclusis, etc

Obs. *A. Cappadoacum* Boiss in Balansa, in Asiat. exs. 1856 videtur forma *A. atrovioleae* Boiss

#### ALLIUM (LERULESCENS BOISS (Sect. *Porrum*))

*A.* bulbo . scapo erecto ultra medium triphyllo foliis planis hinc inaequalibus acuminatis canaliculatis scapo brevioribus, umbellae globosae multiflorae capsuliferae pedicellis longitudine perigono, apathi laceratione diphylli ovato brevissime mucronatae umbellae brevioribus, perigono rubello-caerulescentis interstitiis foliolis oblongis apice attenuatis acutiusculis, staminibus perigono tertia parte brevioribus alternatim truncatis cuspidatis cuspidate antherifera brevissimi lateribus setaceis longe superata

Hab. circa *Erzerum* Anm. cl. CaWert ex am. Huet

Planta mihi ex unico specimine radice orbato nota *A. rotundo* habitu et foliis affinis sed ut videtur distincta floribus majoribus, perigonio phyllis magis elongatis laevibus nee scabundis attenuatis nee obtusis, colore magis caeruleo *A. smbriforme* Boiss perigono quoque caeruleo donatum habet flores minores, folia angustissime hinc inaequalia, cuspidate truncatis aequales

ALLIUM CUHTUM BOISS et Gaillardot (Sect *Poim m* )

A bulbo ovato-rotundo sub tunicis bulbillos sessiles paucos flavos edenti, scapo crasso nano redo basi subtnphyllo, folus semitereli-fislulosis suprA canaliculalis scapo subbrezionbus, iimbellj mulufloa" capsuhferA ovato-globosa pedicelhs exten-rlfes brevissimis Intenonljus Jlore demum 2 Vs-plo longionbus, spathfi diphyllii ovato urabellâ multti brezion, pengonu subglohosi phyllis ovalis oblQ<sup>is</sup> Iambus dorso intensiis margine pallidc; rubellis, sLamimbus a Item ft tncuspidatis filamcntis lanceolatis dd quartam partem supenorem tncuspidatis cuspidc aolhcnferâ bubbrezion anlbcns incliis»

Hab in arcrosis ullri *Abaroiih* in viciniis *Sidomt, Syria*; cl Gail-ljrdot Ft fine Man

Scopus Iripolharib, folia hneam fciû diamctro lata, umbella magmtudims feiè A *sphwrocephah* scd floret dimidio minores AHinc A *Reuiano* Boiss scapo tenuon Ilxuoso, folus tenuionbus, flonbus m uraljellâ paucionbus mjjonhus breviiis pedicellatis, cu&pidibus filamciiloï um longf; oxsertis distmcto

ALUUSTHELDIUEICIII BOISS (Sect *Pot rum*)

A bulbo ovato-rotundo minuto soliLano tuEicis membraDaceis extenunbas nigriLantibus vcsito, scapo crecto elato tenui fistuloso infern6 bubdiphylo, fob is tenuibus teretibus fistulosis scapo brevioribus, umbell<c globosac multifloras pedicelhs flore vix longionbus, spalhJ(laceratione?)dipbyll.i oblonga attenuato-acuminatfi pdicclhs subacquilongâ persistenti, pengonu rosei phylls lanceolalis acutmsculis nervo intension percursis, staminibus pengonio inserlis eo terlfl parte brevioribus, flameotis margine ciliatulis tnbus lauccolatis simpliciboS tnbuis alternis tncuspidatia cuspidc antbcnfurA flamaculo ipso tnplô brezion laterahbus setaceis duplô superata

Hab in regione sylvaticfl montis *Olympi Thes&ah* cl. Heldreich Floret Julio

Pedale vel paul6 elalius Umbella et florea A *schmnoprasi* quod aspectu similmum longè differt bulbo oblongo attenuato folus

minùs tenuibus et stamimljus simplicibus Nostra species propè  
*A acutiflonm* et *A Aucheri* collocanda est

ALLWUM STOCKSI\NUM BOISS (Sect *Scorodon* )

A bulbo unico ovato tunicis fla,vo-rufescentibus m fibras te-  
uissimas solutis densè vestito, scapo liumih infrà medium \$-4  
phyllo, fohis fihfoimibus semiterctibus non fistulosis marginc  
scabridis suprâ canahculatis circinua to-con volutis, umbellâ pa-  
tu!6 multiflorâ pedicellis tenuibus patentibus flore 2-2'/i-plo  
longionbus, spalhiunivalvisacpfi bipartite ovatfi brevi aculJ albo-  
membranacei, pengonn campaulati phjllis oblongis acutis bre-  
viler acunuoalis roseis ncrvo medio intension, lilamenlis basi  
pengomo adnatis eo lertiJ parlc brevionbus intcgris glabns parte  
dimidii infenori [alternis prEBscrtun) tngulan-dilalatis supernc<sup>5</sup>!  
abruptè attenuatis, ovano punctate apicc reluso,

Hab in regno *Cabuhco* Grillith^ m ditione *Bdoutschistan* circi  
*DooOund* Stocks sub *A i ubello*

Plantula 2 '/\* polhcans habitu ct staminum cbaractenbus af-  
finis *A oreophilo* C A H bulbi luucis mcembranaceis, fohis  
Idto-lineanbus plains, flonbus subduplo majonbus distincLo

ALLIUM GRIFFITHIUNUM COISS (Sect *Scorodon.*)

A. bulbo unico ovato tunicis palhdfc luscenclibus tandem in  
fibraa subsolutos vestito, scapo tenui infrà medium 2-3 pli)Uo,  
folna tenmter lililormibus canaliculalis non fistulosis Iambus  
scapo brevionbus, umbelli parvâ 15-20-florâ pedicellis flore vix  
longionbus, spatM monophyllâ vel laceratione diphyllia foliohs  
"breviter ovatis pedicellis vix asquilonis, pengonn campanulas  
e sicco albidis foliohs obldtigo-lanceolatis obtusiusculis mar-  
gins obsoletè erosuhs, filamentis basi pengonio adnatis eoque  
triplè brevionbus omnibus simplicibus alternis prBesertim basi  
valdè tngulan-dilatatis abruptè et breyiter attenuate

Hab. in regno *Catiuhco* prop?! *Hydozye* cl Griffith N° 452

Scapus 6-B polhcans, folia tenuissima, pengoiuim campanu-  
lato-aubconnivens circiter 3 lineas longum Praecedenti speciei

aflmc forma<sup>n</sup> pengonu, folus tenuicnbus et praesertim fl la men Us  
breuissimis eximiè distinctum

ALLIUM EXILE Boiss. et Orph (Sect *Codonoprasum* )

A bulbo parvo ovato tunicis, membranceis tenuibus vestito, scapo filiformi humili infernè 3-4 phyllo folus angushssimè h-  
ncan-filiformibus caule brevionbua lffivibus, umbelli capsuliferfl,  
flonbus 3-4 pedicelUs maequalibua flore 3-4-pld longionbus sufml-  
tis, spalM monophylli albi ovata plunnervi saepè bifidi in mucro-  
nem subsequilongum. flores suboequantem abeunti, pengomi albi  
vcl pallid^ carnei phylhs ollipticis aculis, anthens luteis inclusis.

Hab ranssime in monte *JEpos* msulse *Chio* cl. Orphanids.

Ex aflinitate *A Sipylei etparciflon* sed pengonium minus, spa-  
llia non lanccolata, pedicelh llhs *A pamflon* minus capillarcs,  
nee adcO elongati

ALLIUM TAURICOLUM BOISS (Sect *Codonoprasum* )

A bulbo ovato lunicis mgns subfibrosis secàs basin scapi longè  
productis densè vestito, scapo humili flexuoso ferè ad medium  
usquft 2-3 phyllo folus tenuiter fliformibus brevibus semitere-  
tibus non fistulosis suprâ sulcatis, umbellae 15-12 florae pedicelhs  
subacqualibus numquam deflexis pengomo vix longionbus, spa-  
thaB diphyllae foliohs e basi dilatata long6 lmean-filiformibus  
umbelia plerumqiiè longionbus, pengonn purpurei laevis foliohs  
oblongo-lanceolatis acutis, filamentis basi pengomo adhsrenti  
subdilatatis tenuibus simplicibus anthens breviter exsertis, cap-  
suO obovati truncate longitudinahter stria to-rugulosi

*A fngidum* Boiss Liagn ex parte

Hab in regione montanâ supenon et alpini *Taun Ciliaci* Kot- \*  
schy! Balansa sub *A fngido*

Ilanc spccim cum *A. fngido* meo e summo *Taygeto* onundo  
commiscui donee spccimma numerosa hujus characteres de-  
monstravennt *A fngidum* eodem habitu donatum differt tunicis  
radicahbus tenuioribus ultrâ bulbi apicein non productis, umbellffi  
pedicelhs valdè inaBqualibus longionbus pengonium dupld su-  
perantibus, pengonn pallidi phylhb ovato-oblongis, capsulft laevi



*A. montanum* Sibth. tunicis longitudinahter sulcalis, pengomi phyllis obtusis longiùs distal

ALLIUM BREVIGAULE Bois!) etBalansa (Sect *Codonoprasum* )

A. bulbo ovato tunicis membranaceis ultrà bulbum non productis restilo, scapo nano fle\uo&o 2-3 phjllo, folns angustissimfi lineanbus nervulosis \aginisquè ad nervos et margines scabndulis, umbella capsuliferA 10-20 flora pedicellis teauissimis suhinaequalibus demùm palenti-arcuatis flore 2'/, p!6 longionbus, spathas phyllis binis lanceolatis umbellam aequantibus vel sublongionbus, pengonn rosei phyllis oblongo-ellipticis obtusiuscuhs, filamentis e basi sensim altenuaUs perigomo paul6 brevionbus, anthers mclusis, capsulà ovata IEBVI

**Hab m regiODE alpmfl monlis DedSdagh Antitaun in Cappadocid**  
cl Balansa

Scapus bipolhcans, habitus *A. monlani* et *Tatincoh* Priori pengonio obtuso afliois differt tunicis non conaceis sulcatisque, ab *A. Tauncolo* differt folns magis scabndis plamuscuhs, pengodii phyllis obtusis, anthem mijhisis, pedicellis tenuionbus arcualis

Obs *All Achamm* Boiss et Orph in Fl Graec. exs N<sup>D</sup> 421 videtur tantum forma pengonio pauld brevion *All calhmischon* Lmk = *Borgam* Kth

ALLIUM STAMINEUM BOISS ID Pinard pi exs 1843 (Sect *Codonoprasum* )

A bulbo ovato, folns angustis semiteretibus fistulosis suprà canal lculatis supenoribus scapo sublongionbus, umbelia capsuliferl muUiflorA peduncuhs long is capillanbus undiqu6 divancatim effusis flexuosia inaequalibus, spathsE diphyllée fohohs lanceolatis sensim attenuatis umbellam superantibus, pengonu campanulato-rotundati rosei phyllis ovatis obtusis LQ mucronulum abruptè attenuatis, filamentis roseis a basi sensim attenuatis perigomo sesquilongioribus, anthers luteis exsertis

*A. pukhdlum* Boiss. *Diagn* pi Or 13, p 34io Observ nonDoD

Hab. m *LacomA* Heldr N° 202, *CanA* Pinard loc cit, *Lydid* propè *Smyrnam* BOISS, *CilmA* Balansa N° 813, *SynA* Kotschy

K<sup>o</sup> 234 pi Alepp Kurd , *Libauo* Kot&chy, Gaillardot, *Palcestwd* Boiss , prov *Ghilan Pemw boieahs* Aucher N<sup>o</sup> 5387

Ilanc speciem dm̄ habui pro *A pulchello* Don, quod nomen specificum plantse European sub nominibus *A pamculah* Gaud All uonL —*A flepiYf* K —*A cannaUvar capsuhfen*Auct absque dubio Inbuendum cst Nostra planta ab ill ā abundē dilTert staturfi humihori 0-10 pollican, foliis angustionbus et pracsertim umbellse magis multiflorae pedicellis elongatis undiqu6 effusis, pengonio rotundato nee ovato, anthers flavis nee rabellis.

ALLIUM HYMETTIUM BOISS et Heldreich. (Sect *Codonoprasum* )

A bulbo ovato tumcis conaceis fuscis secus scapi basin productis vestito, scapo modico parte inferiori subtnphyllo folns angust6 semicylindncis fistulosis, umbellâ capsuhferâ subglobosd pedicclhs subacqualibus pengonio suMuplô longionbus, spathS diphyLU lanceolate acuminate umbellâ longion, perigonn palhdô rosei phylhs oblongis obtusis abruptc̄ et breviter mucronatis, filameLis perigoDio sublongionbus anthers lutescentibus

Hab in cacumine *Jlymetti* Spruncrl Heldreich t in rupibus *Eubeco* Spruner

Scapus semipedahs vel paulo longior, umbella flonfera magnitudims nucis p jrvtC, pdicclh 3-4 hneat, longi Planta mihi dm̄ multis voxata dubns, viva in loco natah ultenûs observanda, ab *A puhhello* Don et *stammeo* pedicellis brevibus subaequalibus, ab *A paniculate* eodem caractere et filamentis exsertis, ab *All pal-lentis* L vanetate palhdê roseâ filamentis breviter exsertis et perigonn phylhs mucronalis dislincta, propiûs forsan ad *A Olym-picum* Boiss accedens vagims radicalibus tenmbus et flonbus minonbus distinctum *A monlanmn* Sibth deniquê habet tunicas trassas sulcatas et stamina inclusa. An tamen nostra species vanetas umbellis multiflons ct podicellis brevionbus subeDqnalibus *A fngidi* e monte *Taygeto* \*

## ASPARAGE^E

*Ruscus ACULEATL'S L var. angushfohus Boiss*

Folia oblongo-lanceolata basi 2 hneas tanlùm lata apice longS  
altenuata, caeterùm omnia speciei

*R` angistifoUus Boiss in Sched. Kolschy pi Cilic.*

Hab in angustns *Gtileh Boghas Tavrt Cihcm Kotschy*

Specimina intermedia inter hanc formam ettypicam occurrint.

## COLCHICACEJE

COLCHICUM POLYPHYLUJM BOISS 6t Heldf

G. tunicis radicaibus tenuissimis membranis fuscis, tubere  
' ovato, flonbus 6-10 vaginid loogfl cyhndnd membranaceA stnatfl .  
apice truncate inclusis, pengomi tubo quarts parte supenon tan-  
ttm e vagiofl exserto limbo qnmtaplò longion, laciouS angustS"  
elliptico-hneanbus obtusis 7-8 nervis e sicco palhd6 carneis parte  
inferior) papillosis, filamentis ad basin lacimarum insertis limbo  
pengonn dimidid brevionbus, anthers luteis linea^ibus, styhs  
anthers sublongionbus, stigmatè brevi recurvo unilateral], foliis  
sub anthesi in imi ?agind brevissimis anno insequenti numero-  
sissimis prsBter infenorem vaginam elongatam terminaDtem a  
basin capsularum subverticillatis lineanbus eloogatis multiner-  
vus, càpsulis oblongis cai\*pelh» breviter rostratis.

Hab ad *Giilek Boghaz* ad radices *Taun Cthaa* cl Balansa 98  
Juno 1855 cum foliis et capsulis matuns, ad *Merstna Cthcm* ad  
littus mans Uonferum loeunte Octobn 1855 cl. Reinert et Held-  
reich

Tuber magnitudine nucis parvae, vagina 3 polhcan\$, pengonu

Plant, onent now Ser sec N" 4

16

lubus 4-5 pollitdn\*, limbub magmludiois ferè *C montam foci-*  
niis 2 lineas latis Folia evoluta semipedalia tres lmeas lata Spe-  
ties insigms llonbus minutis et folns angustis,, ad gregem *C man-*  
*lam* accedens scd caeteris negleclis folns cum fructu Ian türn evola-  
lis dislinctissima

COLCHICUM PARNASSICUM Sartori, Orphan et Hetdr

G tunicis radicaibus membranaceis fuscis seeds vaginas flo-  
rales longè productis, llonbus 1-3 vagnus longis membraoaceis  
inclusis, perigonu tabo limbo 5-6-pl6 longion lacinus oblongo-  
clhpticis obtusis roseis, nervis 15-20 rectis fauce glabri; fila-  
raenlis ad eandem altitudinem insertis subinsquahbus, styhs  
antheras superantibus stigma libus umlateralibus curvatis, folns  
•1-5 hysteranthiis oblongo-lanceolatis obtusis

Hab. in regione sylvaticA et alpini *Parnam* usquè ad cacu-  
meii, in monte *Chelmos Peloponnest* Sartoni Orphanides 1 Guic-  
ciardi! Floret a medio Julio ad finem Augusti

Habitus et plenque caracterea *C. aulumnahs* a quo praeter flo-  
rescentiam prsbociorem tamen specificè differre videtur. Folia  
ejusdem latitudinis plerumque obtusiora sunt, pengooii lacimae  
pro latitudinc breviores obtusiores, faux perigonu glabra nee pa-  
pillosa, filamenta ad eandem altitudinem nee ad diversas inaerla,  
styli antheras multùm superantes nee eis subdequales; capsuto  
deoiquè minores esse videntur HSPC species a *C latifolto* Sm.  
*Bivonw* Guss in monte *Parties Attics* crescenti flonbus dimidiO  
minoribus i"»" tessellalis differt

COLCHICUM SZOWITZU F et M Var *mvale* B et Huet

Minus, bulbus minutus, folia bina latiusculè lineana, plicata  
subrecurva. Vagina folia pengoniuinque includens saBpiàs brevis-  
sima. Flos umcus, perigonu lacinis paulO minores

*C mvale* Boiss et Huet pi Arm en. exs.

Hab in monte *Kolalh Dagh Armenus* ad nives 8-9000' cl Haet  
da Pavilion Fl Maio

## CYPERACEAE

CAREX HUETIANA BOISS (Sect. *Legthmw*)

G. radice fibrosa dense caespitosa, folia flexuosa subconata acuta virentibus, culmo leni striato subtrigono flexuoso folia demum longiora, spica masculina solitaria terminalis oblonga, femineis 2-3 dense approximatis in umbra brevissime pedunculata terminalis sessili subrotunda bractea inferiori nigrescenti basi vaginanti in folium spica brevius abeunti, stigmatibus tribus, fructibus parvis hirtis oblongis utrinque attenuatis in rostrum breve retusum abeuntibus, glumis oblongis obtusis mucicis fuscis foemineis fructu brevioribus

Hab in *Arnim* montibus supra *Zazalarhant* alt 7-8000' cl Huet du Pavillon. Fl Jul. Aug

Habitus omnino *C. montana* sed folia subgraciliora sublatiora magis flexuosa et ab ea praesertim distincta bractea inferior vaginanti, fructibus minoribus non tetraetris, utrinque magis attenuatis, glumis non retusis nec mucronatis Ob bracteam vaginantem melius forsitan prope *C. hirsutem* et *polyrrhizam* diversissimas collocanda Hanc speciem sub nomine nunc *C. Reuleauxii* designaveram oblitus aham speciem sub hoc nomine jam descriptum fuisse

CAREX SCHOTTII BOISS (Sect. *Legitmw*)

G. radice fibrosa, folia dense caespitosa brevibus plains latiuscule hinc acutiusculis acuminatis, culmo tetraetris folia longiora, spica terminalibus 1-3 subsessilibus approximatis ovato-oblongis supero masculinis infero foemineis inferioribus 2-3 foemineis longioribus (infero praesertim) pedunculatis, bractea inferior longe vaginanti in folium pedunculum subsquans abeunti, superioribus breviter vaginantibus nigrescentibus aphyllis, stigmatibus tribus, fructibus oblongo-trigonis laevibus majoribus in rostrum eis dimidiato brevius retusum marginibus scaberrimis attenuatis, glumis oblongis

gis obtusiusculis fructus subsequantibus fuscis margine palhdionibus

Hab in regione alpinfl *Taun Cihaa* supra *Bulghar Maaden* alt 7000'-8000' Kotschy! Balansat

Folia basi 2 lineas lata 3-5 pollices longa palhdè virentia densissimè caespitosa Culmi 1/2-1 pedales. Spies breves 5-7 lineas longas, pedunculus inferior sesquipollicans Ex affinitate *C. fulgmosa* quae differt foliis angustioribus, spicis brevioribus, terminali androgyne unica, femineis brevius pedunculatis pendulis, glumis magis elongatis, fructu angustior in rostrum longius attenuato, a *C. atrati* longius distat.

*C. nEX CILIGICA* Doiss. (Sect *Legitima*)

G glauco-virens, radice stolonifera, foliis elongatis conaceis iriferis planiusculis supernè acutè triquetris acuminatis margine scabundis, culmo folioso foliis longioribus, spicis 3-4 terminalibus oblongis terminalibus masculinis caeteris faemineis erectis pedunculo inferioribus elongato superioribus brevissimis, bracteis inferioribus longè vaginantibus ore fuscis in folium pedunculum et apicam aequans vel superans products, stigmatibus tabulis, fructu oblongo-triquetro supernè fuscescenti in rostrum longiusculum laeve lineare profunde bidentatum abrupte attenuato, glumis oblongo-lanceolatis fructu brevioribus obtusiusculis fuscis in medio vindi.

Hab in regione superiorum *Taun Cilum* supra *Bulghar Maaden* cl Balansa. Fl Julio

Culmi pedales, folia semipedalia inferioribus sesquilineam longa, spies 7-8 lineas longas, inferioris vagina 5-6 lineas longa, pedunculus 1/2-1 pollicans, fructus lineam longus, rostrum lineam dimidiam longum Afiliis *C. fulgida* quae differt fructu sensim in rostrum attenuato margine serrulato. *C. Schottii* habet folia latiora breviora densè caespitosa, radicem fibrosam, fructus in rostrum margine scabundum attenuatos

## GRAMINEÆ

## GRYPsis DURA BOISS

Cæspitosa tota breviter pulverulento-velutina, radice fibrosa, caubbus abbreviatis erectis vel ascendentibus vaginis conaceis dense obtectis, culmis erectis supernè nudis, folus conaceis rigidis crassis glaucis convolutis pungentibus subpatentibus curvibus summorum limbo brevissimo, vaginae ore dense et breviter barbato, paniculâ dense spiciformi cylindricâ elongatâ albâ, glumis compresso-cannatis oblongo-hænanbus acutis præter nervum viridem ciliatum albo-membranaceis submsBquahbus flosculo subbrezionibus, glumelhs msqualibus inferiori lineam ad cannam viridem ciliatulâ apice in mucronulum attenuate; mferion brevion omnind membranacefl subbiphcata apice LruncaLo-erosulâ glabrâ, caryopaide ovatâ subcompress& basi subattenuatft

Hab in ditiombus *Sande* et *Beloutschtstan* cl Gnfilth N° 455

Folia culmea inferora limbo 3-4 polhcan donata crassa, culmi 8-10 polhcares. Spica 2 '/\*-J pollicans diamctro % Imeas lata Spiculae lineam longs. Species folns pungentibus crassis et glumellarum formâ a catena mini notis distincta, habitu pohus *Sporobolos* paniculA spiciformi donates referens sed *Crypsidi* ob stylos terminates nee ad basin spiculae emergentes certè adnumeranda

PHLEUM SERRULATUM BOISS (Sect, *Chilochloa*.)

Ph. perenne glabrum glaucescens, radice fibrosd caespitosâ culmos ferules fasciculosque fohorum edenti, folus ngidulis conformtim pknnerviis marglne serrulatis, ligulâ obtusâ sublacerfl, paniculd spiciformi cylindracefl elongate, glumis lineanbus apice in mucronem longum attenualis dorso tnnervus ciliatis margine 'membranaceo infrd mucronem sensim atlenualo, flosculo acuto glumis terlii parte brevion basi rudimenlo aucto

Hab. in collibus inculUs Cifiutp supra *Gulek Boghas* (Balansal),

in *Syrtd* loco non nolalo Kolschv sub *Phi Kotsthyimss*, mcaacuminp  
 montis *Velmhi* (Eloise Samarilam et Guicciardi sub *Phi Velucensi*  
 Boiss mss

Species affiins *Phleo Bcehmen* et ab eo ut videtur sal distincta  
 foliis angustionbus lineam circiter latis, hgiilâ pauld longion,  
 spiculis paululùm majonbus et imprimis glumis tnpld longiùs  
 raucronatis membrana non apice rotundato-truncatii sed sensim  
 attenuate marginatis, dorso cilns validionbus etlongioribus acu-  
 leolalo-cilialis Hùe c descnptione referendum est *Phi ambiguum*  
 Gnseb Spic Fl Rumel. (non Ten ore quod *Phi Micheln* sistU )

Obs *Phi, Parnassicum* mss in Guicciardi pi Parnassi 1855 est  
*Phi praten&is* forma glumis remoti et longe ciliatts breviterque  
 mucronatis

#### MILIUM VENTICILIATUM BOISS et Bal

M. annuum ^labrum, radice fibrosd, culmis ssspiùs plunbus  
 erectis foliosis pumihs, foliis plains angust6 hneanbus striatus  
 margin e apicem versùs scabndis Crcvibus supremo basi panicu-  
 lam involucranli, vaginis non dilatatis, hgulS oblongl sab denlalo-  
 lacerd, panicolu? pyramidatas ramis scabns capillanbus elongatis  
 demùm patulis per 40-20 regulariter verticillatis pluriflons mfe-  
 nonbus ssepè stenlibus, pedicellis tSiuissimis subdivancatis spi-  
 culd 4-8 pld longionbus apice incrassatis, glumis flosculo sub-  
 brevionbus cannatis caring subscabndis Infenon lanceolali acutd  
 supenon ovato-oblongd sublongion apice mucronulati, glumel-  
 lis adpressè puberulis ovato-oblongis infenori tnnervi supenon  
 subbrevion bmervi, caryopside ovato-oblongfl apiculatd glumellis  
 adbajrenti macula basilan lincari.

Hab in pratis regioms montanae jugorum *Almadagh* et *Mourad-  
 dagh Phrygiw* alt. 1200 metr cl Balansa Fl Jun., Julio.

HabUas *Aira imolucraUe* Gav Afflne *M trtchopodo* Boiss **quod**  
 diiTert pamculaj abbreviataB ramis per 2-3 verticillatis abbreviate  
 lsvibus, glumis ffiquilongis obscurè cannatis lsvibus flosculo  
 jcquilongis

Obs *M poaforme* Boiss in Bal pi exs. 4857 videtur tanlùm  
 lorraa culmis et pamculA magis evolulis, pedicell^ abbr€viati«  
*M. tnychapodt*



**PPTATHERUM BLANCHEANUM E Desv ined**

**P** perenne glabrum pallidft virens culmis» elalis erectis, folns h-  
neanbus elongatis etiarn exsiccatis planis, hgulâ elongatfi oblongd,  
pamculs eloDgatte pyramidatae ram is erecto-palulis infimis 2-3  
caetens sohtanis, glumis magnis lanceolatis acuminatis cserules-  
centibus margine et apice scanosis stramineis, flosculo glabro  
mgro nitido arista eo tertifi parte longipn superato, anthers gla-  
bns, caryopside elhpticâ compressâ macula hilan longitudinali  
exaratâ

**Hab** *circk*^*Saida Syria* cl. *Blanche*.

Planta 2-3 pedalis, folia sesqmlineam lata Panicula 6-9 polli-  
cans, glumae *I* hneas longae, arista 3 lineas longa Vald6 affinis  
*P. carulescenii*, *quod*, differt foliis angubtionbus convolutis, glumis  
multd minonbus, arista sesquilineam longil, anthers apice sub-  
barbiilatis.

**ARTHATHERUH PAUCIFLORUM BOISS et Buhse (Sect *Euarthra-*  
*thervm*)**

**A.** caespitosum caudice r e ^ t i, cauibus ngidis mfernê râmosis,  
folns patulis flexuosis glaucis siccitate convolutis tenmbus flacci-  
dulis, vagiDarum ore longè barbato, paniculâ breviter exsertd  
oblongd pauciflord, pedicellis spiculfl 2-3-pld brevionbus apice  
incrassatis ad maertionem barbatis, glumis stramineis lanceolatis  
acutis sub lente undiquè scabndulis supenon pauld longion,  
Hosculo bjeyiter stipitato^um stipite glabro apice integro, arista;  
parte indivisa brevissimd glabrifi, sells totA longitudine barbatis  
flosculo vix longionbus e glmnâ apice breviLer exsertis

**Hab** in *Persid* loco non notato cl *Buhse*.

**Habitus** *A pennah* Tr. Panicula tres pollices longa, pedicelh  
2-3 lineas glum© 6 lineas longs Arista plumae 4-5 lneas longee  
Ex afflnitatei *pmgmtis*, *scopam eipmnati* Duo species pnores  
Joins duns crassionbus pungentibus, posterior vaginis pamcu-  
laque ramis elongatis glabns gTumis lsevibus, omnes anstis multd  
longionbus differunt

AimiiuTiiERUM ELATUM Doiss (Sect *Euat tinatherum*.)

A percenne csespnosum ciilmis elatis> ramosis glabns, folns glabns convolutis tenuilcr filiformibus elongalis flexuosis aculis, vagims ore<sup>1</sup> barbatis, pamcubs mulUfloris stnctis, glumis glabris lancoolatis subinaequalibus longè atenuato-acummatis flosculo 2 1/2 longioribus, flosculu stipite brevi longè barbato, glumellfl infenore convolute supernè scabridà ex apice .cum aristà articulata", aristae parte indivisa longmsculA apice taDtim cihau setd medii lota barbatd laleralibus mulW brevioribus nudis

Hab in ditione *Beloutschistan* cl. Griffith N° 638<sup>^</sup>

Culmisesqmpedaies in paniculam semipedalem abeuntes, glamaB 4 lineas longas, arista 15-16 lineas longa Miñe *A plumoso*, ab eo ptscter staturam et paniculam amphorem differt glumis brevioribus, flosculo scabendo nee lacvi, sets media<sup>n</sup> arista; a basi plumosd

• AVENA HIRTIFOLIA Boiss (Sect *Avenastrum* )

A percnniSj radice stoloniferfl, culmis erectit> elalis glabns, folns hneanbus fasciculorum s ten hum longissimis mfenonbnsque palul6 vel retrorsum hispidis, ligul<sup>^</sup>tnangan acutà lacerd, paniculae brevis pauciflorae ramis solitarus 1-2 stachyis gubsecundis, spicuh triflorus cum pedicello hispido flosculu stenhs, glumis basi virentibus caeteriim scanosis flavidis ianceolatis acutis infenon uDinervi supenon tertid parte longior tnnervi, flosculis paulo supra medium dorsum arista eis dupl6 longiore mstructis, glumelld inferiori medii parte inferiori viridi supenon scanosd stramineA lanceolata apice denticulate, interion pauld brenori hyahnfl bidentatà, axi hirsute pihs ad basin flosculorum glumellam dimidiam aequantibus, ovano apice pubescenle

Hab ad *Tchabanne dagh* propè *Guedis Phrygiw* cl *uaiansa*.

Culmi 2 1/2 pedales, folia surculorum pedaha et ultra sèsquiliDeam longa. "Valdè affims *A pubescenh* pro cujus formi earn habm sed specificè differre videtur folns surculorum longtssunis, culmo elation, panicult 2-3 pollican e 7-40 spiculis tantum constantli Glumse ferè duplò majores sunt, superior 9-10 lineas longa, nunquam nee flosculi ut in *A pubescentt* violaceo-vanegate.

## TRisetum LACONICUM Boiss et Orph

Tr perenne radice stolonifera, culmis erectis elatis, foliis linear-lanceolatis acutis vaginisque pilis brevibus patulo-deflexis lurtis, vaginarum ore aunculato, ligula brevissima trunca fimbriata, panicula contracta lanceolata raris verticillatis erectis brevibus a basi spiciferis, spiculis stramineis infloribus cum pedicello hirsuto flosculis stenosis, glumis lanceolatis acumatis multinerviis uninerviis superioribus longioribus basi subternerviis, glumellis aequilodigitis inferioribus ad quartam partem superioribus arista apice obsolete bidentata superioribus apice bifida, axi barbata pilis basilanibus latere multinerviis dimidiam flosculum superantibus, ovario glabro.

Hab. in regione Malevo Laconicae alt. 4000' cl. Orphanidis

Subbipedale, folia rigidula 1/2 lineam longa, panicula 5-6 pollicans, spiculis paulo majores eis *Ti flavescens* quod affinis differt paniculae effusae, glumellis inferioribus apice bisetosae, pilis basilanibus flosculorum brevissimis

VENTENATA SUDENERVIS BOISS et Bal. in Bull. Sc. Bot. Fr., I 4, p. 305.

Y. annua glabra caulis solitarius vel plures erectis, foliis brevibus angustis planis siccis convolutis, ligula oblonga acuta, panicula laxa ramis capillaribus scabris inferioribus per 4-5 verticillatis superioribus oppositis, spiculis in racemo 1-3 breviter pedicellatis, glumis ovato-lanceolatis acuminatis inferioribus 5 nervi superioribus dimidiis brevioribus ternerviis nervo intermedio scabro caeteris brevioribus laevibus parum prominuis, dorsalibus 2 cum radimento pedicelliferis, infimo sessili superioribus pedicellato articulato, glumellis inferioribus floris inferioribus in anastomosis terminalem attenuata, floris superioribus basi in callum villosum attenuata apice bidentata ad medium dorsum arista geniculata inferius tortili instructa.

Hab. in collibus lapideis circa Smyrnas, in herbosis ad Kata-Qheul Deri circa Ouchak-Plwygu alt. 700 metr. Fl. Maio detexit et a *V. tenui* distincta cl. Balansa

Plant. orient. Dowr. Ser. uel. N° 1.

Habitu characteribus et spicularum magnitudine *V tenui* admodum affinis, haec differt glumis 7-9 nerviis nervis valde praeinertibus omnibus scabris, glumifera inferius tertia tantum parte brevior

VENTENATA QUERCETORUM BOISS et Bal

*V. anava* glabra caulibus plerumque erectis vel basi geniculatis, foliis brevibus planis siccis subplicatis, ligula lanceolata apice lacera, panicula oblonga<sup>1</sup> contracta, ramis brevissimis strobilatis apice incrassatis unispiculatis, spiculis 4-5 floris, glumis subscabris flosculis brevibus in nervis ad nervos scabris, flosculi inferiores sessilis glabra glumella inferiori acuta muticula, glumella inferior flosculorum superiorum dorso ad medium usque pilis adpressiusculis velutina superna hyalina apice longiuscule bidentata dorso medio arista geniculata flosculo triplici longiore instructa

Hab copiose in quercetis circa *Bulghas Kew Phrygiae* alt. 950 metr cl Balansa Fl Julio

Valde affinis *Vent macros* quae differt flosculis magis strobilatis, glumella oblongo-linearem Dec ovatae formantibus, glumella ostenon ad basin internam calli tantum pilosiuscula dorso glabra apice brevissime bidentata

SESLKWA IUGINALIS Boiss et Orph

*S. radice caespitosa*, foliis glaucescentibus linearibus laevibus apice attenuato-mucronatis elevatim nervoso-striatis, vagina tenuiter et dense pubescentibus, ligula brevissima truncata, panicula gracili, panicula spiciformi oblonga densa, spiculis 3 floris per fasciculos dispositis, fasciculis bimis inferioribus bracteae vaginanti (spicula abortiva) ovato-rotanda apice denticulata suffultis, glumis oblongo-lanceolatis apice longe attenuato-acuminatis superna carinata ciliatis flosculis sublongioribus, glumella inferior breviter lutea apice in 3-4 anastulas inaequales divisit aristam intermedia dimidiam glumellam superanti

Hab in monte *Kyllene Peloponnesi* supra *Livadi* prope cacumen alt 6000' Fl sst cl Orphanides, in monte *Chelmos* cl Heldr

Culmi pedales brevioresque, folia lineam unam lata siccitale subconvoluta, spica m̄da caeruleo-gnsea 9-10 hneas longa, bracteaB aliquandd spiculas ferè squantes ahqaandd breviores Afflms *S. mhdw* Ten qua? differ! folus dupld lationbus margine scabris cnlmoqoe vabdionbus, vaginis glabns, spies bracteis abbreviatis. *S. margtnata* Gnseb difTert folus abruptè et breviter nracronatis, vaginis glabns, spied ovata-rotunda" anstisque glumellam aequantibus

#### DACTYLOCTENIUM SCINDICUM fioiss

*D. annuum*-? caulibus basi procumbeDtibus ad nodos ramosis, fohi9 glaacescentibas planis basin versùs margine sparsim ciliatis hgulà truncate ciliatà, spicis ad apicem barbatum culmi 4-6 digilatis ovatis, rachide glabrA in mucronembrevem excnrrenti, spicuh8 2-4 flons, glamis ovatis cannfl scabndis supenon dorso in anstam ei sqmloDgam products, glumell& mferion cannaU cannd non sulcatà apice truncatulà dorso in mucronem brevissimum tene-mm abeunti.

Hab. in ditione *Scmde* cl. Griffith N° 637

A speciebus generis mihi notis prater spicas breves ovatas in apice eulnu capitatas 6 hneas tantum longus differt glumella mfenon secùs canaam non profundè utnnquè sulcatd nee apice in mucronem crassum subpnngentem altenuata

#### MELICA ANGUSTIFOLIA BOISS et Blanche

*M. glabra* cabnis elabs tenuibus, folus angustissunè lineanbus convolutis ngidulis scabndis, hguld nllfl, paniculà prster ramu-Inm unam alteramve 2^4 Bpicnlatos breves stnetos simplici racemifonm, spicnhs erectis tnflons, glumis oblongis rubellts acutis vel obtosioscnlis snpenon pauld majon flosculos sqaanti, flosculis gla\*biis infenon obsolete nervoso longion apice s»pè sabbi-dentato, seenndo obtnso.valdè nervoso-stnato^ tertio stenli clavato

. Hab. in declivibus et rapestnbus *Ltbam* suprā *Sidonem* et suprā *Tnpohm* cl Blanche

Planta pedahs vel sesquipedahs folns lenaissimib, pamculd bipollican ob ramulos stnctissimos primp aspectu simplici, spi-

ouilis magmludiniis eorum *M minutceL* a quifi earn elsi dubiLauler  
 distinumus Ligula nulla nee clongata, spiculse erects nee nu-  
 lantes, glumse acutae nee acuminatse, paniculrc rami noo patentes

MELICA BAUNSE BOISS

M culmis erectis breviter fohosis, foliis ad vaginas et limbum  
 densè et breviter pubescenti-velutinis stnclia anguslè hneanbus  
 siccitale convolutis, hguia brevi truncate, panicula spicaeformis  
 becundse longae ramulis stnctis 3-8 spiculigens, spicuhs biflons  
 llore superior! neutro, glumis glabns lauceolalis acutis inferion  
 lloscukun aequanti sapenori paulo longion, glumellâ mferion  
 llosculi hermaphroditi lanceolald dorso piUs longis undiquè hir-  
 buta, flosculo neutro longiusculè pedicellato glabro tuberculato  
 oblongo-hnari

**Hab in monte Ahdagh Cappadocia et m monte Boulghas dagh**  
*VhnjguE* alt 1100 metr cl Balansa

Gulmi pedales et ultrd, pamcula 3-5 pedalis ob ramulos stnetos  
 simplex videtur Spicul® 3 lineas Ian turn longa Affinis *M Perstca*  
 Kunth = *M Kotschyi* Hochsl. differt spicuhs lerti/l parte brevion-  
 bus, flosculo sterili longiùs pedicellate apice non truncato

MELICA PENICILLAHIS BOISS et Balansa

M culmis erectis elalis, folns glabris glaucescentibus ngidis  
 acutis linean-lanceolatis siccitate convolutis margiue scabnduhs,  
 ligulâ brevi truncate, paoculae spiciformis secunds ramulis stne-  
 us 4-5 lions, glumis membranaceis rubelhs latè ovato-oblongis  
 obtusis subaequilongis floscuhs subbrevionbus, floscuhs tribus  
 omnibus dens6 et loDgè Inrsutis supenon oblongo-pyriformi pe-  
 dicellate neutro

**Hab in colhbus lapidosis ad occidentem C<ssarea in Cappa-**  
*doad* alt 1200 metr. cl Balansa.

Planta bipedalis, paocula primâ fronle simplex 4polhcaris,  
 <piculaB magne 5 lineas longis Species eximia *A M ahatd*, *M Cu-*  
*pam* et omnibus huic affinibus spicuhs dupld majonbus, glumis  
 lntis oblusis *et* flosculo slenh etiam piloso disccdens

COLPODIUM CALVERTI BOISS (Sect *Eucolpodium* )

C, perenne glabrum culmo erecto basi lumidoad apicem usquẽ folioso, radice fibrosã, foliis hneanbus plains acutis stnalo-nervosissimis margine scabndis ligulã brevi truncatã, pamculs breviter pyranudatae ramis verticillatis 3-4-ms, spiculis oumerosis minimis breviter pedicellatis violaceo-flavidis biflons, glumis ovatis glabns acutmsculis spiculS dimidid brevionbus, glumellA utraq̃ue ad nervos breviter senceo-lanata apice truncatã denticulatã, flosculo supenon longmscnlẽ pedicellate\*

***Calabrom parvifl&ra* Boiss Mss**

Hab in *ArmmtA* propẽ *Erzeroum* legit cl Gal vert comm. cl a Tchihatcheff

Gnlmus semipedahs, folia lineam aut paul6 ampliũs lata supenus paniculam 3 pollices longam basi amplectens Spiculse lineam unam longis. Yaldẽ uffiuc *C bulboso* Trin differt folus lationbus, paoculd muHiflorã, spiculis dimidid minonbus, glumis obtusionbus proportion e flosculorum brevionbus

COLPODIUM PARVIPLORUM boiss et Buhse (Sect *Eucolpodium* )

C radice fibrosS, culmo erecto basi subbulboso, foliis radicaibus brevibus linean-setaceis stnatis minutẽ scabndis, culmeis pauld lationbus brevissimis laeviusculis, ligulã oblongã, pamculs triangulans ramis patentibus capillanbus bmis infenonbus mult6 longionbus, spiculis mioutis breviter pedicellatis biflons, glumis ovatis acutis subioaBqualibus floscuhs tertid parte brevionbus, glnmellis palhdẽ violaceis supernẽ flavidis glabemmis obtusis denticulatis

Hab. ID *Persw* monte *Sahend* cl. Buhse

Flosculis glabns nee senceo-villosis solo *C. vwlaceo* Boiss affine, hoc differt spiculis majonbus, glumis oblongo-lanceolatis, paleis oblongo-lanceolatis mucrorralatis, spiculis UDifloris

NEPHELOCHLOA TRIPOLITANA Boiss et Blanche

N annua glabra culmis basi gemculalis ascendntibus humili-

has usquè ad basin paniculac 2-3 phyllis folns plants acutis flaccidis, ligulâ ovata fissa, paniculae ovata erects ramis capillanbus erecto-patulis flexuosis per 5-6 verticillalis lofenonbus bis supenonbus semel divisiss, sptcuhs oblongis valdè compressis 13-15 fions flosculis dissitis, rachide scabrusculâ, glumis lanceolatis acutis inferior uninervi supenon duplA longior trmervi flosculum inferior non sequenti, glumella inferior obsolete 5 nervi caninato-plicatâ hinc vindi apice scarioso obliquè truncate cum mucronulo, glumella" supenon sub anthesi patet tissimfl subbrevion multdque angustior binervi apice retusi, ovario rotundo glabro stigmatibus plumosis subsessilibus superato

*Poa Gaillardot* Boiss Mss

Hab ad margines scimitarum inter hortos ad *Tripoli* Synw cl Blanche, circa *Beyrouth* in *Libano* cl Gaillardot.

Gulmi 5-6 pollicares, folia hinc lata, panicula 4-5 pollices longa ramis inferioribus 10-12 spiculas gerentibus. Spiculae 5-6 lineas longae 2 Uneas latae flosculis exquisitè dissitis et distichis Glumellâ peristantes superior divergens subcurrata et stigmata denudans In meis specimenibus stamina non vidi. *N. Perstea* a nostra specie eximie differt statura elata, spiculis et flosculis dimidiis minoribus eis non dissitis, glumella supenon multd brevion, etc

*KALERIA PHLEOIDES* Pers var. *condensata*, Boiss.

Panicula densè spicata oblonga, spicularum flosculi obtusiores, glumella inferior minus acuta valdè tuberculata nervis lateralibus plus [minusve prominuis, arista terminali abbreviate sspè ad mucronulum reductfl

*K condensata* Boiss et DC Mss

Hab. propè *Beyrouth* cl Blanche, propè *Saida* in *Libano* cl Gaillardot

Var. *amblyantha*. Panicula angustè spicaeformis, spiculæ minimæ flosculis obtusissimis muticis laciniosis nervis lateralibus obsolete.

*K amblyantha* E Desvaux Mss

Hab ad *Beyrouth* cl Blanche, propè *Saida* cl Gaillardot.

Yanetas *amblyantha* panicula fronte ob spicam angustam floscu-



losqueobtusosmuUcossubteretes\neB&<sup>1</sup>/<sub>i</sub>; tanlùm longos speciem a *K phlemde* diversissimam sistere videtur sed vanetas *condensate* pamculâ oblongâ, floscuhs minûs obtusis et breviter anstatis, nervis lateralibus glumellariun pronouentibus transitus evidentes ad formam typicam pnebet. *K obtusiflora* Boiss Diagn. e Persia ausirali ab omnibus hiſce formis differt glumis glabns, fjoscuhs fere dupld longionbus lsBvissimis apice rotundatis, an tamen haec etiam formis *K phleotdis* admimeranda?

KJGLERIA BERYTHEA BOISS et Blanche. (Sect. *LophocMoa.*)

**K** annua cubnis basi subgeniculatis ad apicem usquè fohosis, folns planis multinervis flaccidis vagimsque palulè hirtis, hgulfl brevi truncatâ fimbnatâ, pamculd dens<sup>^</sup> spicifonni cyliDdncfl mtidâ, spiculis magnis 4 floris, glumis aequilongis lanceolatis acutis dorso scabris inferiori angustion, flosculis glumas tertiâ parte superantibus, glumellâ infenori lanceolatâ acutâ cannatâ hirsute latè membranaceâ nervo medio panld sub apice acuto in anstam longiusculam excurrenti, glumellâ mtenon paulO longion breviter bisetd

Hab. circâ *Beyrouth* cl *Blanche*, circâ *Saida* cl *Gaillardot*

Planta quoque *K. phleoidt* afulis sed facies ob spiculas saltern dupld majores absque aristis tres lineas lon gas diversissima, praetereâ glums eqqmlongse sunt, glumellaque inferior interior longè bisetosd brevior est nee longior

POA THESSALA BOISS et Orph (Sect *Gemmnce.*)

**P.** perenms radice fibrosâ caBspitoſâ, folns angustè hneanbus acutis brevibus, cubms erectis tenuibus mfernè gemculatis, ligulft oblongâ acutâ, pamculae erectaB brevis oblongs ramis tenuissimis erects-patuhs flexuosissimis scabris infenoribus bmis, spiculis compressissimis laxmsculè 7-9 lions ovato-oblongis, flosculis lanceolatis acutis vindibu& margme et apice scanosis margine dorso et infernè etiam facie hirsubs libens

Hab. in regione infenori montis *Olympi Thessali* propè *Crya-Urysn* cl Prof Orphanidfes. Fl Julio

Affinis *P. punutw* Host quas dilTert pauculae raimis pa ten ti bus,  
(loscu-hs oblongo-lanceolatis internè facie non birtis)

Vox THICIIPOUA Hcldr el Sarton

l\ perennis densissime cespitosa radice fibrosj, culnus tenuibus erectis basi saepè geniculatis supernè denudalis, folns glabns plains surculorum stenlmm setaceo-capillanbus flaccidis, culmeis 2-3 vaginâ suâ brevionbus anguslè hneanbus acatiubcuhs liguhs lanceolatis acutis, paniculac crctas pauciflora laxse ova IHD ramib tandem palentibus inferioribus gemiois elongatis cffilens solitariis, spiculis ovatis laxè tnflons glaberrums, glumis cannato-compressis aculis dorso tnnervns margine membraDa-ceis subscquahbus spicula\* dimidi6 brevionbus, glumelU mfenori ovato-oblongâ obtusâ dorso corapressi obscur6 quinquenerri, supenon angustion paulo brevion elliptic^ apice bifidfi.

Hab in pascuis alpinis *Pamasa* all 6000'-7000' (Sarton 1846), (Heldreich 1852) Fl Aug

Caespites pulvinares sacpi ampli Folia surculorum hneae 1/4 lata vix polhcana, culraea lmeam dimidiam lata breviora, pamcula vix pollicem longa ram is inferioribus 5-6 lineas longis SpiculæB 2 lineas longfi Species msignis ex agmine *P. bilbostr et hgulatff* folus lenuissimis et flosculis glabns d is tine la.

POA DOLOSA Doiss et Heldr

P perennis cespitosa radice fibrosâ, culmis erectis tenuibus mediocnbus, folus angustfe hneanbus (sicutate?) convolutis in niucronulum abeuntibus, culmeorum limbo brevi, liguld breviter ovatâ obtusâ, pamculaj oblongs contracts apice cernuae raimis geminis solitarnsve capillaceis, spiculis tnflons ovatis, flosculis basi land parc& cohasrentibus, paled inferiori acutiuscolâ *cann'd* margioeque basm versûs pubescenti-senceâ.

Hab in pascuis alpinis *Olympi Thessah* Cl Heldreich.

Affinis *P. lam* et *P. minon*. Prior diifer^ folns dupld lationbus hgulâ dupld longion oblongA acutfl, spiculis majonbus, glumis evidentiûs acuminatis. Posterior paniculâ nutanti, spiculis mul-liflons, hgula acutâ longiûs dislat

Obs *Poa Parnassica* B et II in Helder Fl Gr exs ad *P alpina* el *P oreophda* B et 11 in Helder Fl. gr exs ad *P psychrophila* reducendae sunt

FESTUCA DIVERSIFOLIA BOISS et Bal in Bull Soc Bot. 1857, p 30G,

F cEDspitosa radice fibrosfl, culmis erectis elatis foliosis, folis fasciculorum stenlium involutis filiformibus caulram plains latioribus omnibus lssvibus glabns, hgulfi brevi truncate, paniculâ erectâ tenecolatâ conferta ramis capillanbus stnelis 4-6-ms yaldè inaequalibns strictiusculis, spicuhs tnflons viridibns, glumis oblongo-lanceolatis acutis HOSCUIIS tertid parte brevionbus subaBquilongis inferior! umrervi supenon pauld lalipn trinervi, axi glabrdj glumellfl inferiori lanceolate muticfl tnnervi dorso cannatd Mlenon snblongion bicannald acutd ad cannas scabndd, ovano apice glabro, caryopside oblongo-lanceolate canahculata maculfi hilan punctiformi

Hab in parte medifl *Sipyh* prop6 *Magnesium*, ID regione montanâ *Tauri ad Pyku Ciltctas*, propè *Ouchak Phrygtw* in raontibus ad *Yachatmchlar Kern* alt 1100 mètr Gl Balansa Fl. Jun. Jul

Gulmi 1 VJ-2 pedales, folia eaulina 1 7<sub>a</sub> hneas lata (in specimibns ^hrygus minùs dissumlia), panicula 3-4 polhcaris, spiculae 2 hneas tantdm longs Habitus *Pom pratensis* var *angustifohw* cujus genens habet flosculos compressos carmatos sed *Fe&tvm* ob caryopside glumell® intenori\* adhsrentem adnmeranda

FESTUCA GYLLENIGA BOISS. et Helder var. *mulhflora*

Major, tnpedahs, culmi minùs tenues, panicula spicaQfonnis strictjssima 5-6 polhcans ramis vix scabndis, spiculaB 5-6 floraB, glumellse infenons nervi prominentiores

*F. aflims* Boiss. el Helder in Fl Grsec exs. — *F Parnassica* Mss

Hab in lapidosis regionis supenons montis Parnassi Helder (Orphan Specimina numerosa nobis transitus praebuerunt inter nanc et formam, pnùs descnptam quSB quoque in monte *Parnasso*

occurt *Dpscriiioiii F CijUemca*<sup>1</sup> addendum «ovanum apicepi-  
losnm »

FESTUCA PILOSA Hall var *Argwa* Boiss>, et Balansa

Densè crespuosa, folia valdè scabra, paniculiB magis patulse py-  
ramidalaò rami clongati flexuosi, spiculae paulò minores rubra\*  
(loscnlis mnticLs Ligula ferè duplù longior lanceolata acnminata  
apice libsa

*F Argieali* et Bal in Bal pi exs 1856

Hab valgalissima in rcgionc alpinfl montis *Argwt Cappadoaw*  
all 2200'cl Balansa

FESTUCA SIMPLEX BOISS {Sect *Schmodorus*}

F perennis glabra, radice fibrosd, culmis tenuibus basi genicu-  
latis erectis ngidis in femè folio&is, folus brevibus ngidulis latius-  
cul6 hnearibus plains acutis multinerviis margine scabndis, fasci-  
calorum slenlium angustionbas, ligiilã brevissimfl truncatii, pa-  
raculae erecttc laiç et angustù spiciformis ramulis brentsimis  
stnctis monostachyis soli tarns inferiori ranis geminalo, spiculis  
laxiuscalé qmnqaeflons Eubelhs, glumis lanceolatis acutis albo-  
marginatis bupenon floscalo dimidi6 brevion nervis tnbus validis  
nistructi infenon dimidid brevion UDinervi, flosculis tpretius-  
culis, glumellis aeqmlongis acutis infenon lanceolate dorso ro-  
tundata acuti obscure nervosS intenori ad 2 nervos scabndd,  
ovano apice glabro

Hab ad nvulos m planitie alts *Tektr Jaila* montis *Argm* in  
*Cappadoad* alt 2117 metr cl Balansa.

Gulmi pedales, folia caulina scsquipollicem longa 1 7s lineam  
I a Là lasciculorum multo angustiora, pamcnla snbsccunda bipolli-  
caris spiculis 7-12 dissitis subscsilibus fragihbus 3 hneas circ,  
longis Nulli nisi *F elation* aflinis quac prater paniculam ramo-  
sam el spiculas lungè pedicellatas differl gtumis obtasis minùs  
inaequalibu->, flosculis majonbus mamfestè nervosis

## VULPU BREVIS Boiss et Kotschy in Ky pi Syr 1855

V annua glabra nana, culmis rectis fohosis, folus arefactione convolutis seiaceis obtusis, vaginis lationbus sin at is, ligulá brevi lacera, pamculA erect\* conferta brevi scundfi folia supenora vix superanU, pedicelhs a basi ad apicem mcrassalis subcora-pressis, spicnlis 5-6 flons a laterc compressis, gliimis flores squan-tibus vel subsuperantibus inferiori paululúm brevion setaceA anstaBformi supenon dorso convex^ aDgustissun^ hnean supern6 antennatd anstatfl, floscalo lofcnon sessili fertili glumelld inferiori glumae supenon simili angustissim& hnean dorso sabcannalfi longfe anstatA, glumelU supenon mfenorem (absque anstft) sequaoti angustfe lmean binervi apice retusi, floscuhs supenon-bus 4-5 axi elongate setaceA sulTultis stenlibus ad suas glmellas inferorc8 abbreviatas longc anslaLas reductis, caryopsidc angusté hnean elongate.

Hab. in graminosis ad *Mar Tserhs Libam* propé *Bscherre* alt 480(y Fl. Jul. cl. Kotschy

Plaatnla bipollicans culmis plunbas confertis, paniculá 6-7 ti-neas longfi, glumaD circ. 5 lineas cum anstis longtc Affinis *V. Lt-gusttccB* et *tnwassatce*, prater slaturam glumae inferions structure et floscuhs supenonbus stenhbus distinctissima

BROMUS SYRUGUS BOISS et Blancho (Sect *Festucacet.*)

Br. perenms csspitosus radice ilbrosa, culmis erects fohosis basi vaginis flbrosis fohorum mfenorum vestilis, fohis elongalis plaois flaccidissimis glabñsvel patulè hirtulis, fasciculomm steri-linm Don angustionbus, vaginis patulè hirtis, Ugalá brevi trun-catá iacerfl, panicalá ereclá pyramidal ramis scabndis lufeno-nbus longis patuhs, sptculis 4-8 flons compressis hneanbus, floscuhs defloralis vix divergenlibus, glumis laneolatis acuminatis mediá spiculá brevionbus mferiori uninen/i supenon tnnervi, glumelhs aequilongis mferion tnnervi in anstam est breviorcm abeunti superior! binervi.

Hab ID colhbus lapidosis circa *Beyrouth* et *Sidonem* cl *Blanche* Fl Aprili, Maio

Valdè afiims *B credo* pro cuius vanetalc eum habuimus sed characteres differentiates satis cons tan tes videnLur Ab eo differ! tolms homomorphis magis flaccidis, paniculae minùs ngidao ramis infenoribus uon slnctis abbreviate sed valdè patulis sapè bipol-hcanbus., floscu paulo minores sunt vix divergentes, glume 11^ uon inacquales ct inferior 3 nee 5-7 nervia.

BROMLIS TOMENTELLUS BOISS. var *hispidus*

Vaginae et folia patulè hispida fasciculorum sterilinm convoluld <n>gustiora, glumae ct glumellifi undiquè hispid®

**Br. hispidus Boiss Mss**

Hab ad *Yaparlm Kmi Phrygw*, alt. 900metr cl Balansa

BromUS GAPPADOCICUS BOISS et Balansa in Bull Soc BoL Fr 1857 (Sect *Feslucacet*)

Br perennis caespitosus, rhizomatibusvaginisreticulato-flbrosih vesliliSj culmis foliosis erectis, folus glabns vel patulè hirtulis Fasciculorum stenhum convolutis fihformibua, culmeis brevion-Lus planis margiue scabns, ligulâ brevissimd truncate lacerd, pamculs subnutantis pyranudato-ovatae ramis capillanbus scabndis patuhs flexuobis 2-3-nis spiculas 1-3 ferentibus, spicuha hneanbus compressis laxmsculè 6-8 flons, glumis lanceolate acutis submsequalibus dimidiam spiculam aquaotibus inferior! umnervi supenon tnnervi, glumellA Inferion lanceolate 3-5 nem ad nervos subscabnda paulò sub apice in anstam ei subaeqailon-gam dtrengentem abeunti, supenon aequilongâ bicannatd ad nervos hirtid, ovano apice piloso

Hab in collibus *CappadocuB* copios6 alt 1000-1500 metr in sjlvis quercinis *Phrygug* propè *Ouchak* cl Balansa. Fl Junio.

**A Br. erecto, tomentello et sderophyllo quibus affinis differl paniculsQ** subnutantis ramis capillanbus patalis, spiculse ois duarum postenorum specierum minores sunt. *Br. Syrtacw* differt folus homomorphis, ilosculorum anstis brevibus non divergentibus

BROMUS PHRYGIUS BOISS (Sect *Smafakus* )

R anrius uulibus oroclis elatis glabn.>, folus vagimsqac info-

rioribus brevissim6 velutims, pamculae patentis demura nutantit) ramis elongalis tlexuosis mfenonbus 2-3 stachyis cactens monosiachyis, spicuhis 9-11 floris magnis oblongo-lanceolalis conipressib 8-12 floris etiam fructifens margine sese lmbncatim obtegotibus, glumis oblongis obtusis, glumellâ infenon oblortgorhombeA margine medium versûs in angulum obtusum inflexA sub apice obtuso bidentato anstalj aristd demum divancata" glumelld sublongion, glumellâ interion multd brevion

Hab in viueis prop6 *Ouchak Phrygice* alt 900 metr cl Balansa

Bipedahs, rami inferiores paniculao 1 Va-2 V\* pollicares, spicuisB pollicares vix.ultrâ 2 lineas latifi Aflinis *B squairoso* differt culmis elationbus, spiculis numerosionbus longids pedunculati^ angustionbus, glumella infenon angustiorl mros veutineosa k *B. Anatolico* e&dem glumellsB aogustie et indumeato brevissim^ velutino nee hispido differt

BROVUS TIGRIDIS BOISS et Nod (Sect *Serrafalcus* )

Br animus, culmis erectis parum elatis glabns folns vagunsque mfenonbus breviter velutino-hirtis, paniculae erects contractae ramis brevibus prater inflmos monostachyis, spicuhis oblongo-hneanbus compressis 10-14 floris, flosouhs minutis fructifer^ margine aese obsegenlibus, glumis acutis brevibus, glumellâ inferiorion oblouga 7 nervi undiquè scabnda margine &upri medium angulum obtusum exhibenli paululum sub apice obtuso retuso anstatd anstd rectd tenm flosculo aequilongâ vel sublongion, glumelld supenon snbbrevion ad canoas cihatd

Hab in *Babylomd* ad oras *Tigrtidis* cl Noe Fl Maio

Pedalis vel humihor, spiculaa majores 9 lineas longaj 2 lalae, (loscuh absque arista tres lineas longi. A *Br squairoso* et *patulu* differ I aristis tenuibus rectis. A *Br arvensi* ramis pamculae brevissimis ab utroque floscuhs mulld minonbus *Br braehystachys* Horn' habet spiculas multo mmores, flosculos minores

Obs *Br Noëanua* Boiss. in pi Noe exs a *Br sqwrro&o* non sat differt

AGIU>PYIUJM JUNCEUU P B var *Sarlorn* B et II

Vaginas densius velutinae Glumai sub quinquenerviae Glinjielk  
oxtenor apicc evidentiùs cannata

4 i'arloral) clH Mss

Hab in insulâ Teno (Sarton), ID liltonbus 4<AOB ad *Phalerum*  
(Spruijor, Heldreich), in znanlimis *Cretw* ad *Ktssamos* (Heldrojch)

A specie disjungere non audemus, habitus planè idem el nu-  
merus nejrvorum in glumis ranat <

AGnorYnuM SGIRPEUM Presl. var *flamdifohum* B. et Hldr

Folia radica ha loDga flaccida facie supenon breviler et palul6  
Inrsuta.

A *flacadifohum* B et H in Hldr Herb Grsec Norm. N° 501

Hab in plamtie manlimâ *Aiticm* ad *Phaleraum* (Hldr)

Haec vanetas cujus characteres stationum inter Juncos probabihler  
ddscnbendi sunt habel ommnO spiculas et glumas glumellasque  
iruncatas retusas A *sarpet* in eisdem locis quoque occurrentis  
et quod forsàn ab *Ag ngido* non sat differt

AcnorYRUM TAURI BOISS et Bal in Bull. Soc Bot. Fr. 4857

A cffispitosum glabrum radice fibrosâ, culmis erectis tenuibus\*  
ad nodos infracUs basi ascendentibus, foliis convolutis linean-seta-  
ceis acutis facie supenon velutinis, ligulâ brevissun^ truncate, spicâ  
brevis laxd non fragili rachi angulatd laevi, spicuùs ravicem pauld  
minis quam earum longitudo remotis 4-7 flons angustis stnetis  
sublinearibus jumonbus siepè extds subrecurvis floscubs facilè  
cum parte rachidis spiculae secedcnlibus, glumis subinaequali-  
bus oblongo-lanceolatis oblusis marguie membranaceis dumdiã  
spiculam subBequanlibus, glumcllâ mfenori oblongo-lanoeolatâ  
obtusd muticA vel obsolel6 inucronulali supernè 3 nervi> supe-  
rior! paulo brevion oblasâ bicannatâ ad nervos lscviusculS, ova-  
rio apice villosa.

Hab in regione alpina cl subalpina *Taun Cilma* alt 1700 mctr  
**Balansa**, Kotschy, pi exs sub *Brack ramoso* var Boiss.



Gulmi pedales vei pauid longiores, fasciculonim stenham folia pauca elongata, spica 1-3 poHicans 4-9 spiculata, spiculose 6 bneas, noscuh 3 longi Species spiculis .wguslis, flosculis fragilibus potabilis, Habitus *Brack ramost* quocum hoc pnus confudi sed hoc **longè** differl spiculis pedicellalis nee sessilibus, multiflons latioribus, glumis glumellisqne anstatis, etc

**AcnoPYRUM DIVARICATUM** Boiss et Balansa in Bull Soc. Bot Fr 1857

A. ctespilosum radice hbrosã surculos repentes edenu, culm is erectis, folns lanceolatis plams acutis ngidijlis utrdque facie breviter velutims, UguU truncate subnullã, vagims ad ortnmJimbi subbiaunculatis glabns, spied recta hnean distichd non fragili, spiculis 4-5 lions strictis supremis flosculis stenhbus, spicula3 rachi fragili, glumis flosculum infenorem ^ubaequantibus oblongo-linearibus glabns flosculorum mferiornm rauticis acutis apicc ssepè bidentatis dente allcro in supenonbus in anstam rectam elongato, glumã inferior subbreuion 5-6 aervi supenon 7 nem, glumellã infenon oblongo-lanceolate glabrS dorso laeTiusculã apice broviter bidentatã nervo medio in anslam scabram dentum divancatam efl duplo longiorem abeunti, supenon sqailongA bicanoatd ad nervos scabra, ovano apicc villosa.

Hab. in regione subalpinã montium *Karamas dagh* et *Dedi dagk* ^*appadoam* alt. 1600 metr cl. Balansa. Fl. Inbo

Pedale vel sesqmpedale, folia brevina 1<sup>f</sup> />-2 lineas lata Spica 2-3 poll ices longa 6-8 spiculis stnctis inter se minùs qnam earum longitudo distantibus coDstans, glumella inferior 5 lineas, arista 9-10 longis Species valdè aflims *A. elymoidi* Hoch&t. glumis muticis, flosculis pilosis et folns glabns distincto.

**ELYMUS CAPPADOGIGUS** Boiss et Bal in Bull Soc Bot Fr. 1857 .

E, glaber glaucescens rhizomale stolones longos horizon tales subtùs radicantes edenli, culmis tenuibus ereclis modicè elatis, folus linearibus convolulissensim attenuat^atutis ngidulis summis abbreviatis apice spicam aequantibus, spicã tenumali densã

linari spiculis geminis superioribus  
 1-2 floris cum rudimento & pedicelliformi loculi superioris,  
 glumis linearibus setosis scabris spiculis aequantibus strictis, glu-  
 miculis inferius oblongo-linearibus superioribus 2-5-nervi in mucronem  
 longiusculum attenuate, superius paulo brevius bicanna. Ca-  
 lami superius ciliolatis, ovano parte superiori villosa

Hab. in pratis salsis juxta paludes *Cesarea* in *Cappadocia* cl. Ba-  
 tansa Fl. Julio

Culmi pedales vel breviores Spicae 1,7-2 pollicea longae. In-  
 terlineae latae 10-15 spicularum, spiculae 4 lineas longae, affinis  
*juncea* Fisch. culmis elatis, foliis planis, spiculis longioribus elati-  
 oribus, glumis abbreviatis, flosculis a basi nervosis pubescenti-  
 busque distincto

LOLIUM STRICTUM Presl var. *compressum* B. et Heldr.

Culmi abbreviati compressi rigidi, spicae curvulae, spiculae saepe  
 approximatae imbricatae

*L. compressum* Boiss. et Orph. in Fl. gr. exsiccata.

Hab. in *Gramma* agro *Conthucio* cl. Prof. Orphand.

Specimina cl. Allicae Heldr. Herb. Normale N° 548 inter hanc  
 formam et typum intermedia docuere notas hic indicatas van-  
 abiles esse.

ANDROPOGON POGONANTHUS B. et Bal. in Bull. Soc. Bot. Fr.  
 1858 (Sect. *Spodtopogon*)

A. caespitosum rhizomate fibroso surculos repentis quoque  
 cespiti, culmis erectis elatis ramosis inferius saepe perennantibus,  
 foliis praeter pilos nonnullos ad basin hinc hinc quandoque obvios glabris  
 planis rigidulis basi lanceolatis attenuato-acuminatis, ligula bre-  
 viter ovata obtusa, panícula oblongo-lanceolata rectae contractae  
 rachide flexuosa ramis strictis geminis vel ternatis parte inferius  
 glabris superius spiculiferis hirsutis, spiculis omnibus homogam-  
 mis bifloris flosculo inferius masculino superius hermaphrodito  
 terminatis teroatis intermedio sessili lateribus pedicellatis  
 inferius geminaliter altero sessili altero pedicellato, glumis  
 longis hirsutis subaequilongis nervis paulo superantibus lanceo-

laUsaltenuaUs mucronalis mfenon 5-7 supenon tnnervl, flos-  
calis membranaceo-hyalinis subnervns, glumelltl infenon flos-  
cuh masculi lanceolate plicatâ supernè margimbus cUatA in  
anstam efl dupld vel tnpld brevior attenuate, flons herma-  
phroditi angustion hnean ad mediûm usquè bipartite lobis acu-  
minalis ex emarginatura" anstam gemculatam contortam ea  
tnpld longior edenti, glumelU supenon utriusquè flosculi vjx  
brevion hneari-lanceolatd acutJ supernè ciliata

Hab. in rupestribus lapidosis *Phrygm circd Ouehak*, alt 900 metr  
cl Balansa Fl Julio.

Gramen 2-3 pedale foliis basi hncani aul paulo ampliùs latis,  
pamcnlffi 2-3 pollicares, glumsB 3 '/\* linear, ansta? sex hneas  
longs Affined *Sibirtco* Tnn foliis latissimis, ramis pamculae  
paucispiculatis, glumis mumfestè nervosis breviter hirsute, ans-  
tis brevionbus tenuionbus dishncto

## LASIURUS Boiss

Spica subconipressa articulata rachide compressii Spiculis  
ternis homogams biflorae laterales sessiles latus rachidis spec-  
tantes intermedia breviter pedicellata faciem rachidis spectans  
Glums msDuales lanceolate concavse caudato-acuminataj ex-  
tenor loDgior conacea 7-9 nervia dorso longè et densè vil-  
losa, interior flores includens subconacca dorso cannata ad  
carinam obscurè umnervis cihata ceterum glabra. Flosculus  
extenor masculus interior hermaphroditus Glumellsa hyalino-  
membranaces obloDgo-lanceolatE acuminatsB exterior obscurè  
umnervis breviter atteiuato-acuminata concava, interior pauld  
brevior et angnstior binervis bicannata ad nervos cihatula lan-  
ceolata apice subbifida concava caryopsidem includens Squamuls  
truncatae glabree. Stamina 3 anthens lineanbus, ovanum oblon-  
gum glabram basi subattenuatum Styh 2 terminales longioscuh,  
stigmata elongala longfi plumosa versùs medium spiculoe emer-  
gentia Garyopsis oblonga subcompressa^ libera ventre paululùm  
suprà basin depressione brevi hilan notata — *Genus Andropogo-*

*nearum* habitu *Elionurum* referens, ab *Jschcemo*, *RottbolhA* et affini-  
 bus spioulis ternatis discedens.

LASIURUS HIRSUTE BoiSS

Perennis casspitosa Radix Culmi dum erecti parte inferi-  
 on stricti ramosi perennes 2 pedales stnatis cabn facie folium  
 & pectanli 9ulcati Squama radicales adpresss triangulares aphyllae  
 nervosae adpressfehirUe Folia parte inferior] culmorum approxi-  
 mata superon remotiora glauca stncta hneana acuta plana  
 multnervia ad nervos scabnda facie superon lined albidi no-  
 tata 6-7 polhces longa basin versus sesquilineam lata. Vaginis su-  
 perofi el prsertim ad nodos pubesceEtes novells angustae, ve-  
 Lustae sec is partem ramosam culmi persistentes laxaB stramiEes.  
 Ligula ad senem pilorum reducta. Spica terminalis 4-4 <sup>1</sup>/<sub>a</sub> polh-  
 ces longa, tota eximie senceo-lanata alba Rachis articulis 2 <sup>1</sup>/<sub>U</sub>  
 hneas longis compressis latere extenon convexis adpressè sen-  
 ceis mtenori caDahculatis cannatis margine tantim hirsutis,  
 pili adinsertionem spicularum valde elongati. Pedicellus spiculis  
 intermedia sesquilineam longus senceus. Gluma exterior 6-7 li-  
 neas longa a spied divergens erecto-patula cauda partem IDfeno-  
 rem oblongam longitudine pauld superanti Gluma interior tertia  
 parte minor brevis caudata Flosculi 2 <sup>1</sup>/<sub>•</sub> Uneas longi Garyopsis  
 fare i 7s lineam longa lines <sup>1</sup>/<sub>s</sub> lata

*Rottbollta hirsuta* Vahl — *Ischamum htrsutwn* Nees mss exj  
 Hochst

Hab in *ArabiA petrwd* et *desertd* Schimp Un, I tin., regno  
*Mascatensi* Aucher 5460, dilionibus *Scinde* et *Beloutsdustan* cl  
 IV Stocks

**DIAGNOSES**

**PLANTARUM ORIENTALIIUM NOVARUM**

**GINFVA——T^PIS HAMBOZ ET SCHUCHAHD**

-

DIAGNOSES  
PLANTARUM NOVARUM

PHLESERTIM

OHIENTAAIUHE

IONNULLIS EUROPJEIS BOREALI-AFRICMISQOE ADOITIS

SEMES SECUNDA

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N° 5

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AUGTORE

EDMOND BOISSIER

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LIPSLE

AFUD B HERRMANN

1856

## DIAGNOSES

### PLANTARUM NOVARUM PARS ORIENTALIS

#### RANUNCULACEAE

ADONIS GYUBHBA BOISS Heide et Orph (Sect *ConstUgo*)

A perennis, radice proemorsa fibras cylindricas longas numerosas edenti, caule erecto hirsuto tota longitudine fohoso, folia radicalia caulinoque in petiolo plus minus longo crasso basi in vaginam dilatata suffulta cartens sessilibus omnibus campanulata et breviter hirsuta ambitu ovatis super decompositis segmentis primariis et secundariis petiolulatis laciniis oblongo-lanceolatis lanceolatisque acutis mucronatis, foliis supremis valde distinctis a flore superioribus parvis dissitis, sepalis flavidis lanceolatis acutis petalis subsqualongis, petalis obovatis obtusis carpellis breviter hirsutis crassis ovato-triangularibus subcompressis latere interno rectis in rostrum aequilongum apice circinnatum abentibus utriusque facie grossis et elevatim reticulato-nervis in spicam globosam congestis

Habit in sylvis abietina montis *Kyllhnes* Peloponnesi in faucibus prope *Flambomza* alt 4500', fructiferam legit cl. de Heldrach Jul 1848, floriferam cl. Orphanides in eodem loco Maio 1854.

Planta florifera pedalis tandem bipedalis. Folia radicalia petiolo 3-6 pollicibus suffulta limbo ambitu simpliciter pedem dimidiatim longo latoque Gaulis simplex vel superae subcorymbosae 2-3 ramosus rarius multiflorus Flores eis a *Pyrenaum* submaiores Carpella 2 lineas longa latoque Rostrum cum latere interno carpelli continuum 2 lineas longum Affinis a *Pyrmawa* que differt folia ambitu distinctis in lacinas longiores lineares decompositis, sepalis obovatis obtusis petalis multo brevioribus, carpellis minoribus rostro brevioribus ferè a basi circumnatis



RANUNCULUS SPIAHOSPKRMUS Boiss et Blanche (Sect *Batrathmm.*)

R folus uniformibus omnibus in lacinulas filiformes breves rigidulas undiquè dwergentes divisas, pedunculis crassis foha superantibus tandem recurvis, petalis albis basi flavis calyce reflexo 2 'splo longionbus latè obovatis 9-11 venus, staminibus numerosis carpella superantibus, spica carpellorum globosa<sup>d</sup> receptaculo hirtio, carpellis subglobosis dorso vix cannatis rugosis obtusis apice dorsum versùs aculeolato-hirtulis, stylo brevissimo crassiusculo ad extremitatem diametri majons carpelli sito

Hab in Syria in paludosis man vicinis, circi *Trtpohn et Alexandrette* cl Blanche

Aflinis florura magnitudine vanetati *pantothna R aquahlts ah* eo sat differe videtur foliorum lacinns abbreviatis ngiduis, carpellis numerosionbus minonbusque magis globosis dorso vix cannatis **et pricserLim ^tjlo non ut in eo ex margine intenon carpelli sed** ex ejus apice oriundo *H tncchophyllus* et *R Droueti* foliorum lacinus abbreviatis ngiduisque quoque donati petalis minutis alsque notis longiùs distant

RIVNUNCULUS MYOSUROIDES Boiss et Kotschy (Sect *Ranunculastrum*)

R perennis glabcrnmus nanus, radice grumis oblongis abbreviatis fibrillis Intermixtis consianti, squamis 4-2 membranaceis spathseformibus breviter acuminatis e collo ortis basin foliorum caulisque involucrantibus, folus 1-3 radicalibus petiolo curvato suffultis ambitu rotundis in 5-7 lacinias an<sup>ustè</sup> oblongo-Uneares obtusas sspiùs indivisas ad basin usquè partitis, caule umfloro folus parùm longion 1-2 folia minuta subsessilia indmsa vel triparlita fcrenti, flore minuto flavo, sepahs quinque flavidis oblongis demùm reflexis, petalis calyce parùm longionbus, carpelloram spicà oblongd, receptaculo glabro, carpellis laBvibus miuutis vix corapressis ovatis sursùm curvatis in rostrum breve rectiusculum attenuatis

Hab in Alpinis prope *Zebdrnn* et *Mantschura* Antihbani àlt 6500' cl Kotschy

Gauhs sesquipollicans fructifer parūm elongatus, flores ilhs it *arvensts* ferē minores, foln limbus diametro 4-7 lineas latus, carpellorum spica 4-5 taneas longa densa earn *Myosun* quodammodā referens Species in sectione habitu, carpelhs parvis subturgidK distinctissima propē *R bullnlhfemm* B et Heldr collocanda

RANUNCULUS STRIGILLOSUS Boiss et Huet (Sect *Hecatonia*)

R radice flbns tenuibus cylindncis longis constante, collo vaginis fohorum pnmanoruiu parcē Testrto lateraliter stolomferb, caule erecto parcē folioso umfloro vel saepitis medium versū ramoso 2-3 floro ut et petioli fohaue setuhs adpressis mtidulis stngilloso, folus radicaibus inferionibusque petiolo eis longion suffultis oblongis vel oblongo-elhpticis apice angustatis obtusras- cuhs elevatim 3-5 nerviis saepiūs integernmis ranis apice acute tndentatis dente intermedio longion, cauho intermedio subaes- sih lanceolato-hnean acuLo, summis parvis fihformibus, peduncuhs longissimisstnctissupernē prsertim valdē stngilloso-hirtis, sepa- hs flavidis ovatis obtusis reflexis adpressē hirtis deciduis, petalis exunguiculatis obovatis apice rotundatis multmerviis basi squamuld Dectanferfl instructs, carpellorum spica globosā minutfl, recepta- culo glabro, carpelhs obovatis compressis basi attenuatis glabns apice in rostrum breve comco-compressum rectum abeuntibus

Hab in humidis Armemae prope *Palanteuken* alt *G-IOOCf cl* Huet du Pavilion, in Persiā boreali cl Buhse

.Planta senupedalis vel paulō longior. Folia majora sesquipolli- cem longa 2-4'» hneas lata Flores eis *R bulbosi* pauhilūm mi- nores. Affimsfl *pulchello*C A M quidiffertpubescentisstngillosae defeitu, collo densē nigro-flbnlloso, folus caulinis partitis basi vaginatis, flonbus dimidid minonbus, carpelhs majonbus apice in roptr«mcarpellodimidionlongius abeuntibus it *longtcaulis*C A H. sepahs persistentibus, petalis basi tubulosis longitus differt

RANUNCULUS HUETII BOISS. (Sect *Hecatoma* )

R. pumilus, radice praemorsā brevi fibras tenues cyhdncas edenti, collo vaginis flbrosis vestito, caule ascendenti pibs albis subpatuhs villosa aepiūs sohtano ranūs umfloro saepiūs infra me-

(hum ramoBO 2-4 floro, folua petiolisque molliter et adpressiusculè albo-villosis radicalibus breviter petiolatis expansis ambitu oyatis pinnatipartitis partitionibus utnquè 2\*3 in lacinias oblongas apice 2-3 fldas divergentes partitis, folns canlinis sessilibus in lacinias lineares integras partitis summis mdmsis, sepalisovato-oblongis obtusis dorso villosis margine membranaceis flavidis glabns non reflexis, petalis flavis obovatis calycem dupld sjiperantibus, carpellorum spicā globosā, receptaculo glabro, carpelhs (jumoribus) obovatis compressis in stylum brevem cnrvatum abeuntibus.

*R dtssectm var velulma* Boiss Ann Sc Mat 4841

Hab. in Armenia, in pratis ad *Tachkopru* inter *Bmbmt* et *Erzeroum* cl Huet du Pavilion

Var *glabrescens* Caulcs et folia glabrescenUa, heec tamen ad laciniarum apicem penicillata

Hab in monte *Techdagh* et circd *Erzeroum* cl Calvert

Planta 2-3 pollicaris, folia vix polbcm longa lataqae laeinns Uneam vel panlo ampbus latis. Ex afflnitate *R diuectt* cm olfm adnumeraveram ex specunine umco Auchenano, Bed *R. dmectoa* e Tauna verus est planta elatior longifts villosa follis ahter dissecilis, potiùs insectis quam pinnatis, lacimis longionbns, etc

RANUNCULUS CALVEHTII BOISS et Huet (Sect. *Hecatonia*)

R rbizomate brevi subincrassato fibras tenues cyluidricas edenti, collo densè fibroso, caule erecto pilis brevibus mollibus adpressiusculis hirtulo a medio ramoso corymbosè multifloro subnudo, tohis radicalibus petiolo eis plerumquè longion patulè et breviter villosulo suffultis ambitu rotundatis tnpartitis partitionibus cs^neatis ultrâ medium lterùm in lacinias latè lineares biauttntftnv catas divisas omnibus utnquè adpress6 hirtis, folns caulints ad caulis divisiones paucis minutis sessilibus in lacinias lineares breves Jivisis, peduncubs longis strictis hirtis substnatis, sepahs ovaus cucullatis flavidis villosis, petalis obovatis calyce dupl6 longionbus, spicā carpellorum rotundā, rceptaculo glabro, carpellis ovato-rotundis compressissimis flavidis margine virentibus in rostrum brevissunum subcurvatum abeuntibus

Hab in Armenia circa *Erzeroum* Huet I Calvert 1

Caulis pedahs vel pauld longior Folia radicalia petiolo 14 pof-

hean basi vaginanti suffulta diametro 1-1 1/2 pollicem lata, flores et habitus *R. acns* qm differt foliis minus profundè dissectis lacini-  
 bus, indumento parvum diverso, carpellis paulo longioribus  
 rostratis, caule folioso Propius affinis *R. Ketschgi* Boiss qm est  
 planta major caule glabro, foliis facie inferiori tantum et parvè  
 hirsutis laciniis multo longioribus, carpellis tertium parte majoribus  
 punctatis

RANUNCULUS ARMEHIAGUS BOISS et Huet (Sect *Hecatonia*)

R. totus pilis adpressis rufescentibus hirsutus, rhizomate brevissimo truncate recto fibres tenues radicales edenti, caule humiliter unifloro folia vix superanti vel longiora parvè ramosa, folia radicalibus petiolo patentim birta eis paulo longiora suffulta basi expansis ternatis partitis foliis basi cuneatis in lacinas oblongo-lineares obtusiusculas integras vel apice tridentatas ad medium usque profundiusve incisissimas, folia caulina bipartitis foliis inferius attenuatis petiolatis hinc oblongis integris denticulatis, pedunculis non sulcatis, sepals reflexis flavidis dorso adpressè hirsutis margine lato glabris, petalis antheris obovato-rotundis, carpellis.

Hab. in Armenia ad *Tackopru* inter *Baibwt* et *Erzeroum*, floriferum legit cl. Huet maio 1853

Caulis sub anthesi 1-4 pollices longus pro planta magnitudine crassiusculus Folia ambitu pollicem lata Flos similis flori *B. bulbost* cm nostra species inter omnes rhizomate recto brevissimo, calyce valdè reflexo magis affinis videtur sed a quo prater habitum differt ra dice nonbulboso-incrassata, laciniis foliorum longioribus, pedunculis non sulcatis *R. oreophilus*, et *Hueti* et species affines rhizomate obliquo longiora, calyce patente etc longioribus differunt. Species adhuc fructu ignoto imperfecte nota

RANUNCULUS TRACHYCARPUS Fischer et Meyer

Var. *leiodtscus* Boiss. et Huet — Gaules et petioli molliter et patentim hispidi Carpella disco invisissima, caetera typi

ut *leiodtscus* pi Arm Huet exs

Hab in Armenia cl Huet

Forma et magnitudine\* carpellorum. simillime et variationes spe-

(icrum affinnm quoad spinas vel tuberculos carpellorumnossua-  
serunt hanc plantam *R tachycarpo* ul vanctatem adnumerarc  
Transitum praetcrei praebuit specimen it *trachycarpi* e Naupht  
GEBGæ eodem indumenta patulo donatum carpellis autem facie  
tuberculatis

R̄NUNCULiis PINARDI Boiss (Sect *Echmella* )

√. animus totus pilis adpressis hirtus, radicc tenui paucifibrosS,  
caule humili folioso infrā vel suprd medium dichotomo ramis fle-  
xuosisspius patenti-subrecurvis 1-3 flons, foliis pnmordiaibus  
brevissimS petiolatis ovatis mtegnis, mfenonbus petiolo eis longion  
sufTultis parvis e basi plūs minūs cuneatft subrotundis 3-5 dentatis  
dentibus ovatis obtusis, supenonbus ad dichotomias etpeduneu-  
lorum ortum breviter petiolatis basi cuneatis fer6 ad basin usquē in  
tres lacimas e basi angustion lineari-oblongas integras vel sspiūs  
apicc indentatas partitis, peduncuhs opposittfohissub anthesirectis  
flore paulo longionbus fructifens elongatis mcrassatis patentire^  
curvis, sepalistenuiter membranaceis oblongis dorso adpressē hirts  
margme glabns erectis decidms, petalis pallidē flavis calycem  
parūm supcrantibus hnean-oblongis obtusis basi attenuatissesqua-  
matis, stamimbus paucis, filamentis glabns basi subdilatatisantherA  
ovato-oblongS multō longionbus, carpellis lanceolatis adpresse  
hirsutissimis rectmsculis petala subaequantibus. spied fructifera  
6-9 carpellis stellatim patentibus constant^ carpellis ovato-oblongis  
compresso-plams utnque tenuiter tuberculatis breviter et adpresso  
hirtis margme submcrassatis abeuntibus in rostrum planum adpres-  
se hittum basi latum sensim attenuatum apice circinnatum parte  
semimfera dupl6 longius

*R cornuhis* Boiss in PI Pinard Syr exs non DC

*Gamp&oieias* Pinardi Steven in Dull Soc Nat Moscou 1852 Cum  
10011C

Hab in paite supenon Antihbani suprā *Zebdam* et suprā *ito-  
scheya* ubi legi flor fructiferumque maio 1846, in *Synd* loco non  
notato cl Pinard, adsl quoquo specimen in DC herb ex itinere  
Syriaco cl Labillardière

Plantula 2-5 polkcans, folia mfenora diametro 3-4 lineas lata  
bupenora paulo majora *flores eis Ceratocephahfakatt* subminores

Carpella matura cum rostro 7 lineas longa basi 2 hneas lata Hanc speciem ohm habui pro *R cornuto* DC quern nunc novi ex specimenibus in cultis propè pagum *Scanderun* Libani. suprâ *Saida* a cl. Blanche lectis et descriptionem Candolleanao optimè congruentibus *R comutw* est species herbd, florum magmtudine et sepalis reflexisaffimsiZ *rhynhocarpo* Boiss earumdemregionumonundo, sed ab eo rostro non rectmsculo carpello subbrevion sed carpello sesquilongion apice circmnato optimè distmcta.

Nostra species omnibus notis *Rantmculo* generi aduumeranda est subtnbuque *Echinelli*B, et nullo pacto in novum genus a cl Steven propositum engenda

NIGELLA CILICIGA Boiss et Bal (Sect *Erobalos*)

N annua glabernma caule a basi dichotomè ramosissimo subtoruosoranus crassiusculis angulatis usquè ad flores terminates fohosis, folns in lacimas linean-setaceas stnctiusculas scabnuscultas multifidis, floribus mediocnbus folns involucraUbus multifidis an> longionbus suffultis ccEruleis, sepalis ovatis apice brevissimè subacuminatis basi abruptè attenuato-truncatis breviter slipitatis, petalis filamentis brevioribus stipitatis obversè tnangulanbus bilabiatis laluo interiori dxoudid brevion e basi ovaia attenuate, extenon biparti to partitiombuse basi oblongâ attenuates apice clavatis medium versùs transversè rubrozonatis parcè cilialis, anthers muticis, carpellisjunionbusgrossè luberculatis ad quartam partem longitudinis inter so connexis parte liberft patulo-curratis

Hab. in planitie Gibcid propè *Mer&ina* cl Balansa Fl Maio

Habitus *Ntgellce* *Damascene* sed lacimee fohorum magis slicLie petalorum partitiones clavato-attenuatae nee obtusse et mprimit. carpella basi tantum nee ferè ad apicem usquè coalita

DELPHINIUM GIANDULOSUH BOISS et Huet (Sect *Consohda* )

D annum caule procerò virgato folioso pifls cnsplulis brevissimia hirta a basi dichotomè ramosissimo, ranusiterum subdivancatim ramulosis ramuhsque pilis patulis aureis viscidis glandula msidentibus molhter velutinis, folns pilis adpressis curvulis hirtis subscsihbus in lacimas longas hneares multipartitis, racemis laxmsculis

ramos terminantibus paniculam corymbosam formantibus, pedunculis erecto-patulis glanduloso-velutinis calcare subbrevionibus basi bracteolâ brevissimi linearis suffultis ad medium bibracteolatis bracteolâ minimis setaceis, floribus violaceis, sepalis oblongo-spathulatis dorso breviter et conspicue hirtis margine glabris, calcare flexuoso tenuifloro duplo longioribus, petalo intus ad suturam petalorum inferiorum barbato apice bifido, filamentis parte inferiori valde dilatatis albonitidis margine ciliatis, capsula oblongo-gibba transversè rugulosa adpressiusculè hirtâ subviscidâ apice lateraliter longiusculè mucronata

Hab in cultis *Mavmansour* Armeniae non procul ab *Erzeroum* cl Huet du Pavilion Fl ©state

Planta 1-2 pedibus ramosissima, foliorum lacinae numerosae pollicares lineam latae, racemi 4-5 pollicares, pedunculi fructiferi pollicem vel sesquipollicem longi, flos cum calcare 12-15 lineas longus, capsula 4-5 linea longa Species ex affinitate *D. consolida* et *tomentosa* indumento glanduloso inflorescenti et distinctissima Eiusdem speciei forma prope *Erzeroum* lecta state magis protracta et idcirco calcare brevior apice subuncinato donata sub *D. ramosissimi* nomine inter plantas Huetianas distributa fuit

#### DELPHINIUM BALANSJG BOISS et Reut (Sect *Delphium*)

D perenne glaberrimum glaucescens radice indurata verticali fasciculos strictos foliorum caulesque floriferos ascendentes vel erectos floscos parvos et divaricatos ramosos ramis simplicibus edentibus, foliis radicalibus et inferioribus longiusculè petiolaris limbo abbreviate in lacinas lineares-cuneatas apice breviter et obtuse lobas subpinnatifido, foliis cauliculis intermediis et superioribus strictis 3-5 partitis laciniis hinc inde indivisis vel acutis, floribus breviter pedunculatis spicas laxas formantibus, bracteis hinc inde pedicello apice minutè bracteolato apice incrassato brevioribus, calcare horizontali sepalis caeruleis dorso adpressè hirtulis oblongo-cuneatis obtusis subtriplo longiore, petalis inferioribus albis longè stipitatis limbo minuto ovalo-rotundo basi subcordato, carpelibus praeter pilos paucos adpressos glabris oblongis acutis

Hab circa *Lambesa* Africae borealis cl Balansa pi exs 1853 sub *D. fuiuco*.

HSBC species habitū *D. grmle* DC = *junceum* DC refert sed ab eo eeriē (hffert radice perenni fascicules stenles foliorm caulesque emortuos annomm praecedentium ferenti, folia radica ha semper subpinnatim noc palmatim partita sunt lacinnis lalerahbus utn- quē snbbims abbreviatis

DELPHINIUM FORMOSUM BOISS et Huet. (Sect. *Delphmastrtm* )

D cajole erecto crasso an gala to supernè longè ramoso-pamculato pilis crispis paucis brenbus obsito supernè glabro, folnsetpettohs pilis crispis brevibus paucis hirtis subtis ad nervos et margincs breviter et adpressiuscnlè hirtis ultrà medium 5-7 palmato-partitis partitioiubus in lacimas obtongo-lmeares obtusiusculas terminates longiores incisiss, bracteis bracteohsque glaberrimis •violascentibus oblongis obtusis hisce a flore remotmsculis, sepahs violaceis pnrter marginem sparslm cihatam glabns, calcare sepalum superms acquanti, petahs omnibus facie intern^ et apice aureo-ciliatis supenonbus breviter bidentatis infenonim hmbo angulo acuto incurvo profundè bifido barbatissimo, carpellis glabns

**Hab circa Maadenkhan inter Erzemm et BattoMt el Huel**

Species affinis *D. flexstoso* M B quod distinguitur eaule tenuSan flexHOso, petiohs patulè ciliatis, foliis ferè ad basin parlitiss, bracteis bracteohsque lmeaibus ciliatis, sepahs margme glabns, pelahs supenonbus imberbibus

## PAPAVERACEIÈ

PAPAVER STYLATVH Boiss et Balansa

P annuum radice tenui filiformi, foliis ad collum confertis adpressmsculè et sparsun hirtis petiolo patulè hirsute suffultis lyratopinnatiaeclH segmentis utninquè 2-3 ovato-rotundis obtusè lobatis in costam latiusculam decunrentibus terminali multd majon ovato vel oblongo obtusè lobato, caule 4 vetplunbus erectis simpheibus vel infernè bifldis partc mfenon 1-3 folus minutis sessi-



libus oblongo-lanceolatis pinnatifidis obsitis infernò patulè supernè depressè hirsutis, flonibus mediocribus, sepalis longè setosis, petalis coccineis basi latè nigro-maculatis, filamentis nigris, antheris ovato-rotundis, capsula minutè obconicè disco stigmalifero depresso quinquelobo albo violaceoque variegato centro in stylum prismatico-pentagonum disco ferè longius producto

Hab in planitie *Cihac* propè *Mersina* cl Balansa Floret mitio Aprhis, fructus maturat fine ejusdem mensis

Habitus omnino *P Argemones* Folia radical] a 1-i  $\frac{1}{4}$  pollicem longa, caules  $\frac{1}{2}$ -1 pedales Capsula basi valdè attenuata 3-4 lineas longa Disci rostrum lineam aut sesquilineam longum sectis angulos suos lineas stigmatigeras papillosas usquè ad apicem lorum disci productas violaceas gerens Species disco in rostrum longè producto ab omnibus distinctissima

PAPAVER POLYTRICHUM BOISS et Kotschy

P annuum saapiùs a collo pluncaule caulis simplicibus vel saepiùs infernè dichotomè ramosis pedunculisque setis patentibus vel retrorsis hirsutis, foliis densè et adpressiusculè setosis canaliculatis radicalibus oblongis breviter petiolatis pinnae partitisve subinde lyratis lobis obtusis, caulibus paucis sessilibus pinnatipartitis segmentis saepè pinnatilobatis, flonibus ad ramorum apicem solitariis longè pedunculatis, sepalis hirsutis, petalis coccineis rotundatis immaculatis, capsulis glabris turbinato-obconicis disco stigmatifero depressissimo 7-8 radiato superatis

Hab in vallibus Antihbam inter *Rascheya* et *Damascus* Doiss I circa *Zebdani* Antihbam Kotschy

Species affinis *P rhaeadt* a quo differt caulibus humilioribus  $\frac{1}{2}$ -1 pedibus, indumento setoso denso patulo, flonibus minoribus terè *P dubu*, polhne luteo nee violaceo

PAPAVER SPICATUM BOISS et Balansa

P perenne caule strecto elato flososo pilis albis intertextis scabridis densissimè pannoso supernè in racemum laxè spiciformem longum strictum setis longis adpressiusculis strogosum abeunti, foliis pilis longis scabris adpressiusculis densè albo-pannatis

oblongis radicibus obtusè crenato-dentatis in petiolura attenuatis, superioribus basi subattenuatis sessilibus acutè dentatis acutis, flonibus subsessilibus, sepalis adpressè setosis, petalis latis, capsulis glabris obovatis basi attenuate disco sigmatoso subplano centro umbonato profundè 6 lobo superatis

Hab in colibus circa *ftozdagh* Tmoh occidentalis in *Lydda* Legit fructiferum cl Balansa Julio 1854

Caulis 2-2 1/2 pedalis, racemus 10-12 floras semipedalis longiorve, capsula 6-7 lineas longa, discus margine a capsulfi latè disjunctus Affinis *P. pterocarpus* et *Sm. qumegregioides* differt indumento multo parciori, foliis caulibus amplexicaulibus, flonibus longissimè pedunculatis corimbosis

*Obs* *Pap. maurostomum* in pi Armen Huet ex ultenon examini subjectum a *P. Synaco Boiss* et Blanche cujus capsulam obovatam habet non specificè differt

#### GLAUCIUM GRANDIFOLIUM Boiss et Huet

G. radice verticali, caulibus erectis pilis papillaribus densis scabridis medium versus corymbosè ramosis, foliis radicibus numerosis breviter petiolatis pinnatipartitis partitiombus utrinquè 5-7 angulo recto patentibus oblongis acutiusculè dentatis a parte superioribus deorsum decrescentibus, foliis caulibus sessilibus amplexicaulibus in laciniis acutius dentatis pinnatipartitis, omnibus indumento papillaribus densis albo scabris, sepalis oblongis pilis longis densis obsitis, petalis magnis fulvo-aurantiacis basi magno maculatis, capsulis longè et adpressè setosis, stigmate hastato capsulatione

Hab circa *Erzerum* cl Huet du Pavillon et d Calvert

Caulis in meis specimenibus pedalis Corolla diametro 3-3 1/2 V, pollicans Species pulcherrima culturæ dignissima juxta *G. fukum* et *Gl. cornticulatum* collocanda Prior differt foliis bipinnatis lacinis obtusioribus, capsula tuberculato-scabra, posterior flonibus 3-4 pl 5 minoribus, foliis caulibus multo tenuioribus et acutius dentatis

## FUMARIACEÆ

GOMDMJS NIVALIS Boiss et Huct (Sect *Capnites*)

C glaberrima radice perenni tuberosa cylindrica saepe bicrura, caule simplicissimo parte inferiori fenestris 2-4 squamas oblongas acutas membranaceas ferenti, foliis superioribus 3-4 longe longissimaeque pedunculatis biternatisectis partitodibus pinnatis petiolulatis laciniis oblongo-spathulatis obtusissimis integris raris bifidis, spicis ovata 5-7 floris, bracteis pedicellos stictos asquantibus superantibusque obovatis inferioribus bifidis cactens inter gemmas, calicem sursum spectanti subcurvo obtusissimo corolla sublongior, capsula oblongo-clavata

\* Hab. ad *Gumwhlu* Armenia: alt. 7000' ad nives inter lapides cl. Huct du Pavilion Fl. Maio

Habitus *C. pauciflora* Pers. quae differt foliis simpliciter palmato-flabellatis. A. Fl. Mex. descriptione *C. Emanueh* C. A. Meyer etc. *alpesina* C. A. M. priori calicem acutiusculo et posteriori foliorum lobis linearibus numerosis distinctis

Obs. *Fumana microcarpa* sp. nov. in Huct. PI. Armen. exs. vide tur. tantum forma foliorum lacinis sublobatis, flosculis rosatis *F. parviflora*

## CRUCIFERE

AnABis GIEMOGARPA Doiss et Dal (Sect. *Alomatium*)

A monocarpica, caule tereti glabro simplici vel parce ramoso, foliis radicalibus oblongis runcinatis in petiolum brevem alternatis pinnatis ramosis hirsutis, foliis caulinis ovalo-oblongis sessilibus basi cordatis amplexicaulis obtusis, (longius racemis fructiferis elongatis laxis, pedicellis unilaterahter deflexis incurvis, siliquis primis palenlibus dein pendulis longissimis angustis subcompressis quadrangulis stylo terminali tenui capsulae latitudine sesquialtera\*)

longion, valvulis cannatis, seminibus uisusalibus minimis aptens

Hab in pinetis valhs *Kar Boghas* supra *GMek Boghas* Fructiferam legit fine Julii cl Balansa

Folia radica sesquipedalis Uicemcaukaaouiineaslonga. Racenu fructifera pedales, pedicelli tenues 2 lineas longi, siqua sspè quadripollicares et ultra, linea dinudiata parum latiores Stylus terminalis roeam longus Affima *A cordate* Boiss Ann. Sc Nat. quos siliquas longas patulas habet et quae nostrae habitu ut forma foliorum affinis differt siliquis crassioribus quadrangulis stylo siliqua vix angustior ejusque latitudine breviori apiculatis, seminibus angustialis

ARABIS CILICICA BOISS et Balansa (Sect *Alomatmni*)

*A. perennis* caulibus ascendentibus teretibus parce ramosis elatis duplè indumentopilorum patulorum nodorum furcatorum alfo, ruraque ramosorum brevium obsitis, foliis oblongis runcinato-lobatis indumento brevi ramoso hirtis junioribus cernis radicalibus bariattenuate caulibus sparsis basi sessili amplexicaulibus breviter et obtuse aunculatis, floribus, racemis fructifera glabris laxis, pedicellis glabris erecto-patulis, siliquis rectis arcuatisve longis compressiusculis glabris angustis stylo brevissimo apiculatis, valvulis convexis praeter nervum medium parallelum et elevatum venosis, seminibus compressis subaptens

Hab. in umbrosis faucibus *Seduhtg* supra *Mwsma* in regione calida Gilicis cl. Balansa. Jam Maio meunte fructifera

Planta 1-4 pedalis. Racenu fructifera pedem longi Folia inferiora tripollicana. Pedicelli 5-6 lineas, siliquae pollicares dimidiat lined vix latiores Indumento et foliis formas proceriores *A. ailindeB* refert sed hsc ut *A. brevifolia*, *A. Billardten* et omnes species vel varietates affines a nostris different siliquis lationibus compressis ob senuna prominentia torulosis valvulis planis, seminibus duplo majonibus

ARADIS BAIAN & G BOISS et Reut (Sect *Alomatiwn*)

*A. biennis*, caule crassiusculo erecto flexuoso folioso simplici pilis simplicibus Gurvuhsfurca Lipsaucis intermixtis hirtis, foliis radicalibus

bus numerosis rosulatis oblongo-spathulatis obtusis basi attenuatis obtusè crenulatis caulis sparsis multiminonbus sessilibus oblongo-hnearibus integris omnibus indumento breri pilis plerumque furcatis constant! hirtis, racemo terminah post anthesin stincto clongato, pedicellis flore subbrevioribus, sepalis glabris oblongis membranaceis rubellis, petalis albis lineari-cuneatis calyce dupl6 longioribus, staminibus petala squantibus, siquis stinctis brevibus angustissimè hnearibus glabris compressis nervo medio cananti venis parallelis lateralibus vix vadhion, stylo tenninah diametro siquae aequilongo, seminibus oblongis immarginatis

Hab in cacumine *Djebel Chehah* montium *Aurds* provinciae Constantino cl Balansa pi exs 1853 sub nomine *A altatm*

Gauhs cum racemo longo 6-10 pollicans Folia radica 8-10 lines longa 3 lata Siquai 6-8 hncas longè hncam dimidiam latae. *A alpestris* SchI — *A cthata* auct a nostra specie differ! siquis lationibus stylo dimidiò brevioribus apiculatis, filamentis corollae tertià parte brevioribus, petalis lationibus, flosibus pauld minoribus, folis caulibus sepius dentatis, *A stmocarpa* siquas longis magis distat

Obs *A latifolia* Durieu ab *A parvula* Leon Dufour non differre videtur

#### GANDAMINE HUETII Boiss

C perennis tota pilis ramosis adpressiusculis sub lente hirtella multicauhs, caulis pumilis erectis ascendentibusque simplicibus vel parcè ramosis, folis omnibus pinnatipartitis radicalibus brevissimè petiolatis lacinus utrinquè 3-5 obovatis obtusis minutis appendiculis medioimissis saepè interjectis, folis caulibus paucis lacinnis angustè linearibus terminali saepè indiviso linearibus, racemibus terminalibus 5-9 floris pinnatis corymbosis dein laxiusculis, pedicellis erecto-patulis glabris flore sublongioribus, sepalis glabris ovatis apicè rubellis albo-marginatis, petalis albis obovatis subre-lusis calyce dupl6 longioribus, siquis (jomonibus) angustè hnearibus glabris stigmatè sessilibus terminatis

Hab in Armenia sitpra *Tachkcupru* cl Huet du Pavilion Fl. Maio

Planta fructifera 3—4 pollicans Folia radica cum petiolo

cauliculus pollicem longa tres lineas lata, Flores ferè duplò majores  
eis *C resedifolus* quam facie omnino refert et a qua pratercà  
differt indumento, segmentis foliorum numerosioribus, floribus  
longius pedicellatis, caulibus ramosis, etc

Obs. *C lucorum* in pi Armen Huet exs. 1853 a *C oseycarpa*  
Boiss. non satis differt

Obs. *Nasturtium erythrospermum* Boiss et Huet in pi Armen  
exs 1853 est *N vulgare* Rchb a *N sylvestri* com aliud affine si-  
liquum longioribus tantum distinctum

#### NASTURTIIUM MUNBYANUM BOISS et Reut

N perenne collo fibris radicantibus fibroso, foliis ferè omni-  
bus radicibus glaberrimis pinnatisectis segmentis linearibus  
acutiusculis integerrimis cauibus pluribus incurvo-prostratis gla-  
berrimis ferè a basi parçè ramosis 2-3 folia radicalibus similia  
sed breviora ferentibus, racemis tandem elongatis laxiusculis, po-  
talis croceis calyce sesquialongioribus, sepalis luteis vel rubellis gla-  
berrimis angustè membranaceo-marginatis, siliquis pedicello crassius-  
culo patulo eis 3-4pl6 brevioribus suffultis glabris laevibus lanceo-  
latis teretiusculis rectis incurvisve stylo obtuso apiculatis.

Hab. in pratis bumentibus *Has el Asfour* Mauritaniae regno  
Marocano finitima cl Munby Fl Maio

Folia radicalia cum petiolo bipolycana 4-6 lineas lata, cau-  
les cum racemis fructiferae semipedales Flores magnitudinis  
eorum JV *Botanici*. Siquis 5-6 lineas longis *N asperum* nos-  
trae speciei affine eximè differt foliis bipinnatisectis laciniis abbre-  
viatis, floribus minoribus, *Nast Boissianum* eisdem foliorum divisione  
siliquisque 3-4pl6 longioribus stylo tenus apiculatis, ambo si-  
liquis ut et tota planta papilloso-scabris nec levissimis

#### MALGOLMIA ANGUIFOLIA BOISS et Orph

M. annua vel biennis tota pilis stellatis secus caulem et ramos  
longioribus patulis ad folia adpressis pubescens, caule erecto  
flexuoso folioso saepe ramosissimo, foliis multinerviis longiusculè  
petiolaribus ovato-rotundis basi cordatis circumscissè obtusissimè  
et grosse lobatis lobis mucronulatis nervis breviter petiolatis

ovalis basi brevissimè cuneatis utrinquè angulatim et acutè 2-3 lobato-dentatis, racemis tandem elongatis, pedicellis calyci aequilongis folio cis sublongior caetens simili sed minor suffultis, sepalis basi bisaccatis palhdè virentibus undiquè stellato-pubescentibus, petalorum lamina rosed ungue brevior oblongo-spathulata, siliquis longis breviter pedicellatis secundis erectis deorsum arcuatis torulosis subcompressis breviter et subpatulè mollior pubescentibus tandem glabrescentibus stylo earum latitudine subbrevior mucronatis

*M. cymbalana* Heldr et Sartori Mss

Hab in *Parnasso* propè *Trypia-Spitia* in spelunca alt 5500 cl. Guicciardi et Prof Orphanidis 1854, eodem loco anno 1855 cl Guicciardi ex Heldreich

Planta ex minor specimenibus 1/2-2 pedalis. Folia majora pollicem longa Racemi fractifera semipedales Floras magnitudinis eorum *M. Chubb* et *M. Gras* propè quam collocanda. Siliqua 2-2 1/2, pollicares Species forma foliorum racemisque bracteatis insignis, ut videtur rarissima

HESPERIS REUTERIANA BOISS et Huet (Sect *Deilosma*)

H. perennis in indumento brevi pilorum ramosorum velut in cinerascens, collo pluncaus petiolo vetustis plerumquè vestito ad medium usque fohoso dein paniculato-ramoso, foliis radicalibus oblongis obtusis basi longè attenuatis obtusè sinuato-lobatis caulinis basi breviter attenuate sessilibus oblongo-sobrhombis apice attenuatis acutiusculè denticulatis, racemis antè anthesin corymbosis dein laxiusculis, pedicellis erecto-patulis calyci subsquamlongis, sepalis rubris pilis ramosis hirtis, petalis elliptico-spathulatis purpureis ungue calyce sublongior donatis, siliquis (junioribus) glabris stigmatibus fissis cis angustior superatis

Hab in Armenia propè *Ispir* cl Huet du Pavillon Fl Jumo

Species valdè affinis *H. Armeniae* Boiss quae differt indumento oblongo a^pero, foliis cordatis integris et *H. molaceta* Boiss quas habet inflorescentiam simplicem, (lores majores, petala obovata violacea Infausto casu omnium hucusque fectus matura ignotus est et sic de earum discrimine specifico nota gravior adhuc deest // *bicuspidata* Poir ex descriptione manca male nota cum speciebus de quibus locutus sum conferenda est

HESPEMS KOTSCHYI Boiss. (Sect *Deiloma*)

H perennis caule basi peliolis vetustis squamoso craasiusculo loraentello ptimilo simphci jam inter folia radica in racemum etiani fructiferum abbreviatum abeunti, folus omnibus subradicibus confertis indumento stcllato brevi denso cinerascentibus oblongis obtusis obsolete repandis basi longè attenuate, floribus pedicellis fructiferis incrassatis erecto-patulis, siliquis indumento stellato tomentelhs basi subincurvis erectis complanatis longis latis margimbus snbincrassatis apice angustatis aspennis stigmale bilobo conico terminahs

Hab in preruptis calcareis ad latus orientale montis *Gisyl tepe Tavri Cthcict* cl Kotschy

•planta mihi flonfera ignota, fructifera semipedahs. Folia 2<sup>J</sup>J<sub>t</sub> poll longa 5-7 lineas lata Racemi fructifen axis 3-4 pollicans Siliqua 3-3\*/ , polhces longa ferè 2 lineas lata Habitaafilnisif *breviscapw* Doiss quae diiTert folus mimmis obovatis regulariter fereuatis, indumento magis aspro pihs longionbusfurcatis constant! Forsan propiis accedit ad *H vtolacmni* quam fructiferam non novi Siliqua *Chetrantht* sed semina ul in *If brevtscapd* notorrhizea videntur

Obs. *Sisymbrium pseudosophia* in Huet pi Armen. exs charactenbus non sal firmis a *S soptud* L distinctum ab eo uoii separandum est

HESPERIS UNGUIGULARIS BOISS (Sect *Detlasma* )

H pilis mimmis slellatis sparsis secus caulem et in utrâque forura paging sub lente obsita Istè viridis, caule dalo angulato longè et strictè pamculato, folus mferionbus. cauluiis subset silibus e basi rotunda tà oblongis attenuato-acuminatis minutè denticulfttis, racemis demùm elongate stnclis, pedicellis calyci aequilongis, calycis subsaccati sepalis purpureis oblongis obtusis stellato-puberulis, petalorum unguibus purpureis calyce subduplè longionbus in laminas oblongas acutiusculas sensiu dilalalis, sihquis (Immatuns) longis glabernmis stjctis stigmatc bifido superatis



Hab in *Armenia* cl Calvert

Species characters petalorum insignis et cujus infaustus specimen incompletum parte inferiori deficiens ante oculos habeo Flores in genere maximi, petala cum unguibus pollicem longa, racemi fructiferi pedales, siliquis  $2\frac{1}{5}$ -3 pollicares PropG *H matronalem* collocanda

HESPERIS GLABRA Boiss et NOG (Sect *Deilosma*)

H monocarpica radice cylindrica subnapiformi, caule glabro lam nitido supernè parcè ramoso corymboso-paniculato, foliis videntibus tenuibus sub lente pilis minimis simplicibus furcatisque puberulis, inferioribus oblongis in petiolum brevem attenuatis superioribus c basi sessili rotundata vel subcordata oblongis acutis omnibus margine plius minus denticulatis basin versus saepe laciniatis, pedicellis tenuissimis erecto-patulis calyce longioribus, calyce puberulo basi minutè bisaccato rubello, petalis purpuris ungue subinserto lamina obovata, ovano glaberrimo

Hab in *Kurdistan* propè Van, cl Noe, Junio 1849

Planta bipedalis, folia 2-3 pollices longa pollicem aut paulo amplius lata Flores magnitudinis eorum *H Steventarum* cui accedit etiam glaberrima, formis foliorum, pedicellis tenuissimis, ovano glabro differt

ERYSIMUM RUPESTRE DC var *Calverti* Boiss et Huet

Folia angustè oblongo-lanceolata plius minus denticulata vel etiam lobata denticulis inferioribus a caule remotis, folia inflata saepe integerrima spatulata Vanat nanum caulibusque semipedalibus longioribusque

Hab in Armenia propè Mesopotamiam in valle *Kassuklu* cl Huet, in monte *Techdagh* cl Galvert

Persuasum habeo hanc plantam foliis angustioribus, caulibus parte inferiori non dentatis tantum distinctam ab *E rupestre* polymorpho cum *E Immatum* Boiss quoque conjungendum est non differre *Er pulchellum* Gay a cl auctore ob glandulas placentanas bisectas filiformes ab eo distinctum probabiliter non specificis differt, in nostra varietate enim glandulae inter hoc et *E rupestre* verum longitudine intermedie sunt

## ERYWMUM UNCINATIFOLIUM BOISS et Huet

**E** perenne totum pilis bipartius adpressissimis canescens sa-  
pius multicaule caubus pumilis foliosis simplicibus vel jam infra  
medium pared ramosis, folus versus basin cauhum praesertim  
confertissimis Inflmis oblongo vel elliptico-lanceolatis obtusius-  
cull& psefens hneari-lanceolatis hneanbusque apice mucronato  
caljgso uncinato-curvatis omnibus basi longè filiformi-attenuatis  
mlj|ptè denticulatis lacinulosive, racemis terminahbus corymbo-  
sis 4ein subelongatis, pedicellis erecto-patulis calyce basi subbi-  
saefcato brevionbus, sepahs pube adpressâ bipartite pubescenti-  
bus, petalorum laming obovatt unguibus calyce sublongionbus,  
glghdulis placentarus bilobis, siliquis jumonbus erectis pube bi-  
partitd adpressè pubescentibus, stylo terminali siliquae latitudme  
vix longion eaBque sequilato, stigmatè minutè capitato

**Hab.** in ArmeniA prop<sup>^</sup> *Maimamour* cl Huet du Pavilion

Gaules 4-6 pollicares, folia caulina saepè polhcem vel scsqui-  
polhcem longa supernè lineam vel sesquihueain lata, flores pro  
plants mmutie raagni eos *E Kotskyi* Gay fer6 aBquantes Ex affli-  
mtate hujus folns hnean-setaceis integris siliquisque longè cuspi-  
datis diversissimi et *E rupestrts* quod facile distmguitur fonn&  
foliorunij pube 2-5 partitâ et eodem siliquise stylo longè mucro-  
natse characiere

## EBVSIMUM SHYHNEUH Boiss. et Balansa

**E.** monocarpicum bienne caulibus elatis foliosis angulatis pilis  
bipartitis adpressis pubescentibus supernè in pamculam amplam  
abeuntibus, foluspihs adpressis bipartitis tnfidisquc obsitis palhdè  
virentibus mfenonbus oblongis obtusis runcinato-pinnatifidis, su-  
penoribas linean-lanceolatis acutmsculis recurvis margine subun-  
dulatas parcè dentatis mtegnsvè omnibus basi longè attenuatis,  
axilhs copiosè fascicuhfens, racemis terminalibûs sub anthesi co-  
rymbosisdein elongatis, pedicellis calyce dunididbrevioribus, ca-  
lyce basi non bisaccato adpressè hirto, petalorum sulphureorum  
lanund obovatd in unguem e& longiorem attenuald, glandulis pla-  
centarus circulanbus, siliquispatuhs pilis brevibus 2-4 fidis adpres-

sis hirtis longis quadrangularibus pedicello suo vix crassioribus in stylum cis subangustas carumque latitudine in longius abeunlibus, stigmatibus capitato, semmibus oblongis immarginatis

Hab in colibus lapidosis montibus ad meridiem *Smyrna* ubi fine Aprilis floriferum et fine Junii fructibus maturis legitur cl Dalman anno 1854

Caulis floriferus 12-18 pollicarum, folia inferiora 2-3 pollices longa apice 4-5 nervis laevia Flores magnitudinis eorum *E odorata* Siquas 2-3 pollicares hanc dimidiam latet. A filis *E crepidifolia* si quis erectis a dorso compressis distincto et *E canescens* quod differt folium subtogis pilis omnibus bipartite hirtis, pedicellis calycem circumquantibus *E repandita* floribus dimidio minoribus, radice annua et *E gonocaulum* siliquis strictis brevissimis longius distant

Obs *Er thyrsoidea* Boiss nuper ex Tauro Gihico a cl Kotschy et a monte *Techdagh* Armenia; a cl Huet du Pavillon acceptum siliquis gaudet rault majoribus (saepe 3-4 pollicaribus) et stylo si- Utraque latitudine non squilongotinsp QCimine^Auchenanoinontis *Mouzowdagh* sed duplo longior at forms intermedia; occurrunt

#### ERYSIHUM CHEIRIFLOHUM BOISS.

Er. perenne, caulis erectis foliosis simplicibus sub lente pilis adpressis bifurcatis hirtis, foliis inferioribus caulibus oblongo-ellipticis sessilibus integris basi apiceque attenuatis acutis videntibus sub lente pilis 2-3 furcatis minutissimis obsitis, racemo terminali tandem laxiusculo basi folium supremis vix diminutis sulcato, pedicellis calyce brevioribus pilis 3-4 stellatis brevibus patulis hirtis, floribus magnis, calyce basi bisaccato sparsim et patule hirtis, unguibus exsertis, petalorum laminae oborata sulphurea, glandulis placentanis subtubulis, siliquis (juniperibus) pilis 3-4 furcatis hirtis longis erectis stylo brevi stigmatibus bilobo supercratis

Hab in monte *Techdagh* Armenia cl Calvert.

Caulis ut videtur non elatus, folia 12-20 lineas longa 6-1 lala, (lores eis *E ochroleuca* majores, siliquis immaturas jam bipollicares Species indumento brevi patulo racemi notabilis adhuc imperfecta violae affinis *E Ibencv* foliis incinatis diversissimo et forsitan magis *E othralitico*

Obs *Connngia ramosa* in pi. Huet Armen. exs eat tantium varetur folds majonbus.\* *Gowr Persiea* Boiss

CONRHMHA NANA Boiss etKy

C. annuaglabra vel sub lente breviterpapillosanana, folns crassiusculis plensque radicalibus basi attenuate! sessili somiamplexicauibus obovatis obsolete denticulate, caulibus brevissunis decumbentibus vel erectis 1-5 flons, fobis caubnis oblongis manifestis dentate basi breviter aunculatis, petalorum flavorum ungue subexsertft lamind oblongo-spathulatd obtusd, siliquis pedicello incrassato brevissimo suffultis deflexis teretibus apice sensim attenuate sobiodebisoenubus, valvulis convexis obsolete umnervus, septi marginibus latissimis, semimbus oblongis

Hab. inter Astragaloa montis *Mansclvura* Antilibani cl Kotschy all 6500'.

Folia 6-7 lineastaotum longa, caulescum racemo nunquam polbcefli excedentes sspius breviores, flores illis *C Oentahs* dimidiO minores, sihculae 1 'i-2 pollicares. Species habitu *Malcolmm* quasdam subacaules referens sed colore et formd petalorum, fohis aunculatis *Connngice* adnumeranda

MORICANDIA CLAYATA Boiss et Reut

M. aonua glaucescens glabra caule flexuoso a basi diehotome ramoso jramisque brevibus crassiuscuhs, foliia camosuhs bipinnatisectis segmeptis tereliuscuus lmeanbus integns apice raniis brevissiiine 2-3 lobatis obtusis plus minus elongatis costae pnmariae secundarusquesimilibus, racemis tenminalibus pauciflons post anthesin elongatis demum flexuosis, pedicelhs cajece dinudid brenobus, calyce valde bisaccato sepalis memJbranaceis rubellis oblongo-lineanbus, petalorum unguibus mclusis in lam mam roseam obovatam dilatatis, siliqma erecto-patubs subcompressis rostro ovato stylo treviasuno conico superato siliquid subcrassion intus spongfioso snperatis, valvuhs crassiusculis convexis costis \$-3 elevatis percursia, semimbus bisenahbus ovaUs compressis angusle membraAaceo-marginatis

*MoncaadiaterettfoUa Schimp* pi exs Arab Petr N° 205 non DC

**Hab in Arabid pelroBd Schimperl Boissier!**

**Habitus Erucarub Gaules 5-12 polhcares, fohorum lacn>ia3 ultima?**  
 2-4 hneas longae, flores eis *M arrensis* panl6 minores, sihqumbi-  
 polhcares vix hneam hta& Rostrum terminate cum stylo sesquih-  
 neam longum, seroina minima *Mor terettfoha* DC. *Brassua tereti-*  
*foha* Dcsf tab 164 imhi nunc speciminibus a cl Balansa pi. exs.  
 N° 903 ex *Biskra* et a cl D'« Reboud ex *Laghout* missis nota longd  
 differt ramis tenuibus virgatis, flonbus nunonbus, unguibus petal-  
 orum subexsertis, sihqis tenuionbus stylo eis tenuion earum  
 diametro subdupW longion terminatis, seminibus oblongis unise-  
 nahbus

**ERUGASTRUSI COSSONIANUM Reut Gat Hort Genev 1854**

**E perennans a basi ramosum cauhbus ramisque pibs brevibus**  
 deflexis sparsis hirlis, folifs nsdem pilis sparsis adpressis pared  
 obsitis profund6 pinna tip artito-lacens lacinus pblongo-lan^eolatis  
 inaequaliter et acutiuscalé lobato-sublacens basi exaunculabs^ ra-  
 ccmia ebracteatia demùm elongatis, flonbus palhdís, sihqis erecto-  
 patulis pedicello eis 2-3pló breviori suffultis compressis, stylo eis  
 vix angustion truncato earum latitudine vix longion superatis, se-  
 mmibussubbisenatis ovatis subcompressis

*E obtusangvlvm var exauneulatim* Coss et Duneu. in Bal. pi  
 exs Alger 1853

**Hab in glarcosis torrontis Oued Biskra propé Biskra cl. Balansa**  
*Añme E obtusangulo* quod differt foliis basi aunculatis regula-  
 nùslaciniatis lacinus lobisque rotundatis, flonbus intensiùs luteis,  
 sihqis tereliusculia angustionbus, seminibus unisenatis

**RRUCA SETULOSA BOISS et Reut**

**E perennis rbizomate breviter pluncipiti, collo vesligus petio-**  
 lorum vetustorum sqnamoso, folus omnibus radicaibus ro?ulatis  
 petiolatis pinnatiseclis subbijugis segmentis oblongis integns obtu-  
 sis sectis costam mediam dilatam decurrentibus terminah sub-  
 majori ssep6 4-2 dentato omnibus margine setoso-ciliatis, cauh-  
 bus scapiformibus nudis erectis in racemos tandem elongates la'xos  
 abeuntibus, calyce vix saccato sepalis oblongo-hneanbus rubellis

apice setosis deciduis, petalis omnino violaceis ungue exserto in lamina oblongo-linearem sensim dilatator siliculispedicello crasso stricto eis vix brevior suffultis oblongis inflatis vix compressis obtusis rostro multo tenuiori ensiformi aspermo eis dupli vel triplici brevior superabs, valvulis convexa reticulatis glabris nervo prominenti percursis.

Hab. ad planities *Tirny* in Algeria regio Maroccana contermina cl. Mtmby.

Polia ea fir *Monensu* referentia cum petiolo pollicem vel sesquipollicem longa segmentis 2-3 lineas longis. Calices 7-10 pollicares jam a parte inferiori siliculis. Silicula sexnervis ferè longa  $2\frac{1}{2}$ -3 diametro lata. Rostrum  $2\frac{1}{2}$ -3 lineas longum compressum basi lineas  $2\frac{1}{2}$  latum apice superne angustatum truncatum. Species radice perenni, foliorum formis, caulibus scapiformibus, petalis omnino violaceis nec venoso-purpureis distinctissima

#### FAKSETIA OBOVATA BOISS et Kotschy

*F.* perennis basi suffruticosa tota indumento denso pilorum stellatorum tomentosa flavescens, caudiculis prostratis abbreviatis tortuosis cespitosis, ramis axis foliosis sterilibus alius floriferis omnibus abbreviatis, foliis oblongo-spathulatis integris obtusis in petiolum brevem attenuatis superius breviter oblongis, foliis 3-6 subsessilibus terminalibus brevissimè spicatis, petalis ochroleucis hinc - spathulatis obtusis calyce dupli longioribus, spicis multifloris breviter laxis, siliculis erectis magis obovatis obtusis breviter flavido-tomentosis margine subincrassatis stylo brevi apiculatis.

Hab. in alpinis *Manschura* Antihbam cl. Kotschy

Planta etiam fructifera tripollicans, folia cum petiolo 6-10 lineas longa 2 lata, flores magnitudinis eorum *F. clypeata*. Siliculis magnis 10-11 lineas longis  $4\frac{1}{2}$ -5 latae basi attenuate. Species juxta *F. maerocarpam* statura et siliculis magis rotundis distinctam collocaoda.

#### SAVIGNYA LONGISTYLA Boiss et Reut

*S.* annua glabra glaucescens viscidula caule tenui erecto dichotomo

tomè ramoso, folus radicibus mferonibusque ovato - oblongis obtusè dentatis in petiolum longiusculum attenuatis carnosus mfermedns hnearibus 4-2 tubus minutis lateralibus acutis mfernonbus angustè lmeanbus apice subspathulatis, racemis post anthesin valdè elongatis laxis, pedicellis tenuiter fliformibus flore multoties longioribus sub anthesi erecto-patulis, petalis pallid<sup>^</sup> roseis oblongo - cuneatis in unguem attenuatis calyce duplo longioribus, sepalis oblongo - ellipticis obtusis, pedicellis fractifens patulo-recurvis, siliculis pendulis ellipticis stylo filiformi earum latitudine subaequilongis apiculatis, seminibus ad earum diametro aquilata cinctis

Hab in arenosis deserti ad meridiem *Saada* proYincl<sup>®</sup> *Constantinople* siti cl Balansapl e/s Alg | 853 n° 887 sub *S jEgyptiac*, circa *Laghout* cl Reboud

Affinis *S jEgyptiac* quae differt floribus dimidiis minoribus, siliculis ferè majore stylo craesusculo ejus latitudine quadruplo brevioribus apiculatis. Nostra planta procerior graciliorque est ssp<sup>6</sup> pedalis, pedicelli fructiferi pollicares, petala tres lineas longa, siliculis rostrum ferè 2 lineas longum

#### COGHLARIA SEMIFERVIVUM Boiss et Balansa

*G glaberrima* monocarpica, folus omnibus carnosus glaucescentibus radicibus densè et regulariter rosulatis obovato-cuneatis apice truncato-retusis, caule crassissimo angulato a basi ex omnibus axillis ramosissimo ramulis iterum ramulosis paniculam amplam formantibus, folus caulibus ovato - orbiculatis acutiusculis basi latè et obtusè auriculatis floralibus hnear-lanceolatis brevissimis obtusis, racemis elongatis laxis, sepalis \indibus ovatis latiusculè albo-marginatis, petalis albis oblongo - spathulatis subretusis in unguem attenuatis calyce duplo longioribus, siliculis pedicello nigido erecto-patulo aequilongis vel brevioribus oblongis subinflatis basi longiusculè apice breviter attenuatis stylo brevissimo apiculatis, valvulis convexis subcarnatis nervo medio tenui perovris, loculis dispermis funiculis basi valdè dilatatis maequalibus, seminibus oblongis pendulis

Hab in regione montana superius montis *Masmeneudagh* cl. Balansa Augusto jam fructiferum.

Planla ante annum florationis acaulis ad rosulam eab *Semper-*  
*wvi* simillimam diametro 2'» polhcarem reducta Folia rosul©  
 12-18 lineas longa apice6-8 lata basi in petiohmm attenuate  
 Folia caulina subconcava polbcm et ampliòs lata Gaulis proce-  
 rus ramos numerosos virgatos erecto-patulos cum racemis sapè  
 pedales paniculam amplam formantes allernaUm edens. Silicula  
 2Vi-3 bneas longa. Pulchra species collocanda juxtd *C Awhm*  
 Boise, eodem habitu donatam aed cnjus folia rosularia minima ro-  
 tundato-fipathulata apice acutè denuculata, foha caulina exaun-  
 culata, silicnla stylo longiori apiculata

SCHIWEBEGKIA? IBERIDEA BoiSS 6t Huet

S canbbus snffrotescentibus prostratis vesligiis foborum vetus-  
 torum squamo&is, ramis erectas pmnilis basi densè foliosis simpli-  
 cibus vel suprd medium ramulo uno alterove aucts pube bipartite  
 adressd turtis, foliis parvis pilis bipartitis stellatisque adressii  
 hirbs vmdibus infenonbus confertis elliptic^ supenoribns linea-  
 nbus omnibus integns acutiugculis, racemis terminaUbus flon-  
 fens corymbosis post anthesin elongatis, pedicellis erectis fihfor-  
 nubus flore longionbus, sepalis dit persistentibus ovatis TiieDti-  
 bus albo-margmaus obtusis prater pilos bipartitos paucos glabris,  
 petalis lacteis latè obovatis oalyoe tripld longioribus in ungaem  
 sensim attenuatis, fllamentis omnibus edeotnhs majonbus dilata-  
 tis, silicuiia junion ovata\* inflatd glabrd stylo brevi apiculata.

*Kemera? \*bendeaT\$piB&.wHuet* pi Armen exs 4853

Hab. in ArmeniA pfopè *Zazalarhani* cl Huet du Pavilion

Pla&la fructu matoro ignoto qoad genus adhuc incerta Prios  
 earn ad *Kemeram* addnxeramus sed ab ed differt habitu, flamen-  
 tis non fractis Facie, etatura, mflorulentid et florum magmtudine  
*ScMvxreclnamPodolicam* refert qns quoque calycem subpersisten-  
 tem sibculamque mflatam habet et ided hmc genen donee meliòs  
 not\* sit hanc adjungimufi. Notaa differentiates in *Sch. Podohe&snnt*  
 indumentum stellatum quidem sed nuauUssimum, folia dentata,  
 ^stamina majora dentata et capsula pubescens



DRADA DIVERSIFOLIA BOISS et Huet. (Sect *Aizopm* )

Dr. laxiusculè caespitosa foliis pallidè virentibus angustè linearibus brevibus margine et seeds nervum medium elevatum breviter cihato-aspens caeterium glabns inferioribus rosularum deflexis obtusis tunonum juniorum angustionibus acutiusculis, scapis pilis enspis hirtis vel glabns folus multoties longionbus, racemo terminali tandem oblongo laxiusculopedicelliserecurvisflifor- mibus hirtis vel glabris flore longionbus, sepahs flavidis longiuscule persistentibus dorso sparsim et longiusculè pilosis, staminibus di- midio petalo brevionbus, siliculis (junionbus) hirtis ellipticis utnn- què acutis stylo earum latitudine brevion apiculatis.

Hab in monte *TecMagh* Armenue alt. 700(^-8000', cl. Huet du Pavilion, cl Galvert

Folia circiter 2 \*/• lineas longa dunidiam hneam tantòm lata, scapus cum racemo 3-4 pollices longus. Gapsula demùm tresbneas longa. *Inter A tzopstdesD brunuBfoha* Stev obfoUaabbreviatamagis afflnisjhfioca nostrfl differt scapis mulWbrevioribufl, sihculis mino- ribus oblongo-ellipticis. *Dr cusptdata* longius folus lationbus sili- culisque magis elongatis differt.

DHADA DICRANOIDES BOISS. et Huet (Sect. *Aizopns.*)

Dr caulibus folus exsiccatis densè congestis veslitis colnmnanbus in caBspitem pulvinarem plus minus densumconfertis, fohu bre- viter linearibus obtusiuscuhs planLs margine plus minus ciliatis cilus adressis sapè glabnuscuh, scapis brevibus pedicelhsque glabns eis flore subduplò longioribus, calyce glabro, staminibus dimidio petalo longionbus, siliculis oblongis vel ellipticis gla- bns basi et praesertun apice attenuates stylo longiuscul6 mucro- natis.

Hab. in rupibus suprâ *Batbout* Armenia? cl Huet du Pavilion, circa *Ispircl.* Calvert.

*Draba bryoidi* DC valde allms sed hsc sat differre videtur folus brevionbus magis imbncatis crebnüs longiüs et patulè ciliatis, *Dr scabm* C A M fohorum longitudine nostram speciem magis refe-rens dilTert eis longè attenuatis aculis nervo medio prominenti, siliculis ovatis

Obs *Dr vefattna* Boiss. et Huet. in pi. Armen exs. 1853 est *Dr rosularu* Boiss Ann. Sc. Nat var. *leioearpa*. Specimina in eodem monte *Techdagh* Armenia a cl. Calvert lecta et sicculia jam pubescentibus donate docuerunt *Dr veluttm tantijmvm&lemD rosufaru* esse. Eidem speciei adnumeranda *Dr Perstca?* var. Boiss in pi. Ancher. Ann. Sc. Nat. 1842 ex specimine Auchenano Incompleto ad *Dr. Pemcam* a quâ valdè differt relata

DRABA HUETH BOISS (Sect. *DraJbeUa.*)

*Dr. anna* canto infernè fohoso jam infra<sup>1</sup> mediam partem in racemum simplicem demura elongatum laxnm abennti pilis patulis aliisbFffribus ramosis alns longionbus patuhshirto, foliis oblongis ellipticisve alns integns alns lirepulanteT breviterre denticulatis inferioribus in petiolum brevissimnoi attenuaUs caetens sessilibus, pedicellis pilis densis patulis simplicibus furcatisque hirtis, sepals flavidis oblongis hirtis, petalis pallid^ ochroleucis oblongo-cuneatis retusiscalycepartumexcedentibus, siliquispedicello erecto-patulo vix brevionbus pilis simplicibus adpressis hirtis ellipticis planis, utnquè obtusis stigmatè minuto sessili, lo^ulis 8-10 spennis.

Hab. in Anatoliâ propè *Beybazor* Ancher N° 4058 nuxta com *Dr. nmoraUy'w.* Armeniâ propè *Kochaponar* cl. Huet da Pavilion.

Planta 6-10 polhcans. Racemus fructifer 3-6 pollices longus Floras ffoagnitadinis eormn *Dr nemoralts* a. qua ut et a *Dr luted* difflert siliculis majonbus (3-4 tineas longia 1-1'/'<laUs) pedicello subampulongo nee dupld longion soffultis, loculis 8-10 nee 16-18 spermiA, seminibus dupld saltern majonbus Valde et forsam mimtum afflns *D lutecenH* Cosson plant® Hispanic® quss eisdem fer& characteribuB gaudet et cujug speciuuDa collo pluncauh, caulibus valde abbrenabs, siljculis pnesertim superioribus pedicello suo longionbus tantum differunt.

EROPHIA SETULOSA BOISS. et Blanche

*E. annua* fohis omnibus radicatibus oblongis veloblongo-rhombis integris vel \*tnnquè 1-2 denticulatis setnhs sparsis simpheibus rariòs furcatis ciliati? rariùs eliam facie obsitis, scapis glabns 6-9 flons, pedicellis ereeto-patulis demtum longissunis, siliculis glabns

oblongo-linearibus latitudine sua 3-4pld longioribus utrinque attenuatis, petalis albis calyce duplo longioribus

Hab in cultis propè Saida ad pontem fluvii *Nator-Aoute* d Blanche, in via<sup>1</sup> inter Saida et *Detr elKammar* cl. D'Gaillardot. Fl Januano, Februano

Affinis *Er stenocarpa* Joraan—*Amenco* MB Auct., differt foliis longiusculè petiolatis, indumento non breviter stellato. Siliculis *Er stenocarpw* angustis quo'que apice paulò latiores sunt quam propè basin. *E macrocarpa* habet siliculas pro longitudine angustiores

#### YESICARIA GLABIIESCENS Boiss et Balansa

V perennis basi suffrutescens ramosa ramos abbreviatis densè foliosos stenos caulesque elongates floriferos edens, foliis junobustantum pilis bipartite adpressissimis obsitis adnatis glabris ffitè vindi-flavescentibus crassis usculis linearibus subspathulatis obtusis basi longè attenuate, caulis sparsis linearibus, caulibus vpernè dichotomy paniculato-corymbosis ramis longiusculis extremitate racemos etiam fructiferos contractos paucifloros ferentibus, floribus. ., siliculis pediculis crassiusculis erecto-patulis eis sesquilogioribus suffultis ovatis modicè inflatis brevissimis subobliquè stylo apiculatis, valvulis glaberrimis nerviis vindiis, seminibus complanatis angustissimè et secus partem penitentem tantum alatis

Hab. in regione montana montis *Masmeneudagh* via inter *JGI-hctam* et *CcBsaream* siti cl Dalansa qui legit fructiferam Augusto.

Planta pedibus sesquipedalisque, folia 6-8 lineas longa hneam vel sesquihneam lata Siliculae 3 7i-4 V\* lineas longae in racemo fructifero 6-10 Racemi axis 6-7 lineas tantum longa. ^ores non vidimus sed genus vix dubiam videtur etsi siliculis inflatis sint quam in *V utrunculata* Species caeterum distinctissima.

#### MENIOCUS HIRSUTUS Boiss et Huet.

M annuus totus pilis lepidotis stellatis cinerascens, caule a medio subcorymbosè paniculato-ramoso, foliis linearibus canaliculatis elongatis obtusiusculis, racemus tandem elongatis, sepalis oblongis albis pilis stellatis lepidotis, petalis pallidè luteis linearibus bifidis calyce tertio parte longioribus, appendice fila-

mentorū majorū eis subbreuion, minorū sublabon antheram subsnperanti, siliculis ellipticis pedicello erecto-patulo sublongionbus pīJis ngidls simplicibus e tuberculo orbs erechusculis scabndis pratereā sub lente minutē tuberculosi stylo breuiter mucronatis, loculis 3-4 spermis.

Hab. in neglectis circā *Erzeroum* cl. Huet du Pavilion in consortio *M Umfolti*.

Species a *M hmfoho* cujus faciem habet distinctissima silicua pauuulū majon magu eloogatfl stylo sublongiori apiculatā et praserbm hirto-scabrA nee glaberrimā Petala apice profundius bifida. Floret ant<sup>^</sup> *M. hnifokum* quocum crescit.

ALTSSVM FLOMBUNDif Bois. et Balansa, (Sect. *Odontarrhena?*\*)

A. pereane basi suffruteacens tortuosum ramis oouellis ahis BteriHbns abbreviatis coDfertuu foliosis anno futnro florifens aliis elongatu laxiūjs foliosis snpemē compositē corymbosis pihs stella. Hs ^qoamlformibns sparsia obaitis, fohia hnean-oblongis hnean-bnsque infernē attenuatis plicabs acutiusculis squamulis stellatis lepidotis ramomm sterihnm argenteis florl/erorumflavidis, floralibas linearibus abbreviate, flonbns vitelliDis, pedicelhs capillanbus patulis calyce tnpld longionbus, sepalis petaha concolonbus obtosis squamulis 1-2 stellatis conspersis, petalis calyce sesquilon-gionbua extts 1-2 sqnamnlis stellatis conspersis uogne in lanu-nam ovato-spathulalam dilatato, filamentis nunonbus basi squamā eig aqnilonga suffoltis majonbus lateraliter appendice cum eis coalitA breuiore in dentem lateralem abeunti auctis, siliculis pedkjello reenrvo tandem pendulis planissimus glabris obovatis obtnsissimis stylo brensuno apiculatis basi aubangustatis, loculis umouulatis, gemtubns cdmppressis immarginatis.

Hab. in schistosis vallis *Ouzel D4r6* supra *Sedichtg* in Giucia htorali cl. Balansa Floret fine Haii.

PlaBta pedaliavel sesqaipedalis, folia 8-12 lmeas longa lineam vel sesqmifineam lata, flores *A argentex T\|m* Silicula 27,/hneas longa 2 lata. JuxtA *A peltanoidem* collocandum et cum eo ob silicnfls planissimas magna forsā sectionem noyem in genere formans ab eo distmctum fohis angustiotibua, silicuhs dumdid minoribns stylo dimidid breuion apiculatis

ALYSSUM CILIGICUU Boiss. et Dalansa (Sect *Odontarrhena* )

A monocarpicum caule tereti elato rubello vel virenti pilis sparsissimis stellatis lepidoto infernè sub anthesi denudato dem fohoso supernè in pamculam amplam foliosam subcorymbosam abeunti, foliis vindibus sparsim et minutissimè stellato-lepidotis oblongo-spathulatis basi attenuatis florahbus sensim minonbus ramulos dorales non Bquantibus, racemis sub antbesi umbellato-corymbosis fructifens̄ laxis, pedicellis tenuissimib̄ flore subdupld longionbus, flonbus muratis vitellinis, calyce concolori sparsun lepidoto, petalis calyce sesquolongionbus ungue in laminam ovato-spathulatam dilatato, filamentis minonbus basi appendice liberâ eis subasquilogâ apice eroso-truncatâ suffultis, majoribus appendice eis ultrâ medium coactâ apice tndentaU auctis, sibcuhs minimis demùm pedicello incurvo secûs racemorum axm penduûs ovato-rotundis planissimis stellato-pnbernlift stylo earum diametro dunidid brevion apiculatis, loculis monospermis, semjne ovato complanato unmarginato

Hab in herbis vallis *Guzel D4r4* suprâ *Sedushtg* in *CikaA* *httvrah* cl *Balan&a*. Fl Jumo Fruct. Sept.

Planta tnpedalis, pamcula ampla laxa, folia intermedia pollicem longa 2 Uneas lata, silicula diametro lineam lata. Species siliculia miDimis pendulis ab omnibus distinctusuna

ALYSSUM CALLICHRUM BOISS et Balansa (Sect *Odontairiwna*.)

A perenne cauibus infernè mduratis ramosis ranusque squamis stellatis noo contignis flavido-pulveisalentis, ramis allis stnlibus abbreviate densiûs fobosu aliis flonferis foliosis supernè in corymbum densum slrictum abbrevjatum abeunibus, folus oblongo-spathulatis in petiolum attenuatis obtusisaimis stellato-lepidotis ramorum sterihum magis cams florabbus usquè ad racemorum basin hncan-lanceolatis, racemis muitiflons densissimis umbelliformibus fructifens vix elongatis, pedicellis capillanbu^ flore duplô longionbus, flonbus intensè ntelliûs, sepalis concolonbus lineanbus basi lepidotis, petalis calyce sesquolongionbus ungup in hmbum oblongo-cuneatnm retusm

extus basi lepidotum sensim dilatato, filaments majonbus basi appendice lanceolate eis dimidi6 brevion suffultis, majonbus squammd cum eis ad medium usquē coahd in dentem abeunti auctis, silicua parvA pedicello erecto - patulo tenui ngido eā subduplfl longion suffulfej glabemmd elliptic^ stylo ejus diametrum dimidium aquanti snperata'', loculisumovulalis, semioibus ovatis immargiDatis.

Hab. in fēgione montanfl supenon mootis *Masmenettdagh* inter Taurtm et urbem *Cmaream* siti Floret Augusto. Fr Septembn fadāle et ultra, folia caulina pollicem longa extremitato 4 lineas lata. Gorymbi ramosissinu amaenē myrianthi, flores eis *A argentei* ferē minores, silicula 1/« lineas longa ¼« lata. AJSne *A elato* qilod eiliculis magma orbiculatis differt, magis proxlmum *A Cotrico* foliis minonbus, pamculfl racemisqae fruchfens laxia, sibctiU *ov&t&t* seminibua angustē marginatis distinctissimo. Deniqueil *tonstellatmBoiss* in Ann. Sc. Nat 1854 racemis froctiferis quoque abbreviate densis donatum differt flonbus pallidis, siliculis majonbus lepidoto-stellatis.

ALYSSUM OXYCARPUM DOISS. et Balansa. (Sect *Odontarrhena*) -

A. perenne e basi ramosissimum ramia induratib brevibus tortuosis intricatb nndis, ramnks aliis brenbus foliosis caespitosis stenlibus aliis floriferis pauld longionbus simplicibus in raceatoid sunplicem ebam fructiferum densam abeuntibus, foliis rairn^rum gterdium minimig lepidoto - stellatis cams ovato-spathulatis baā tongiusculē attenuatis subplicatis obtusissums, ramulis flonfens firacbfens denndatis, flonbus. . . . siliculia pedicello eis panl6 longion suffultu glabemmis elhpticis basi apiceque attenuatis acntiuscdlis stylo earum diametrmn dunidium subasqnanti apionlabs, loculis onioTolatis, senumbus ovatis immargwatis.

Hab. in regione alpinfl infenon montis *Mameneudagh inxer Taurwn* et urbem *Cmaream*, legit fructiferum Aug cl. Balansa

Suftnrtwulus csBftpitous, ranu fructiferi 1-2 polhces tantum longi. Siliculffi 2/i ūneas longs umbellas densas formant Species pulchella qus nobis ab omnibus *A alpestns* fornus ramulis sjmpliabus urniellas sunplices ferentibus, sdmri.16 acutatis glabermis distmcta videtur *A cmstellatwn* siliculas quoque elhpticas

habet sed lepidoto-stellatas et insuper est planta elata racemis in  
pamculas dispositis

ALYSSUM MASMENIUM BOISS. (Sect *Odontarrhena*)

A. perenne basi suffrutescens ramos stenos abbreviatis fo-  
sos caulesque elatos flonferos omnes pilis stellatis plùs minùs  
lepidotos edens, folns ramorum stenlium lepidoto-argenteis ob-  
ovatis obtusis sects nervum medium pbcatis basi in petiolum al-  
tenaatis, caulium flonferorum et florahbus minùs cams angustio-  
nbus sub antheseos fine jam deciduis, flonbus in corymbtim tei-  
muialem compositum laxumdispositis, racemis tenninahbus etiam  
fructifens corymboso-umbellatis paucifloris, flonbus viteUnis,  
sepahs oblongis parcissimè lepidotis, petahs obovatis calycem  
pauld superantibus, filamentis minonbus basi appendice liberfl eis  
aequilongiobsitis, majonbus appendice eis ad medium usquè coa-  
liti apice tndenticulatfl auctas, sihculis glabemmis pedicello eis  
squilongo vel sublongion suflultis ovatis complanatis stylo earum  
dimidio diametro longiori apiculatis, senunibus angustissunè mar''  
gmatis.

Hab in regione montand supenon montis *Masmeneiidagh*, cl.  
Balansa Floret Aug Fruct Sept

Planla pedalis vel sesquipedalis habitu *A Comcum* Tel *A. elatym*  
omnin6 referens Sibcula  $i \frac{1}{2}$  lineas longa. *A Corncam* ra-  
cemis fructifens in umbellam non coDtractis, sihculis minonims  
*A elalwm* sihculis latè orbiculatis racemisque laxis, *A cailxchroum*  
umbelhs multiflons, sihehs dimidid minonbus differnt. An hùe  
vel ad *A mwalem* vel ad aham speciem spectent specimina a cl.  
Kotschy e monte Tauro anno 1836 et rurstis anno 1853 relate sed  
semper ommnd fructibus destituta mihi incertnm.—*Odontorrhma*  
*pameulata* Fenzl et *Odontarrhena surculosa* Schott et Kotschy in  
pi. Taun 1853 mihi a fonrus *A alpestns* non sejungi posse videntur.

ALVSSUM OCHROLEUCUM BOISS. et Huet (Sect. *Ewtytmj*)

A perenne totumindumento adpresso pilorumslellatorumca-  
ntun basi suff^utesc^ns prostratum, ram is numerosis eredu po-  
milis densè foliosis sunphcibus vercorymbosè ramosis ramj& u-

curvatis, folus elongatis hnearibus obtusmscuhs basi attenuatia, racemis terrain abttus foliis supremis suffultis sub anthesi umbellato corymbosis densis fructifens parum elongatis pvaus, pedicellis patuhs flore sublongionbus, sepahs obloDgis pilis stellalis densis lepidoto-canis, petalis pallidè ochroleucis calyce snbdupl6 longionbus limbo obovato subretuso prater 1-3 pilos stellatos facie extenon glabro, filamentis majonbus pauló infrá medium denUculo auctis minonbus basi appendice ad medium usquè coahtA eis tnpló brenon auctis, siliculis lepidotis cinerascentibus minutis sub'' orbicularibus pedicello patnlo eis fere duplo longion suffultis apice subretusis stylo earum radio sublongiori apiculatis, valvulis convexis, locubs biovulatis monospermis, semimbus suborbiculaascompressis angustè membranaceo-marginatis.

Hab in Armenia propè *Tortotm* cl. Huet du Pavilion.

Rami caBspitosi 3-3 pollicares, folia 4-7 lineas longa lineam aut panló amphús lata, flores in *A montani* pauld nunores, silicate diametro unà lineà *nx* latiores. Habitus *Odontarrhenw* sed characteres *Ewlysst* in quo juxtà *A montamm* collocandum et a quo folns angustis, siliculis tnpló miDonbus, etc. egregiè differt

Obs. *A prostratum* Boiss. et Huet in pi. Amen, exs 1853 a fonnis *A alpestns* (*A torpuoso*, *Saprantco*) non sat differt et Imic speciei potymorphffi quoque adjungendum est.

ALYSSVU XANTHOCALPUM BOISS. Ann. Sc. Natur. (Sect. ~~*Evalu-*~~  
~~*sum.*~~)

A annuum multicaule caulibus pumilis procumbentibus ascendentibusTe foboos pills stellatis elongatis hirsutis simplicibus, foliis eisdem pilis elongatis stellatis densis intncatis canescentihirsntis obovatis obtusiusculis basi breviter attenuatis, racemis foliia snpremis suffultis j>er anthesin corymboso-umbellatis dein elongatis, pedicellis flore longionbus, sepalis oblongis eisdem pilis stellatis hirtis, petalis palbdè luteis calyce sesquolongionbus glabns lunbd obevato in unguem dilatatum sensim attenuato, filamentis dilatatis majonbus supersè versùs  $\frac{1}{4}$  longitudims dentaculo lmean auctis, 'mmonbus appendice latA lineam eis subbrenon apico bifidd infernè tantùm cum eis coalitd auctis, MHCHHS pedicello patulo recuxroTe eis pauld longion suflultis ovabs apice attenuatis pilis



stellato-ramosis erectis e tuberculo ortis scabemmis stylo ois subaequilongo superatis, valvuis valdè convexis, localis dispermis, scminibus immarginatis,

*A macrostym* Boiss et Hnet pi Armen exs 1853

Hab circà *Erzermm* Huet du Pavilion! Calvert t *Tokat* Aucher I m monte *Akdagh* Cappadocise Aucher i

Caules 3-5 polhcares, folia 3-4 tineas looga 1 7,-2 hneas lata, (lores magmtudims eorum *A mmtam*, siUculae 2 lineas longse Species distinctissima quoad durationem unperfectè nota a grege *A hirsute* flonbus magms aliisque notis meo sensu discedens et potiùs *A. tetraslemom* Boiss appropinquanda Hujus descnptionem magis completam hie dare utile duxi.

AIASSUM UMBELLATUM DesvauX var. *mrymbulosum* Boiss

Totum adpressiusculè stellato-pilosum, folia minima elliptico-liocana, flores capsulsque minores, eaa angustiores ellipticae

*A corymbulosum* Boiss in Balansa pi Orient exs 1854.

Hab in colhbus ad meridiem *Smyrna* siUs, cl Balansa

In *A itmbellato* Taurico caules robustiores subpatulè stellato-hirsuti, foliã majora, siliculs majores latioresque sed cetera benè convemunt, planta *Smyrnea* e loco calidion siccionque onunda est et autumo has notas non sabs graves e naturaïoci onundas ease.

CLYPEOLA ELEGANS BOISS ct Huet

Cl annua tola densè pihs stellato-Iepidotis adpressè cinerascens 4 basi muHicauliB, caulibus erectis fobosia parte saperlon parcè et corymbosè ramosis, folus hnean-subspathulatis obtusis basl attenuate, rameis sensim diminutis angustioribus, racemis terminalibus tandem elongatis laxiusculis, pedicelbs setaceis canescen- Ubus flore paulè longioribus frnctifens flexuoso-contortis, sepalis oblongis lutescentibus sparsim stellato-Iepidotis, petalis luteis oblongo-cunoatis retusis calyce duplè longionbus, sihculis ovato-orbiculatis basi apiceque subretusis stylo brevi apicnlatis disco setis diaphanis simpbcibus hirtis margme glabro inflato ultrâquo facie m torquois modum bullato

Hab in Armenia inter *Zarbas* et *Haho* cl Huet du Pa<sup>^</sup>llon

Habitus *C jouthlasptdis* sed caules basi non ascendentes, **ferè** pedales, folia ferè eadem, flores tñpld majores fln Silicula magnitudinis ejus *C jonikUupuhs* margine iorquatim inflata (galbèè *gaufry* elegantissima).

THLASPI IVOSULARE Boiss. et Balacsa. (Sect. *Pachyphragma*)

Thl. glaberrimum monocarpicum, foliis carnoeis radicalibus dense rosulatis oblongo-hneanbus oblongieque obtosis acutiusculisque ut nnp <sup>^</sup> %d crenato-denticulatis basi in petiolum attenuatis, caule craaso angulato ex axillis ramos arcuatos numerosos simplices in racemum abeuntes corymbnm formantes edenti, foliis caulinis rameisque sessilibus oblongis acutiusculis basi cordato-aiqplexicailibus aunculis rotundatw, flonbus... . racenus fructifens elongatis densinsculis, pedicellis angulo recto patantibus SJJJ-culfl pauld longionbus, silicula ovatd facie supenon planfl ob alam marginalem eevalam concaviusculd facie inferiori inflata convexft carinatd apice retusâ stylo brevissimo vix exserto apieulatd, septo semilunan bilamellato undulato-phcato, valvulis navicularibus aid marginali loculo angustiori, loculis biovulatis, semi-**MDUB** ovafcu penduhs lsvibus crassie

Hab in regione montanfi supenon jugi *Masmeneudagh*, d Balansa legit fructiferum Augusto 1855.

Planta antè florationis annum acaubs rosulft denafi foliorom cum petiolo 10-14 lineas longorum 2 <sup>'</sup>/i lmeas latomm con&tans Gaiillis flonfer crassus jam paulO suprt basin ramosus ramob 10-16 cipini racemo s<sup>^</sup>pèseniipedales sursùm arcuatos corymbosos edons ipse in racemum centralem aeasilem tenninatus Silicula 3 lineas longa. Species inter omnes crescendi modo distinctissima aulli afDnis.

THIA&PI HUKTII BOISS. in Huet pi Armen exs 1853. (Sect *Nonuma*)

Tb annum glabrum glaucescens a collo simplex vel pluncaule, caulibus herbaceis acutè angulatis parte inferiori foliosis superaft subumbellatim ramoso-corymbosis, folus lnfinis oblongis obtosis basi longè attenuatjs, caulinis e basi sessih longfc et obtusiusculè

aunculatd oblongis supremis acutis omnibus remote repando-denticulatis, racemis demum elongatis centrali sessili lateralibus ramos breves parces fohosos terminantibus, pedicellis florifens erecto-patulis flore duplo longioribus filiformibus, sepalis ovatis pallidis latiusculè albo-marginatis, petalis albis calyce  $2\frac{1}{2}$  longioribus limbo obovato in unguem angustato, siliculis pedicellis patentissimis eis 2-3 longioribus suffultis ovato-orbiculatis apice emarginatis stylo emarginaturum vix excedenti superatis circulanter alatis ala loculo dimidio angustioribus, loculis bivulatis, seminibus oblongis peripheries stnatis

Hab circa *Tortoum* cl Huet du Pavillon Fl. Fr.que Junio.

Herbâ habituque affinis *Thl arvensi*, eumè distincta pedicellis fructifens horizontalibus siliculis multo minoribus diametro tres hincas longis latisque angustius alatis, loculis 2 nec polyspermis. Planta fructifera ferè pedalis. Flores eius *Th arvensis* paulo majores. Habitu quoque refert *Th Prvlongt* seminibus papillois non-stnatis alisque notis distinctissimum.

THLASPI BREYICAULE BOISS et Ky. (Sect. *Neurotropis*.)

Th. annuum glaberrimum caule nano simpliciter oligophyllo, foliis radicalibus minulis ovatis breviter petiolatis superioribus lineari-oblongis sessilibus basi acutè aunculato-amplexicaubus, foliis superioribus tenerrimis etiam fructiferis confertè subumbellatè, pedicellis tenuibus erecto-patulis siliculas longitudine dimidid brevioribus siliculis orbiculatis apice sinu angustissimo obcordatis stigmatè sessili in fundo emarginaturis superatis, ala marginali medio versus loculo aequalatè basi angustata\* Nervoso-reticulatè nervo marginatè, loculis 6-7 spensis, seminibus oblongis laevibus

Hab in subalpinis *Bludm* supra *Zebdant* Antilibam cl Kotschy qui fructiferum legit Junio 1855

Planta e meis specimenibus 1-1 V, pollicans. Siliculae majores diametro 4 lineas latae Affine *T Kotschyano* quod differt foliis caulinis obtusè aunculatis, racemis fructifens elongatis, emarginaturis sinu aperto *Th orbiculatim* stylo elongato aliisque notis longius differt

**THLASPI LIACINDM BOISS et Huet in pi Amen exs 1853. (Sect *Pterotropts*)**

Thl monocarpicmn glabrum glaucescens, radios breviter ramosos truncato crassiusculo, caule sspius solitano erecto folioso supernè in 2-3 ramos subcymbose diviso rans simplici, foliis radicalibus rosatis minutis obovatis oblongisve in petiolum brevissimum attenuate obtusè crenatodenticulatis raris uitegris, caulibus e basi sessili obtusè et obsoletè aunculatis oblongis integerrimis acutiusculis strictis, racemulis demum elongatis, pedicellis filiformibus flori squilongis, sepalis oblongis petaloideis pallidè hinc late membranaceo-marginatis obtusis, petalis calyce plus duplo longioribus pallidè lilacinis unguis in limbum oblongo-spathulatum sensum dilatato, siliculis (immutatis) pedicello erecto-patulo eis sequilongo soflutis oblongo-spathulatis basi attenuatis apice rotundato retusis stylo longo apiculatis alatis ad anticè loculo angustion, loculis 6 spermis \* .

Hab. in Armenia boreali in via inter *Gumuchchant* et *Zazalar-chartf* cl. Huet. du Pavilion qui legit flonfenun Haiio 1853.

Caulia fructifer semipedalis longiore, folia infera cum petiolo 6-9 lineas longa Racemi fructiferi 3-4 pollicaria. Flores ferè magnitudinis eorum *TM praams* Species pulchra ex affinitate *TV ockrolcuia* Boiss et prasertim *Thl. elegantts*, ab eis colore florum, siliculis apice non emarginatis distinctissimè

Obs *TW muranthtm* Boiss. et Blanche pi Syr exs specimenis numerosioribus a cl Blanche et Gaillardot acceptis a *Th perfoUato* floribus subminoribus silicibus pauld latius alatis non sat Viffert

**CRENULARIA EUNOMIOIDES Boiss**

Cr' glaberrima caudice crasso lignoso tortuoso ramos suffrutescentes denudatos glaucos flexuosos fragiles edentl, ramis novellis tenibus fragilibus inferne fohosis superne breviter denudatis in racemos tandem oblongos laxiusculos abeuntibus, foliis oppositis ovato-subspathulatis obtusis integerrimis glaucis carnis in petiolum brevem breviter attenuate, pedicellis filiformibus erectis

ilore dupl6 longionbus, sepalis membranaceis oblongis violaceis albo-marginatis, petalis roseo-lilacinis calyce tnpl6 longionbus ungue in Umbumoblango-spathulatum rctusum sensim dilatato, filamentis omnibus liberis edentulis majonbus basi subdilatatis, siliculis pedicello stncto eis paul6 longion sufiultis obovatis apice lationibus emarginatis stylo emarginaturum non excedenti apicnlatis aid utnnqufe rubella phcato-stnatâ Integrâ supernê loculo squilatâ infernê sensim angustatâ marginaUs

*Lipophragma eunomotdes* Schott et Kotschy in Kotsch. pi. Taur exs N°32,23\*et201

Hab in schistosis mendionahbus vallis *Gwguta* Taun Gilicici alt 700^ cl. Kotschy Fl Jun Fruct. **Jul**

Omnibus notis, facie, fragilitate, pedicellis stnctis, filamentis hbris edentuhs, siliculis citd decidui umloculari, semine pleurorhizeo *CrenularuE* genen adnumeranda, a *Cr orbiculatd* Boiss cxiiniê distincta siliculas aid non squall angusld crenalatd sed integerrimd versûs apicem siliculat dilatad.

ÈiioNEMA. SGHISTOSUM Boiss. et Kotschy

*Mih* perenne glabemmum a basi ramosum ramis pumilis ascendntibus ad apicem usquê densê fohosis simplicibus vel ex axillis suporionbus parcA ramuligens, folns erecto-patenUbus lineanbus elongatis finnulis acutiusculis parte inferionattenuatis, floribus in racemos terminales umbelhformes fructiferos parùm elongates dispositis, pedicellis filiformibus flore paul6 longionbusj sepahs vindi-rubellis oblongo-hneanbus angustê membranaceo-marginatis, petalis roseis oblongo-cuneatis retusis calyce subdupl6 longionbus, filamentis omnibus ubens edentulis loogioribus basi latere extenon subdilatatis, siliculis obovatis concavis alâ margineeroso denticulate loculis multô lation longionque utnnquê instructis profund6 apice flssis stylo flssurâ multd brevion superatis, seminibus oblongis obliquê notorrhizeis

*Ibens sckwtosa* Kotschy pi Taur exs.

Hab in schistosis Taun Cilicicicl Kotschy

Plantulffi suffrutescentis rami 2-3 pollicares. Folia crebernma b-7 Uneas longa Uueae<sup>3/«</sup> lata, floras llhs *Mih saxatilu* tnpld majorrs Silicula 3 lineas aut paul6 amphûs longa unâ facie concava

alterâ convexa. Species foliis longis angustis Uneanus densisracemoque contracto insignis, habitu *Ibertdem* referens, invito caractere staminum edentulorum *JEthionema* U nee *Eunomtw* adsociandapropè <sup>fi</sup> oondt/bftumDCDelessertlc II, tab. 76 collocanda quod foliis saltern dupld brevionibus filamentiaque dentatis differt.

JETHIONEMA PULCHELLUM Boiss. et Huet.

*JEth* suJfruUcosum palhdè virens ramis numerosis erectis vel ascendentibus punulis densiusculè foliosis superaè corymbosè 2-4 ramulosis ranùs simpheibus, foliis elhpco-luieanbus obtusis obsolete mucronulatiB basi attenuate, racenus etiam fructiferis densis abbreviates, pedjcellis erecto-patulis flon squilongis, segahs oblongis obtusis violaceis albo-marginatis, petalorum roseorum calyce 2 7«pl° longiUhim lamind obova<sup>^</sup> filamentis edentulis majoribus basi dilatato-subgibbosis, siliculis pedicello stneto longionbus in racemum densum oblongum subimbricatis obovatis concavis alâ subplicatfl erosodenticulatâ loculo mult6 latiore eoque superaè sqtulongft margmatis emargmaturfl nssunDformi profundd, stylo brevissimo, loculis monospermis.

Hab. in incultis propè *Erzmmm* secfts viam qua? ad Persiam ducit.

Rami 4-5 pollicares dumulos caspitosos formantes Folia 3-4 lineas longa supernè lineam aut paulò ampliùs lata versùs basin ramorum valdè diminuta. Flores magnitudinis eorum *Mth condxfoln*. Racemus fructifer polhcaris vel paul6 longior. Habitu affline *jEth. Armeno* Boiss pro quo prunum habuimus sed hoc habet folia acutiora et pauld angustiora, sibculasque minores arigustiùs alatasahsdivergentibussinumterminalem non flssuraeformem sed latiasimum formantibus. Affine quoque *JEth cortdifoho* DC Deleas. Ic. t. 76, quod differt alis silicularum integns apice rotundatis neo acutatis.

JETUIUWEMA CAPITATUH BOISS et Balansa

iEth. glabemmujii dumulosum basi ramosissimum hgnosum tortuosum, ramis numerosis csspitosis erectis brevibus foliosis simpUcibus, folns palhdè virentibus hnean-oblongis hneanbu&ve

obtusis basi attenuatis erectis, flonbus , racemis terminalibus fructifens abbreviatis ob pedicellos breves axi stnctos densè capitatis, silicuis ovatis latere extenon convexis intenon concavis virentibus apice profundè emarginatis sinnbus rotundahs stylo brevissimo apiculatis, alls loculo multd lationbus margins erosuhs.

Hab ad rupes qtubus insidet castellum diratum *Pylarum Cthaarum* Fructiferum fine Junii legit cl Balansa.

Ramuli fruchferi ngidi 3-4 pollicares, folia 3-4 hneas longa apice lineam lata angustiora ve Silicuto 2-2 '/\* hneas longslataeque in capitula terminalia condensate quo characlere haec species quoad flores ignota al) añlnibus *JEth corùkfdko* et *MXh Armeno* in quibus racemi fructifen elongati sunt optimè distinguitur

JSTHIONEUA SPECIOSUM BOISS et Huet

iEth suffmtescensglaucumramispumilis ascendctibus infeniè ssepiis denudatis dein foliosis simpbcibus, folus carnosulis oblongis ellipticisve sessilibus obtusis vel acatiusculis Integemmis, racemis tenmahbus flonfens umbellatis fructifens laus, pedicelUs capillanbus flore subbrezionbus, sepalis oblongis virentibus obtusis albo-marginatis, petalis roseis calyce 3<sup>f</sup>/<sub>9</sub>pl6 longioribna lamind obovatd subretnsA, filamentismajonbussubdilatais latenabter obtus6 denlatiSj sihcuus pedicello patulo-recorvo brezionbus suborbiculatis latere uno plamosculis altero convexis alà dentatolobata loculis angustion circumcircâ marginatis apice sinu rotundato termmatis stylo emarginaturd multd longion su^eratis, locuhs monospermis

*Mth speciosum* et *JEth elliptwum* B et H in pi Armen exs. 1853

Hab in Armenia inter *Gumuchhant* et *Zazalarhani* et propè *Erzermmi* cl Huet du Pavilion Fl Maio. Fr Jun

Rami 2-3 polhcares, racemi fructifen tandem bipollicares Flores e maximis generis eos *JEth grandtflon* aequantes Silicala tantvun 2 7t hneas longa Species elegantissima sihculfl angustè alata apice acutiuscul6 circumcircâ dentatolobafa distincta *Mth fimbivtio* accedens quod differt foliis tnpló majonbus, silicuis basi valdè attenuatis alà supernè loculo lation marginatis

✓ "JETHIONEMA LACERUM Boise et Balansa

vEth perenne glaberrimum palhde' virens radice crassa lignosa e collo edenti 2-3 caules pumilos ascendentes vel basi procumbentes fohosos, folus sessilibus oblongis vel oblongo-lanceolatis basi rotuodatis vel abrupte attenuatis raniis subcordatis infeioribus obtusiusculis supenonbus acutis racemo teraunali simplici florifero condensate\* umbeUniformi foliis supremis stipato ftuctifero elongato, flonbus majusculis, filamentis omnibus libens edentulia majonbus inferni dilatatis, petalis albidis dein purpureis calyce duplo lodgioribus uigue in laminam obovatam dilatato, pedicellis erecto-patnlia subincnrvs silicula subbrevioribus, sikculis ovatis sinu angastissimo sspd fissursformi emargmatis stylo elongate lobos aquanti vel superanti, aid viridi radiatim subphcatd eroso-denticulatd loculis albidis lation

Hab in rapestribus partis snpenons *Pylarum Ciltwtarum* Tauri c\ Balansaj fl et fr ineante Julio

Caules 3-5 pollicares, folia 6-9 lineas longa 2-3 \*/• lata Race- mi fractifen 1-3 polhceslongi Silicula 3-4 lineas longa Habitus *JEth. stylost* DC. quod differt stamimbus majonbus connatis alfs- que gilicnls integns; affine quoque *Mth flmbnato* Boiss quod differt filiculi longion ob alas inferne attenuatas obloDgocuneati majon, alis loculo angustioribus

**ETHIONEMA CABDIOPHYLLUM** Boiss et Huet var *edmtvia* Boiss et Huet

Filaments majora dilatata quidem sed edentula Silicula obtu- atus margine dentata, caeterum omnia speciei

Hab propè *Tortown* Anneniae d Huet du Pavilion

**ISIVIS VELUTINA** Boiss et Huet (Sect *Samarana* )

Is annua caule glabro rubello a medio vel a basi paniculato, foliis camosulis glaucescentibus glabns infenonbus obovatis basi breviter attenuatis supenonbus sessilibus baa obtuse aunculatis oblongis supremis hneanbus acutis, pedicellis patulis post anthesw



dcflexis apice incrassatis (lore dupld longionbus, sepalis oblongis apice cnspulo-lanatis, petalis palhdē ochroleucis calyce sesqmlongionbus, siliquis (immaturis) ovato-tnangulanbus basi rotundatis apice attenuato-acutiuscuhs alá tomentellâ loculum longiûs albo-tomentosum circumdante eoque latiore

Hab in valle *Kassuklu* Armenia boreahs cl Huet du Pavilion

Planta vix pedalis, folia infenora 1-1 1/2 polhcem longa 8-0 lineas lata Racemi 2-3 pollices longi Ai&Dis I *Candolkance* Boiss differt radice aimud nee bienm subperennanti, folus nunonbus obtasissuuè nee obtusè aunculatis infenoribus ea *Moncandus arvensts* referentibus, siliqms non utnnque rotundaUs sed basi obtusissimis apice at in / *apiculatd* stylo elongato diversissimA acutatis

ISATIS CALLIFEHA Boiss et Bal. (Sect. *Glastum*)

Is perenms? basi hgnescens caule erecto tereti foboso albido patulè hirsuto paniculato-ramoso, foliis hirtnlis margine breviter cihatis Tadicalibus oblongo-lanceolatis basi longè attenuatis obtusmsculis obsoletè denticulatis integnsve, caulinis et rameisbasi sessili aunculatâ amplexicaubbus aunculis elongate obtusis, racemis fructifens elongatis laxiusculis, pedicellb refractis e basi capillan apice dilatatis siliculs sabaaquilongis, sibculâ glabri elliptic^ apicc rotundatâ obtusâ basi breviter attenuate loculo utnnquè in callumoblongummedio sulcatum valdè prominenti.

Hab. in fauce fluvii *Guzel D6r4* suprd *Sedichtg* in *Cilictd* littorali cl Balansa Fl. et Fr Apnli.

Planta bipedabs caule infernè lignoso et crasso quam e\ rosuld in specimine flonfero stenli perennem esse suspicor; folia infenora cum petiolo 6 pollices longa polhcem autsesquipollicem lata, caulina infenora suprâ basin sa?pè constneta. Flores aurei. Sihcola *hex* lineas longa 2 1/2, lata Species loculo utnnquè prominentercal-lifero facilè distinguenda

ISATIS TOMENTELLA Boiss el Bal. (Sect *Glastum* )

Is perennans radice mduratâ crassiusculd e collo post anthesin rosulas laterales emittente, caulibus albidis Ditidis erecto-flexuosis

latè corymboso-pamculatis infernè patulè hispidis cseterùm glabns, folus.in planta fructiferá jam exsiccatis infenonbus et rosularum lateralium oblongis obtusis infernè in petiolum longè attenuate patulè hispiduhs, cauhnis et rameis minimis glabns e basi acutiusculè sagittatà linean-lanceoiatis, racemisramulos termmantibus etiam fructiferis brevibus, pedicellis filiformibus flore subdupld longionbus fructiferis pendulis apice valdé incrassatis, petahs croceis lmean-oblongis sepalis oblongis membranaceis Havidis sesquiongnbns, siliquis retrorsiim velutuns tandem rubello-nigriscantibus hnean-oblongis infernè subattenuatis apice velrotundatis vcl trnncato-subretusis utnqnqfe costfl angnstA elevatà longitudinah percursis

Hab in regione mediS montis *Sipyh* supra *Magnesium* cl *Balansa*.

Planta bipedalis, flores eis / *tnctonce* paul6 majoros, racemi fructifen 2-3 pollicares Siliqua 6-7 lineas longa 1 < / t lata, collocanda propd / *cmescentem* a quA sat differre videtur siliquis brevionbus et prasertim multd angustionbus eas / *Orwntahs, Alcppiae* et aliarum specierum anDuarmm referenti.

ISATIS FRIGIDA Boiss. et Kotschy (Sect. *Gla&tum*)

Is. perennis glaucescens caudice crasso lignoso caules subterraneos surcnlosque foliosos basi elongates denudatos edenti, cauhbus floriferis glabns erectis humilibus teretibua albidis jam pauld suprft basin dichotomè et parcè paniculato-corymbosis, foliis infimis et surculornm oblongis obtusis mtegemnus in petiolum longiusculum aitenuatis glabns vel breviter hirtelhs, caubnis sessilibus Qvatts oblongisve basi obtus6 auriculatocordatis glabns summis hneanbus auriculatis, racemis ternunahbus brenbus laxis, pedicellis filifonnibus patnhs flore subdupld longionbus fruclifens pendulis apice subincrassatis, petahs lutcis sepabs oblongis sesquiongnbus, siliquis (immatuns) utnqnquè totà superficie velutinis oblongo hnearibus obtusis basi subattenuatis

*Ieatts siifruteseens* Boiss in Kotschy pi Cilicic 4853

Hab in declmbus cacununis *Metdests* Taun Cihcici snprS fodinas plumbeas *Qukk* alt 9000' cl Kotschy

Planta 8-10 polhcaris Folia infenora cum peliolo 4 7<sub>9</sub>-2 pol-

hæcana Siliquæ forma *el Is canescens* referre videntur Species  
 daratione perenniet rhizomale stolonoso insignis *^ro^h Is. Alpmam*  
 collocanda sed ab eâ fructu diversissima Nomen specificum impro-  
 pnum mutavi ex observatione cl Balansa qui plantam vivam obser-  
 vavit

## VIOLARIE ^

VIOLA. AIIIMENA BOISS et Huet (Sect *(Morales)*)

V acaulis extolonosa caudicibus tenuibus induratis, foliis rosu-  
 latis petiolo pilis deflexis hirsute eis breviori suffultis ovatis basi  
 sinu angusto profundè cordatis apice attenuate acutis obtusè cre-  
 nulatis utnunquè præter papillas minutissimas glandulosas pilis albis  
 ad nervos subtilis copiosionibus hirsutis, stipulis lanceolatis hirsutis  
 longè setacco-acuminatis setaceo-fimbriatis fimbriis apice rabro-  
 glandulosis, pedunculis hirtulis folia subaequantibus, floribus nu-  
 nutis, sepalis oblongis obtusiusculis ciliatis basi breviter et obtusè  
 appendiculatis, petalis supra basin parvè barbatis calyce subduplo  
 longioribus, stylo breviter uncinato, calcare recto obtuso sepalis  
 ab eo longioribus

Hab circa *Erzeroum* cl Huet du Pavillon Fl Aug

Foliorum lunbus sub onthesi 8-9 lineas longus basi 6-7 latus  
 flores eis *V palustris* rix majores. Species cujus specimen unicum  
 vidi et cujus fructum infaustè non novi, indumento formæque folio-  
 rum ab omnibus hujus sectionis mihi notis distincta juxta *V Gbel-  
 meam et Libanoticam collocanda*

VIOLA DICHIROA. BOISS et Huet (Sect *Melamum*)

V perennis radice caudiculos numerosos breves infernè denu-  
 datos sspè indurates edenti, folius ad caudiculis apicem con-  
 fertis obovatis oblongisve obtusissimis integris in petiolum eis s s-  
 pius longiorem attenuatis pilis brevibus albis lente vix perspicuis  
 præsertim secus margines et petiolos hirtis, stipulis linearibus  
 elongatis versus basin lacinulâ auctis raris folio similibus sed  
 paulo minoribus oblongis in petiolum undentatum attenuatis, pe-

dunculis foUa superantibns snpernè1-2 squamnlas minimas afindas ferentibus, sepalis oblongo-lroearibus obtosis margine angttstè membranaceo glanduloso-serrolatis denticulis ascendentibus basi breviter et obtusè aunculatis, petalis calyce duplò longionbns violaceis obovato-rotundis mferiori abcordato basi eximiè angnstato pallidOj calcare cylindnco obtuso sepalis vix squtfongo

Hab. in monte *Gakdagh* Armenis cl Huetdu Pavilion Pl. Jun.

Planta inter deckvia saxosa crescens 2-3 pollicans, folia 4-6 kneas longa pebolo pins minus elongato suffolta. Flores eis *V ealcaratw* ferè dunidi6 minores, Afflnis *V Clementiana* Boiss. differt colore florum, petalis magis rotundatis inferior! *pasi* valdè angustato lobis magis divancatis, calcare dimidi6 brevion

## POLYGALEJE

POUGALA TELEPHIOIDES BOISS et Balansa (Sect *Polygalun*)

P perennis vindis a collo ramosissima ramis prostratis flbformibus densissund et unilateraliter foliosis muintisaiinë adpressè et sparsim birtis, foliis minutis oboratis obtusissimis breYissunèpeUo\* latis glabns, racemis termmalibus capitaUspauciflons folus supremis suffultis, flonbus parvis vividè esnileis, bracteis nunubssunis, pedicellis calyci aequilongis, sepalis oblongo-lanceolatis albo-marginatis, petalis oblongo-spathulatis acutiusculis basi attenuatis nervis tnbus ramulosis percursis

Hab in regione alpiná infenon montis *Masmeneudagh* ad septentnonem Ciliciae siti m humidis Septembn flonferam legit cl Balansa

Habitus *P supinee* vel *P depress*® sed folia et flores dumdid minora, caules densiùs fohosi etfohorum forma diversa Magis afflnis *P subumflora* Boiss et Heldr. quae habitu simillima differt flonbus axillanbus solitam, petalis subumnervus

POL\GALA ANATOUCA BOISS et Heldr var *flonbunda*

Racenu florales densiores longiores saepè 5-6 pollicares, Flores albidi vel rosei paulò majores

*P flonkinda* Boiss et Huet in pi. Armen. exs 4853  
 Hab in incultis circa *Erzeroum* Huet du Pavilion! Galvert I

POLYGALA. MCNBYANA Boiss et Reut (Sect *Chamwbuxus*)

P perennis glaberrima caudice lignoso multicauli, caulibus erectis pedibus magnis acutè angulatis infernè denudatis pulvims fohorum delapsorum cicatricosis supernè breviter ramosis ramis densè fohosis, folns sessilibus ellipticis vel elliptico-lineanbus utrinquè attenuatis apice acutis vel obtusrasculis mucronatis subpungentibus margine subrevolutis, pedunculis ad axillas supremas ramorum brevissimus 1-2 flons, bracteolis ad pedicellorum basin rubellis ovatis deciduis, sepalis lateralibus ovatis superion ferè duplè majon oblongo concavo basi saccato omnibus obtusis margine ciliatis albidis, alis obovatis obtusis in unguem sensim attenuatis corollas subaequilongis\*lbis vel pallide carneis apice flavoscentibus, corollae lobis lateralibus albidis vel roseis lobo intermedio aurantiaco lateralibus paulo longioribus bilobis lobis integris, capsula junon pland ovato-rotunda retusè anguste marginati

Hab. in quercetis (*Quercus coccifera*) collis andi *Busfer* propè Oran ad alt 300 supra mare in consortio *Cish ladamfen*, *Gmwtat hntfolME*, *Erica arborea* Cl. Munby Floret Februario

Affinis *P chamwbuxo* quae differt ramis procumbentibus elongatis radicanibus minus acutè angulatis puberulis, folns crassioribus oblusioribus magis dissitis, alis latioribus abnuptius basi attenuatis, corollae lobo medio quadridentato *P Mtnbyana* habitu et folns *Gent& tam tnetonam* refert

## SILENE^E

SAPONARIA ATOCIOIDES Boiss var *Cakerti*

Folia minora ovato - spatulata obtusissima, in petiolum longè attenuata Inflorescentia etiam per anthesin laxiuscula Calyces iam sub antheseos fine subinflati Radix ut in formà typicè perennis

*S. Calverti* Boiss in Huet pi Ann. exs  
 Hab. in Armenia supra' *Memrd* (Huet da Pavilion).

DIAMTHUS ASPERULUS Boiss. et Huet. (Sect. *Armenasttwn*)

D. basi suifrutescens multicaulis caulibus erectis pinnulis simplicibus angulatis fohosis glabns, foliis vindibus flaccidulis Uneanus inferonbus obtusiusculis caetens acutis margine scabndnhs intermedia eequantibus subsuperantibusve, vagina folii latitudie dupld longion, flonbus 4-6 m capitulum terminate dense congestis, phyllis involucrabus paucis e basi angustè lanceolate longè anstatis floras aequantikus, squanus calycinis qaaterms oblongis obtusissunis pallidis membranaceo-marginatis calycis tubo quadruple) brenonbus apice nervulosis in mucronem eis dimidid breviorum stnclum asperulum abruptè abeuntibus, calycis abbreviati cylindnci supernè subangustati stnati rubelli dentibus oblongis margraatis ciholatis apice in mucronem brevem attenuatis, petalorum lanund rubrà minutà oblongd concolon paucidentatd.

Hab. non procul ab urbe *Erzeroum* in vid ad Persiam cl Huet du Pavilloo.

Gaules 4-6 polhcares, folia intermedia pollicana lineam dimidiam aut lineam lata Calyx quinque lineas circiter longus Species propè *D. Parnasstcum* collocanda qui differt visciditate, caulibus elatis, phyllis involucrabus dilatatis brevissimè anstatis, \* calyce longion, etc.

DIANTHUS HASHENJGUS BOISS (Sect. *Armertastrtm*)

B. perenms totus pube breviss\ma crystalline sub lente velutinus caulibus prostratis denudatis ramos stenles abbreviatis apice fohosos caulesque flonferos edentibus, folus lanceolatis latis ljevibus ngidis acutis nervis tribus vahdis laterahbus marginantibus percursis ramorum stenum paucis rosulatis, fertiliu strictis inteimedio m\td brevionbus, \agini fohi latitudine sesquilongion, caulibus supernè parcè et breviter dichotomis 2-4 fasciculos S-4 floras breviter pedunculatos subcorymbosos ferentibus, flonbus scssihbus, bracteis c basi lanceolaU subulatis squa-

mas Don aequantibus, squamus calycinis quaternis palhdis velutino-pruinosis ovatis margine membranaceis cuspidè subulata" eis vix brevior superatis calyce brevioribus, calyce cylindrico apice subangustato rabello stnato scaberrasculo dentibus lanceolatis acutis, petals e sicco pallidis ungue lato in limbum parum exsertum ebarbatum minutum obovatum apice obliq. denticulatum ab-

UDtl

Hab in regione alpina" mantis *Masmeneudagh* ad boream Tann Cilioci siti cl Balansa Fruct. Septembn.

Folia rosularum 8-10 lineas longa lineam et amplius lata, caules 8-10 pollicares, calyces 8 lineas longi. Ex affinitate *D pnbescens* Sibth et *D gracilis* Sibth., foliis latis brevibus angustis, etc. distinctus

DIANTHUS NOEAMS Boiss (Sect *Caryophyllum* )

D perennis multicaulis, caulis erectis elatis brevissimè velutino-tomentosis supernè laxè et dichotomè paniculate ad foliorum ortum subnodoso-incrassatis, foliis angustè linearibus subulatis elongatis subtù<sup>9</sup> elevatum tnoens nervo medio lato tunonum hirtis caulinis glabrescentibus internodio subbrevioribus<sup>^</sup> vaginè folii latitudine duplè longioribus, floribus longiusculè pedunculatis solitariis, squamis calycinis quaternis palhdis adpressis oblongis teniter striatis flembranaceo-marginatis ciliolatis in raucronem brevem attenuatis calyce triplo brevioribus, calycis tubo cylindrico toto bello glabro dentibus oblongis adpressè velutinis asgaste albo-marginatis acutis, petals albis laminis oblongo-cuneatis glabris acutè dentate dentibus area centrali diametro quadruplè brevioribus

Hab ad *Mendeh* propè *Bagdad* cl Noè Floret Junio

Gaulces bipedales, folia turionum 2-3 pollices longa caulis sesquipedalium lineam dinudiam lata Calyx 7 lineas longus Petala parva Habitus *D serratifolius* Fl Græcae qui celerim caulos simpliciter unitifloros et calyces breviores habet, magis affinis *D polydoru* et *D Anatolico* prater alias nulas locis abbreviatis calycibusque dimidiis brevioribus, etc distinctis

DIANTHUS MULTICAULIS Boiss et Huet (Sect *Caryotfyltum*)

D cespitosus multicaulis rhizomate indurato ramoao, caulibus punuhs erectis teDuibus foliosis unifloris, folus radicaibus caulinisque an&ustissimè hnearibus flexuosis (siccitate?) phcatis margine scabndis, cauhnorum vaginâ fain latitudine multoties Ion-gum, squamis calycims quaterms rubello-violaceis oblongis sub-squilonis in mucronem tenuem eis 2-Sfpld breviorē abruptius-culd attenuatis, calyce rubro-violaceo oblongo-cylindnco apicecon-stincto squamis dupld longion striato ad tertiam partem usqud in denies lanceolatos ciliato-marginatos mucronatos flsso, petalorum lamind roseâ unberbi obovatâ submtegrfl

Hab. in Armenia monte *Pakmteucken* alt 700(7-8000'et in valle *Techdagh all 6000^8000'* cl Huet, circa £r^mmmAuchern° 496

PLanta 5-8 pollicans, folia radicalia pollicaria omma angustis-sima Calyces 7 hneascirciterlongi HabituZ) *pungentem ci&mnēs* referons sed ab eis caulibus semper umflons, petalisintegm, folus tenuissimis discedens Magis affine *D mtegro* folus latis abbreviatis, squamis calycims brevibus, calyce breviter dentalo (amen distinct\* *D Ldmcfatzionus* tandem squamarum formâ et longitudine nostram plantam refert sed differt flonbus dupld longioribus alusque nobis

DIANTHUS FraBRUTUS M B var. *brochyodontus* Boiss et Huet.

Caules tenuiores. Squamae calycine bfeviores quatemae nee ^t sspiùs in formâ typicâ senaa Petalorum limbn® areas intermedia\* latitndine dimidi6 breviores

D *dwrniosus* Boiss et Huet in pi Arm exs 1853

Hab. in Armeniâ propè *Tortoum* cl Huet t cl Galvert

SII^NE SIHTORU Boiss et Heldr (Sect *Ctmomorpha*.)

S. annua caulibus abbreviatis diffusis breviter ramosis pubo brevi densâ patulâ velubnis, fohis radicaibus hneari-spathulatis sub anthesi emarcidis caulmis hnearibus basi breviter connabs ~~omnibus~~ obtu&s puboscenti-viscidulis, peduncubs teiminalibu&



1-4 in racemum brevem corymbosum dispositis calyci subaequilongis rectis, calyce florifero cylindrico fructifero ovato-como basi vix umbilicato viscido tenenter sub 30 serialo ad tertiam partem in dentes triangulo-lanceolatos acutos rigidos dmsc, petalis capsula" comed apice in collum attenuate calyce subbrevis, semibus cinerascens compressiusculis dorso canaliculatis oculo armato vix et tenuissimè rugulosis

Hab in arenosis montibus Insularum *Tenos et Mycont* Archipelagi cl. Sartori

Gaules in meis specimenibus in orbem prostrati 4-5 pollicares internodi abbreviatis nodis incrassatis Calyces fructiferi 4 lineas longi Affinis *S. arnica* qua differt foliis acutis (Sj flonibus ferè duplo) majonibus, calyce non viscoso basi valde umbilicato ultra tertiam partem 5 dentato, capsula apice minus attenuate, seminibus manifesto rugulosis *S. Lydia* cujus flores quoque minuti longiora differt caulibus rectis, dentibus calycis subulatis longissimis

SILENE REUTEHIANA BOISS et Blanche. (Sect *Annuw.*)

*S.* annua glabra viscidula caule erecto tereti inferè crasso ad nodos valde incrassato jam a parte inferiori oppositè ramoso, foliis in parte inferiori caulibus approximatis lanceolato-linearibus acutis basi dilatata brevissimè connatis nervo valde subtus prominent! percursis, foliis superioribus rameisque angustissimè linearibus brevissimis, ramis elongatis virgatis nudis erecto-patulis simplicibus vel oppositè ramulosis, flonibus ad extremitatem ramulorum inferiorum solitariis ad ramorum extremitatem fasciculato-capitatis, calycibus clavatis elongatis membranaceis albis dentibus ovatis obtusis nervis 10 prominulis, petalorum roseorum limbo profundè retuso, capsula oblonga carpophoro breviori, seminibus minimis compressis facie planis dorso subcanaliculatis minutissimè rugulosis

Hab ad *Soltma Libani* cl Blanche Aug 1847, in arenis ferruginosis Libani inter *El Meroudj* et *Beckfaia* cl Gaillardot Jul. 1853

HSBC species minus cum *S. eompacl* confusa ab ea differt foliis etiam inferioribus angustioribus, superioribus et rameis non oblongis latis valde evolutis sed brevissimis bracteiformibus, caule

e parte inferiori opposita et virgatim ramosissimo nec simpliciter vel supernè tantum breviter ramosa, floribus ramulorum inferiorum solitariis, petalis retusis nec integris, semmibus dimidiatis in donibus.

SILENE GAPILLIPES Boiss et Heldr. (Sect. *EunUme.*)

S. perennis, caulibus basi decumbentibus pubes crispulis patulis mox iterum hirsutis demum fractis erectis & glabrescentibus formibus pluries trichotomis, ramis tenuibus elongatis, foliis palmaribus Yirentibus utrinque pubescentibus obovatis obtusis in petiolam lanuginosa aequilongam sensim attenuatis, superioribus oblongo vel linearispathulatis basi attenuatis breviter mucronatis, bracteis linearis-subulatis subulatisque brevibus, pedunculis capillaribus unifloris 3-4-pluribus longioribus, calyce membranaceo albido pallidissime virentilineato dentibus brevibus obtusis, petalis e sicco albidis vel palmaribus roseis lamini linearis-cuneata bifida ungue dilatato margine longe ciliato vix latior, corona\* nulla, calyce fractifero clavato, capsula ovata carpophoro edax breviter suffluta.

Hab. in faucibus speluncarum superius in Isauria cl. Heldreich qui specimen in herbario retulit. Fl. fine Junii

Caulis filiformis pedalis basi procumbens. Folia inferiora in petiolo 4-15 lineas longa 5 lineas lata. Pedunculi superius bracteolas superiores pollicares. Flores in Saxifragaceis. *Saxifragaxalid miores* Affinis *S. Smitthtt* B. et Heldr. a qua differt foliis pubescentibus multum majoribus, caulibus multum ramosioribus, petalorum unguibus ciliatis.

SILENE MONTBRETIANA Boiss var *KurMa* Boiss. et Noe.

Folia longa lanceolata in petiolum longum attenuata, pubes brevis retrorsa forma typica; calyces autem distinctis stamini anguste tubulosi, alabastra cyathacea nec subclavata.

SILENE ISPIRENSIS Boiss. et Huet (Sect. *Etmene*)

S. perennis basi suffrutescens tota pubes brevissima retrorsa virentino-cinerascens, ramis erectis foliosis apice cymoso-trifloris addito saepe ramulo axillari inferiori unifloro, foliis lanceolatis brevibus acutis juniorum brevium in petiolum brevem atten-

nuatis, caulmis sessilibus, pedunculis calyce dundidū brevionibus glanduloso-puberulis florum laterahum apice mutū bibracteatis, calyce palhdē virenti-membranaceo glanduloso-pubescenti rubello-nervoso dentibus triangulan-lanceolatis obtusiusculis latè albob-membranaceis, carpophoro (per anthesin) ovano sublongion, petalis (e sicco) hvidis ungue lato in lunbum apice tantum bilobum dilatato, appendice nullft

Hab. in *Armernd* propfe *Ispir* cl Huet da Pavilion.

Planta e meis specimmibus semipedalis Folia caulina 8-10 hneas longa 1 7/8-2 lateradica pauld longiora etangastiora Calyx sex lineas ferē longus Lamina calyce tnpld breyior Affinis habitu et charactenbus 5 *Hohenhckm* Boiss guaBdiffertcaulefloriferopaa-cifoho, calyce flonfero elongato ad medium mflato, petalis appendiculatis, etc

SILENE ECHINUS Boiss et Heldr (Sect *Ewilene* )

S pereDnis acaohs densissunē ccespitosa, folus densē confertis erecto-patubsbrevibos obtusē tnquetris acerosis patnlē glanduloso-hirtis, pedunculis glandulosissunis folia parfun excedentibus uniflons rands triflons bracteis e basi lanceolate acummato-pnngentibas pauld suprâ medjunn obsitid, calyce e basi tubulosi longē clavato-dilatato rubello glandulosissimo obsoletē stnato-neiroso dentibus breviter lanceolatis acutis membranaceo-marginatis, petalorum roseorum ungue membranaceo-marginatâ sub limbo aa-gustatâ, limbo ad medium usquē in lacimas oblongo-hneares fissa, appendice bipartite lacnps oblongis, capsulA oblongi calyce inclosl carpophoro eâ sesquilongionsuffiiltA.

*Stl sufaUata* in pi Heldr Anat exs 1845 non Boiss. Diagn.

Hab in andis montis *Boudroum* ad mendiem urbis *Isbarta* Plsidi-cealt 4000'-5000'

Hanc speciem olim combinavimus cum 5 *snbulatd* qua certē differt foliis longionibus inms acerosis, caulibus veins fohonun 2-3 pana saepē ferentibus, calyce longion 12-13 hneas longo albido parcissimē glanduloso, petalorum albomm unguibus exsertis HSBC *S sutoulataexd* Prof Fenzlmscheduhsadpl Taur Kotschyas est forma *S stentoruB* SUB a qud cam autem diversissunam esse antumainus — *S nardtfoha* Boiss et Huet in pi. Annen. exs.

1853 nihil est nisi forma magis evoluta *S. subulate* *S. echmus* habet folia pollicem longa brevioraque, calyces sub anthesi 8-9 hneas longos, ejus propior affinitas est cum *S. falcata* Sibth foliis brevioribus incurvis, capsulâ calyce destructo nudâ faciliè distinctâ.

SILENE DUPLEVROIDES L. var. *soletio calyx* Bora, et Huet.

Folia angustiora 1-2 hneas lata bipolihcana, caules minus rara. Osi sspè n. flon. Calyx longior (15-16 hneas longus) basi infra basin annulo circulari! pedunculo apicem includente auctus.

Hab in Armenia circa *Eirzerotm* Huet I Galvertl

Annulum ab calycis basin situm etsi magis obsoletum in specimenibus Caucasiacis *S. buplevmdts* quoque vidimus

SILENE MASMENÆA BOISS

*S.* perennis caudicibus filiformibus repentibus ramos brevissimos dense foliosos. Idem cespites parvos congestos edentibus, foliis rigidis subulatis brevibus recta facie superne planiusculis inferne convexis glanduloso-ciliatis, caulibus unifloris glandulosis medium versus 2-4 partibus foliorum brevissimorum lustratis, calyce albido robello variegato glanduloso flonifero cylindrico fructifero davato dentibus oblongis obtusis membranaceo-marginatis, petalis albis ungue dilatato utrinque ad limbi ortum in denarium obtusum abeunti, limbo obovato ad medium usque bipartite\*, corona brevi latâ truncatâ bipartite, capsulâ oblongâ carpophoro subsequens longâ.

Hab in regione alpina montis *Masmen&dagh* ad septentrionem Cihciae siti cl Balansa Fl Septembris

Folia omnia radice 3-5 hneas tantum longa. Scapi 3-4 pollicares. Calyces 9 hneas longi. Species pulchella affinis *S. falcate* et *S. echmo*, distincta foliis tenuioribus multo brevioribus, scapis elongatis, flonibus tertio parte brevioribus. Plan. Idem tota multo minus viscidâ.

VELEZIA HISPIDA BOISS et Bal

Y anima a basi diramantim ramosissimam ramis crebre glanduloso-birtis alternatim et dichotome plures ramulosas, foliis glandu-

duloso-ciliatis linean-lanceolatis acutis stnctis facie inferlori elevatim versùs basin 5 apice 3-nervns, flonbus ad ramulos breves versùs ramorum apicem sensim diminutos cymosè irregulaiiter 1-3nis pedicelhs stnctis glandulosis calyce brevionbus bracteatis suffultis, bracteis e basi lanceolate subulatis calycem dimidinm aequantibus vel superantibus, calyce cylindnco demùm rubello a cut6 pentagono conaceo ad angulos crassos patule glanduloso-hirta dentibus breviter lanceolatis subin curvis pungentibus inter angulos membranaceo, petalorum ungue virenti in hmbum roseum exsertam hnearem ultrd medium in 2 lacmias setaceas partitum nx dilatato, stamimbus exsertis, capsulft cylindncfl ovano subbrevion, semiMbus oblongis concaviusculis

Hab in *Tmolo* occidentali prop6 pagum alpinum *Bozdagh* in pomanis cl Balansa Floret fine Julu

Gaules fi-10 pollicares, folia inferora polhcana lines<sup>s</sup>/«basi lata. Calyces 3 \*/9 lmeas longi Species affinis *V quadndenta*UB et /'osciculat<p, petalorum forma distwctissima

## ALSINE.E

### BUFFONIA CALYCVLATA Boiss et Balansa

B perennis caudicibus suffrutescens saepè elongatis tenuous prostratis, ramis numerosis erectis filiformibus basi sub lentepruinoso«puberulis caeteriufrglabns in raceraum laxum spicaBformem simplicem vel strictè ramosum abeuntibus, foliis subulatis ramo adpressis acutis internodio multoties brevionbus basi vaginA brevissimA connatis, flonbus secùs racemum vel racemi ramulos brietes breviter pedunculatis sessilibusve solitams velranùs binis approximate basi bracteis brevissimis c basi tnangulan subulatis nervo excepto membranaceis suffoltis, calycis glabn sepalis lancfolatls acutis subpungentibus subcannatisextenonbus obsoletè mtenonbus manifestò 7 nervns, petalis albis oblongis baai breviter angustatis calyce quarts parte brevionbus, filamentis 8 corolla sublongionbus, anthers violaceis, stylo filamenta jequanti, calyce fructifero clauso. capsulaB valvis calyce subbrevioribus, semine maxim© oblon-

go compresso tenuissimè *m* senatun secùs penphsenam tuberculato

Hab in regione montani superior! *Taun* Oventahs supra *Bulgarmadenc* | Balansa Fl Sept

Caules flonfen racenus computatis 8-10 polhcares, folia inferiora 2 V»-3 lineas longa, flores eis *B perenhis* paulò majores Semen lineà unà pauld longius. *B perennu* differt ramis tenmonbus, sepalis 5 nervus, filamentis capsulæ que calyce multd brevionbus, calyce basi ebracteato. Alis species perennes generis eddem notd flonbusque longè pedicellatis vel sepalis tnnerrns longiùs diftenint

#### STELLARIA CILICICA Boias et Balansa

St. annua tenera secùs caules pedunculos et margines foliorum remotè et minutè echinulata scabnda caeterùm glabra palhdè virens, radice fibros^ tenui, collo simplici vel ramoso, cauhsbut, erectUs vel ascendentibus fohosis supernè plunès dichotomis tenuibus herbaeis acutè angulato-sulcatis, foliis hnearibus acutis patulo-subcurvatis umnerviis basi brevissim6 connatis marginibus et nervo medio in angulos sectis caulera decurrentibus, flonbus tenninalibus in dichotomusque sitis longè pedunculatis pedunculis erectis nudis firncttferis apice cernuis, sepalis glabns ISBvibas vel obsolete tuberculatis oblongis acutis mucronulatis vindibus enervus angnst^ albo-marginatis, petalis albis calyce brevionbus cuneato-obcordatis, stamimbus 10 corollá brevionbus, anthem luteis, stylis 2 brevibus in stigmata oblonga abeuntibus, ovano pauciovulato, capsula calyce aublongion ad basin usquè in valvulas 3-6 subirregulariter ad basin usquè partita, placentà ad basin capsulffi hemisphaencà, semuubus 2-3 maxunis reDifbrnubos subcompressis tuberculatis.

Hab. in herbidis faucis *Guzel Lfr6* supra *Sedtclug* in regione Littorali Cilicias Floret Apnh cl Balansa

Gaules 4n-|0 polhcares. Folia inferiora 12-15 hneas longa basi sesqmUneam longa, supenora sensim minora Pedunculi tandem polhcares et ultra Flores magmtudims eorum SI *Gram/mm* sed calyx fructifer sensim auctus Habitus *Lepyrod* | *cl* | *di* \$ quacum seminibus magna paucis funiculisque brevissimis crassis convenit sed a qufl valns stylorum pumerum superantibus differt. Caeterùm *StelktfWB* quajdam v gr. *Sf. Kotschyana* Fensl. eodem caractere seminum gaudent Species ab omnibus distinctissima

ARENARIA TRIGHOTOMABOISS (Sect *Erenwgone*)

A perennis basi indurata ramis stentibus abbreviate densissime caespitosis, foliis confertissimis glaucis sub lente parcescens scaberrimis tenuissimè subulatis acutis acerosis, caulibus floriferis erectis firmibus minutè glanduloso-tuberculatis foliorum 2-3 partibus internodio multo brevioribus obsitis a medio plerumque trichotomis, ramis pedicellisque capillaribus nudis subdivergentibus paniculam corymbosam laxam formantibus, sepalis glaberrimis lanceolatis ciliatis basi induratis inferne membranaceo-marginatis acutissimis mucronatis, petalis albis calyce subbrevioribus

**Hab in Cappadocia & Euphrate Audi N° 500 bis.**

Folia caespitibus 3-4 lineas longa tenuissima. Caules floriferi cum panicula 5-6 pollicibus longi. Affinis *A. Ledebourianae* Fenzl e monte Tauro a qua differt foliis tenuioribus, panicula multo magis capillaribus laxioribus, ramulis pedicellisque magis elongatis, flores minores, sepalis multo acutiora acuminata

ARENARIA GUICCIARDII Heldr (Sect *Euthaha*)

A annua a collo saepius, pluncaulis, nana, tota pilis brevibus erecto-patulis scaberrima, foliis minimis inferioribus ovato-oblongis acutis in petiolum cis sublongiorem attenuatis, superioribus sessilibus lanceolatis, floribus pedicellis crassiusculis calyce brevioribus suffultis stentibus in cymis corymbosas fasciculiformes densas dispositas, sepalis vix lobatis scaberrimis nervis lanceolatis acuminatis apice subrecurvis basi ad medium usque angustè membranaceo-marginatis, petalis calyce triplo brevioribus, capsula calyce subbrevioribus cylindrica apice subattenuata, seminibus nigris tenuiter tuberculatis

Hab versus cacumen montis *Parnes* Asiæ ad Heldreich, Junio jam fructifera

Planta pollicarum, flores conferti 2 lineas circiter longi. Affinis *A. confertiflora* et *A. Nevadaensis*, prior differt indumento cinerascens, sepalis latioribus apice minus attenuatis, petalis calyce paribus brevioribus, posterior floribus longè pedicellatis, sepalis reclis nec apice recurve. Ab utraque *A. Gussonei* differt capsula ekmagata angustata

ALSINE GLANDULOSA BOISS et Huot. (Sect *Am tt flora*;) )

A caespitosa caudiculis infero p̄ rostra Us hgncscentibus, ramis erectis glabris tenibus ad foliorum. ortum nodoso-incrassalis, folus glabris mternodio brevionibus breviter connatis lineari-sulcatis rigidulis acutiusculis elevatim unnerveis tunonum radicum longioribus, cymft terminali corymbifonni, pedicellis filiformibus demum calyce naultoties longioribus parçẽ el patulẽ glandulosis, sepalis glanduloso-puberulis oblongis acutis elevatim trinervis, petahsovalissub anthesi patuliscalycetricnte longioribus, capsua .

Hab. in monte *Techdagh* Armeiuae suprd *Guezẽ* cl Huet du Pavilion Fl Julio

Rami 6-8 pollicaros, folia cauhna 5-7 lineas longa Habitu valdẽ afflms *A jumpmnw* a quẽ praeter indumcEtum glandulosum rnflorescenti© differt sepalis non mucronato-acummalis, petahs ovalis patulis nee hnean-obloiiigis erectis *A hneata* C A M — *A Villarsn* var Fenzl aflinis quoqne est planta humihor tenerior sepalis quoque mucranalo-acuminalib disincta.

Obs *Cerastium connatum* Boiss et Hoet in pi. Arm exs cst tanlum vanetas virens vix glauca *C chlorcefolu* F. et M. — *C Ftschen* Gremcr

ALSINE JUKIPEIUNA Fenzl Var *grandiflora* Boiss. et Huet

Folia patula tenuia, flores subduplẽ majores, petala oblongo-hneana calyce subduplũ longiora, capsula obloEgo-cyiindrica calyce tneate loogior.

Hab in Armenus monte *Techdagh* alt 7000-8000' cl. Huet du Pavilion

Floras in Me vanetate ferẽ 4 lineas longi et proportio calycis cum petahs omnind diversa sed typicd *Arenandjumpmnd* LinnaBi Dobis ignoU novam speciem non proponere audemus

ALSINE UMBELLULIFERA BOISS et Bal (Sect.- *Tryphane* )

A. perennis cespitosa caudicuhis prostratis ramosis, ramis aliis



sternibus abbreviatis densè fohosis alns elongate lihformibus laxè fohosis simplicibus erectis apice umbicatis 2-5 (lons, folns glabns vinctibus tenuibus subulatis obtusis ramo adpressis caulum flonferorum brevissimis, floribus 4-5 minutissimis oblongis acutis ad basin pedicellorum umbellulatis Involucnformibus, pedicellis in»-quilongis florem aequantibus vel brevioribus aequalibus viscidulis, sepalis glabns vel parçè glanduloso-viscidulis vinctibus oblongis acutis elevatim ternerviis, petalis albis obovatis calyce subduplo longioribus, capsulâ calycem subexcedenti valvulis tribus obtusis, seminibus umformibus obsolete et lenuissimè tuberculatis

Hab in regione alpinâ *Tauri Qrimtahi* suprâ *Sulgarmaaden* c)  
Balansa Fl Julio

Habitus *Arenarum* B Folia *A setacea* sed strictiora obtusiora Flores magnitudinis eorum *A. Villarm* Species uiflorescenti distinctissima propè *A fakatam* Gneeb. et *A Atttmm* collocanda

ALSINE ORPHANIDIS Doiss (Sect *Sabuhnev*)

*A* annua tota pilis patulis longiusculis apice glandulosis parte supenon presertim hirtella e basi ramosa, rami ascendunt libformibus ad fohorum insertionem nodulosis supra medium plures laxè et divancatim dichotomis, foliis basi dilatatis connatis ternervi brevissimè hinc setaceis acutis subrecurvis internodiis multo brevioribus, pedicellis capillanibus glandulosis calyce per anthesin 2-4plo longioribus fructifens elongatis rectis, sepalis glandulosis ovato-oblongis acutis trinerviis angustè albo-marginatis, petalis ovatis calyce tenente brevioribus, capsula calyce plus triente longioris valvulis ovato-oblongis obtusis, seminibus reniformibus dorso subcanaliculatis tenuissimè tuberculatis

Hab propè *Voshtzam* Peloponnesi cl *Orphanides* Fl Aprili

Planta 4-6 pollicans, folia vix tres lineas longa Capsula ovata sesquialineam longa Collocanda propè *A th/mifoham* Fenzl quas dilTert glabntic, inflorescentia confertion, pedicellis abbreviatis, sepalis oblongo-ellipticis, petalis calycem excedentibus, capsula calycem subaequantibus

## SCLEKANTHEJE

THURYABOISS elBalansa

Calyx profunde quinquefidus tubo indurate obcomco apice subcoarctato lacinnis lanceolatis subpungentibus coriaceis crassis margine plus minus membranaceis aestivatione quincuncialibus Petala 5 summo calycis tubo inserta elliptico-lineana indivisa crassiuscula inferne cannato-subplicata aestivatione quincuncialia persistentia Stamina 10 pengyna summo calycis tubo inserta Filamenta ab apice ad basin sensim dilatata a petalis libera basi in anulum brevissimum inter se coacta nonnulla sspius abortu anthera. Anthera ovate medio dorso filamentum affixum biloculares lateraliter dehiscentes Ovarium tubo calycino inclusum liberum sessile uniloculare Stylus 3 a basi liber filiformes stigmatibus distinctis Placenta uniliformi-subtetra a basi ad apicem ovam producta paulo sub apice 4-5 ovula pendula sessilia ferens. Ovulum unicum fertile incurvum campylotropum rehooka effeta vesiculiformia Utrunculus in fundo tubi calycini liber parte infera tenuiter membranaceus superne subcrustaceus in tres valvas subpartibus monospermus Semen e parte superne placenta pendulum ovatum Embryo amphitropus annulans albumen fannaceum includens Radicula supera vix prominula

Herba perennis caespitosa Orientalis foliis exstipulatis subulatis confertis floribus majusculis in cymis capituliformes sessiles facile postanthesincedentes dispositis habitu *Aanthophyllum* referens — Oenus cl. et altissimo Thury Botanices in Academia Genevensi Professor! qui hujus plantae iconem analysesque accuratissimas delineavit dicatum, structure floris et ovarii curiosissimum, a *Drypideis* quarum faciem habet petalorum insertionis, staminibus pengynis, placenta elongata discedens, a *Paronychia* ceteris neglectis foliis exstipulatis ahenum, inter *Sderontheas* ob stantum insertionem collocandum, ab omnibus hujus subordinis generibus floribus corollatis ovano pluriovulato distinctum

## TIURYA CANTATA Boiss et Bal. in Sal. pi. exs. Or. 1856

Caules caespitiosi prostrati 4-6 pollicares, juncei, foliis emarcescentibus YC&UU, nigris, exrenatis ramos annuinos vaginis foliorum omnino tectos breviter hirsutos pollicares cadentes. Folia opposita A-A<sup>l</sup> /, lineas longa, rigida, adpressa, subulato-tinetra, in mucronem brevem abeuntia, nervo vix *cannanti* lateralibusque indistinctis percursa, margine utrinque ciliis pellucidis septatis eorum latitudine longioribus basi dilatatis pectinata, basi sensim dilatata, in vaginam brevem membranaceam connata praeter cilia glabra. Folia floralia flores basi bracteantia, latiora pauloque longiora, magis membranacea lanceolata, plana, 3-5 nervia, praeter cilia dorso hirsuta, 5 lineas longa basi sesquilineam lata, brevissimè connata, patentia, calycibus vix breviora, cymis inflorescentibus vel abortu biflorae capitatae. Flores sessilibus, intermediis ebracteatis, laterales bracteatis linearilanceolatis membranaceis calyce dimidio brevioribus basi sessilibus. Calyx 6-8 lineas longus (tubo sesquilineam laciniis 4-5 lineas longis basi linearilatis), pilis adpressis septatis hirsutus, coriaceus, pallide virens. Tubus obconicus, basi glabrescens, longitudinè obsolete sulculosus, intra bracteolas brevissimè pedicellatas pedicello crasso, multo gibber, ad laciniam ortum obsolete coarctatus. Lacinae rigidae, lanceolatae, crasse, dorso obsolete caninatae, fasciculis vascularibus subquadratis interius percursis, acute, membranaceo-marginatae, membrana duorum exteriorum ciliato-lacerae lacinae intermediae late extensa lacera interiori integre lacinarum duarum interiorum integral. Petala summo tubo calycino inserta basi inter se intervallo conjuncta calycinis lacinus tertio parte breviora (lineas 3 longa 1  $\frac{1}{2}$  lata) alba scanosa, post anthesin fere immutatim persistentia, venis quinque ramulosis percursa, elliptico-lanceolata, obtusa, apice obsolete et remote erosula parte membranacea dorsoque caninata. Filamenta alba, glabra, complanata, basi in anulum angustissimum summo tubo calycino eodem puncto quo corolla insertum ab ea omnino liberum coalita, a basi ad apicem angustata, persistentia, in flore juniori petalis (praesertim ea quae petalis opposita) breviora, in flore adulto corolla lantum paulo breviora, nonnulla (3,4, 5,8) abortu ananthera. An-

thoraa flavo-rufescentes, medio dorso filamentis insertis, apice et basi obsolete retusa. Pollen Ovarium oblongum, imo tubo calycino insertum, ab eo omnino liberum. Styli tres a basi liberi, filamentis paulo breviores, tertia parte superiorum facie interius vesiculis sparsis dentiformibus obsiti, apice subincrassati vesiculis densioribus. Placenta e fundo ovarii ad ejus apicem recta filiformi-triangulari. Ovula 4-5, ovata, placenta ad quartam partem ceteram superiorem non verticillatim sed approximativè nascentia, pendula vel horizontali-pendula. Uterculus ovario vix major parte inferiorum tenuiter papiraceo superiorum crustaceo, virens, angustus obtusus, in tres valvas compressione fissilis. Placenta compressa seminis compressione incurva superne ovula sterilia vacua seminis compressione complanata semenque fertile ferens. Semen fertile unicum pendulum totam ferè pericarpium cavitatem implens pallide brunneum. Radicula supera hilo contigua parva prominula. Colyledones recurvae.

Habitat in regione alpina Tauro Orientalis superius *Julghar Maaden* r. Balansa qui legit floribus et fructibus Augusto

## LINEAE

LINUM LAMBESANUM BOISS. et Reut (Sect. *Euhnum*)

Linum perenne multicaule pallide virens, caulibus erectis dense foliosis strobiliformibus superne dichotome corymboso-paniculatis ramis rectis, foliis linearibus lanceolatis strobiliformibus acutis uninerviis margine scabris caeterum glabris, bracteis angustissimis e basi latius subulato-acuminatis, sepalis e basi oblongis glanduloso-marginatis longe attenuato-acuminatis glabris, petalis albidis violaceo-nervulosis basi flavidis calyce triplo longioribus, stigmatibus capitatis, capsula

*Linum aspen folium* Cosson in pi Balansa Alg 1853 N° 943 non Boiss. et Reut

Habitat in sylvis, circa *Lambesa* prov. *Constantine* cl Balansa Fl. funn. fine

*Linum aspen folium* B. et Reut habitu huic speciei valde affine differt radice annua, foliis tota facie inferioribus scabris, caule ramisque

pamculse flexifractis, bracteis attenuatis nee setaceo-anstatis, pe-  
lahs paulò brevionibus obsolete stnatis

LINUM rLÄicuM Boiss et Noe (Sect *Euhnum Adenolmum* PI)

L perenne glabernmum glaucum, caudiculis prostratis induratis  
caules plures edentibus, cauibus erectis virgatis foliosis supernè  
corymbose ramosis, folus hnean-lanceolatis acutis glaucis opacis  
tnnervus nervo medio prominulo laterahbus obsoletionibus mar-  
gine revolutò lscvmsculis, rameis angustatis densis, flonbus 5-6 ter-  
minalibus, pedunculis filiformibus calyce per anthesin dupl6 lon-  
gionbu's demtm elongatis patulo-arcuatis, sepahs ovatis acutmscu-  
lis angust6 albo-marginatis prominenter tnnervus, petahs csoruleis  
calyce 4-5pl6 majonbus, stylis filamenla non ffiquantibus, stigma-  
tibus capitatis, capsula

Hab in colibus circ<sup>^</sup> *Dtarbehr c\* Noe Flor Maio

Caules pedales folus densiusculè vestiti Folia cauina 9-11 hneas  
longa Lineam ant pauld ampliùs lata Flores magmtudinis eonun  
*L Austnaa* a quo differt folus latioribus, pamculse raims stnetis,  
sepahs prominontissim6 nrvosis, glaucedinc Species caeterdm im-  
perfect nola

## MALVACEM

**ALTHÆA CALVERTI** Boiss (Sect *Akea* )

A tota indumento duplici pilorum stellatorum ahorum brenum  
densissimorum ahorum longiorum magis sparsorum canescens,  
cauibus virgatis simplicibus (an semper?), folus petiohs eis longio-  
nibus vel acquilongis suffultis rotundatis obtusissimè 5-7 lobis cir-  
cumcircâ obtusmscul6 crenalo-dentatis basi subcordatis, flpnbus  
paucis PX axilhs supremis soli tarns, pedunculo calyci subgBqmlongo,  
mvolucn calyce diinidio brevions adpressfc tomentosi lobis sex  
tnangularibus acutiusculis, caljcis pihs stellatis patulis tomentosohi>pidi  
longitudmaliter hn<sup>^</sup>ati lobis tnangulan-lanceolatis acutius-  
culis, corollâ Eoseâ cal\ce duple longion, carpelhs

Hab in *Arnietud* circd *Erzerowm* cl Calvei t

Folia pro plants non magna inferiora diametro sesquipolhcana supenora sensim diminuta, flores magmtudims eorum *M alee*®. Ab *A palltd* et *Kurdtcd* flonbus dimidiA minonbus statim distinguenda, affinis potiuls *A HeMreichn* e Macedonia quae est planta etiam9i piloso-atellata tamen vindis, flonbus 2-3 aggregatis brevissunè pedunculatis longè et laxè racemosis

ALTHAEA HOHEHACKEHI Boiss etHuel (Sect *Aleea* )

*A. perennis* caule infernè stepiùs ramoso ramisque vjrgatis fleuosispihs stellatisalns parvis alns longionbus cams, folus mdu-mento simplici pilorum stellatorum velutinis flavo-Tirennbus subtiis canescentibus inferioribus longè petiolatis omnibus ad quintain partem usquè 5-7 lobis lobis rotundatis Tel ovatis acutmsculè crenato-dentatis, flonbus in axilhs sohtams infenonbus longè supremis brenter pedunculatis racemos longos foliates laxos formantibus, involucn cano-tomentosi calyce dimidui brevions lobis ovatis acutiusculis, calycis cam lobis lineatis tnangularibus acutis, corollis calyce quadrupld majonbus niveis fauce flavidis, carpellis adpressè hirsutisdorso canahculato utnnqoemembranaceo-marginato membrand radiatim nervosã

*A rosea* Hohen pi exs 1836 non Cav

Hab. ad *Lenkoran* propè mare Caspium cl Hohenacker, supra *Ek&ja* Armenia? Inincultis cl Huet du Pavilion.

Species afflnis caracteribus et florum magnitudine *A rosea* et *A poM*«te ab eis distincta caulibus ramisque tenuionbus, mdu-mento fohonun tenuion sparsion, colore florum, carpellis dorso utnnquè latiùs membranaceis facie tomentosis nee glabns

ALTHAEA KIRMNDENSIS Boiss etNoe (Sect *Alcea*)

*A. caule* virgato elato folioso pihsetosis e tuberculo ortissparsiſ a basi 2-5 ramosis erectis scabndo praeterea sparsim et minute stellato-puberulo, folus petiolis eis subaBquilongis stellatim tomentoso-hiapidis suffultis ad •/• longitudinis usquè 5 partitis sinibus rotundatis partitione media oblongã infernè subangustaU longion intermedns oblongis extenonbus brevi-isimis ovatis omnibus obtu-

sis minutè et obtusè crenulatis, indumento foliorum rufescenti pagina inferiori dense; stellato-tomentoso superne pilis subsimpli-  
cibus dense setulosa<sup>1</sup>, floribus axillaribus solitariis racemos longis-  
simos laxos formantibus, pedunculis tomentoso-hirtis calyci subae-  
qualibus, involucri stellatim tomentosi calyce limbo brevibus lobis  
triangulari-lanceolatis acutis, calycis profunde partiti tomentosi  
partitionibus lanceolatis obscure hinc acutiusculis, corollae roseae  
calyce quadruplo majori, carpellis .

Habitat in Persia ad fines Babylonis et Noe.

Plantam tamen videri et in atacamita et in Gimpchi Folia partem floriferam  
bipolycanicam basi subcordata, flores magnitudinis eorum *A. digitatae*  
quae affinis differt indumento foliorum dense canescenti molliori,  
(bins profundius divisis lacinis acutiusculis, nervis subtilibus validis  
prominens, floribus subsessilibus

## HYPERICACEAE:

*Hypericum polyphyllum* Boiss et Bal (Sect. *Twinto Carpiwn*)

Hierba perenne glaberrima laevissima multicaulis, caulibus e basi  
superioribus ascendenti erectis elatis simplicissimis dense foliosis  
foliorum nervo medio decurrenti elevatis hinc ceterum tere-  
tibus tenibus virgatis, foliis elliptico-hinc obtusis sessilibus  
integerrimis pellucido-punctatis praeterquam marginem versus  
sparsim nigro-punctatis strictis decussatis parvis intervallo sub-  
longioribus, panicula terminali brevi opposita ramosa pauciflora  
ramo centrali ad florem solitaneam quandoque reducto subinde cy-  
**mosa**, floribus subsessilibus, bracteis breviter lanceolatis acutis,  
**calycis** glabris profunde partiti lacinis ovatis breviter mucronatis  
acutis marginibus sub lente crenatis parvis nigro-punctatis, petals  
calyce 3-4plo longioribus integris nigro-punctatis, capsula

Habitat ad *Ticluioush* prope *Mersina* in Cilicia hinc cl. Balansa  
Florere incipit Junio

Gaulis pedales besquipedalesque Folia intermedia 6 lineas longa  
hinc \ /\* lata Flores paulo maiores eis *U. Olympici* quod nos-  
trae speciei affinis differt caulibus procumbentibus, punctorum ni-  
grorum in *totA* plants defectu, glaucis pellucidis foliorum tu

tuberculos prominentibus, folis latioribus remotioribus, sepals majoribus oblongo-lanceolatis

Obs *H tenellum* nova species a me inter plantas Kotschyanas Taun proposita et tunc mihi frustulis incompletis tantum nota ex specimenibus numerosis completisque a cl Balansa ex eodem loco missis est *H cwnsattm* Poir calycibus nigro-glandulosis vel eglandulosis varians— Panter/7 *lythnfolium* nova species inter easdem plantas Kotschyanas a me propositum ulterius cum novis specimenibus a cl Balansa missis collatum ab *H Lydio* non satis differt

HYPERICUM CRENULATUM BOISS in Kotschy p) Taur exs 1853  
(Sect *Twniomrptim*)

H glaberrimum rhizomate suffruticoso tortuoso ramosissimo caespitoso, ramis tenuibus saepius procumbentibus ascendentibusve foliosis simplicibus in paniculam brevem subcorymbosam 3-7 florum abeuntibus, folis parvis sessilibus ovatis obtusissimis margine undulato-crenulatis parcespellucido-punctatis, punctis mgris nullis, bracteis minutis oblongis glanduloso-ciliatis, pedunculis glabris calyce lonponibus, calycis glabri profundè partiti lacinis oblongis obtusis margine glandulis mgris brevissimè stipitatis obsitis, petals integris non nigro-punctatis calyce tripl6 longioribus, capsulâ oblongâ apice attenuate rubrâ vittis crebns longitudinalibus **percursd**

Hab in regione alpina Tauri Gilicici Kotschy 1 Balansa!

Planta caespites saepè extensos formans, rami filiformes panem denudati saepè elongati prostrati, rami florum abbreviati 3-4 pollicares, folia  $\frac{1}{2}$ - $\frac{1}{3}$  lineas longa Flores magnitudinis eorum *H perforati* Gl Balansa formam majorem in eisdem locis legit ramis crassioribus firmioribus erectis, folis 4-5 lineas longis, panicula magis floribunda Species habitu ad *H putverulentum* Fenzl et *H leprosum* Boiss accedens sed ab eis distinctissima glaberrima, calycis laciniis abbreviatis et ovario vittis longitudinalibus nee glandulis sparsis obsito

HYPERICUM SCABRELLUM BOISS (Sect *Tmtomrpium*)

H perenne totum pube brevissimè scabundum glaucescens,



caulibus ascendentibus tenuibus virgatis parte inferior! ramulos  
 Uliformes ssepè edentibus, folns oblongis obtusis sessihbus pellu-  
 cido-punctatis sparsim nigro-punctatis internodio plerumque bre-  
 vionibus, paniculde terminahs ovatae composite multiflora ramis  
 patentibus, bracteis oblongis hneanbusve obtusiusculis glanduloso-  
 fimbriatis, pedunculis calyce subbrevionibus, calycis profundè  
 partiti lacinus lanceolatis acutiusculis glanduloso-serratis serra-  
 tuns ascendentibus., corollâ calyce triplo longior non nigro-punc-  
 tata, capsulis vittis longitudinalibus percursis

Hab in *Tauro* ad fontes *Cydm* alt 5000' d Kotschy

Gaules 8-10 pollicares, folia intermedia 8-10 lineas longa, llores  
 sectis paniculae ramos tandem subunilaterales magnitudinis eorum  
*H lomentosi* quod praeter indumentum densum longiorum differit  
 panicula tandem laxa, sepalis ovatis acuminatis stipitato-glandu-  
 losis nee serratis. Affine quoque habitu *H a/mulato* Moris ramis  
 floribus basi glanduloso-annulatis alisque notis distinctissimo.  
*H Pestalozzi* facie quoque affine pedicellis differt tenuissimis,  
 calyce integro eglanduloso, etc

HYPERICUM GRACILE Boiss (Sect. *Tiburcarpium*)

H caulibus ascendentibus simplicibus teretibus gracilibus bre-  
 viter tomentosis, folns supra virentibus minutè papillosis subtus  
 canescentibus tomentellis basi sessihbus subcordatis oblongo-  
 ellipticis vel elliptico-lanceolatis inferioribus obtusis internodio  
 longioribus superioribus acutiusculis dissitis omnibus non pellu-  
 cido-punctatis margine autem seriatim nigro-punctatis, panicula  
 terminali composite ovata ramis erecto-patulis, bracteis bracteolis  
 lanceolatis glanduloso-serratis eis pedicellos aequantibus, ca-  
 lycis glabro ad basin usque partiti lacinus lanceolato-hneanbus  
 acutiusculis dorso impunctatis serratis serratis ascendentibus  
 glandulis nigris terminalis, petalis calyce triplo longioribus apice  
 nigro-punctatis, capsula longitudinaliter glanduloso-vittata.

Hab ad *Guleck Boghas* Taun Gilicici Kotschy, Bala-Dsa, ad  
*Bmdoukh* propè Mersina Cilicie Balansa Fl Junio

Gaules 4-2 pedales, folia inferiora sesquipollicaria 7-8 lineas  
 longa superiora minor a, panicula 4-6 pollices longa Ab *H atcmanno*  
 distinctum folns non pellucido-punctatis, calycibus dorso

nigro-punctatis Magis affine *H lanuginoso* Lam quod distinguitur indumenta magis cano, folus inferioribus aunculato-cordatis, sepalis obovatis obtusis

## ACERINEAE

### ACER HELDREICHII Orph

A arborea ramis cortice fusco-rubello vestitis, foliis petiolo inferioribus longioribus superioribus eis circiter longioribus suffultis superius glabris subtus parvis prominenter nervosis parvis hirtis ferè ad basin usque palmato-tripartitis partibus oblongis breviter acutato-acuminatis superius et obtuse dentatis intermedia basi cuneato-angustata lateralibus profundis bilobis lobo exteriori breviori, racemis paniculatis laxis sub anthesi erectis tandem pendulis, pedicellis longis, staminibus corollam paulo superantibus, ovario densis villosis, alis glabrescentibus rubris junioribus subparallelis tandem valde arcuatis subdivergentibus.

Habit in monte *Kyllene* prope *Flambountza* cl. Orphanidis, in Parnassi regione abietinis prope *Kafkana* supra *Rachova* alt 4500' Heldreich et Orphan. I

Arbor raediosissima Folia ea *Ampelopsidis hederaceae* forma referentia diametro 3-4 pollicana Racemi breves subcorymbosi 4-7 florum longis pedunculatis Species prope *A opulifolium* collocanda sed ab omnibus mihi notis forma et divisione foliorum distinctissima.

### ACER KYRASSEI BOISS. et B

A ramis cortice rubella pulverulenta vestitis junioribus velutinis, petiolis foliorum adultorum folio ferè duplo longioribus parte inferiori hirsutis, foliis superius glabris subtus parvis hirtis basi truncatis transversè lateralibus ad medium usque quinquelobis partibus inferioribus obtusissimis 2-3 lobis basi subangustata lateralibus oblongis obtusis omnibus margine integris, racemis subcorymbosis abbreviatis petiolo non squantibus, pe-

duncuhs hirsutis, ovario hirsuto, fructûs glabrati alis subdivergentibus

Hab. in Libano circa *Eden* cl. Reygasse ex Blanche

Petioh 3-4 pollicares. Folia majora basi inter extremitates loborum lateralium exactè oppositorum 4 pollicana  $2\frac{1}{2}$ , polhces longa, fructus eis *A. opuhfolu* paulo minores. Hinc et *A. obtusato* affine differt folns transversè lationibus basi secûs lineam rectam ad petioh insertionem vix emarginatam truncatis, lobis profundioribus obtusè inlobis. Affine quoque *A. Lobelu* Ten. cujus folia quoque transversè sublitora basi que etsi minus evidenter truncata et quod partitiombus fobi longè acuminatis alisque fructûs divergentibus distinguitur.

ACER TUMCO LUM Boiss. et Balansa

A. arboreum ramuhs glabns cortice rubellâ vestitis, folns petiohs glabns eis plerùmque longioribus suffultis supra glabns subtûs puberuhs tandem glabratis palmatim ad medium usque quinquelobis basi cordatis partitiombus interioribus apice truncatis acutiusculis inlobis basi non attenuatis lateralibus oblongis acutiusculis grossè dentatis, racemis abbreviatis multilobis corymbosis, fructûs glabrati alis divergentibus.

Hab. in monte castelli *Gulek* Taun Cihcici cl. Kotschy pi. exs. 1843 n.º 342, in vid. a Tarso Gilicis ad *C&Saream* inter *Bosante Tchai* et *Kamechlt Tchai* cl. Balansa. Fructus maturat Septembri.

Petioh 3-4 pollicares. Folia diametro 3-3½ pollicana. Fructus magnitudinis et forma? eorum *A. opuhfolu* Villars. cum forsitan minus affine sed a quo hoc dissociare aptius dijudicavimus. In omnibus formis enim Europaeis et Caucasicisque *A. opuhfolu* partitiones foliorum minus profundae sunt et praesertim ovatae obtusae vel acutate sed nunquam truncatae inlobaeque sunt.

ACER SYRIACUM BOISS. et Gaillardot

A. ramulis glabns cortice rubellâ vestitis, folns glabns conaceis biformibus ramulorum annotinorum elongatorum breviter petiolatis e basi angustè subcordatis oblongis vel angulato-inlobis, margine undulato-conspicuis pinuloso-denticulatis lobis acutis late-

ralibus minoribus, foliis ramulorum flonferorum abbreviatorum longiusculè petiolatis e basi eximiè rotundatè sensum dilatatis truncatis trilobis margine integro lobis angulatis obtusis brevibus squamibus, racemis corymbosis erectis folio brevioribus, fructibus glabris alis modicè divergentibus

Hab in valle *Barghoutti* Libani supra *Saida* cl D<sup>T</sup> Gaillardot Fructus maturat Augusto.

Folia ramulorum stenuum sesquipedalica, inferiora oblonga acuminata, superiora forma ea *Hedera helvetica* referenda sed triloba Folia ramulorum flonferorum adulta (res pedales longa apice tres pedales et amplius lata lobis pedalem dimidium tantum longis, ea *Linodendron tulijferum* quodam modo referenda Fructus magnitudinis eorum *A. opulifolium* Species distinctissima

## GERANIACEAE

GERANIUM PELOPONNESIACUM BOISS Diagn var *Ubanicum*

Indumentum caulium et foliorum brevissimum, flores minores

*G. Libanoticum* Boiss et Blanche in pi Syr ex Schenck in Schubert

Hab in montibus circa *Eden* Libani cl Reygasse ex Blanche

Reiterato examine et ex specimenibus binis altero flonifero altero fructifero a *G. Peloponnesiaco* etsi patria diversa sit non specificè diversum videtur *G. Libanoticum* Schenck loc cit ex descriptione *G. tuberorum* vel species affinis videtur

## RHAMNACEAE

RHAMNUS FALLAX BOISS. (Sect *Bhamnium*)

Rh fruticosa inermis ramis glabris cortice rubello vestitis, foliis petiolo brevi subcomplanato suffultis ovato-ellipticis basi rotundatis apice breviter acuminatis serrulatis dentibus ascendentibus incurvis obtusis sinibus glandulosis venis ad nervum medium

ulmqu6 sub 12 obhqnis rectis nervo medio subtiis hirtello tandem glabrato paginfi supenon tuberculis minimis pellucidis exasperatâ, ramuhs ilonfens praeter pruinam citô deciduam glabris, flonbus hermaphroditic, petahs milhs, stammibus quatuor, styhs longis 2-3 fidis, drupis pedicello eis aeqmlongo vel subbreuion suffullis Ingonis apicc retusi^

*Rh alpinus* Smith Prodr Fl Gr non L

Hah iti regione alpini fit abietmâ Parnassi ad *Carcana*, *Chamtola*, etc cl de Heldrcich 1852, cl Orphamdes 1854-

Valdfê simihs *Rh alpino* pro quo eum diû habmmus, ab eo specificê diltre videtur flonbus in omnibus speciminibus a me ob sorvalis hermaphroditis rec dioicis In *Rh alpino* msuper folia **sæpè** cordata juniora utrmqu6 plus miniis hirla, petaoli et rami **juniores** manifpste Pt sempor tomentelh

RIIAMNUS GRÆCUS Boiss ot Reuter Comment ad Fl Graecam Mss (Sect *Cervi&pina*)

Rh ramis plus minûs lortuosis apicc sæp6 spinosis, ramuhs ^labns pubcruhsvc, folus lcnuissim6 puberulis demûm glabratis viridibus ol)ovalis vel obovato-cuneiformibus obtusis cum mucronulo vel retusi^ uilegns tenuibus vcnulis pellucidis reticulatis tacic supenon sub lontc puncticulatis, lloribus axillanbus ad partem superiorem ramulornm fasciculatis vindi-lutescentibus peduncuhs cis subuequilongis suffultis, sepalis lanceolato-tngulanbus palhdè vironlibus post anthesin reflexis tnnerviis nervis lateralibus subobsoletis, drupis obovatis subcompressis retusis padicelhs eis sublongioribus suffultib, semmibus glabns rimft margme vix carlilagmoa profunda partm aperta percursis

*Rh saxatilis* Sihth Prodr ex loco non L

Hlab in *Palamede* Argolirtis Spruner t montibns *Parties* et *Hym\*Uo* Heldr 1 *Lucmid* Heldr 1 *Creld* Rauh t

Var 3 *aiigustifolm* Folia cra^siora oblongo-spathulata ,

*Rh oleoides* Sib Hi Prodr ?

Hab in insuld *Spâ* Boiss

Folia formæ typicse i-5 lineas longa 3-4 lata in petiolum eis fer6 tnpld breviora atenuata Affinis *R olmidi* qui differt folns «ras-  
**sioribus** oblongo-linpanbus \rl hnean-^pathulatis, sepahs latè

tnangulanbus fusco-virentibus vahdè tnnervus post anthesin vix reflexis

RIIAMNUS PETIOLAMS Boiss (Sect *Cemspina* )

Rh glabernifla ramis rigidis cortice laevi nitida<sup>1</sup> fuscS tandem albicanti vestitis, ramuhs erecto-patuhs rubelhsngidis apice spinescentibus, folns in ramulorum parte superior! paucis petiohs eis subacquilongis suffultis ovatis vol oblongis basi plùs minùs cunctis breviler acuminatis obsolctissimè crenulatis crenis glandulosis venis utnnqu6 subqumis arcuatis extenonbus basi ulnnquè marginantibus, baccis inM folia ad ramulorum partem inferiorem sparsis pedicello demùm pendulo eis sublongionsuffultis obsoletè Lngonis retusis, semimbus badus run& angusta loti longitudine percursis

Hab ad *Gulek Boghds* Tauri Gilicici cl Balansa Fructus maturat Augusto

Folia petiolo 8-10 lincaslongo suffulta conacea subintegra nervis prominentibus Affinis *Rh catharlico* qui prsoler folia brevius petiolata basi rotundata profundiiis crenata longè diflbrtseminum rim3 prorstis clausâ

## LEGUMINOS^1

MEDICAGO BLANCIEANA BOISS

M annua tota patulfe hispidula cauibus angulalis erectis, stipule semisagittatis acutis latere extenon profundfe et acutè dentatis, petiolo foholis ovato-ellipticis breviter et argutè denticulalis breviori vel longion, foholo supremo longiusculè petioluldto, pedunculis folia siLbaequantibus, flonbus calyce hirtto, legumine compresso basi et apice convexo anfractibus qumis aretè mcumbentibus superficie obsoletè reliculato-venosis margine obtusiusculis distichè et subhonzontahterspinifensspuiisbrevibusbasidilatata triangulari in nervum non productis, anfractibus duobus superiyibus diminutis valdè convexis margine brevissimè spimfens

Hab in segetibns propè *Smda* cl Blanche Maio 1853fructifera

Legumen 4 1/2 lineas diametro la turn E grege Oentah *M Gal-*  
*Urn et rotated* in qua directio spinaram quoad margmem anfractus  
horizontalis est, ab utrdque specie differt spims basi nee inter se  
coalitis nee in nervum productis et praBtereñ anfractu inferiori et  
supenonbus minonbus convexis undè legumen lenticulare con-  
vexum nee complanatum est

POCOCKIA PLICATA Boiss et Bal

P annua a basi ramosa tota indumenta bren adpressmsculè  
enspulo velutina, cauibus ascendentibus erectisve, stipulis minutis  
tnangulan-semisagittatis integris vel basi extenon denliculatis,  
pedunculis foholo brevionbus, foliolis cuneato-obcordatis ranùs  
apice rotundatis nervulosis margine supenon brevissimè denti-  
culatis mtermedio petiolulato, pedunculis /olio pauld longionbus  
apice umbellatim 5-6 flons pedicellis calyce brevionbus basi brac-  
teohs scetaceis suffultis, calycis adpressmsculè hirsuti lacinnis e  
basi lanceolate setaceis tubo subdupld longionbus, corollid luted  
glabrS, vexillo laciniis calycinis vix excedenti, legumine adpressè  
hirto piano linear falcato obtuso obliquè mucronulato transversè  
et parallelè nervoso-striato margine supenon concavo denticuhs  
brevissimis complanatis obtusmsculis basi coalitis marginato 6-7  
spermo plicis transversis elevatis 2-3 in utrSque pagind alternan-  
tibus

Hab in arenosis fluvn *Ouzel D6r\$* propè *Mersina* ubi umcum  
specimen fine Man legit cl Balansa, probabihter ex regione mon-  
tand Taun advecta quse tune hujus vera habitatio

Gaules semipedales, fohola 3 lineas longa 3 1/2, apice lata, floras  
parvi 2 lineas vix longi Legumen 7-9 lineas longum 2 1/2»latum.  
Species distinctissima prop6 *P Arabwam* collocanda quae flonbus  
majonbus, calyce brevissimè dentato, legumine glabro utroque  
margine denticulato faciebus non plica to alusque distat notis

POGOCKIA GILICICA Boiss et Balansa

P annua a basi ramosa pilis cnspulis tota puberula^ caulibu\*  
erectis velprocumbentibus dunusculis ferè a basi dicbotomapt al-  
teraatim ramosis, stipulis semisagittatis petiolo breviter adnatis

acutis latorc extenon obsoletè erosulo-denticulatis, petiolo foliohs brevion, foliohs obovatis obsolete denticulatis terminali petiolu- lato, peduncuhs folio aeqwlongis longionbusque^ flonbus minutis brevitorpedicellatis densè capitatis, calycis adpressèhirsutilacinus e basi latiori subulatis tubo brevissimo phiriès longionbus, legu- mine adpressè hirtio compresso semiorbicular nervis parallelis elevatis densè stnato margine interior! recto obtuso in mucronem brevem abeunti extenon acuto curvato

Hab in pinetis suprâ pagum *Alladagh* et in vineis circa *Gülele Boghas Cihcia*> cl Balansa, in regione sylvaticâ montis *Casm Syriae borealis* Boiss

Valdfè affinis *P glomerate* eisdem locis occun-enti et qua speci- flc6 differt florum capitulis ID ramo sessilibus legumineque majon secits marginem intenorem  $2 \frac{1}{a}$ -3 nee 2 hneas longo *P Auchen* qas capitula quoque peduaculata habet legumine etiam minon margine extenon angust^ marginato monospermo sat dilTerre vi- detur.

#### TriGOiELLA CEPHALOTES BOISS et Balansa

T simplex vel pluncaulis annua, cauhsbus erecus tenuiDus sincie ramosis ramisqne glabemmis, stipulis longis cihatis e basi paul6 lation subulaUs, petiolo stipulis longion fobolis brevion, foholis glabnuscuhsfohorum Infimorum ovatis caeterorum ellipticis argutè denticulatis apice truncatis mucronulatis, peduncuhs adpressè hirtis folio squilongis vel longionbus, flonbus minutis brevissimè pedicellatis in capitulum etiam fructiferum rotundum dispositis, calycis hirsuti dentibus e basi lanceolate subulatis inaequalibus tubo duplò loDgionbus, corollâ pallidè luteâ calycinis dentibus brevion, legummibus honzontahbus vel deflexis compressis oblon- fis apice attenuate breviter acuminato sursùm recurvato utr&que facie albo-birsutis monospermis

Hab in herbidis ad fluvium *GuzelDdrd* supra *Sedwfug* in *Ctliad littorali* cl Balansa. Fl. Maio meunte, fructus maturat Junio

Gaules pedales et ultrâ, fohola majora 7-8 lineas longa Capitula flonfera piso vix majora Legumen 3 hneas longum sesquilineam ^tun *AfUnis Tr.8ptcat*(E Sibth quae distinguitur foliohs angustio- r>bus Imeanbu5, flonbus majonbus, COFOIIS calyce lorgionbus,



capitulis fructifens oblongis, legumino m rosLrum longissimum  
rccurvura abeunli

TMGONELLA IIALOPIIILA Boiss (Sect *Buceras* )

Tr annua tota pihs adpressis hirta, cauhbus teimibus abbrevia-  
te erectis vel procumbentibus, petiohs tenuissimis infenonbus  
lohohs longioribus supenonbus abbreviate, foliohs minimis bre-  
visimè cuneato-obcordatis elevatim nervulosis obtusè denticulatis  
lenmnali petiolulato, stipuhs infenonbus lanceolatis supenonbus  
c bat> i lati breviler tngulari-semisagittatis integris, flonbus mi-  
nimis in capitula globosa pedunculo folns floralibus dupld longion  
suffulla congestis, calycis adpressè hirti dentibus triangularibus  
tubo subdunidio brevioribus, corolll flavfl calyce sesquilongion,  
legumnnbus adpressè lurlis subsessilibus ex apice peduncuh stel-  
latim patntibus hneanbus compressis falcatis 3-4 spermis relicu-  
ldlo-rugosis margiue extenon inter semina sinuato, seminibus  
cylindncis. idivibus

TV *sinuatar* *brachycarpa* in pi Gihc Bal 1855

Hab in arenosis mantimis inter *Mersina* et *Pompeiopolvm* Cihciai  
c\ Dalansa. Fl ineuntc April]

AtRnis *T sinuate* Boiss Diagn pro cujus vanetate primùm ha-  
bui sed ab eâ spccifice dill'ert calycims dentibus lationbus tubo  
brevioribus nee longionbus, legumine falcato nee recto 3-4 nee  
6-7 hneas. longo; foliola obtusè nee acutmsculè denticulata sunt

TriGONELL\ GAILLAnDOTi Boiss (Sect *Buceras* )

Tr annua glabra caule erecto procero sulcato^ stipuhs latis bre-  
vibus semisagittatis profundè et acutè mcisis,, foliis longè petiolatis  
foliohs magms obovatis obtusissunè denticulatis temunali longè  
petiolulalo, pedunculis petiolo sublongionbus, flonbus magms  
breviter pedicellatis in capitula laxa dispositis, calycis dentibus  
triangularibus tubo dimidid brevioribus, corolla" luteffl calyce tnpld  
longion ahs carmam longè superanlibus, legununibus (Immaluns)  
longè hneanbus compressis falcaLis glabris stellatim patentibus

Hab in cultis circa *SaiAa* Phaemcia) cl D<sup>r</sup> Gaillardot

Foliola pollicem longa 8-10 tineas lata Flores 5 lineas longi

Legumen 15 lineas et amplius longum et tantulum immaturum a modo visum inde nescio an pentacarpium laeve vel sinuatum fiat. E maximis generis soli *T. Cmellesynaeat* comparanda quae differt foliolis multifloris minoribus obcordatis, stipulis induratis, quinque plus dimidiis minoribus, calycis dentibus tubo aequilongis, alis cannam vix excedentibus, etc.

TRIGONELLA RIGIDA BOISS et Balansa (Sect. *Buceras*)

T. annua hirta multicaulis caulibus prostratis brevibus simplicibus vel a basi ramosis fructifera incrassatis flexuosis rigidis, stipulis brevibus triangulari-semisagittatis argute inciso-dentatis, foliis leguminibus in capitula densa breviter pedunculata sectis ramos alternatim subumbrata et approximata disposita confertis crassis rectis brevibus cylindrico-subcompressis apice subattenuatis obtusis reticulato-rugosis glabris, seminibus ovato-rhomboides videscentibus.

Habitat in calcareis circa Bosantem in via a Tarso ad Cmsaream. Fructiferam Augusti legit Balansa.

Prope *T. arassipcedem* Boiss. collocanda ab ea differt capitulis fructiferis crebrioribus magisque approximatis et praesertim leguminibus triplicibus brevioribus et crassioribus 3-4 lineas tantum longis glabris nec adpressis hirtis rugis convexis multo magis prominentibus percursis. Flores et folia non vidimus.

TRIGONELLA BALANSAE BOISS et Reut (Sect. *Falcatula*)

T. annua parva et adpressis secus petiolos et subtus ad nervum medium foliorum hirtula caeterum glabra, caulibus erectis vel decumbentibus subdichotome ramosis, stipulis lanceolatis acuminatis remote et tenuiter denticulatis basi pinnatifidis, foliis longè petiolatis, foliolis breviter obovatis basi cuneatis obsolete denticulatis terminatis longitudinalibus lateralibus vix petiolulatis, pedunculis petiolos duplices superantibus, capitulis subsphaericis, floribus nutantibus calycis aequilongis suffultis. calycis glabris vel hirtulis dentibus superioribus lanceolatis tubo aequilongis inferioribus triangularibus brevioribus, floribus pallide flavis, ex illo alas superantes cannam «quantum», leguminibus deflexis compressis falcatis

transverse venosis obtusiusculis vel brevissimè acutatis, seminibus oblongis rufis tuberculatis

*Tigon corniculata* Sibth Fl Græca tab. 761 (optima) non L

Hab in Græciæ Boiss pi exs 1842, in Asia minor prope Smyrnam Boiss 1842, Balansa pi exs 1854 N° 177 sub *Tr corniculata*

Species a nobis et pluribus aliis confusa cum *Tr corniculata* ex Italia et Græcia quoque oriunda quæ est *Tr elatior* Sibth Fl Græca tab 762 et quæ specificè a nostrâ differit stipulis angustissimè lanceolatis et longioribus ac ut in aliis, foliis præsertim superioribus oblongis subrhombicis, capitulis florum ovatis vel oblongis, corollis intensius 11 nervis, calycibus dentibus longioribus, legumine denique longè acuminato, seminibus pallidioribus etiam sub lente obsoletissimè tuberculatis

TRIPOLIUM MAGRORRHIZUM BOISS (Sect *Triphastrium*)

*Tr* præsertim petiolos et pedunculos hirtulos glabrum, radice elongata, caulibus prostratis parvè ramosis, stipulis elongatis vaginantibus albo-membranaceis breviter setaceo-acuminatis, pediculis elongatis, foliis ovatis vel orbiculatis elevatim multistriatis argutè serrulatis dentibus spinulosis, capitulis globosis longè pedunculatis, pediculis hirtulis deorsum deflexis calycem æquantibus, dentibus calycinis lanceolatis uninerviis membranaceo-marginatis tubo glabro subsquarosis, corollis albidæ vexillo acutiusculo calyce duplè longiori cannali longè superanti

Hab ad fontes superius plumbi fodinas in monte *Pasch Olug* Taun Cilicici cl Kotschy alt 700'

Inter *Tr pallescens* et *Anatolium* ferè medium, præsertim calyce corollæ proportionè multo brevior, postenus foliis argutè spinulosis raris orbiculatis, capitulis florisque purpureis minoribus Species tamen ex specimenibus numerosioribus observanda

Obs *Tr Tmoleum* Boiss et Bal in pi Anat exs 1854 a *Tr glandulifero* stipulis longioribus connatis, dentibus calycis tubo triplo longioribus nec eo subsquarosis, corollæ calycem vix excedenti ut nobis videbatur specificè diversum cultum characteres amisit et ideo species delenda

TRIFOLIUM BALANSJE Boiss (Sect *Trtfoliastrum* )

Tr annuum glabrum caulibus farctis stnatis elongatis ramosis erectis vel ascendentibus, stipulis e basi triangularibus lanceolatis acuminatis, petiolis foliolis 2-3plô longioribus, foliolis obovatis breviter denticulatis denticulis spinulosis, pedunculis folio floralibus duplô longioribus, pedicellis calyce sesquialongioribus tandem reflexis, calycis pallidi vmdistincti dentibus e basi lanceolate subulatis tubo dupld longioribus sinibus rotundatis, Corollâ pallidè roseâ, vexillo oblongo-linearibus acutiusculis distinctis alas linearibus lanceolatis valdè superanti, legumine

Hab in arvis otiosis ad *Cordilw* propè *Smyrnam* cl Balansa Fl Maio

Habitu et characteribus *Tr Michehano* affine. Hoc a nostrâ specie facilè distinguitur caulibus crassioribus fistulosis, stipulis minoribus ovatis foliolis retusis, calycis dentibus magis elongatis ferè a basi subulatis tandem patentibus tubo tripld longioribus, ejus flores paululùm majores sunt

LOTUS MACROTRICUS Boiss in pi Anat Tchihatch Ann Sc Nat 1854

Species delenda et ut synonymon ad *L dwarfcatum* Boiss. Diagn adducenda Panzer *L Berytheus* Boiss Mss in Gaillardot pi Syrens 1854 non satis a *L halophytlo* floribus majoribus longius pedunculatis differt. Specimina inter utrumque intermedia vidi

ANTHYLLIS VARIEGATA Boiss in pi Taur Kotschyil853

Hæc species ex novis specimenibus a cl Balansa relatis ab *A. Webbend* non sat differre videtur igiturque delenda

GLYCYRRHIZOPSIS Boiss et Bal

Calyx tubuloso-subcampanulatus basi subsequialis ferè ad medium usquè bilabiatus labiis squilongis superioribus breviter bidentatis dentibus triangularibus inferioribus ad basin usquè in dentes

JdiiceolaLot\* subecquilongos parilito Vrxillum oblongum obtusum  
 ^ubrectusum rectum basi in unguem brevem altenuatum AIBB libene  
 recta? hnean-quadratae obtusae vexillo breviores cannaB squilongse  
 in unguem eis breviorum basi latere supenon abruptè abeuntes  
 infcnori gibbae Cannae petals apice tantim subcohaerentia obovata  
 obtuMssima Literc supenon submcurva ungue limbo subbrezion  
~~Semina 10-filamentis vixillum libere dehiscente. Ovarium sessile~~  
 oblongo-hneare biovulatum umloculare Stylus filiformis ovano  
 quadruple longior apicc curvatus Stigma capitatum Legumen  
 oblongum lateraliter subcompressum substipitatum laeve conaceum  
 (lebiscens bivalve valvis post dehisceniamvaldè contortis, breTiter  
 muGronatum dispernum Fuincuh basi dilatati brevissuni Semina  
 sphacenco-subcompressa

Hcrbre pcrenncs Onenlalcs habitu *Glycyrrhizm*, flonbus flavis  
 Genus *Glycyrrhizce* affine ab ei diversum calyce basi non gibbo,  
**alis** obtusissimis nee acutatis rectis nec curvalis libens nee carinss  
**adnatis**, filamontis longè nee breviter inter se coalitis, ovano 2  
 nee 4-5 ovulato, logumine multi) majon subcompresso nee piano  
 loruloso, dehiscenti nee siibindehiscenti

GLTC\nniri7opsis FIAVESCENS DOISM etDal

(*Uynprhtza flmesa'nb* Boiss Diagn pi Or I Scr N° VI

Hab in CiliciS circii ^danafAuchcr<sup>1</sup>),, circa *Memna* ad pa gum  
*Ilouloukh* cl IJalama floriferam fine Apnlis, fructiferam ineunte  
 Junto, in sylvis ad basin montis *Cassn* in vi& a *Laodiced* ad *Swdteh*  
 in Synd Doiss Jun 1840 fmctif

HæC descnplioni ex spcciminibus mehonbus et Inictifens ad-  
 flenda Caulf^ orccti vel ascendentes infernè pra3ter stipulas squa-  
 miforme^ nudi supnrr<sup>1</sup> simplices vel paniculato-ramosi Spicarum  
 pedunculi axillares fructifcn tandem pedem dimidium et amphùs  
 longi Spicrc llonfer,e densae nulliflorse fructiferai laxa3 legumi-  
 nibus 5-10 ercclo-patuh"? Calyx 4 hneas, vexillum 7 hneas longa  
 Legumen oblongo-subrhombeum intrd calycem breviter stipitatum  
 18 lmeas ferè longum, 1 latum, 4 crassum, brunneum lseve latere  
 supenon recto-subconvexum mfenori extremitate valdfè curvatum  
 in rostrum ascendens 2-a hneas longum productum Sutura supe-  
 rior plamuscula Infmoi ohluse cannata Semina magnitudims

Pibi bddio-fuscd inaculis punctuhsque nigris\* vanegata Planta Syriaca (cujus flores non vidi) habet legiimina paululum compressiora, semina paululim rainora, obscurora, obsoletius puoctala Omnia reliqua convemunt

COLUTEA CLUCICA fciSS et Bal

C fruticosa ramis sparsim breviter et adpressè hirtis striatis junionbus palhdis, folus 4-5 jugis foliohs glaucescentibus petiolulatis ovato-oblongis ovalisve apice truncatis vel retusis pube adpressd brevi sparsissimfi sub lenLe paging inferiorL obsitis, stipule minimis membranaceis lanceolatis, peduncuhs 4-7 florts, calycib

- pube brevissimfl adpre&sd hirti dentibus Inangulanbus, vexilli carinam subsBquantis gibbis nullis, alismargine convolute lanceolatis cannd sublongionbus lobo basilan ungue brevion, canni obtusissimd, legumine

Hab in Cilicia littorali propè *Mersma* cl Baldnsa, in pinelis propfe *GullekBoghas* alt 4000'cl Kotschy

Hsec planta qaam pnus pro *C Pcniv* vane talc babui ab cà ul eta *C Aleppicd* differtfohohsmull6 majoribus 8-dl lincas longis Alae praetereA carinam excedunt et carum lobus basilans multd brevior

COLUTEA ARMENA BOISS, et Huet

C ramis glabns vel sparsim brevissunè et dpressè hirtellis albicantibus, folus subtnjugis fohohs brevissim6 peliolulalis carnosuhs apice rotundatis truncalisve, pedunculis 3-5 lions folia asquantibusvel excedentibus, calycis adpressè hirLi albo-cilialuh brovisissimi dentibus brevissimis latis acutis, vexillo subrotundo gibbis. basilanbus brevibus parallels, alis planis linean-lancrolalis carinam obtusissimam excedentibus, legumine apice clauso

Hab in Armenia Calvert, Huet du Pavilion I

Ob'alas planas solùm *C arborescenti* et *ententes* comparanda Prior differt folus plunfoliolatis, fohohs conliguis nee rcmoliuscuhs minus carnosus nunusque rotundatis^ calycis dentibus longionbus^ ahs obtusionbus cannd brevionbus *C cruenta* differl li5c not5 alarum et legumine apice hianti

## OXANTHIOPIS DIONTICA Boiss

0 acaulis caespitosa adpressis cano-argyrea nitida, stipulis ultra medium petiolo adnatis membranaceis parte libera oblongo-lanceolatis obtusis videscentibus ciliatis, foliis 6-7 jugis foliis elliptico-linearibus complicate, scapis foliis triple longioribus pilis nigris albisque intermixtis adpressis, floribus 5-7 laxiusculis capitatis pedicellis calyce brevioribus suffultis bracteis hnearibus pedicello paulo longioribus, calycis pilis nigris adpressis hirsuti denique lancolato-linearibus tubo subaequilongis, corolla violaceo-caerulea calyce duplo longior, vexillo recto alis longioribus obtusis carinis subaequilongis, carinis apice violaceo-maculata in mucronem ejus limbo brevioribus sensim attenuata, legumine subpedunculato brevissimo stipitato ovato-oblongo compresso adpressis et brevissimis hirsuto in mucronem brevissimum recurvum attenuato

*Astragalus dionticus* Schott et Kotschy in Tauro exs. 1853 N° 129 et 253

Hab. in arenosis dionticis raonLi<sup>^</sup> *Gisyl Deppe* alt 8000' cl Kotschy, in Tauro supra *Bulgarmaden* cl Balansa Fl. Jul. fruct. Aug.

Planta humilis radice crassa, caudiculis ramosis abbreviatis cespitosis squamosis. Folia cum petiolo 1/2 pollicem longa, foliola 1/4 lineas longa. Flores 4 lineas ferè longi, legumen 3-4 lineas longum 1/2 latum. Species elegans propè *O. Persicam* collocanda quae floribus minoribus, canna mucrone subulato longo, legumine inflato egregie differat collocanda

ASTRAGALUS CRETACEUS Boiss et Kotschy (Sect. *Hypoglottis*)

A perennis caudicibus procumbentibus denudatis dum apice folia condensata pedunculisque foliis subbreviores vel squilongos edentibus, foliis indumento lanato cernis sub 25 jugis foliis pinnatis contiguis villo connexis demum sejunctis ellipticis retusis, stipulis breviter petiolo adnatis triangulari-lanceolatis membranaceis, pedunculibus albo-lanatis floribus in capitulum ovatum densis confertis sessilibus, calyce membranaceo demum lacero albo-hirsuto dentibus subulatis tubo subnatis brevioribus, corolla, legu-

minibus pilis niveis densissimis longis rigidis villosis oblongis subcompressis breviter acuminatis

Hab in locis Pino *H(Uepensi)* consitis inter *Hebron* et *Dabourieh* Palestine cl Kotschy.

Folia ovata 3-4 pollices longa 7 lineas lata Capiiula fructifera nuce duplo majora, legumen 6 lineas longum pilis ejus diametro subaequilongis densissimis obsitum Affinis *A emarginato* Lab pedunculis longissimis leguminibus dimidiatis distinctissimo *A hirsutum* WiUd planta alpina indumentis setoso-adpresso rufescenti, foliis paucijugis longius distal.

ASTRAGALUS STRIMINEUS BOISS et Kotschy (Sect *Galegiformes*)

*A. perennis* pallo viridis, caulibus erectis glabris stramineis teretibus striatis inferne fohosis superne subangulatis parce ramosis, foliis strictis 7-8 jugis petiolo crassiusculo supra piano subtus canato jam paulo supra basin foliofero, foliis petiolulatis ellipticis vel elliptico-linearibus obtusis vel Tetusis margine supra subinvolutis praeter pilos sparsos adpressos citra evadens glabris, stipulis membranaceis stramineis triangulari-lanceolatis acuminatis libens, racemis 4-5 ex axillis superius inter se approximatis elongatis virgatis laxis, pedunculis crassis, floribus soletis brevissime pedicellatis horizontalibus bracteis lanceolatis stramineis ciliolatis suffultis, calyce stramineo tubuloso adpresso hirsuto dentibus linearilanceolatis acutiusculis tubo quadruplo brevioribus, corolla pallide ochroleuca glabra calyce tertio parte longior, leguminibus pendulis glabris intra calycem stipitatis subincurvis acuminatis compresso-subtriquetris bilocularibus

Hab circa pagum *Bludan* Antihbam alt 4800'

Bipedalis vel elatior Folia inferiora 4-5 pollicina foliis 8-10 lineas longis, superiora foliis minoribus donata Racemi serripedales longioresque, flores 8 lineas longi, legumen sesquipollicare % ' / > lineas latum Ex affinitate *A siliquosi* et *tetragonocarpi* Boiss Prior differt calycibus magis hirsutis, legumine piano, posterior foliis angustis floribus minoribus, legumine angustiori Ictragono



ASTRAGALUS CIMYSOCHLORUS BOISS et Kolschy (Seel. *Anthylloidi*)

A perennis tolus indumenta flavido dense et breviter velutinus, cauhbus brevissimis duns stipuhs et saepè reliquus petiolorum vetustorum vctilis, stipulis membranaceis albis in imam oppositifoham apice breviter bilobam coahitis, folus ambitu hnean-lanceolalis 20-25 foholalis fohohs oblongo-subquadratis retusis junonibus villo connexis tandem inferioribus prosertim subdistantibus, pedunciihs JicuaUs folus brevionbus pilis albis nigrisque mixtis velutims, floribus densè ovalo-capitatis sessihbus, bractem linean-selaceis nigro-lirsutis, calycis tubulosi post anthesin non accreti pihs albis nigrisque velutino-liruti deutibus linean-setaceis lubo subtnpld brevionbusj corolla violaced calyce sesquilingiore, legumimbus capitatis ovatis albo-hispidis papyraceis lnHatis apice acutis breviter mucronatis

Hab in rupestribus summi Taun Gihcici Kotschy I Balansa I

Folia pedem dimidium et amphiis longa foliohs 3-4 hneas longis 1  $\frac{1}{2}$ -2 latis Legumen 9-11 hneas longum 6-7 latum Species folus el habitu *A emarginalum* Lab et a (lines referens sed ab eis omnibus legumine maximo lit in *A. utngcro* et affimbus infiato sed papyraceo distinctissima

AsmAGALUS TAURIGOLUS BOISS (Sect *Anthyllmdei*)

A perennis totus indumenta adpresso gnseus senceus cauhbus abbreviatis caospitosis, stipuhs membranaceis petiolo breviter adnatis secus cdules imbricatis virentibus inferioribus obtusè el brevitor supcrionbus longiùs et acutè bilobis, folus 9-12 jugis foholis oblongo-elhpticis acutmscuhs approximatis, pedunculis folio tnp16 longionbus rectis pihs albis nigrisque adpressè hirtis^ spicis terminalibus capita Us densis fructifens oblongis, floribus aubsessihbus, bracteis Uneari-setaceis nigro-hispidis, calycis tubulosi post anthesin non inflati pihs albis mgnsque hispidi dentibus setaceis tubo tnp16 brevionbus, corolla cacruleo-violaceá' cdlyce tertift parte longion, legumimbus parvis longè albo-villosis oblongis marginc inferior] sulcalis acutmscuhs in rostrum recurvum abeuntibus

Hab in regione alpina Tauri OneDialis supra *Bulgharmaden* cl  
Balansa

Species affinis *A. molh* M B ab eo distincta indumento senceo,  
foliis minoribus minus angustatis, floribus minoribus, legumini-  
bus dimidiis minoribus lateraliter vix compresso

Obs Ex specimenibus e Tauro a cl Balansa relatis componi  
*A. demissum* Boiss Diagn ab *A. amceno* Fenzl specified non differere

ASTRAGALUS MICRACME BOISS et Noe. (Sect *Tragacantha pedun-  
culati*)

*A. suffrutescens* ramis prostratis petioliis vetustis tenuibus hor-  
ridis junioribus abbreviatis foliosis cespitosis, stipulis in unam  
oppositifloram membranaceam albam hirsutam apice oblique trun-  
catam breviter et acute bilobam coarctatis, foliis 6-7 jugis dense et  
breviter tomentosis glandulosis, petiolo tenui patulo in spinulam te-  
nuem foliolis vix longiorem abeuntibus, foliolis parvis inter se appo-  
ximatis obovatis retusis a petiolo remotis ab inferioribus ad su-  
periora diminutis, pedunculis foliis triplo longioribus apice flores  
5-1 laxiuscule capitulos ferentibus, calycibus indumento adpresso  
longo tomentosis glandulosis floriculis tubulosis dentibus rectis e basi  
lanceolate subulatis tubi quartam partem superantibus, fructifloris  
inflatis ovato-globosis, corollae sicco carnoso calyce sesquialongioribus,  
vexillo oblongo retuso recto, alis oblongis carnosis superantibus

***Tragacantha alterum genus Rauwolf It ex loco nata***

Hab inter *Envan* et *Ears* Rauwolf, in subalpinis propè *Van  
Armenae* cl Noe qui floriferum legit Junio 1849

Species propè *A. coluteoidem* collocanda cui valde affinis est et  
a quo differt petioliis tenuibus nec crassis rigidis, 6-7 nec multi-  
jugis, pedunculis non foliolis subbrevis longioribus sed ea multo superan-  
tibus

ASTRAGALUS LIBANOTICUS BOISS et Kotsch<sup>^</sup> (Sect *Tragacantha P  
Microcalyam*)

*A. suffruticosus* caulis petioliis vetustis erecto-patulis horridis,  
foliis sexjugis, petioliis hirtulis palidius virentibus spinosis tenerrimis  
**flavida** foliolis longioribus foliolis minutis virentibus adpressiusculis

hirtis elhpticis mucronatis inferioribus a basi pelioh remotis, stipulis scanosis stramincis parte hberâ ngiduh triangulanbus acuminatis, flonbus axillanbus in capitulum ovatum conglobatis, axilhs bifloris, bractcis membranaceis dorso lanatis plicatis acutis calyce subbrevionbus, calyce densè villosò demum 5 partito, corollâ slramineâ, vexillo ungue sublongion sequilato, legummeum-loculari adressè hirsutissimo

Hab in Libano inter *Bsckerre* et *Eden* cl Kotsehy qui fructiferum legit asst 4855

Species affinis *A echino* Labill et *A gummtfero* Lab ab utroque distincta spinis crebnonbus longionbus (petioli bipollicares), glomerulo florum majon, a priori iterùm foliolis non canescentibus, a posteriori eis non muticis Glomerulus florum non terminahs ut in *A echino* sed ad basin rami annotim situs qui character forsan non sat firmus sed ex cvolutione senon ramuli post anthesin onundus est

ASTRAGALUS CRASSINERVIUS BOISS et Noe (Sect *Tragacantha Macrocalyam*)

*A suffrulosus* ramis abbreviate parte inferiori petiobsvetus-  
lis curvatis plûs minûs spmosis, folus 3-4 jugis, petiolo tomentello crassmsculo in spin am flavidam foliolis multd brevioribus, foliolis oblongo-elhplicis oblusis spmulâ brevi tenui terminatis utrinque adressè tomentoso-gnseis nervis primarus secundarnsque sublûs prominuh, stipuh flavis subconaceis latis glabns lobis breviter cuspidalis, flonbus axillanbus bims, calyce densè et longè albo-piloso stipuh ultrâ medium occultato in lacinias setaceas demùm ad basin usquè flsso, corollâ carneâ calycem tertiâ parte excedenti, vexiUi Unearis curvati ungue in laminam exauriculatam sensim dilatator alarum carinam subexcedentium limbo linear! ungue dimidiò brevion

Hab circâ *Van Armeniae* cl Kotsehy

Habitus *A pyenocephah* Fisch sed fohola obtusa breviora, axillss bi nee multiflorcC vexillique lamina non basi acutangula.

Obs *A Maronicus* Boiss et Bl in pi Syr exs quod stipulis fongè nee breviter aciiminatis, flonbus calyci aequilongis nee sesquilongionbus, capituh abbreviate ab *A. Drusanim* specific^

disinctam autumabamus in hoc ex speciminibus intermediis nuper accepUs confluit

ASTRAGALUS FENZLII Boies (Sect. *Tragacantke Macroealyam.*)

A suffimtescens ramis brevibus petiolis vetustis homdis cass-pitosè confertis, foliis brevibus 5-6 jugis, petiolo flavido ngido breviter hirto in spinam foholis breviorē abeunti, fohohs adpresschirtis griseis parvis cllipticis basi attenuatis acutissimè spinulosis inter se valdè approximate, stipulis ovatis acuminatis ciliatis membranaceis, flonbus in axilis 2-4 glomeratis, calycis densè albo-lanati dentibus e basi triangulari linean-subulatis tubo sublongionbus, corollā purpurei calf ce tertia" parte longion, vexilli lamina<sup>1</sup> elliptic^ obtusfl basi acutè aunculatd in unguem subitò attenuate, alarum laraini cannd connate linean unguibus dimidib brevion

Hab in regione mendionah alpmS faun *Cilicia* all. 5300'-6000' Kotschy coll 1836 n° 131 et coll 1853 n° 110.

Species pumila ex aflimtate A *phlodts Boiss* a qu& inter ahos characteres vexillo abruptè in unguem attenuate foliohsque angustionbus differt Gl et am a Fischer hoc ad *Astr barbajovis* adducit calyce tenui ad basin usquè tandem partito aliisque notis me iudice distinctissimum

ASTRAGALUS SCHOTTIANUS DOISS (Sect *Tmgacanthm Macrocaly-*  
*cum* )

A suffimtescens, ramis vetustis crassiuscuhs peliolis vetustis **longis** nigrescentibus homdis, fohis 4-5 jugis, petiolis albo-hirsutis tenuibus in spinam flavidam foholis aBquilongam abeuntibus, foholis albo-lanatis ovato-oblongis obtusis breviter spinulosis, stipulis membranaceis ovatis cihatis breviter acummatis, flonbus 2-4 glomeratis axillanbus, calycis densè et adpressè albo-lanati dentibus e basi lanceolate subulatis tubo tandem usquè ad basin fissili longionbus, corolla earned calycem tertid parte excedenti, vexilh laminA oblongo-hnean obtusmscuW basi obtusè aunculata in unguem sensim attenuate, alarum lamind linean ohtus£ canna? coalite unguibus ferè dimidiò brevion

Hab in rupibus circa castellum *Gvleck* Tauri Gihcici alt 4800'  
cl Kotschy

Ex altitudine *A globiflon* et *A Lamarckn* Boiss foholis latioribus obtusionibus et indumenta magis lanato ohstitis, ramis crassioribus magis elongatis ab eis distinctius

(*OnONILLA GIUNDIFLORA* BoiSS

Hanc speciem id radices Tauri Gihcici propè *Guleck Boghas* legit  
cl Balansa Julio 1856 fructiferam a planta Canensi nonmsi calyce glabemmo (ut plures species affines variant) diversam Haec descriptionem addenda Legumina 2-6 ad pedunculorum apicem erecto-divergentia longissima (3-3' pollicana), inter semina subsinuata, latere interiori bicannata extenon acutè cannata, sensim in rostrum longiim a tenuata rostro apice recurvo stilo deflexo terminato

Obs *Secuttgeia Atlantica* TSoiss. et Rout Pugill pag 42 ex specimenibus fructifens ab amioiss Durieu acceptis est ut primum autumaveramus vera *COTOWMB* species *Coromlla Atlantica* dicenda Eju<sup>^</sup> legamina stinctiuscule<sup>^</sup> recta sunt, 3-3' /,, pollicana, tenuia, tetragon a angulis marginibus acutis, cis ad facies sitis obtusis, inter seraina non angustata, apice in rostrum breve apice recurvura attenuata

*ONamYCTi*? *TRICHOCALYCINA* Bois<sup>^</sup> (Sect *Hymnobrajchu*)

0 perennis, caulis plunibus erectis simplicibus foliosis eximie stnatis pihs longis sparsis patulis hirtis, stipulis libens triangulancelanceolatis acutis, fohis longè petiolatis 6-7 jugis foholis disatis magnis oblongis acutis viridibus pihs longis tenuibus adpressis **hirtis**, spicis terminibus demum longissimis laxiusculis, bracteis setaceis, pediculis bractea brevioribus, calicis adpressè hirti lacinnis c basi lanceolate longè setaceis tubo triplo longioribus, obovato purpurascenti calyce duplo longioribus, vexillo obcordato adpressè hirtis carinis xquilongis, alis apice oblique atteiratis acutis cannt triplo brevioribus glabris, cannd glabrè subtus angulo recto turvaia apice nctiusculd legumine jumori dense rufescenti-lanato

Hab propè *Van Armenise* cl Noe

Planta sesquipedalis, folia pedem dimidium foliola pollicem longa, spies tandem ferè pedales Flores magnitudinis eorum *O gaktiformis* et *O Townefortu* Priori ovaru mdumento ut videtur affinis sed ab *e&* et affimbus lacinnis calycis mirè sctaceo-elongatis diversa,

HEDYSAHUH SULPIUREUM BOISS (Seel *Lewlofnun* ?)

H. perenne totum pilis adpressis canum, cauibus humilibus erectis, stipulis in unam oppositifoliam apice breviter bidentalam coactis, foliis brevibus patulis 4-5 jagis foholis oblongis in fidiis axillae approximatis, pedunculis e\ axillis supremis folio dupli longioribus, flonibus 7-8 subsessilibus capitatis, bracteis lanceolatis brevibus, calycis pilis albis adpressis terti denibus lanceolatis tubo subaequilongis, corollâ sulphureo calyce triplici longior, vexillo oblongo retuso cannd sublongior, ahs canna) subtus angulo recto curvata subaequilongis, ovario adpresso hirtello, legumine . .

Hab propè *Tortoum* Armenise ubi flonferum legit cl Calvert

Gaulis in meo specimine bipollicans, folia vix pollicaria foliolis 2 7i lineas longis sesquilineam latis Pedunculus sesquipollicaris, flores 7 lineas circiter longi Ex affinitate *H varn* inter affines staturâ humilil, foliolis minutis, flonibus sulphureis in\$igne

HEDYSARUM CALYEUTI BOISS (Sect *Leiololntm* ?)

H perenne totum pilis adpressissimis argyreum nitidum, caulibus erectis, stipulis in unam oppositifoliam bilobam breviter connatis lobis e basi ovatis & cuspidatis, folus patulo-recurvis sexjugis foliolis subsessilibus ovatis vel ovato-oblongis inferioribus axilla approximatis, pedunculis ex axillis supremis folio brevioribus, Qonibus breviter pedicellatis in spicam ovatam confertis, bracteis triangularibus pedicellum aequantibus citò deciduis, calycis tenuissimè et adpressissimè hirti dentibus lanceolatis apice auriculatis tubo subbrevioribus, corollâ calyce triplici longior sulphureo, vexillo obcordato carind sublongior, alis obtusis cannd subtus angulo recto curvatis subbrevioribus, ovario Unean adpresso hirtello, **legumine**

Ilab m *Armed* propè *Tortoum* cl. Calvert

Folia 9-1/2 pollices longa, foliola 6 lineas circiter longa, corolla 8 lineas circiter longa. Colore florum et partium floralium forma et proportione speciei praecedenti affinis a qua statura relatione, **foliis** multo majonibus stipulaeque certe different

HEDYSARUM ACULEOLATUM Munby (Sect *Echmolohum*)

H annuum totum pilis sparsis adpressis hirtum virens a collo pluncaule caulibus erectis decumbentibusque pumibus, stipulis linearibus acuminatis ciliatis a petiolo libens, foliis 4-5 jugis foliolis oblongo-ellipticis obtusis mucronulatis, pedunculis folio paulo brevioribus, floribus 4-5 subsessilibus dense capitatis etiam post anthesin erectis, bracteis lanceolatis pedicello brevioribus, calycis lacinis angustis linearibus subulatis ciliatis tubo triplo longioribus, corolla purpurea, vexillo oblongo-lineariter retuso canna sublongior calyce duplo longior, alis linearibus obtusis canna paulo brevioribus, canna subtus angulo obtusissimo curvata apice obtusi, leguminibus rectis 4-5 articulatis articulis planis orbiculatis aculeolis flavidis apice uncinatis dense obsitis pube inter aculeolos minutissima lente solium conspicua.

Hab in segetibus inter *Tkmc* et *Lalla Maghrnia* Maio legitur il Munby.

Caules vix semipedales, foliola 6-7 lineas longa, flores eis *H. capitati* paululum minores, legumen pollicare articulis diametro vix 2 lineas latis. Affine *H. capitato* quod different foliolis plunjugis minoribus sicpius retusis, floribus etiam sub anthesi fine deflexis majonibus, dentibus calycis basi laevioribus, canna subtus angulo rotundato sed recto curvata et inprimis leguminis curvati articuli) majonibus brevius et siccioribus aculeolatis inter aculeos dense et breviter cernens *H. spinosissimum* longius distat,

VICIA HYPOLEUGA Boiss et Noe (Sect *Cirtuxa*)

V perennis, caudiculis subterraneis fibris formibus repentibus, caulibus erectis flexuosis pumilibus parce ramosis angulatis adpressis hirtis, foliis abbreviatis fere a basi approximatim et subalternatim 7-11 foliolatis rachide crassi in cirrhum brevissimi-

plicem vel bifidum abeunli, foliis ngidis ovatis oblongisve utn-  
 què adpressè pilosis supr,1 canescentibus subtiis argyreis, fo-  
 Uorum inferiorum obtusis supenorum acutiusculis, stipulis semi-  
 sagittatis acutis, pedunculis folio a\illan duplo longionbus, ra-  
 cemis 4-8 flons unilateralibus laxinsculis, pedicellis tubo caly-  
 cino multd brevionbus, calycis pihs adpressis sparsis hirti vio-  
 lacei dentibus breviter triangulanbus infenonbiis pauld longion-  
 bus, corolla obscurè violacefi glabra<sup>1</sup> calyce quadruple longion,  
 vexilh oblongo-hncans retusi ungue a lamina" non distincto alls  
 oblongo-hncans sublongion, cannd rotundatd apice acutius-  
 cuia alis pauld brevion, stylo supern6 circumcirca dens6 barbato,  
 legumine stipite calyce sublongion suffulto basi sttbattenuato  
 oblongo-rhombeo subcompresso glabro 3-4 spermo

Hab in regione alpma" raontis *Gysil Deppe* Taun Gilicici alt  
 850(K. Kotschy I Balansa I

Caules senupedales, floras 8-9 lineas longi Species elegans  
 habitu et characteribus *V anisodon* B Huet valdè affinis qusc  
 differt foliolis vix canescentibus subtiis non discoloribus, floribus  
 paulò minoribus, calycis dentibus magis msqualibus mferionibus  
 elongatis

**ERVUM LUNATUM** BOISS. et Bal

E. annuum glabrum, caulibus Lenmbusangulatisereclis pumilis  
 flemosis, folus abbreviate alternatim 6-10 foholatis m cirrhum.  
 longiusculum ramosum abeuntibus, foliolis parvis cuneato-obovatis  
 retusis mucronulatis brevissimè petiolulatis. stipulis rainutis argutè  
 mcibis, pedunculis laxè %-3 flons folium aequantibus vel sublongio-  
 nbus, pedicello calyce sublongion, calycis glabn lacinnis e basi  
 tnangulan setaceis tubo aeqmlongis, corolU palhdè cserulescenti  
 calyce tnpl6 longion, vexillo oblongo retuso cseruleo stnato ahs  
 sublongion, alls oblongis obtusis cannam subtùs valdè curvatam  
 oblusam apice violaceo-maculatam excedentibus, stylo sursùm re-  
 fracto latere superior piloso, leguminibus tetraspenms btipile ca-  
 lycem ssquanti suffultis subSemilunatis latere sapenon modicè cur-  
 vatis concavis, inferior valdè convexis, latitud-ine vix duplO latio-  
 nbus, papyraceis plants



Hab in pinetis dd beplcntrioneni spectantibus montis *Nift dagh* ad onentem Smyee cl Balanaa Fine Man jam fructiferum

Gaules semipcdals, fohola 1 1/2-2 liDcas longa Corolla tres Uneas circiler longa, legumen 6-7 lineas Ion gum 3-4 lalum Species leguminibus ab omnibus disinctissima.

LUTHYRUS DUUGUS Boiss et Noe (Sect *Eulathyrw* )

L glaber annuus caule erecto angulato fohoso infernè ramoso, ramis sine Us, folns brovibus bijugis cum imp an, petiolo complanato foliohs brevion, foliolis longè et angustè lmoaribus acutis terminali lateralibus supenontius aequilongo, stipulis linean-semibagittatis aculis clongatis, flonbus solitarus axillanbus pedunculo petiolo sublongion ad medium bibracteolato suffultis, calycis glabemmi dentibus Lngulaiibus acutis tubo soquilongis, corolla rubello-vio-lacea calyce dupld longion, legumme recto oblongo-rhombeo apice bre\iter mucronato 1-2 spenno doTso canahculato-bicannato, seminibus

Hab in cullis prope *Bagdad* cl Noe.

Planta 15-46 pollicans, foliola6-7 lineas longa \*/r<sup>3</sup>/\* lme© lata, flores llis *L acerw* pauld minores, legumen sex lineas fort! longnm3Iatum Species propè *L saftuttmet* Ciceramcollocanda caule erecto non scandenti, folus impari-pinnatis non cirrhosis distinctissima

Obs *Lathyrus frtgtdus* Schott et Ky in pi. Cihc exs 1853 est Ptsitwt *Attchen* Jaub et Spach Illustr pi Or

## ROSACES

POTENTILLA CALVCINA Boiss etBalansa (Sect *Pinnalte.*)

P perennis palhdè virens tota pilis ad ramos et petiolos patulis ad folia adpressiuscuhs hirta pluncauhs collo vestigiis fohorum dolapsorum squamoso, cauhs tenuibus erectis llexuosis fohosis parcè et dichotomy ramosis, folus radicalibus et caulmis mfenonbus pinnatis 2-3 jugis foliolis ovatis insequaliter inciso-serratis inferionbus mull6 minonbus, folus supenonbus subsessihbus

Iernatis foliolis oblongis acutionibus, stipulis ulnque breviter bidentatis, flonibus indichotomissupremissolitarusterminalibusque 2-3 fasciculatis, ramuhs brevissimis, peduncuhs fohis floralibus brevionibus fructifens deflexis, calyce adpressmsculè hirsute fohis oxtenonibus hnean-lanceolatis intenonibus oblongo-triangularibus tnpld longionibus lationibusque, petabs oblongo-spathulatis calyce brevionibus, carpellis minulis lssvibus glabns

Hab. circa\* pagum *Alia dagh* ad radices *Taun Cilmci* cl Balansa, Maio jam fructifera

Affiuus *P rapcstnquK* a nostrfi differt caule procenori (in noslr.1 caules semipedales vel vix longiores) non compresso, stipulis in utroque latere petioh indivisis, mflorescentiA ob ramulos pedunculosque elongatos foliaque floraha minutissima laxissimd paniculate, pedunculis fructifens crectis, petabs obovatis calyce subtnpld longionibus

Obs *P Panutmci* Boiss et Orphan in Orph Fl Groc exs ad *P pedakim* Willd. reducatur

#### SANGU[SORO]A ARMENA fioiSS

S caule elato stnato dichotomy ramoso parte inferior] indumento brevissimo crispulo rufescenti velutino, ramis elongatis strictis pedunculisque glabrescentibus, foliis glabns inferioribus longè petiolatis 15-17 foholatis foliohs brevissim6 pctiolulatis hnean-oblongis basi inaequaliLer cordatis circumcircd argutè multi^erratis dentibus ascendentibus mucrone nigro terminatis, fohorum ^upremorum foliohs paucis subfasciculatis diminutis hnean-lanceolatis, spicis longè pedunculatis cylindncis, bracteis ovato-triangularibus aculmscuhs rubns ciliatis facie glabns flores w\ excedentibus, sepalis oblongis obtusis virentibus apice fusco-purpureis extùs hirsutis mtùs apice hirsuto excepto glabns, iilamentis calycom longè excedentibus lutescentibus

Hab in Armeclae monte *Techdagh* supr& *Erzeroum* cl Calvert

Foliorum hmbus semipedahs foliohs intermodus bipolhcanbus 5-6 lineafi Irilis. Spica crassa 2-2 1/2 polhcans, Affinisspicis crassis *S alpwuB* Dunge foliohs ovato-oblongis craasiùs el obtusiis dentate longiùs petiolnlatis distinctsp

PRUNIIS PSEUDOAFIMENIACA Heldr et Sarton (Sect *Euprunus* )

Pr arborea vel frulicosa, ramorum corlice cinerascenti, ramulis annolmis glabns, folns glabris minulis pctiohs eis tnplò brevionbus suffuHis ellipticis ulnnque attenualis acuiisvel clhptico-spaihulatis obtusatis mimitfc et obtusè crenato-denticulatis, gemmis llontens biflon\* sparsis, peduncuhsbreuissimis glabris, llonbus drupis glabns pruinosis ovatis, pulamine ovato subcompresso acuto margme supcnon acutiusculo infonon levitersulcato

Hab in regionc abictinii montis *Parties Atticas* Arbor mediocns, racumen versùs frutox humihs Fructus a pastonbus *Agnobenkoukia* id c^t *Armenia (e sylvestres* dicli Fructus maturat medio Julio Sartoni Ueldreich!

Folia 8-12 lincas longa basi semper cuneata Peduncuh fnictifen lincam vel scsquiliioam longi Fructus e\ sicco magnitudinis terasi parvi, sarcocarpio carnosio Putamen 6 lineas longum 4 latum Folus minonbus el prsrscriim peduiculis breuissimis nee elongatis ulet frctu minon a Pr *insishtid* ct *P domeslicd* distincta Magis idfinis *Pr covunaho'* Ten qua? dilTert folns majonbubbasi longiùs allonuatis secùs nervum medium hirsulis, drupflminon multdmi-niis caruosA Species crcterùm ullcrion examini subjicienda

## CRASSULACE.E

SEDUH ERIOCARPUM Sibth var *modeslum*.

Planla longius hirla Flores majores albidu petalis minùs acuminalis

*S modestum* Boiss in Kokchy pi Cihc i 853

**Hab infaucibus *Gulek Boghas Cihcix a\i 3800/***

Hanc speciem colui c semmibus Kotschyams et plantam vivam observans hanc a *S itocarpo* Siblli — *S Onentah* Doiss ut vanelatem nee specilicè differre nunc pulo

Obs *Umbilicus Pehtalozzce* Boiss in kotsclry pi Gilic exs 1853 uiimero^ioribus spcciminibu<sup>1</sup>? A cl Balansa ex eodem loco acceptis

ab *V Lbanolico* DC quoad folia plius minus retusa, ramos el calyces hirtos V») glabrusculos, magiiludinpm norum mir6-\ananti lion differl In diagnosi Prodr Caiid scapus erronefc ob folia raulin.) NIL- citale delapsa « nudus « dicitur

## UMBELLIFERUM

### Knynglijm Kotschyi Boiss

E perermc glaberrimum paludt; virens, radice verticali, collo crasso fibroso, caule tereti crasso albido fohoso supern^ in pamculam corymbosam oligocephalam abeunti, folus conaceis radichabus petiolo longo supern6 spinuloso suJtultis, limbo ambitu rotundo palmatisecto segmentis elongatisangust^hneanbus in lacunas angulfe hnearcs elongatas saep6 itcrum lacinulalas apice lenuiter spinulosas nternatim sct-tis, **folus** cauhnis petiolo brovi dilaiato ^uf- fultis 3-5 palmatisectis, capitulis brevissimèppduncularis, nnolucris phjilis **valda** conaceis flonbus 2-3pl6 longionbus accro^is nervo^o- striatis utnnqufe 2-3 dentalis, paleis acerosis linran-lancoolnlis •lores dupld superanlibus, caiycis tubo papillis albis acuminate dms>è obsito 1 acinus norvo valido purtursis lanceolatis acero^is

Halj in *Tamo Ciltaco* ad terminoi Gcdreti versùs plumbi fodinas •ill G400' cl Kolschy

Caulis pedalis, fohoiium radichahum scgmcnla 3-4 pollices longj 'aciniaequè hneam vel scsquilineam latac Capilula magmtudinis corum *E Bourgati* Species affinis *E Billardien* ct prsBsertira *E Heldreichm* Boiss ab eis lacums longis angustissimis foliorum dis- lincta

### DUPLVRUM LOPIIICARPUM Boiss Ct Bal

B \*annuum glaberrimum, caule tereti rubello erecto flexuoso Mioso supernè parc6 et dichotomè ramoso, fohis inferioribus ob- longis in petiolum basi amplexicaulem altenuatis, intermediis latè ovatis perfoliatis, rameis orbicularibus perfohatis, umbellis e\m- volucratis 6-10 radiatis, involucelh phylhs 5 oblongis aculis ba^i **atenuatis** stipitatis exterioribus tribus flores «uporaritibn<; interior-

**ribus** bimis mimmis, petalis aurantiacis, fructus oblongi jugis angustè alatis ahs in cnstam spongiosam alternatim et momliformiter dcxtrorsum simslrorsumque flexuosam dilatatis

Hab circa *Gulek Boghas* Taun CiUcici cl Balansa Fl Junio

Planta pedalis vel paulò longior, folia integerrima glaucescentia, intermedia sesquipollicera vel 2 pollices longa Mencarpia 2-2 <sup>1</sup>/<sub>t</sub> lmeas longa Habitus et color florum *B crocei* quod mencarpus Iambus exalatis statim dignoscitur Species fructus fabrica elegantissima

ATHAMATA DLNSA BOISS et Orphan.

Ath tota indumento denso brevissimo molli ter velutina gnsea, caule crasso humili a basi ramoso ramis abbreviatis erecto-patulis fohosis, foliis petiolo brevi vaginaeformi insidentibus triternatisectis segmentis ambitu ovatis in lacinias angustè lmeares abbreviatis dissectis, umbellis breviter pedunculatis in unoquoque ramo 3-5 corymbum amplum convexum formantibus breviter multiradiatis, involucri pbyllis lanceolato-linearibus albo-marginatis radibus subbrevisionibus involucri bispidis pedicellos aequantibus, umbellis derisis, flonibus a lbis, fructu junon albo-tomentoso stylis longis rigidis > rectis divergentibus superato

Hab in rupibus prae-ruptissimis *Cnarozastrum* montis *Parnassus* alt 6000' abundanter sed locis omnino imperviis cl. prof. Orphanidis Floret Julio

Planta sequè longa ac lata 7-10 pollicans, umbellis heraisphencè confertis ferè omnino tecta Umbellae centrales ramorum diametro bipollicares laterales minores Folia radicalia 5-6 pollicana *hixtd Ath ramosissimam* collocanda quae differt indumento parvum, caule elatione, fohorum elongatorum lacinis elongatis, stylis de llexis

PBUCEDANUM ~~nEPAUERATUM~~ Boiss et Bal

P bienne glaberrimum radice verticali collo fibroso, caule elato glaucescenti striato tereti a basi alternatim vel dichotomè ramoso, ramis strictis elongatis virgatis iterum pariter dichotomis^ folia radicalibus paucis^ longè petiolatis pinnatisectis subternis jugis segmentis

vel sessilibus indivisis elliptico-linearibus\* vel longiusculè pedunculatis in laciniis elliptico-lineares acutas tripartite, foliis caulibus et ramis ad vaginam lanceolatam petiolarem reductis, umbellis terminalibus valde aequaliter 3-5 radiatis radibus distinctis, involucri nullo, involucri phyllis 3-5 membranaceis lanceolatis acuminate pedicellis subbrevionibus, umbellulis paucifloris, pedicellis inaequalibus, floribus fructibus in umbellula 1 vel 2 fertilibus oblongis corampressis apice breviter attenuatis stylopodio depresso BIS angustioribus superatis, stylis deltoideis brevibus, jugis filiformibus, valleculis angustè univittatis, commissure concava bivittata canali inani medio versus percurta

Hab. In regione montana superiorum Taunonensis supra *Bulgharmaden* cl. Balansa qui legit fructiferum medio Septembri

Folia semipedalia segmentis vel lacinis 1-1 1/2 pollicina longis 1 1/2-2 V. lineas lata Us. Caulibus cum ramis tripedibus strictè ramosissimis Mericarpiis 3-7 lineas longa 1 Va lata Habitus et folia omnino *Johrntze* sed fructus caracteribus in genere *Peucedano* non procul a *P. Chabrim* et *a. Qmbus militans*

#### JOHHENU SELINOIDES Boiss et Balansa

J. caule elato tereti crassiusculo superae paniculato, foliis radicalibus petiolo basi vaginanti suffultis ambitu triangularibus tripinnatisectis divisionibus primariis secundariisque petiolatis segmentis angustè linearibus lanceolatis, caulium inferiorum segmentis latioribus oblongo-lanceolatis confluentibus basi decurrentibus, caulibus superioribus et ramis ad vaginas cucullatas lineares longas ramis amplexi-angustis apice breviter acummatas minores segmenta pauca ferentes reductis, umbellis multiradiatis radius vix inaequalibus, involucri involucriisque nullis, puncto eorum umbellularem umbellulamque in nodum incrassato, floribus luteis, fructibus pedicello filiformi eis paulo longioribus suffultis oblongis corampressis stylopodio acutè conico superatis, stylis deflexis stylopodio aequilongis, mericarpiis margine spongioso lato margem, jugia lateralibus nullis interioribus Iribus tenuiter filiformibus obsolete vittifera, valleculis plants evittatis, commissure concava

Hab. In faucibus *Pylarum Cilmarum* a cl. Balansa lecta Septembri 1855 fructu maturo

Plant.] bomiiicmalLapaniculamamplamramosampdens Raimili  
breves basi vaginad umbelJam Lorminalem et saepiùs alteramsub-  
ses.ilom minorcm lalcralem ferentes Foha formi el magnitudinc  
ita *Silm ptatensis* rolerentia Radii circiter pollicares Mencarpia  
turn sljlopodio læ-> lmcas longa 2 lata Species umbelh& multira-  
duLis cuquahbus ab omnibus dNincliisima

MYL\MILA ECHINULATA BOISS el Blanche

M cauto stnato flexuoso a basi dichotomè ramoso pilis albis  
<UMKÇ et hreviler obsito, folus ridicahbus eodem ladumento cmo-  
idscctibus brevibus bipiinatisectis. segmentis oblongis obtusè m-  
risis, folus cdulims supenonbus ad vaginas hneares reduclis, pe-  
riuncuhs clongatis radn^quc papilhs sparsis spmulaeformibus echi-  
nnljlis, umbellis 6-10 radiatis, involucns involucelhsqQe nulhsy  
peLihis lutns dorso puberulis, fructu glabro pedicello tenmter fili-  
formi ^ublongion ovato-elhplico apice non emarginato, htylopodio  
miTiimo margmem vix asquanti stjlis deflexis eo pauUS longioribus  
supralo, alae ulnnqut; diametro semims sublations parle margi-  
tiali mcrassaU albd, inlcrnd pollucid.) angustion, vittis tenuibus  
\*iomini cDquilongis o\Lcrionbus paulo lationbus , commissure  
**glabra**

[Lib circd *Eden Libani* rev P Reygasss ex am Blanche

l'l.inta habitu *M Sekakul* referent scd fructus majore^ eos *M la-  
siomqw* reforentos 5 ^linea<sup>1</sup>\* v>ngi \ lali Species parlr superior  
**planta spinulosa** fruclufque fornid **insignis**

AINSWORTHIA ELtr.VNS Uoiss et I3alan>a

\ annua tola hrcvisMrm.<sup>1</sup> hirtoscabndula pallid6 virens cauli-  
Im^ lenuibim iingulnhs forè a basi dichotomè ramosis, folus radica-  
libus ot mfenoribus hrevitor petiolatis pmnatiseclis 2-3 |Uglisseg-  
jneutis ovdi<> oblUM.<sup>1</sup> liiciso-crenalis Lermmali sajpe trilobo, folus  
"Jiipenonbus sessibus insegmenta pauca hneari-lanceolala acuta  
**subintegra** piniati^ctlis, umbellis long\*\* pedunculate 7-14 radiatis  
**radus** peduiiLulisque acutangulisscabris, involucns involucellisque  
**retacis** Mdlnis doliexiv, peUilis albis glabris radwntibus, caiycis  
**dentibus** oh-ohMis fiuctibu^ jn umbelluhs dimorplus alns urceo-

latis subrotundis alus planis subrotundis basi apiceque retusis pedicellis setaceis eis Eeqinlongis suffultis sub lente brevissimè vel Uno-hirtis, stylopodiominuto emarginaturd occultato styhsbrevibus deflexis, alae diametro seminis duplo lations parte extenori albfl vix incrassaU Isevi in tenon rufescenti aequilatà<sup>1</sup>, vittis dorsahbas I lalerahbus semen marginantibus clavatis intenonbus interrupt ad apicem seminis brevibus clavatis dein ad ejus basin in binas maculas oblongas rursiis nascentibus, vittis comraissuralibus binis filiformibus contigui<sup>^</sup>, commissure medium verstus puberuld

Hab *circi Gulek Boghas Twm Cihaci cl* Balansa Fl Junio

Plantapedahsvelscsqmpedahs, habitus *Haselquisttw JEgijptiacm* sed folia minùs dmsa, fructus minores margme laaves nee rugosi 3 '/t lm tantùm diametro lati et magmtudie vittarum ahii. characteribus neglectis ab omnibus *Ainsworlhice* speciebus statim dignoscendi *Hasulquisttw* genus a *Tordyho* caractere vanabili fructus dimorphi tautùm distinctum probabiiiter ID postemm non servandum crit

CYCLOTAXIS TUIGIDA Boiss. et Balansa

€ annua setuhs albis brevibiis paLuha hispidula multicaulis Caulibus erectis vel ascendontibus parcè et dichotomè ramosis, folns uiferioribiis et radicalibus petiolatis ambitu oblongis tnpinnatisectis lacinulis lineanbus brevibus, folns supenonbus abbreviate potiolo brevi vagmaeformi suffultiSj umbcllis alus terminalibus fertilibus breviter pedunculalis 2-3 radutis alus axillanbus vel en basi umbellae fertilis nascentibus mascuhs, radus umbella\* fertilis post anthesin valdè mcrassalis, involucro nullo, involucelli phyllis brevissimis deflcxis Integns vel bilidis, calycis deutibus breviter lanceolatis cit6 deciduis, stylopodio cupulan membranaceo in flonbus masculis prassertim dilatato truncate phcalo rubello, fructibus stellatim patentibus centrah sessih leevi lateralibus dorso saapitùs echinulato-scabndis pedicello brevissuno incrassato suffulUs omnibus fertilibus dehiscentibus brovibus turgidis laterahLer compressis dorso sulcalis in rostrum rectum ngidum leres lateraliter scabndum slylis duobus ngidis divergentibus superatum abcuntibus, jugislalis obtusis inlus spongioso-incrassatis, carpophoro lato apice bifido



*Scandix turgida* Boiss et Balansa pi Gilic exs \ 855

Hab in calcareis ad *Bouloukh* propè *Mersina* Ciliciac littorahs  
cl Balansa Fructifera Maio

Habitu, fructus magmtudine valde affims *C Palestine* BUJSS  
ab eâ differt foliorum lacmulis magis abbreviate, umbelhs pauci-  
radiatis, fructibus omnibus detuscentibus et aequilatis, lateralibus  
longiis pedicclatis, quamvis in hac specie fructus centralis am-  
bellulse peripheries vix dissimihs sit eam ex stylopodii formâ  
aptiùs *Cydotaxtdi* quam *Scandia* adnumeramus, pñons generis  
tamen characteres differen bales eam minuere fatemur

ANTIIRISCUS KOTSCHYI BOISS et Bal

A glabra perennis radice vertically cauhbus numerosis cur-  
valo-decumbentibus teretibus strmtis dichotomè ramosis, folns  
radicahbus numerosis petiolu in femè dilatato patulo-recurvo brevi  
suffultis ambitu ovatis bipinnatisectis segmentis petioimlatis ovatis  
in lacinias ellipticas integras vel trifldas acutiuscolas par tit is, cau-  
lims paucis valde diminutis lacinus tenmonbus, umbeilis longms-  
culè pedunculatis 4-5 radiatis involucns nullis, involucelli phyllis  
2-3 brevibus cito deciduis, pelahs parvis albis non radiantibus,  
fructibus pediccllo tenui eis longion suffultis hneanbus a latere  
subcompressis laivibus nitidis apice brevissimè et obsoletè ros-  
iratis svilcatisque, stylopodus duobus comcis in stylos breves  
abeuntibus

*Chwrophyllum Kotschy* Fenzl in Kotschy pi Cihc exs 1853

Hab in regione alpinâ *Taun Cihcwialt* 8000' Kotschy! Balansa I

Habitus Cart *Cam* sed caules magis decumbentes, folia *Rente-  
ram procumbentem* referent Mencarpia 2 hneas aut pauld ampliùs  
longa Ex fruclibus matuns a cl Balansa lectis et planè evittatis  
haec planta inter *CkBrophylla* non militat Ob mencarpia apice  
tantùm sulcata et radicem non tuberosam aptiùs *Anthnsco* quam  
*Freyer*® adnumeranda

MEUCAJIPUS CILICIGUS Boiss et Bal

M caule erecto lamusculo mfernè acutè anguUtObupernè plus  
minùs acutè triquelro corymbose, foliis pallidè virentibus praeser-

Um ad petiolulos et costas hreviter et sparsim papilloso-asperulis, radicalibus bipinnatisectis 3-4 jugis ambitu triangularibus petiolo lato vaginanti supra plana basi margemato, segmentis breviter petiolulatis vel sessilibus oblongis obtusis obtusè calloso-crenulatis, foliis caulibus inferioribus pinnatisectis superioribus ad vaginas petiolares lanceolatas obtusas reductis, umbellis 15-18 radiatis centralibus breviter caetens longè pedunculatis, involucri involucrellique phyllis oblongis obtusis vel mucronulatis margine anguste membranaceis, umbellulis multiradiatis, fructu pedicello eodem subaequilongum suffulto parvo ovato-oblongo obtusissimo basi subangustum, mericarpi altero saepe tetraptero altero triptero alii crassiusculis lateralibus saepe latioribus, albumine usque ad  $\frac{5}{8}$  longitudinis pericarpium producto

*M microcarpum* Boiss in pi Anat Balans 1855 non Diagn

Hab in Cilicia montem prope *Mersina* Bilans et Cadet de Fontenay in herbario Heldreich!

Gaulis 1  $\frac{1}{2}$ -2 pediculis, foliorum segmenta 12-18 nervis longa 6-9 lata, mericarpia 4  $\frac{1}{8}$  nervis longa *M microcarpum* cum hac specie adnumeraveram certè differt caule tereti, aetiam dorsalibus multo angustioribus, umbellis pauciradiatis *M Cilioticus* fructus caractere *Heptaptere colladonioidi* adnumerandus esset quia affinis differt fructu duplo majore, phyllis involucri et involucrellae uncinato-setaceis reflexis, etc Species *Mehocarpi wiper* detecta Remonstrant *Heptapteram* generis non amplius servandam esse et *Mehocarpi* ipsum forsitan fons extremis in *Colladomam* confluere

#### CONIUM DIVARICATUM Boiss et Orphan

C glabrum caule elato tereti sternalo dichotomo ramoso, foliis radicalibus caulibus superioribus petiolo brevi vaginiformi suffultis bipinnatisectis segmentis oblongis in lacinas oblongo-uncinatas acutas partitis, umbellis pedunculis radius brevioribus suffultis 12-15 radiatis nodo incrassato, involucri nullo, involucrellae phyllis 3-5 lanceolatis brevissimis, pedicellis fructu breviter ovato a latere compresso 4-6plo longioribus, stylopodio depresso stylo ea vix longioribus superato, jugis mericarporum obtusis.

Hab in monte *Parmiso* prope *Rackoya* cl Orphanides alt 3500\*

Hasc planta cujus specimen Incomplelum bucùsque taniùm **vidi** a *C maailalu* differre videtur foliorum laciniis lationibus, involu- cellis phyllis habens nee nullatrahiter inter se basi coactis, pedicellis longioribus et in primis jugis convexis parùm a valleculis distinctis et cum eis unicoloribus nee albis elevatis

ECHINOPHOM CARVIFOLU Boiss et Balansa

Est annua glabra, radice verticali brevi ramosa, caule erecto sulcato fore a basi ramoso ramis erecto-patulis, foliis radicalibus et inferioribus petiolo basi dilatato suffaltis ambitu triangulari-lanceolatis pinnatisectis segmentis utriusque 7-9 ab inferioribus ad superiora minutis oblongis a basi in lacinulas breves lineares bipinnatisectis, foliis superioribus brevibus sessilibus multifidis, umbellis inaequaliter 7-9 radiatis, involucri involucellique phyllis lanceolatis acutis hisce pedicellos subsequantibus, flore centrali sessili hermaphrodito caeteris pedicellatis dentibus calycibus orbatis masculinis petalis albis glabris non radiantibus, umbellulis multifidis corpus ovato-rotundum pedicellatis apice liberis florum masculinorum marginalium concretorum echinatum formantibus, fructu contracto breviter rostrato dentibus calycibus densis patulis, stylopodus in stylis divergentes abeuntes

Habit in umbrosis montis ad orientem pagi *Kechhck* propè *Mw-srna* siti in *Cihcia*\* Legit Junio LI Balansa

Folia *Can cam* Caulis pedalis vel sesquipedalis ramis elongatis paniculam corymbosam formantibus Umbellulae multifidae magnitudinis *Pm* Vittas in fructu non omnino maturo non observare potuimus Species radice annua, foliis lenis nee rigidis etc distinctissima

CAUCALIS LEPTOPHYLLA L var *pedunculata* Boiss et Noe

Umbellarum pedunculae graciles folio axillari 2-3pld longipres, flores paulo longius pedicellati

**Habit in Kindistiana** cl Noe

**RUBIACEÆ**

GALIMUM CILICICUM BOISS (Sect *Eugalta*)

G perenne cespitosa, caulibus parte inferiori procumbentibus, ramis erectis, pumilis densissime foliosis simplicibus vel parce ramosis sub lente velutino-puberulis, foliis semis lineari-subulnatis rigidiusculis nervo medio vix margine latio in mucronem brevem abeunti percursis margine scabundis, floribus ad ramorum partem superiorem in verticillastra 3-5 subdistantia paniculam brevem spicatum formantia dispositis, verticillatis inferioribus e pedunculis oppositis apice 3-5 floris brevibus superiorem e floribus fasciculatis sessilibus constantibus, foliis axillaribus longe longioribus, corollae glabrae albae lobis breviter lanceolatis in mucronem brevem intus reflexum abeuntibus, ovario oblongo-clavato apice truncate, antheris ovatis nigris, stylo apice breviter bifido, fructu ovato obsolete tuberculato

*G. Olymncum* Boiss in Kotschypl Cihc. 4853 non Diagn

Hab in regione alpina Taun Gihcici alt 8000-9000<sup>1</sup> Kotschy I Balansa I

Var *procerum* — Gaules rigidiores elongati 3-5 pollicares, folia rigidiora erecto-patentia tandem straminea. Verticillastra pauciflora floribus omnibus sessilibus

Hab in regione montana caudion infra *Gulek Maaden* cl Bantensa.

Hanc plantam tam cum *G. Olympicum* confudi donec specimina numerosa a cl Balansa lecta me docuerunt esse speciem diversam sistere. Gaules in *G. Olympicum* semper brevissimi sunt fasciculum florum unicum terminalem ferentes, folia mucrone saltem duplo longiora terminata vix et obsolete scabunda. stylus ad basin usque bipartitus. Forma procerum primo aspectu verissima ad typum tamen manifeste referenda ut et formae elatiores *G. Onen-*  
*alis* ad typum ejusdem speciei

GAUUM Anii/EnEN« FJoiss et Djlansa (Sect *Euapanne* )

(I :mimum ~~pi~~ iseo-virens, caubbus longis flaccidis ascendentibu\*  
~~teretiusculis~~ pilult\* tomenlosis parle supenon opposite ramosis,  
**ramis** pantulam longissinam angustam formarHibus, folJis 8-1 Oms  
~~acul~~on roliorsis scabernmis mfimis oblongo-spathulatis basi at-  
tenuatis ta'tons lanceoldto-hncanbus in mucroncm longinsculum  
abeuntibus omrnub suLtüs elcvalim uninerviis preter aculeos  
maigmdlos utrdquo *Uc\c* birtis, paniculai ramis tomentelHs verti-  
cillo axillan muU6 longionbus apice plunès tñchotonns ramuhs  
**pedicellisque** brevibus divancalis cymam confertam formanlibus,  
**bracteis** linean-sctaceib bievibus ad pnorem tñchotomiam ver-  
ticillaus ad c#ler^ oppositib, corollae glabrse albac plans lacinus  
lanccoljtis longè caudalo-acurainatis, anthens obbngis lutescenti-  
bus h lam en to longiusculo suffultis, stylo ad basin bipartito, sligma-  
tibus sphaericis nigricanLibus, pedicellis fructifens patulo-subre-  
Lin vis IrucUi vi\ longionbus, fruclu didymo minutè papilloso-gra-  
jmlalo

Hab in scpiibiib ad *Bmilovhh* propo *Merstna* Gilicias littoral is cl  
Bdlausa Fl Maio

Species distinctissima, scabntiead *Apannes* veras, inflorescentii  
a u I em ad *G cmidalum* accedens sed praesertim *G pisifero* Boiss  
accetlons glabntie corollâ saltern dupld majonuon caudatâ, fruclu  
inllato quadruplè majon caeterùm dislinctissimo *G adharents*  
CJUIGS 1-2 peddles *H* prob longiores, flores illis *G aparwes* paulti  
**majores**, fructus magnitudims *G Vaillantit*

## DIPSACEÆ

CEPHALAHIA CILICTCA BOISS et Kotschy (Seel *Leptcephalns* )

C procera caule tereli clalo pilia relrorsis basi tuberculatis pubc  
brevisund obsitis Inspida superng opposite ramosa ramis tenuibus  
dngulatis virgatis elongatis, folns tomentosis oblon go-la nee olatis  
arutiusculè dentatis in petiolum brevem attenuatis dentibus bre-

**Viter** Lrianganbus awsendeuLibus, rameis glabrescentibus hnea-  
nbuj> vel Unean-subulatis, pedunculis longissimis, capiluis sphav  
ncis, paleis prater margmem cihalulum glabrescentibus mflmis  
ova Us obLusismuticis caeiens oblongo-lmeanbus apicein rostrum  
breVe abruptè attenuate, corollis albis extus villo&issimis non ra-  
diantibus, involucello adprcssiibculè hirlo tetragono compresso  
dentibus quatuor rectib triangulanbns breviter aristalis

Hab in Ciliciâ littorah circâ *ffemna* KolSchy et *Bouloukh* Ba-  
lansa

Plan La 4-5 pedalis, folia infenora 4-6 poDices longa pollicem  
Jala, capitula eis *C Transylvantce* majora, fructus 2 •/• lineas, den-  
ies terminates lmean longi lateraliter ranùs denliculo aucti Spe-  
ties afiims *C Transylvamcee* quæ differL folns pinnatis, paleis lon-  
giùs arista Us, involucello octodentato, clc

GEPHALAIU DIPSACOIDES Boiss et Balansa (Sect *Lepicephalus*)

G perennis caule procero lereti slnalo glabro supernè opposite  
famoso ranus longis strictis submonoccephalis, folns radicaibus  
molliter lomentosts gnseis pinnatipartitis longfè petiolatis parlitio-  
nibus laleralibus utnnqu6 4-2 oblongis obtusis seeds petiolum de-  
currentibus terminali multd majori elliptic^ utnnpè attenuate  
acutâ crenulatd, folns caulims ad ramorum basin sessilibus in la-  
cinias angustè hneares pinnatiparlilis, capituhs magnis ovato-ro-  
tundis, paleis albidis tomentelhs mfimis oratis muticis calens  
lanceolalis breviter acuminatis pungentibus corollâ ochroleucâ non  
radianti breviter tomentelW, involucelli quadranguli acutè angulatj  
sulcati dentibus quatuor hneanbus mvômcro C-8plò brevionbus,  
quatuor Intermedys brevissimis

Hab ID regione montanâ *Taun Cilwm* circa *Gulel; Boghas* cl  
Balansa Floret fine Juh

Caulis plures pedes altus, folia radicaaha fere *Knauttw sylvaticce*  
Capitulum magnitudine et characteribus afiims *C amkosimdi*  
B et Spr folns 3-5 jugis pinnatipartitis segmentis ovatis basi an-  
guatatis distmetissimee

## SYNANTHEREJE

ANTHEMIS MICROSPERMA, Boiss et Kotschy (Sect *Euanthemis* )

A annua tota pils> adpressis cinerascens, cauhbus e collo plunbus tenuissimis flexuosis ramosis procumbentibus, foliis parvis angustè hneanbus acutè et brevissimè pinnatilobatis, capitulis parvib longè peduncuiatis, involucri adpressi phylls adpressè hirtis oblongis membranaceo-marginatis, liguhs albis oblongis tndentatis disco vix longionbus tandem reflexis, receptaculo ovato, paleis oblongo-lanceolatis apice abruptè attenuatis acutis praeter nervum medium obscunorem hyahnis disci flosculs brevionbus, achenus minimis obovalis laevmscuhs obsoletè costatis apice rotundatis calvis minutè umbonatis

Hab in deserto *Arainco* inter *Cairo* et *El Ansch* cl Kotschy

Caules cum pedunculis semipedales, folia 4-5 hneas longa lineam dimidiam lata^ achenia dimidiam lineam vix longa Species formâ foliorum et achenus minutis distinctissima habitu ^4 *scaposam* et *A fugacem* Gay referens

ANTHEMIS HEBRONICA BOISS et Kotschy (Sect *Euanthemis* )

A annua virens parcè hirtula a collo multicaulis, cauhbus nanis procumbentibus ascendentibusque tenuibus ramosis, folus in lobos tenues bipmnatisectis ambitu ovato-oblongis, capitulis minutis peduncuiatis, involucri adpressi adpressè hirti phyllis oblongo-lanceolatis vmdibus albo-marginatis, paleis oblongo-lanceolatis subcarinatis apice abruptiuscul6 in mucronem attenuatis, ligulis albis ovato-oblongis demùm reflexis disco vix aequilongis, recep-laculo hemisphtenco, corollas tubo in flonbus extenonbus praBsertim indurato rubello ad achenu apicem persistenti, achenus obsoletè tuberculatis obpyramidatis margine brevi dimidiato superatis, achenus intenoribus tenmonbus stnatis margine integro,

Hab circâ *Hebron* Palestine cl Kotschy

Planta habitu parùm notabilis tubi corollhm naturâ et achenus juxtâ *A Chiam* collocanda sed ab efl involucri phylls non nigro-

marginatis, capilulis multft minonbus, hgulis brevibus valdè discedens.

GOTA LYONNETIOIDES Boiss et Kotschy

G annua nana adpressiusculè hirta caule ranùs solitano monocephalo sapiùs a collo ramoso ramis divancatis mduratis submonocephalis tandem supernè mcrassatis, folns angustè Hneanbus in lacinias breves acutas saepè iterum dentatas pinnatipartitis, capitulis discoideis, involucln adpreasissimi adpressè hirti phylhs lanceolatis obtusis palhdè rufescentibus albo-membranaceis, receptaculo CODICO, paleis linean-lanceolatis subcannatis mucronulatis, achenns parvis mgricantibus obpyramidatim et acutè quadraogulis subcompressis basi acutis utnquè laevibus apiee truncatis margine angustissimo utnque in denticulum minimum abeunti

Hab in montibus *Zebdam* Antilibam alt 5000' Kotschy

Planta 2-3 pollicans facie omnind *Anthemidem* e sectione *Lyonnei* B v. gr *L abrotamfoham* referens sed prater folia angustiora achenns omninO generis *COUB* ab e3 et afiinibus discedens '

GOTA OXYLEPIS BOISS in Kobchy pi exs Gihc 1853.

G perennis caudicibus induratis caules flonferos ascendentes striatos fohosos supernè longè denudatos monocephalos ahosque breviores stenles edentibus, foliis prater pilos albos patulos sparsia^imos glabnuscus petiolo lacinulis setaceis spinuloso sui^Tultas bipmoatipartitis lacinulis nunutis lanceolatis lobatis lobis omnibus acutis tenuissunè aristulatis, involucln adpressè hirsuti phylhs adpressis lanceolatis obtusis membrand marginali mgrS augustd erosuli^ paleis e basi lanceolate longè et tenuiterspinosisngidisflosculos superantibus, ligulis achemis breviter obpyramidatis quadrangulis compressis obsoletè stnatis membrane brevi truncate in extenonbus subdunidiatâ superatis

Hab in regione montand supenon Taun Orientalis supra *Buigarmaaden* cl. Kotschy et cl Balansa

Caules flonfen 1 V>2 pedales Gapitula eis *C. alttsstmce* maprA Species foliis tenuissimè sectis lacinulis aristatis paleisque aculis-&inas notabihs juxt^ *C maerantham* Gollocaada Earn fructiferam tantùm vidi, an lgitur capitula verè discoidea?



ACHILLEA MOJVOCEPIULV fioiss et Balansa (Sect *SanlöhnotdecB* )

A t mullicaulis cauhbus ereclis tenmbus terc-  
 tibus simplicibus vel parcè ramulo&is fohosis adpressè cano-to-  
 mentosis supernè longis denudatis monocephalis folus patulis re-  
 curvisve anguste hneari-vcrmiculatis aretè revolutis pinnatisectis  
 scgmentis transversis acutè denticulatis confertissimis, capitulis  
 globosis, mvolucn phyllis adpressissimis sparsim et adpressè ca-  
 nescenlibus ovato-lanceolalis acutis elevatim cannatis, liguhs fla—  
 vis paucis ovatis brevissimis

Hab ad rmnas castelh propè *Anacha* in Tauro Gihcico siti cl  
 Balansa Fl Sept Oct

Caules *e* caudicibus lignosis procumbentibus semipedales lon-  
 gioresque, pedunculi nudi 3-4 polhcares Gapitula magmtudine  
 pisi Folia fer6 *A miarolobcB* DC , majora8-101meas longa, gem-  
 marum breviora Ex aflimato *A. microlobw*, *A sulphurew* Boiss  
 cL *A oligocephalw* DC ab omnibus praeter alias notas caulibus mo-  
 nocephalis diversa

HELICIIRYSUM AMORGINUM BOISS et Orphan (Sect *Virginea* )

H perenne totum adpressè et densè cano-tomentosum, caulibus  
 simplicibus ereclis totd longitudine fohosis apice 5-8 capitula  
 brevis&imè pcdunculata in capitulum conglobata ferenlibus, folus  
 radicalibus el infenonbus superionbus angustè hneanbus  
 obtusis supremis acutis, mvolucn squamis mveis praeter basin  
 lanatam glabris rnlidis tandemstellalim patentibus oblongo-lanceo-  
 lalim obtusis subcucullatis, mfirmis et intimis brevionbus, inter-  
 medns disco sesquiloncionbus, receptaculo nudo areolato, flo-  
 nbus temineis paucis marginahbus, castens hermaphroditis,  
 pappo scabro flosculos superanti, achenus glabns mimmis an-  
 nulo basilari tumidulo nitido donatis

Hab in insuW *Amorgo* cl D<sup>r</sup> Gnpanis ex Prof Orphamdes

Hujus pulchernniBe stirpis infausto casu specimina parte infe-  
 non orbatS UnLum vidimus, caules humiles esse videntur, folia  
 supenora 6-9 lineas longa lineam vix lata Gapitula expansa dia-  
 metro 6-7 lineas lata in capitulum subsphaencum nuce majus con-

densala Capitulum magnitudine ab *H lacteo*, *mveo*, *leucocephalo* nisque Onentibus involucris niveis donatis prater mflorulentiam diversam distinguitur Collocandum prope *Gn virgineum* Sibth Fl Graec caule obovato, foliis ovatis superioribus oblongo-hincibus, involucri phyllis intimis longioribus distinctum

HELICNYSUM BILLARDIERI BOISS et Blanche (Sect *Virginea*)

H perenne caespitosum totum adpressum et densum cano-tomentosum, caulibus simplicibus erectis tota longitudine foveosis apice 1-3 cephalis, foliis radicalibus obovatis obtusis basi attenuatis, caulibus oblongis vel hinc-spathulatis acutiusculis, pedunculis ebracteatis capitulis aequilongis vel longioribus, involucri phyllis niveis omnimodis glabris nitidis oblongo-ellipticis obtusis vixim et intimis brevioribus, intermediis disco sesquialongioribus, receptaculo nudo, foliis fere, minus marginalibus paucis escens hennaphroditis, pappo scabro flosculos superanti

*H virgineum* DC Prodr nee *Gn virgineum* Sibth Fl Graec tab 860

Hab in Libano circa *Eden* c\ Blanche, Labillardiere herb DC. **inter *Bscherret Anubiti* Kotschy**

Ut jam dixit cl Lindley in Sibth Fl *GTSBCA H virgineum* Sibth (sub *Gnaphalo*) ex monte Atho differt caule humiliori, capitulis subsessilibus, involucri phyllis intimis longioribus, omnibus basi lanatis *H Amorgnum* B et Orph capitulis numerosioribus conglobatis, involucri phyllis basi lanatis paulo durioribus longitudinaliter in *H Billardimnon* undulato-subplicatis differt

CENTAUREA LYOAONICA BOISS et Heldr (Sect *Acrolophus*)

C perennis breviter et parcissime araneoso-hirtula caulibus abbreviatis suffrutulentibus, ramis pumilis tenuibus angulatis simplicibus vel bifurcis 1-2 cephalis, foliis radicalibus et inferioribus tenuiter pinnatifidis, segmentis angustis hincibus rachidi simplicibus brevibus divaricatis, foliis superioribus sub capitulo hincibus integris, capitulis minutis, involucri phyllis adpressis palmaribus membranaceo-marginatis in appendicem centro fuscam margine late membranaceam irregulariter laceram in

intenoribus manifestius cucullatam abeuntibus, flosculis pallidè roseis, achenis

Hab in aridis *Lycaomte* inter *Beychehr* et *Komah* cl Heldreich Maio 1845

Caules brevissimu sublignosi, rami flonfen tnpollicares, folia longiora vix polhcana lacinus lineam dimidiam labs. Capitula ea *C. Cariensis* omninò referentia quæ affinis differt ramis elatis, foliorum lacinus latis et prassertim involucri appendicibus regulariter cihato-pectinatis in mucronem brevem abeuntibus.

CENTAUREA PRJEALTA BOISS et Balansa (Sect *Lopholomotdes*)

C caule parcè araneoso demùm glabrescenti elato angolato-sulcato supèrè longè et corymbosè ramoso, folis radicalibus araneosis demùm glabrescentibus pinnatisectis segmentis aliis intermixtis minutis oblongis sessilibus alus petiolulatis lyrato-pinnatipartitis partitiombus inferioribus oblongis acutis terminali majon oblongâ dentatâ, folis caulinis minutis pinnatisectis vel indivisis hnear-lanceolatis, capitulis magnis pedunculis eis plerumque longioribus suffultis, involucri glabri squamisvindi-flavescentibus ovato-oblongis appendice brevissimâ triangulari fuscescenti lnermi ciliatâ utrinque decurrenti tenninatis, aliis flavidis latitudine squamæ multò brevioribus, flosculis atropurpureis non radiantibus, achenis adpressè hirtis, pappi sordidi sene extenon achenio sublongior mteriori achenio subtriplid brevior.

Hab in fauce *Guzel d&rt* Ciliciffil littoralis supra *Sedichig* propè *Mersina* cl Balansa Fl Junio ineunte

Caulis 3-4 pedalis, folia radicalia 8-10 polhcana medium versus tres polhces lata, capitula eis *C. scabioscs* pauld majores. Ex habitu, colore flosculorum, et indole pappi propè *C. Anhoctam* Boiss collocanda quæ squamis in spmas latas rigidas palulis abeuntibus, etc, differt

CENTAUREA MUSARUM BOISS et Orphamdes (Sect *Phalolepis*)

C perennis tota indumento cano adpresso mvea cspitosa, folis radicalibus petiolatis alns lyratis segmentis oblongis integris

obtusis terminali multo majori, alns oblongis basi lobulatis indmsis alns ut et caulina in lacinias oblongas obtusas integras pinnatipartitis, sapenonbus sessilibus, summis ovato-oblongis basi minutè lobalis, cauibus pumihs erectis simplicibus monocephalis vel supernè parcè et subcorymbosè 3-5 cephalis tota longitudine fohosis, involucri ovato-rotundi squamis glabris imbricatis flavescens longitadinaliter striatis abeuntibus in appendices membranaceo-scanosas latas ovatas obtusas cacullatas erecto-patulas squamas ipsas tegentibus centro fuscas margine latè albidas eroulas, flosculis (lavis non radiantibus, achenis pallidis glabris, pappi serie extensa achenio triplo breviori interiorem superant)

Hab in regione media Parnassi prope *Chstozasteno* alt 5000' cl Orphanides Floret Julio meunte

Species insignis folns *C Ragusinw* in *inmw*, involucri squamis scanosis laxis *Chartolepidem* vel *C deustam* referenti Gaules bipedales, capitula magnitudinis eorum *C scabiom*

CENTAUREA CILICICA BOISS et Balansa (Sect *CakUi* apa )

G biennis? ad partes juniores brevissimè puberula demùm glabrescens caule diffuso dichotomè ramosissimo, folns radicalibus inferiusque in lacinias lineares integras pinnatipartitis caetens pinnatilobatis indivisisque linear-oblongis acutiusculis, capitulis subsessilibus folns eis longioribus bracteatis oblongo-cylindricis, involucri glabris virentibus apice angustatis squamis oblongis adpressis angustissimè albo-marginatis terminatis appendice palmatis 5-7 spinosis, squamis pallidè flavis lateralibus brevissimis terminali praesortim in squamis intermediis alns triplo longioribus vahlionque, squamis intimis inermibus hincanibus, flosculis purpureis, achenis minutis calvis sordidè albis nigricanti-hincanibus basi attenuatis, hilo obliquo areola terminali umbonata

Hab circa *Mersina Cthace* cl Balansa qui legit fl fr Octobris

Species habitu et capitulis angustis *C myacantham* omnino referens sed ab *e* spinis appendicibus elongatis omnino distincta, planta non hybrida, spina tenerrimis squamarum 2-3 lineas longa.

## DEROUETIA Boiss et Balansa

Capitulum multiflorum Involucrum squamis paucis, extenon-  
biw brevionbub Receptaculum setis longis sparsis inter (lores  
insiructum Achenia cyhndrica stnata erostna apice non attenuate  
Pappus subbisenahs conformis pilosus setis numerosis sub lente  
<\*cabris—Herbæ peronnps humiles Orientates facie *Crepidem pyg-*  
TTMIW **referentes**

## DEROUETIA FRiriDA. Boiss et Bal

D peicnnis tota indumento brevissimo enspulo fannulenta  
praeteredque ad folio rum paginam inferiorem setulis brevibus  
patul<sup>^</sup> hirt.i, rhizomate longo tenui snbterraneo sæp6 ramoso,  
folns omnibus radicaibus oblongis obtusis in petiolum attenuate  
integris vel remote ct breviter dentatis vel subruncinato-lyratis  
lacinulisbasilanbusutrinqu<sup>^</sup> 4-3nis brevibus retrorsis, scapis 1-2  
folia pauld superantibus, capituhis minutis cyhndnco-subcomcis,  
involucn phyllis lanceolato-hneanbus acutmsculis planis praeter  
indumentum albo-fannosum setulis brevibus nigncantibus seeds  
lineam media m >œp6 obsitis extenonbus 3-5 inaequalibus bre-  
vionbus, floscuhs luteis subtûs concolonbus glabns, acheniis **pal-**  
lidifi extenonbus conformibus subcurvatis omnibus pappo niveo  
achenio aequilongo involucro vix longion superatis, receptaculi  
setis achemo sesqmlongionbus

*D robertioides* Bal pi exs Anat 1855

Hab in cacumme montis *Masmeneudagh* Taun mtenons ad  
meridiem *Cesarem* siti alt 9000<sup>p</sup>-9800' Septembn 1855 cl Ba-  
lansa

Folia cum petiolo 1-4 \*\* pollicem longa 3-5 lineas lata Scapi  
monocephah 1-2 polhcares Capitulum magnitudinis *Robertice*  
Hoc novum genus cl Derouet bot Turonensi dicatum habitu  
gaudet *Robertus* receptaculo paleaceo, pappique setis paucis pa-  
leaceis distinctse et mehûs inter *Rodtgims* mihtat juxtfl *Bodigiam*  
habitu proTsus alieno, involucro calyculato, receptaculo paleaceo,  
acheniiis longè attenuatis distinctam

**DEROUETIA ROBERTIOIDES Boiss**

D perennis caespitosa rhizomate crasso ramoso, foliis glabrescentibus omnibus radicalibus angustè hinc pinnatipartitis scapis numerosis monocephalis folia superantibus, capitulis breviter cylindricis, involucri phyllis parvis et brevissimè fannosopuberulis hinc acutis extensibus paucis inaequalibus triplicibus brevibus, ligulis flavis subtis rubellis, achenis pappo sordide albo eis aequilongo superatis, receptaculi areolati setis achenio brevibus

***Crepu robertundes* Boiss Diagn**

Hab in cacumine *Anhhbani* Boiss

Haec species cum praecedenti habitu, habitatione alpina, capitulis angustis et achenionim structurâ optimè congruit et ambo a *Creptide* habitu alieno et receptaculo setoso benè distinguuntur

**PODOSPERMUM VERRUGOSUM Boiss et Balansa**

P perenne, radice crassa verticali, foliis omnibus radicalibus numerosis angustè hinc flexuosis acuminatis mollibus pinnatis araneoso-canescens deinde glabrescentibus, scapis monocephalis glabrescentibus folia superantibus tandem crassiusculis, involucri glabris squamis paucis imbricatis membranaceis pallidis angustè imbricatis obtusiusculis ab infimis triangularibus ad intimas multò longiores lanceolatas sensim auctis, flosculis achenis callo eis sublatione longiusculo cavo stipitatis tuberculis transverse squamiformibus valdè echinatis, pappo pallide rufescenti achenio longiori, setis nonnullis longioribus superis non plumosis

Hab ad *Boutoukh* circa *Merstna* Ciliciae hinc Maio meunte jam fructiferum cl Balansa

Folia 6-12 pollices longa lineam  $\frac{1}{8}$ -1 lata Capitula fructifera sesquipollicana Achenia cum stipite 6-7 hinc longa Ex affinitate *P mollis* *BtP villosi*, ab eis radice non tuberosa, foliis plerumque angustioribus achenis squamellosis distinctum *Sc multiscapum* Boiss habitu affinis differt foliis margine undulatis, achenis brevioribus stipite cavo non suffultis multò lenius sub lente tuberculatis

SconzoNERA LACERA Boiss et Balansa (Sect *Euscorzoneria*)

Sc perennis parvissima fannosa demum glabra vinctis, radice  
 verlicah cjhndncā, caule tereti infernè-lantum folioso simplici  
 erecto monocephalo vel basi ramos arcuatos monocephalos edenti,  
 foliis radicalibus vel inferioribus pinnatipartitis lacinis longis li-  
 nari-lanceolatis patentibus acutis integris vel basi denticulatis  
 rachide plus minus laevi laciniis minutis inter lacinas auctfl, folio  
 superiorum ipepius unico angustiori basi tantum pinnatifido, capi-  
 tuis longè pedunculatis sub anthesi cylindricis, involucri glabro  
 pliallis paucis ab infimis ovatis breviter acuminiatis ad superiora  
 lanccolata acuta sensim auctis, flosculis roseis involucri subduplo  
 longioribus, achenis abbreviatis superioribus pariter angustatis trans-  
 versè echinulatis pappo niveo eis ffiguilongo superatis

Uab ad *Bouloukh* circa *Mersina* GUICISB hitoralis cl Balansa

Planta pedalis vel sesquipedalis, folia 4-5 pollices longa lacinis  
 sffipè pollicem vel sesquipedalem longis Squamas involucri fruc-  
 tiferum inferioribus pollicem longas, achenis 4 lineas tantum longa  
 Species mlerpurpurascens adinis soli *S. tinasca* forma foliorum, invo-  
 luerneque squamis abbreviatis obtusis acheniis brevibus e\m\6  
 distincta?

TIUGOPOGON bAYMTANI Heldr et Sartori

Tr radice vilicah libillosa, collo inter vaginas foliorum infe-  
 riorum densè confertorum lanalo, caule leni erecto simplici vel  
 kernel bitve sscp6prope basin furcato, foliis radicalibus et infe-  
 ribus inferioribus subdilatatis valde Una Us superioribus glabris angustissimis  
 linearibus, caulibus sparse similibus abbreviatis basi saepe eviden-  
 tius dilatatis, pedunculis etiam fructiferis vix incrassatis, anthodis  
 ylabernmi phyllis quique lanceolatis corollis subsuperantibus  
 pappo subbrevioribus, flosculis paucis fiavescentibus, achenis  
 marginatis in femore laevibus superioribus munculatis obtusangulis  
 in rostrum sensim attenuatis

Hab in regione superiorum montis *Parnassi* Guicciardi ex Held-  
 flich, in regionemediis montis *Parnassi* AUICSB Heldr

Caulis 1/2-t pollicali\* tenuis, folia inferiora vix lineis 4 lata Ha<

bitus omninō et capitula 7V *croafoln* quod differt folns infern6 vix lanatis cauhnisbasi magis dilatatis, flosculis in capitulo majon numerosionbus violaceis, achemis abruptè m rostrum attenuatis acutangulis a basi muncatis

LEONTODON MASMENAUM BOISS et Bal (Sect *Asteroiheca*)

L perenne totum setis albis patulis apice breviter glochidiatis asperum, radice crassa" verticali, fobis omnibus radicalibus lanceolatis pinnatifidis dentibus abbreviatis undulatis, cauibus plunbus humilibus monocephalis scapiformibus 1-3 foliohs setaceis obsilis, Involucris squamis imbncatis ab infenoribns brevibus subpatulis cannA et margine pectinato-cihatis ad interiores cann& tantum parcè cihatas sensim elongatis, flosculis intense luteis, acheuus brevibus albidis scabnduhs supern6 vix attenuatis pappo sordido albo eis aequilongo superatis

Hab in regione supenon montis *Masmeneudagh* Tauri Gihcici cl Balansa Fl Augusto

**Species propè** *L aspernum*— *Asteroth. aspernum* Cass collocanda, ab eo dislinctaindumenlisetisbrevissiniè glochidiatis nee subfurcatis, scapis2-3 pollicanbus, involucris phyllis magis aspens acutionbus et prsesertun achenus 5 hneas tantum longis apice subattenuatis nee manifesto rostratis Habitus potiùs diversissimi *L Hispanici* Merat

UIERACIUM REIISHOLDII Hcldr et Sarton (Sect *Aphyllopoda*?)

H. caule mfernè stnato rubello pilis longis ngidiuscuhs patulo-deflexis hirsuto supernè acutè angulato virgato pilis sparsis asperulo ranus subsimphci srapius jam infra" medium ramos numerosos strictos \irgatos acutangulos edenti, fohis caulims inferionbus radicalibusque oblongo-lanceolatis acutis in petiolum patulèhirsutum brevem basi attenuatis grossè et remotè dentatis vel basi pinnatifidfs, folns caubnis supenonbusrameisque parvis sessihbus stnetis lanceolatis obsoletè 1-2 denticulatis integrisve omnibus parcè hirlulo-asperulis, capitulis ad extrenutatem ramorum 3-5 dichotomy pamculatis, peduncuhs stnetis sub capitulo pnesertim minutè squamulosis capitulo plernmque plunes longionbus, capituhb minulis,



Involucn obconici phyllis plains mgricantibus medio parcissim et breviter hirtulis caeterum glabns obtusiusculis inferioribus tnan-gulanbus in bracteolas sensim abeuntibus interioribus subtnpl6 longioribus, flosculis luteis concoloribus involucri tertia" parte longioribus, achenis 10-stnatis pappo pauciseto sordide albo eis pauld longioribus superatis

Hab in regione inferiori *Parnassi* prop6 *Bachova*, cl Guicciardi exHeldr Fl Julio

Planta 2-3 pedahs Folia mfenora 5 pollices longa 15-16 hneas lata Capitula magnitudinis eorum *Crepidts incarnatw* Habitus omnino *Crepidts* sed achenia (etsi immatura visa) columnana et pappus omnind *Himam* Planta ramis stnctis virgatis angulosis cunosissima inter *Hieraaa* anomala, juxtã *H Reutmanam* verosimiliter collocanda



**DIAGNOSES:**

**PLANTARUM ORIENTALIUM NOVARUM**

— —  
СЛУЖБА — ИВИС ИАМУИ/ И sf ИИ i fi,il, U\  
— — — —

DIAGNOSES  
PLANTARUM NOVARUM

III M-U11U

**ORIENTALIUM**

NONNULLIS EUROPEIS BOREALI-AFRICANISQUE ADDITIS

SERIES SECUNDA

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**N° 6**

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AUCTOR

**E BOISSIER**

SOI PH\> LtNtV SIDAII

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LIPSIÆ | PAF  
APUD B HERMANN | APUD J -f BAILLIÈRE

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1859



## DIAGNOSES

# PLATAIUM *mum m&mmi* ORIENTALIUM

—

## RANUNCULACEÆ

RANUNCULUS DAMASCENUS BOISS et Gaillardot (hoc *Immun-  
culastrum*)

R Lotus patule cL molliter hirsutus, radice grumis oblongis  
tonslanti, caule sulcato a medio plunes dichotomy ramoso corym-  
boso, folns radicalibus petiolo eis sublongiori suftultis anibitu ro-  
tandatis cordatis profundè tripartite partitionibus ovato-cuneati<sup>^</sup>  
3-3 fidis circumcirca' profundè deotatis dentibus ovatis obtusis,  
folns supenonbus sessihbus tnsectis segmentis linearibus obtusis  
<sup>^</sup>-3 partiLis, sepalis oblongis deflexis, petalis obovatis aureib  
veriosis, spicâ fructiferd ovata, carpellis triangulan-corapressis in  
rostrum eis sublongm̄s rectum apice obsolete uncmulatum s=ubdi-  
vergens seosim aitenuatis, axi fflabrS •

Hab in cultis circa *Damasciim* cl Gaillardot

Planta pedahs vet sesquipedahs, hmbus fohorum radical i urn  
diametro 1 Vi-2 pollicans, spica fmctifera 5 lineas longa, car-  
pellum 2 lineas circiter longum angustum Affinis *R uxyspermo*  
MB quidiffertstatur&minori, foliorum radicaum partitionibus  
uiagis cuneatis elongatisque, carpellis mmonbus rostro stncto non  
divergenti spicam angustiolem formantibus

RANUNCULUS GRANULATUS Griseb Spicil pag 306 (Sect *Ranun-  
cidastrum* DC.)

U perenms radice grumis ovaUs minutih libns tcimihub inler-  
nuxtis conslanti, foliis radicalibus peUohs basi dilatalis laxissimè  
basi hirtis limbo 2-3-pld longionbus suJTultis, limbo plabro ambilu

ovaLo-rolundo lernaliMiLlo segmenli^ fuhorum intunoium subpal-  
nidtirn cdsterorum piitiintun soctis lobis brevibu^ obtuse, cauli-  
hu& 1-2 tenuibu^ oreUis ba&i palule^ supernè adpressiusculè Uirliis  
simplicibu& unitlori^\* vo] raraulo auctis, folio caulmo subsessih  
inparlUo lacuna lineanbus sjeptu>> solitano ahquandò i-2 foln\*-  
simpUcibut. lineanbus scii^ ramulum obvns flore minuto. sepa-  
lis luLeis relloxis glabris demiiim dccidms, filamentis glabris, car-  
pollorum spicâ ovatâ densâ minulâ, a\i glabrâ^ carpellis minutis  
vindibus ovatis compressis rostro eis dimidid brevion sursùm di-  
reclo et mferionbu^ prfp^ortim angulum cum carpello forman-  
Libus scd apicc semper reclis icrmuiatis

Hdb in *Phrygid ad Yathamichhv Kern propò Ouchak* cl Ita-  
lansapl exs 1857 N° 150 Tumi milio jam fructifer in *Mhymd*  
Gnselj

Limbus fohoruin 6-10 linear longus, caulis post anihesm '/\* 1  
pedalis, corolla eâ *It pedah* minor Spica carpellorum raagnitu-  
dine pisi sed ovata Affinis *R Peloponnesiata* grumis ovatis et car-  
pellorum rostro brevi non uncinato quoque donalo sed hie difTere  
sat videtur foliorum infimorum segmentis crenalo-dentatis, cau-  
libushumilionbus crassïonbus, flonbus majonbus, carpellis dupld  
majonbus in carpellum cum eis angulum TIX lormantem atenua-  
Lis, mea specnmna cum Gnsebachianis lantùm (lonfens praBler  
sepala in eis pilosiuscula ommnd congruunt

RANUNCULUS HETERORRHIZUS BOISS ct Balansa (Sect *Ramm-  
rulasrum*)

R perenms, radice grunju\* brevibuss oblongo-cyhndncis fibris-  
que tenuibus elongatis intermix tis constanti, caule humili cnspul^  
hirto recto vel dccumbenti dichotomy et divancatim bis ramoso,  
folus radicaibus 1-2 peliolo hirto limbo glabro 2-3-pld longion  
suffultis, limbo orbiculato tnsecto segmentis in lacinias oblongo-  
hnearès obtusa^ partitis, folus caulims paucis inferior! sessih in  
lacinias 3-5 lineares partito summis lineanbus Integra, (loribus  
terminalibus solilanis pcdiincuhs cnspc pubescenlibus siifiFultis,  
sepalis glabris rubellis luteo-marginatis demum rellexis, petalis  
obovalis aureis Intensiùs vcniois, filamentis glabm carpellorum  
spu.â mirml.1 oblongA a\i glabrâ, carpellis minulis oblongis com-





L'U'AVKRACEii:

I'U'AVHI STiucTi M Hoiss el Balansa

! poroioo cdulibub Hindis olatis loliosis patulè slngoso-cibal-  
lis suporno in raccmum la\um clongatum glabrescentem abeim-  
iilms, folns radicalibus obloiiigo-laiiceolaLisinpetiolum allenuatis  
ol)lulis obluscè denials denlibus nscendentibus ulnnque brevitei  
el lonuilni ssolosis, cauùrus vaW6 diminutis scs^ihbus acuhs acnU'  
loli.ilis hlricLit, bractois jugusLu linean-lanceolalis pcdunculo  
tinillii brevionbus, pcduticulis glabn«\* sinclis uniflons floro multo  
longioribus, sepal is oblongis cucullatis obtusissimis viridibus su-  
prnrnc scano^o-marginatis sellis brevibus sparsis curvulis setosii^  
pclnlis c sicco latentns, capsulS oblon^o-obovatil glabr.l disco  
sliginatoso papillo^o convoxo ^exlobo

llab in regione montanã montB *Mouradd/igh Phrygim* cl Ba-  
lansa fino Junn Forè ommno (ructiferum)

Caulcs cum racomo pcdali ct ultrã 2-2 7« pcdales patult sln-  
SOM sotm sub Icnc cchinuldLis Folia rathcnlia cum petiolo 5(>  
poll longd 9-12 lmcas lala, ppdunculi 2-2 '/> pollicrs longi Florcs  
te\ nlabaslro) innöres cis *P sptcati* eSdem ferè inllorescenliA do-  
iiiah sfd mdumei)to pannoso cano, caule crasso nee gracili, pe-  
diinculi> laterahbus brevissimis vel nullis, disco stigmatoso parle  
superiors capsule la lion uec angustion egregi^ diversi

PAI'WER S\RJACI'M Boiv\* ft Blanche (Seel *Rhwadei*)

V annum lolum pilii seiulosis patulis secus pedunculob ad-  
pipssuiscult-\* raic^conhbus hispidum. cauibus orectis ascenden-  
hbusve simpliciu^cuhs, folns radicalibus Inrums longiusculè pe-  
tiolatis pinnaliseclis legmentis infenonbus ovatb-lnangulanbui  
distanlibus lermnnli mnltto majon oblongo omnibus acutmsculè  
(Tenato-donlalis, folns uiulmis pinnaiisectis sessilibu^ segmentis  
**lanceolati^** protundc ct acute denlalis summis lineari-lnceolatis  
**serratis**, pedunenhs longi^simis, caljce adpressè hirsuto, petabs  
**purpureis basi nigro-maculatis** capsule slabrã clavato-lurbinatd

basi valdè attenuate siigmate tomco superati stigma Us crenis  
9-10 incumbentibus

Hab in arvis humidis circa *Beyrout* Syria cl *Blanche*

AfiineP rtetfecujusfloresliabetetP *commutato*Y etM abeii  
differt folns minùs divisis noo bipinuatisectis et praesertim cap-  
sulá<sup>1</sup> longè obconicft operculo elcvahm conico nee plano-convexo

superata

## FUMARIACEJE

CORYDALIS PABNASSICA Orpli et Heldr

C radice buliosd subcavivel solidA, caule tenui diphyllò sqnarnd  
basilari destituto, folns glaucis radicaibus biternatis foliolis oblon-  
gn utnnqu6 aLlenuatis, caulinis subpinnatisectis racemo brevi  
paucifloro denso, bracteis. ovalis integns, corolla purpured, cap-  
^nA ovata lurgida

Hab in regione alpma raonlis *Pmnasv* alt 6000'Orphamd^s t  
Guicciardi I

Atinis *C tuberosm* a qu& ex speciminious obyus distincta vi-  
detur radice subbulbosd, virore glauco, folns minus divisis, foliolis  
non (labellatis, capsule magis turgidd, serainibus majonbus

FUMARIA PIKERMIANA Boiss et Heldr

F glauco-virens decumbens petiohs vix cirrhosis, foliormm la-  
cinus lincanbus obtasis mucrooulatis, racemis etiam sub anthesi  
•axiuscuhs, bracteispedicello sublongionbus, sepahs ovatis subdeo-  
ticulatis corollA rosed apice nigncanti sublatoribus, pedicelhs  
Triictifens erecto-patulis fructu parvo ovalo acutmsculo minutd  
tuberculato duplò longionbus

Hab ad pagum *Pikermi Atttae* cl Guicciardi

AAlms flonim magmtudine et habitu *F Gussonei* et fructu acuto  
*f Munbyi* et *F Reuten* ab eis bracteis longis, sepahs lationbua,  
fructu minon *F Vmllantu* distincta

CHUCIFEILT:

MVTTHIII \ SINUVTV II Ur var *integufoltu* Bois.s el Gaillardol

Folu oblonga InfiTnč longiuscule alienuala inlogernma, pcditelli breviv<sup>um</sup> ijlrrmuqec dimidium caljcem vi\ ajquaulcs Indutncnlm don<sup>um</sup> cra-.sum, glandula<sup>^</sup> podicollalse secta racemiini licdiceilo-5 el siliqua:\* ranorts

Ilab in rupibns calcareis *llm bagroulh* propt<sup>h</sup> *Sidonem* cl Gailfardol

Uanc iildiikim \\\niii, a *M stnutikl* disLinclain sub nomine *M nasbifoltw* proposuerdmus sod <sup>^</sup>pceirmna occurrunL (ur rupibus manliinis [)T0[n' *llaylhum*) oodoni indamenlu, folns aiilein ommntl ~~smuualis~~ don,ila *H* Iransilum ommn6 demonstranlia

**MALCOVIA VELUCIENSIS** Poiss oi Holdr

M anmw Lola piln Lipji Litis adprosbis scabra a basj ramosis-, \nu, loliib obovjto-oblongib oblu<sup>is</sup> ba>J HI poliolum brevom atlujjualis NubuiLegrjs, raccnjb abbreviali<sup>^</sup> Ldritcm valdè elongjlib, pcdiccllis sub anhusi cal>ce subbrezionbus, (lonbus parvis, peLilis obovato-oblongis oblusis roseis unguic subcxserto, siliqui<sup>^</sup> orocto-patonlibus teretibus pube brculcr 2-4 parlilJ scabns sligmalc brovissimo aculiusculo Lcrminalis

Hab in regionc abiulina<sup>^</sup> montis *Veluthi* <sup>^</sup>*Etolice* cl Samaritani el Gmcciardi, hùe prob quoqec referenda planta ex monle *Ziria Pelop&nncsi* sul> N° If4 Fl Graic rxs a cl Prof Orphanidfts cvulgala

FJorc- o luinius scLLioms, mliquic polliccm longse vel paulo brovius pudicello brovissimo lorò cras>sion suffuHje AITmis *M Incoloi* ilifTerL lion bus duplo majonbus, siliquis pube bipartitd scabiis ob sligma tongiu<sup>^</sup> auilionbus

Ob& In Ann Sc Nat pi Audi *M puhhellam* Boiss cum/fcsfiet ide py<fmim DC in|ii>lc combuiavi Nunc copiA spccimnum cdoclu<sup>^</sup> cus ilislinuU<sup>^</sup>ima\* cscce iie<sup>^</sup>ua<sup>^</sup>um babeo *M pilchelta* ex aienosi\*. PalsebLinoi AmalocitaiiLio CL S\nae propò *Beyrowt* oriunda

habet llores Lriplfl majores intense violaceos, cal>ccm ba>i valdo gibbum, folia radica obovata integra omnia glabruscula Plan La allera *M pygnusa* Boiss quae arcuosa man Lima propò *Alexandriam* /*Egyptum*, insulam *Comarum* Persiana australis Kotschy et al probet in locis intermedios incolit, habet llores palidè roscos, folia omnia profundè sinuato-pinnatifida

SISYMBRIUM DAMASCENUM BOISS (Sect *Eumymbnum* )

S. annuum vel bier non patulè in lino caule acriato superius; siliculis ramoso, foliis runcinato-pinnatifidis lacinis oblongis et grossè deulatis terminatis majon oblongis, racemo corymboso deinde elongato, pedicellis hinc sub anthesi calycis hirso susquilongioribus, petalis palidè luteis lamina oblongo-spathulata in unguem sensim attenuatis, siliquis junctibus racemo flagiato brevibus adultis pedicello paulo citius angustatis quinque longioribus ascendentibus tero libus anguloso-striatis densiuscule scabundis, apice subterminali stylo brevi cylindrico glabro vix angustiori stigmatibus truncato retuso terminatis, semibus ovatis compressis

Habitat in litoribus circa *Damascum* et *D*<sup>r</sup> Gaillardot Fl Aprili

Habitus et flores palidè *S. Inonis* sed hoc praeter lacunas Leniores foliorum differunt pedicellis Us gracillimis, floribus minoribus, siliquis junctibus racemum superantibus adultis tenuioribus tomentosius glabris onervis *S Columnae* longius distal lacinus foliorum basi aunculatis, flores majores sum, siliquis pedicello brevissimo ovis aequalato suffulsc crassiores apice non attenuate glabras vel raris puberulaj nunquam scabrae Nosstraj specie 1 siliquis bipollicares sunt vel paulo longiores inferno vix ultra dimidiam lineam la la\*

SIYSIMUM VSPERULUM Boiss et Heldr

Er biennè vel perenne totum pilis adpressis bipariis ad totia tripartitis intermixtis asperulum, foliis angustè hinc lanceolatis basi longè altonualis plicolatis obsolete et remote deuliculis apice acutis subincurvis ad basin caulis inferiorum scitis surculos stenos dense congestis secus caules paucis caulibus? lore-

tiusculis ferè a bast raraosi&simis ramis eiecLis elongate aruatis, flonbus mediocnbus, pedicello longitudine calycis basi non gibbi, petalorum limbo ovato mtegro, ungue subexserto, sihqis pedicello erecto-patulo eis angustion buffuHis obtus6 quadranguhs pilis 3-4 furcalis adpressis minimis scabns ad angulos glabnusculis apicc in sljum brevcem eamm diametro longiorem abruptè attenuaLis, slgmate capilato bilobo

Hab in ipso pago *Carpenm Eurytatux* cl Samantani et Guicciardi

Folia cum petiolo bipolhcana 2 <sup>1</sup>/<sub>2</sub>-3 hrieas lata Sihquae marts 1-<sup>1</sup>/<sub>2</sub>a pollicares. lineam diametro lalae. Aline *E Grteco* Boiss foliorum forma et caracteribus, ab eo differt flonbus minonbus, pilis foliorum et siliquao tnpartitis, eđ apice abrupt et longiùs in stylum attcnuata Ex duobus ^pecimimbus a ne^ visis altcrum cum surcuh^ . stenhbus alterum autem cis orbatum vidi indc nescio an planta verù perennis sit

ERYSLMUM CANESCENS RoLh Var *Cihacum* Boiss et Bal

Folia infcriora obovato-oblonga in pctiolum longè attenuata obtusa remotò et acutè dontata, supenora hnean-ld»ceolata mtegra. Pill tnflidi praBserlim versùs apicem foliorum numerosi bipartitis mixti Caoterum a plantã ex Austria non specific^ differre videtur

Hab in *Pylis tokens* cl Balansa Aug 1855 specimen maturum Plan tarn educavi e semimbus m horto Yaleyres

ERYSIMUM VERRUGOSUM BOISS et GaiFlardoL.

Er bienne ? cauhbus crectis rigidis crassmsculis angulatis stnetè ramosis pubc adpressã bipartite obsitis, folus oblongo-lineanbus obtusis bnsi atlenuatis submlegns pilis biparlitis tripartitisque adpressè scabns, pedicelhs flonfens strictis calyce adpressè scabndo subbreuionbus, flore minuto, petalonim laminfi obovatfl sublùs hirluia, sihqis crassis pedicello brevi eis s>quilato suffultis erecto-patubs exacl6 quadranguhs pube minutissimA 3-4 partita pulverulento-scabns prstereaŕque glanduhs magnis sessihbus verrucosis slgmate sessili truncato eis subaequilato terminatis.

Hab in la tore occidentalah montis *Gebei Cheick (H&rmon)* loco ***Ouadi el Habesch dicto inter Akabet Heuma et Chebd, cl D' Gaillardot*** legit fructiferum Junio

Planta sesquipedalis racemo semipedali longiorque Folia in meo specimine <ferè destructa et idem imperfecta descripta, flores eis *E. canescentis* ferè minores, siliquis 1 7, -2 pollices longae basi ferè hinc latae Species siliquis verrucosis distinctissima ut videtur ex affinitate *E. Grisei* et *canescentis* Hanc ex descriptione et loco pro *E. scabra* DC habueramus sed hoc cuius siqua unica in herb DC exstat hanc habet multo brevior minus quadrangulam stylo ten in terminatam

ERUCA CAPPADOCICA Reut in Cat hort Genev 1857

E annua glabrescens, caule erecto inferius! parte hirtulo ramoso, foliis pinnatisectis segmentis confluentibus oblongo-linearibus basi dentato-lobatis lobis obtusissimis, racemis laxis pedicellis calyce dimidio brevioribus, petalis sulphureis fusco-venosis, sepalis glabris deciduis basi parum gibbis, siqua glaberrima oblongo-lineariter subcompressa in rostrum breve uniforme attenuata, seminibus magnis basi subcompressis

**Hab in y&mlie K&niah ASICB minoris cl deHeldr pi exs 1845, N° 1289 sub *Er sativa*, inter segetes Cappadociae propè Enehtl alt 1460 metr cl Balansa N° 445**

Haec species hucusque cum *Er sativa* confusa ab eis differ! foliorum segmentis latioribus minus dentatis, colore intensiore, seminibus duplo majore diametro linearibus

DIUBA REUTERI BOISS et Huet (Sect *Chrysodraba*)

Dr dense pulvinans compacta, foliis rosulatis plans linearibus spatulatis linearibus basi longè attenuatis ciliatis utrinque longè hirsutis, -scapis numerosis brevibus pilis patulis ramosis hirtis, racemis 5-8 floris subcorymbosis fructifloris elongatis laxis, pedicellis floris subaequilongis, sepalis flavidis margine membranaceis oblongo-ellipticis obtusis dorso hirtulis, petalis retusis basi in unguem attenuatis calyce duplo longioribus, silicibus ellipticis

**utrinque** allcimalis uculis inflalis sL>lo carum laLiludiic Inplu( brevion apiculalis (jutiioribus) spar>nn liirlulis

[lab in iummo monlc *Karakaban Aimemce* ad mvcs cl Huct du Pavilion Fl Maio

Giuspils diamcLro <sup>C</sup>2-J pollicaics FoJia cum ycLiolo 0 **lineas** longa apice linoac <sup>\*</sup>/<sub>s</sub> IIL1 Scapi cum racemo Iioiiloro (i-8 **lineas** longi, silicula 2' / » linear longa Species a nolns pniis confusa cum *Di wauh* Boiss c monlc Tauro folns raulloO minonbus don^iis albo-ponicillalis, racemis paucillons in cjespile sessilibus, m-pnmis sihculis ova Us YIX sesquilineam longis sligmalc subscs^ili apiculalis dislinclâ

DMDA C\PPADOCIC\ DOISS cl Dalansa (Seel *Chrysodtaba* )

Or pulvinans compacla, folns rosulalis planis linean-sublingu laLis oltlusis nlrinqaõ all)o-lnrstutis, scapis» numerosis brevibus pilis ramosis hirtis, raccinih brevibus (J-7 flons, pedicclhs creclo-pa Lulls flora silicul&que paulo longionbu^ sepal is dociduis ohlun-f'is liirLis, pclahs mtent>i' luleis calycc duplO loiigioribus obovatis oblusis in unguem aLlcnuatis, filamentis calyci suba3quilongi.s, si-llculis [tilis ramosis Inrlis mflalis apice subailcnualfe slylo carum dimidiãl aUiLudmc longion apiculatis.

Ilab in regionc a 1 pin a montis *Argcei Cappadocup* cl Balansa Floret Jumo

GfDspites diametro 2-3 polhcares Scapi fruclifcn cum racemo liollicares Folia 2 hncas longa vix lineam dimidiam lala Siliculo; lineas 1 <sup>l</sup>jt~i <sup>1</sup>/<sub>4</sub> longjc Ob siliculas mllatas *Dr ruauh* ol *fhr vesicariw* comparanda a priori difTerL folns paulo majonbus non pcnicilJalim conforLis, scapis elongatis, sihculis lougõ apiculalis ncc muticis *Th vesicaun* diffcrl folns majonbus lalioribus, raccmis fraciifens ob pedicollis brevissimos densis, silicuhs ovalo-globobis brevisfcimù apiculalis *Dr Reulen* habel siliculas basi allcnualas

DnADA CAL\CINA Dois« el Dalansa (Sect *Chiyodraba* )

Dr. cacspilosa caudicubs suffrucicosis, folns rosulalis conferlis **vetustus** seeds caules marccscenlibus pilis ramosis dcns6 canccscen-

**ribus** cllipLico-lineai ibu> oblusis Dæ\*ī alLenualii, scapis J̄J̄J̄J̄J̄ ramosis lurli^ in racemos ftuclifi'ios kmu^jnlos G-iQ (lorob abeunlibus stalls fl.iviJ̄s lurlh oblungis cuculljlis uLum valvissilicula\* ~~delapsis~~ pwMsīiM̄Uiluis pelalis oliovaii>) obiusis <alyco dnpld loii-**gioribus** ID ungueni aUcīīidLib, lilamciiUs o.i]yce vix longionbus, pedicellh creclih siUtulai subaiquilongis, MIICUIJ̄ pihs ramosis lurlj nidaLJ̄ breviler uvaU obtusđ slylo ejus laliludine triplo brc-VKUI apiculaU"!)

Hdb IU fiiisuris rapium regionis subalpinae montis *Argm* supra l̄aguin *Assardjuk* ad mendiom urbi< *Cwsarece* siU Imlio J̄nliī fnicUfcram legil cl. Ualatisa

Folia 4-5 linear longa iiucara lala Scapi cum raccmo fruclifuru scsquiullicarcs SiLicula} valvuke scsquilincam longa.<sup>1</sup> Ila-Ijtus *Dr rosubris* Doiss Ann. Sc Ndl̄ cujus quoque bepala persisieilid sunt cl silicula; (immature tantūni *visai*) nidala<sup>1</sup> quotjuo vidculur scđ haec a noslrJ̄ sal diflerl̄ folns scpalisque duplo nialoriljus, sihcukiquo magis pw̄iormi apicc alienua Id **brevit̄ apiculat̄**

**Haec** nola calycis persistenlh e\ spccimiibus fruclifens nulu-**uissimis** hujutr̄ ^pccicj confirmala gravioiis momculi csce videlui <1 ideò hdc ct alus rationibus duclus D\* *velutitiam* Boiss et Huel a mo in Diagn Scr 2. N° 5 pag 31 cfim Or *rosulan* conjunclam J̄ninc dislinclam autumamus

DIHAHA VELUTINA DOIS& ct Huet (*Soct Chiysodraba* )

Dt caispiLosa caudiculis suffTniUcosk., folns rosulatib olliplicis bat,] altcnuatis obtasis Indumento ramoso voliilmo-canis, bcapis pibs ramosis hirlis demiim glabratis brevibus sajpiūs. a basi in racemum mulliflorum demūin clongalum laxum abcunlibus, pedicellis arcuatis (lore sihculftquc Sīiipiū̄s Jongionbus, sepalis fa— Mdis marginc membranaccis cucullalk hirlalis demūrn decidais, pL'la)is obovatis Inlcgns in unguem brevc̄m altenualis calyce dupld longionljus, filamenlis calyce subbreuionbus, siliculis plains el~lipticis ulnnquē̄ attenualis sparsim hirlulis landem glabns slylo Ijrovissmio apiculalis.

Hab in montc *Techdagh Armenia* propè *Erzcroum* cl. Huet da l'anlion, cl Calvert Hūe etiam spectape videtur Aacl̄i N° 203



Folia majora linear-lanceolata, llores, in sectione magis, **sili-**  
 uilari linear-lanceolata in parte paulo amplius latere. *Det ro-*  
*uhnt* illort caeco deciduo. **MICUKI** jilibrā non inflata magis  
 longat. *Di Pei* uum magis affinis. differre indumento non cano,  
 capsulis elongatis, siliculis aculeatis, petalis retusis. Hujus caespites  
 lanuginosi sunt.

### **MENIUCUS STYLARIS** Boiss et Balanča

M. annuum a basi lanuginosus. Mridi-subcaulescens, lotus pilis ad-  
 pressis sessilibus nitens, non conliguis obsitis, caulis erectus  
 subflexuosus, compositus paniculato-ramosus, ramis in racemum  
 fructuiferis elongatis abscissis, foliis lanceolatis subcanaliculatis  
 haud alleiatis obtusis, lobis magnis, sepals oblongis palmaribus  
 doiso lepidotis, petals intensius flavis calyce dupli longioribus  
 runcatis in unguem longe attenuate profundum bilobis, filamentis  
 medianis medium utrumque dente brevioribus unilatera-  
 libus auctis nudi in angustioribus appendice lanuginosa eis aequi-  
 longa auctis, pedicellis eiclopatis. siliculae simplicibus  
 siliculis ellipticis albis adpressis simplicibus **asperis**  
 stylo earum latitudine subaequilongis apiculatis, loculis. Letra **sper-**  
**mis semibus subcompressis**

[Lib inter tegetes ad basin montis *Kaiamasdaqh* quatuordecim  
 ad orientem in parte C(PSU) we sin Alt circ 1500 metr Floret Junio  
 Cl Dalansa

Flores eis. 1/ linifal dupli majores, siliculae 3-3 1/4 linear  
 longae. Indumento siliculae affinis *M hirsuto* Boiss et Huet qui  
 differre per stachyosera teitane pane tanquam ecedentibus rostroque  
 siliculae linearum tertiam partem nec 1-1 1/4 hinc longo. Setae  
 Mhculae superius in specie non basi ut in *M hirsuto* tu-  
 biculata?

A wi M Moidicim Boiss et Balanča (Sect *Eualysson*)

perenne basi demum buftrutescens pilis stellatis lepidotis  
 adpressis sessilibus nitens pallide virens, canibus abbreviatis pros-  
 tratis ascendentibus, foliis obovatis obtusiusculis basi in pe-  
 tiolum breviter attenuate racemis sub anthesi capitatis foliis

**Supremis** bar>i suftulht liuolifeii\* ^ulu'longdlis, podiceltis flon  
**subaequilongis**, catjci-, ba^i iibciu<quali>\* &q)Jli& s.parsim lopidoln.  
 superne- ni^iicanlihus pclalorum iingiie subbreuionbus, petal-  
 lorum lamina" aurjntiaco-cilririā obovato-cunealJ unguē sub-  
 bra ion, filamentis majonhus edentulis dilatatis, minonbw ad  
 tertiam partom infenorera denlc brcTi lincan auctis, tihcuhs  
 pedicello horizontaliter palenti breuionbus t>uborbiculatis retusis  
 glabemmis stjlo eis suba3quilongo superatis

Hab in regione alpind montis *Mouraddagh Phrygice* alt 2400  
 metr ubi line Junn floriferuni et cum fruct Immatuns logit cl  
 Ralansa

Habitus *A montani* a quo lilnmentorū forms el si lieu I is gla-  
 L>is differt et *A diffusi* et *mgviophylh* quse cauliculis elongate  
 fragihbus, sili(mli9 o^atis Stellato-lepidolis alusque **distinguntur**  
 notis

**ALYSSUM** MODESTLM BOI>& et Baldn-a (Sect *Eunh/smm* L

A annuum tolum hiitum pilis siellalis longē rainusn ?[cpē  
 versùs margined foliorum sens simplicibiis polulii intennixtia,  
**foliis** inferioribus oblongis supenoiiibus Imcaribus omnibus ob-  
**tusis** basi attenuate, racemis abbieviatis frucliferit, IAMUSCUIIS,  
 sepalis deeiduis eJdcm pube stcllatA setisque longis Jn^pidix, pe-  
**4 is** palUdē ocbroleucis lineanbus retusis cañce^ubduplo longio-  
**1ibus** parte e\sertd extùspilis ramosia patentibus lurh., filamentjs  
 minonbusdentc unilateral! medium versùs auctis majonbus parte  
 mfenon dilatalis edentulis, pedicelhs fnictitens erecto-palulis  
 silicala sesquilongionbus, sihculi glabrA ^uborbiculala subretusa  
 mdata stjlo brevi crasso apiculay semimbi^ arigu>ti<bimi> mar-  
 gmatis

*Al nunutum* C Koch in Thirke pi c<t> , Uoiss ID B.il pi c<?>  
 \*85f> non Schlecht

Hab in *Brthymcl* Thirke, in regione alpinā monti^ *Aitjin* Bal  
 N°484, in monte *Almadagh Phnjgue* pi opē *OiuhuK* Bal pi o\>  
 1857

Primum ad *A mniutttm* Schl raldē aflne reltilimu- =ed hoc o\  
 ^P(\*criptione et icone speciticē differt prapter folia **obovata, petals**

Plant oneni no^ar SLT sec N 6

‡

Ldlycern vix superantibih pilis adpressis lepidolis obsitis, filament  
tit minonbui squamulfi oblong,} indivisd auctis

ALYSSUM MACHOPODİM Boiss> et Balansa (Sect *Eualyssum* )

A annum Lotumpubstellat.ladpressá' canescens cauhbusferè  
•i basi patulè i amosis, Coins obovato-oblongis in petiolum brevem  
dtenuatis aculiusculis miperionbus diminulīs sessilibus, ramis  
ramulosis ramulis ad apicem usquè foliosis, racemis terminalibus  
fructifens laxiuscubs ilonfcns confertiflons, sepali3 oblongis  
pube ramosri obsiis, pctahs luleis calyce subdupld longionbus  
cuneath. retusis, filamentis omnibus edentulis infernfe unilatera-  
liter dilalatis, pdiccilis submcassatis erecto-patyilis rigidis sih-  
cul4 dup!6 lon, rionbns, silicula parvft ovata compressft turgiduld  
stellalim pilosi btjlo eA longion roslrati, oculis dispermis serai-  
uibus penduli- compressione angulatis exalatis

Hab in plantie *Cte&arew* in *Cnppadocid* alt 1100 metr cl Ba-  
lansa Fl Jun Jul

Aflne *A t oslrato* Stcv , ramocius, ramis magis patulis Folia  
breviora, majora 6-7 lmcas longa 2<sup>l</sup>/<sub>n</sub> lata Flores minores Ra-  
cemi fructifen 3-4 polhcares Siliculse eis *A rostraU* dimidiO mi-  
nores non orbiculatcc sed ovatac stylo fere' scsquihneam Ion go  
mucronatac Semina angulata aptera nee compressa angustè alata

ALYSSUM DAMASCENUM BOISS et Gaillardot (Sect *Adysetum* )

A annum. to turn pihs adpress^ stellatis obsitum. griseo-virens  
A collo pluncaule caulibus pumihs foliosis simplicibus,folns oblon-  
gis acutiuscuhbasi lon^ in peLiolum attenuatis, racemo sub an-  
thesi capitato fructifero breviter oblongo densiusculo, flonbus  
mimmis pedicello slnclo eis sesquilonion suffultis, sepalis fla-  
vidis sllellato-pubescentibus deciduis, petalis pallid^ flavis anguste  
linean-spaltmlatis apice bifidis e calice breviter exsertis, fila-  
mentis omnibus subulatis edenluhs, sihcult pedicello est pauld  
longion stneto suffultA ovato-rotundd compress^ apice subretusã  
densè stellalo-pnbescenti stylo ejus lalitudine quadrupl6 brevion  
**superatã**

Hab in cultis inter J/erre et *Damasoum* cl D<sup>r</sup> Gailtardot Fl  
Wartio

Habitus et caules breves *A margmati* siculfi subtus convex<sup>^</sup>  
stigmatē sessili superatA magis ovati distincti. *A campestre*  
*micropetalum*, et affima racemo fructifero elongato, pedicellis pa-  
tuhs, siculd minus adpress<sup>&</sup> et dens<sup>è</sup> puberula" brovius stylati,  
filameDtis alatis dentatisque differunt

THIASPI MICROPHYLLUM Boiss et Orph (Sect *Ibendella* >

Th perenne glabrum naum rosulis sohtarns vel paucis cses-  
pites parvos formantibus, folns omnibus rosulanbus minutis obo-  
vatis obtusis integris vel obsolete dentalis in petiolum eis saepè  
longiorem breviter attenuate, racemis paucillons abbrevfatis sub-  
capitatis in rosulfi sessilibus rariùs caule brevissimo suffultis, se-  
palis violaceis glabns, petalis albis calyce subdupld longionbu<sup>^</sup>  
lamina albft oblongd Integra in unguem sensim attenuate, fila-  
mentis calyce longionbus anthers violaceis subrotundis, sicuhs  
(junionbus) pedicello patulo eis sublongion suffullis obtangula-  
nbus infernè attenuatis apice lation truncatis subretusib stylo  
longiusculo apiculatis

Hab ad *Carcana* montis *Pamassi* cl Prof Orphanidès Junio  
1854, ad mves in cacumine montis *Veluchi* cl Samantam et Guic-  
ciardi fine Julu 1857

Platula minima *ThL brevis&tyli* Jordan e montibus *Corstta* > tpe  
cimina minora omninò referens quod a nostro facilè distinguitur  
stammibus calyce subbrevisbus, silicua magis obovatâ stylo  
emarginaturam non superanti apiculatd Hanc speciem sub no-  
mine *T lonocalycis* B et H pnus designaveram sed compen hanc  
esse eandem cum plants a Prof Orphanides in monte *Patnasso*  
pnus delecta

CARPOCERAS C\PPADOCICUM BOISS et Bal

Im bienne, caule erecto elato fohoso demum angulatn  
superne corymboso-paniculato, folns radicalibus oblongis in pe-  
tiolum breviter attenuatis obtusis subrepandis, cauhs oblongis  
obtusis basi aunculato-amplexicaulibus aunculis elongatis tnan-

gulanbus oblusis foliib floralibus ovalis amplexicaulibus acuracemibus densis fructifens breviter evalis, fructifens elongatis, sepalis palhdè virentibus albo-marginatis, petalis calyce plus duplo longioribus cuoealis mfernè sensim attenuatis, pedicellis fructifens ercclo-patulis sihculâ duplo longioribus, silicula linean-oblongâ compresso-quadranguli apice truncata in cornua 2 brevialalerahter abrunti, stylo termmah cornubus longior, locuhs dispermis, seminibus oblongis punctulalis

Hab in regione montanâ supenon montis *Dedi dagh AnUtaun* ad onentem *Ccesarei* Balansa

Plauta sesquipedalis, racemi fructifens 2-2 1/\* pollicares, silicula 3 1/a Imeaa louga apice 1 V\*lineam laia AfQms *C oxycetati* quod ilifTcl auriculis brevioribus fohorum, capsulâ brevior obtangulan longi cornutâ, stylo cornubus brevior superatâ

### **ÆTHIONEMA BALANSÆ ROIS**

(Ell) perenn glaberrimum caulis caespitosis abbreviatis ascendentibus basi ramosis ramisque densè foliatis, foliis crassiusculis glaucescentibus Uncanbus basi angustatis acutis, inferioribus el ramorum s ten hum angustissimis, superioribus sub racemationibus omnibus erectis, racemis sub anthesi brevibus ovato-rotundis densis fructifens elongatis, pedicellis filiformibus erectopatulis (lore sublongioribus, sepalis oblongis rubellis, petalis roseis calyce duplo longioribus laminii obovato-cuneata relusa abruptiusculâ in unguem attenuate, filamentis omnibus libens edentulis longioribus basi latere extenon subdilatalis, siliculis ovato-orbicularibus plamusculis vix concavis basi apiceque emarginatis, fissura apiculi lobis subcontiguis obtusis clausa, stylo lobis brevior, ad marginem Integra locuhs angustior

Hab in *Tauro* Golui in Hort. Valeyres e seminibus a cl Balansa lectis

Rami per anthesin 3, fructifens 5-6 pollicares Folia 6-10 lineas longa inferiora lineam dimidiam superiora sesquilineam lata. Flores eis *Mth coruhfolu* pauld minores Racemus fructifer 2-3 pollicans Silicula 2 1/\*<sup>11Dcab</sup> looga Folus et stamibus edentulis valdè refert *Mth schistosum* racemis fructifens contractis

**siliculisque** 3-4 lineas longis ala"que latissima" erosa" marginatis distinctissimum

LEPIDIUM MIGROSTYLUM DOISS et Heldr (Sect *Lepia*)

L perenne patulè hirtum, rhizomate in caudicukwiosuids foliorum edentes diviso, caulibus flonfens ad basin rosuldrum nascentibus procumbentibus fohosis, folns rosularum oblongis obtusis integris petiolo eis longion suffultis, cauhs sessilibus ovatis acutiusculis acutmsculè et jrregulariter denticulatis; flonbus racemis fructifens oblongis brevibus, pedicelhs erectopatnhs siliculae subffiquilongis, silicnlS hispid^ ovatd irancaLd alS tertiam partem ejus longitudims seqaanti august marginal, stylo emarginaturam non excedenti

Hab in regione superior! *Sympethenco* montis *Veluehi Mtohce* cl Samantani et Guicciardi

Aflinc *L heterophyllo* Benth , *Nebrodensi* Guss , ab eis *fit* ahis ejusdem sectionis stylo emarginaluram sihcul\*fi non excedenti nee plùs minùsve exserto sat distinctum videtur

LEPIDIUM PUMILUM BOISS. et Balansa (Sect *Lepidmstrum*. DC )

L perenne subcaespitosum glabernmum, collo petioiis toliorum vetustorum squamoso, caulibus pumihs a basi dichotomy ramosis flexuosis, folus vindjbus seepè subglaucescentibus mtegerimis lanceolalis crassmsculis subtrmerviis acutiusculis radicalibus in pctiolum longiusculum basi membranaceo-dilatatum alternatis, cauhs et rameis basi sessili angustatd semiamplexicaulibus ranùs minutè et acutè biaunculatis, flonbus , ., racemis fructifens laxiusculis, pedicelhs ngidis erecto-patuhs siliculd  $1\frac{1}{4}$ -2-pl6 longionbua, sihcuhs e basi truncato-subcordats ovatis acutiusculis stylo brevi obtuso superatis, valvulis compressis apice subcannatis aptens nervoso-reticulatis- sutuns utrinqu^ prominentibus

Hab. ID salsis ad margines paludum ad occidentem *CtB&arem* sitarumalt HOOmetr cl. Balansa qui legitfructiferam Sept 4856

Planta 2-3 ranùs 5 pollicans Folia radica cum petiolo 2 polhces longa 2 ranùs 3 lineas lata, caulina abbreviata. Racemi

Iructifen 1-1 V\* pollicarcb SIICUIIB lormâ el magintudine eas> L ,  
*eiassifoln* referenles sed basi magis truncate vel subcordataB Hsec  
 species a nostrfi differt caule elation minùs et parte supenon ple-  
 rumquè rainoso, folus radicalibus ovatis, caulmis omnibus distincté  
 sagitlatis

LLPIDIUM CRENATIFOLIUM Boiss et Bal (Sect *Lepidio&trum* DC )

L perenne glaucum glabrusculum vel papilhs brevibus albis  
 relrorsis hirtellum, caudicibus crassis saepè lignosis, folns crassis  
 radicalibus petiolo limbo aequilongo vel longion suffultis o\atis  
 vel ovato-rotandis obtusis circumcircJi obtusè et profundó cre-  
 natis basi truncatis, caule humih dichotomé ramoso saepè flexuoso,  
 folns cauhnis mimmis scssihbus oblongis acutis basi biaunculatib  
 infenonbus obsoleté crenatis, CBBtus integns, panicuU breviter  
 et patulè ramosA, racerais brevibus laxiusculis, flonbus albis, se-  
 palis rubellis ovato-rotundis margine membranaceis, petalis obo-  
 vatis in unguem attenuatis calyce dupl6 Longionbus, pedicelhs  
 erecto-patuhs sihculâ'sesqui vel dupld longionbus, siliculis JUDIO-  
 nbus breviter ovatis stigmatè sessih apiculatis

Hab ad margin em paludum salsarum *Cappadoaee* circà *Kara-*  
*hissar* alt 1200 metr FJoret eestate

Pldnta semipedahs patulè ramosa Fohoram radicalium limbus  
 9-10 lineas longus 7-9 lalus crenis sesquilineam latis, caulina  
 etiam lofenora 3 lineas vix longa Speciesa *L crassifolio* formâ fo-  
 horum radicalmm et cauhnis valdè diminutis distinctissima

LEPIDIUM CRASSIFOLIUM W K var *dentatum* Boiss et Balansa

Folia radicalia ovata basi breviter cuneata obtusa vel acuta mar-  
 gine a basi ad apicem vel aaeplùs supernè tantum obtusè et minutè  
 crcnata, folia caulina ab inferioribus sat amplis sensim diminuta  
 Integra oblonga acuta aunculis amplis, siliculs ovate compressffl  
 minutffi

Hab in pratis salsis ad occidentem urbis *Ccssarem* situs cl. Ba-  
 lansa, in pascms salsis circà *Van Armenia* cl Noe

Planta semipedalis, folia eis typi plerumque minora Probabi-  
 lissimè vanetas *L aassifohi* in quod formis mtermediis traosit<

*I-trenatifolmni* specific^ differre videtur loins Jsubrolundis basi  
'runcalis grossè latè et profuiidè crenatis, caulinis rainimls

## CISTINE^E

HEMANTHEMUM JELANDICUM Wahl var *Thessalum* B et Orph

Caules parle supenori peduncuh calycesque prsBter pubem al-  
bam brevein pilis longionbus patulis glandulosis densè obsiti  
Caetera forma typicae

Hab in regione supenori montis *Olympi Thessah* alt 8500'  
Cl Prof Orphanidfes

## VIOLARIEiE

VIOLA HETEROSEPALA BOISS et Heldr (Sect *Melamum* )

V annua subperennans vindis tota breviter papillan-hirta,  
cauhbus numerosis foliosis parte inferion procumbentibus, folns  
peliolo eis aBquilongo vel longion suffultis ovatis obtusis lat6 et  
obLusissimfe crenatis, supenonbus oblongis, stipulis pinnatipar-  
titis laciniS supenori oblongA vel oblongo-linean lateralibus h-  
neanbus, pedunculis longissimis, sepalis tnangulanbus acutis  
margine aculeolato-cihatis duobus inferioribus majonbus omni-  
bus appendice obtusd dimidid brevion auctis, petalis calyce dupW  
longionbus flavis post anthesin violascentibus, petalo inferiori  
mtensiùs colorato obtnaDgulari retuso calcare descendenti calycis  
aPpendicibus sesquilongion

Hab in oropedio *Sattam* partis supenons montw *Veluchi Mto-*  
*li*(B cl Samantani el Guicciardi Fl fine Julu

Caules semipedales, flores ferè magmtudinis eorum *V tnc-*  
*loris arven&is*, aflBnis *V. Macedomcm qnx* differt sepalis lanceola-  
tis vix inaequalibus. flore dimidiò minon



VIOLA ^TOLICA BOISS et Heldr (Sect *Melanium* )

V annua vmdis lota sub lente minutissimè papillans, folus oblongis obtusmscuhs cronatis in petiolum eis aequilongum vel longiorem attenuatis, slipuhs pinnatipartitis lacinia supenon inultd longion petiolulata Unean-oblonga lateralibus angust6 lineanbus, pedunculis longissimis, sepalis ovatis acutis basi supra appendicem ovato-rotundam oblusam eis parte dimidia breviorum constctis margine cihatulis, pelahs albo-luLescentibus brovibus latis calyce sesquolongionbus, calcare descendenti concolon appendicibus calycis scsquilongion

Ilab ad *Arnpokephala JEMKB* inter *Rustova* et *Prusso*, cl Samantani et Guicciardi line Juln 1857

A pracedenti afflni differt foliorum limbo magis elongato et msupCH flonbus minonbus, sepalis basi constctis et forma" brevi latâque pctalorum — Forma tertia Sect *Melanu* in monle *Parnasso* propè *Gourna* a cl Guicciardi lecta sub nomine *V hlas-cenhs* a nobis proposita fuit sed accuratiis mspecta a *V Kitmbe-hand* Sch non satis differe videtur

**POLYGALEIE**POLYGALA RAMULOSA Boiss et Bal (Sect *Polygalon.*)

P perennis viridis pihs cnspuhs minutissimis secûs ramos et margines foliorum hirtula e basi mduratd multicauhs, cauhbus brevibus decumbentibus densè fohosis parte supenon ramosis, racemis terminalibus paucifloris laxis brevibus ramis lateralibus superatis, folus ab lnflmis parvis obovatis ad supenora latè linean-clhptica obtusa sensim auctis, bracteis oblongis mucronatis pedicellos aequantibus citd deciduis, flonbus cseruleis, ahs calycinis ellipticis obliquis basi attenualis corolla subbrevionbus capsua angustionbus etiam per anthesin tnnervns nervis extenonribus venosis apice anastomosantibus, capsule sessih ovato-obcor-datd

• Hab in pr.ih> puliidosi *ailBulgkui hem Phrygtce* alt 950mpli  
Kl Janio, cl Balansa

Specie\* mlloreicenia' allmi^ *P depii'ssie* Wend a qufl differl  
caulibus minùs hhformibus, tolms a basi ad apicem sensim elon-  
gatis, alls calycinis etiam peranthesin venose, fructifens capsuld  
lation basi non attenuate angustionibus *nee* aeqiulahs

## SILENK^E

SAPONARIA OHTEGIOIDLS Boiss et Balansa (Sect *Bolanthus* )

S perennis pallidfe virens tola sub lente brevissimè hirtula vis-  
cidula, caudiculis suffrutescenlibus prosiratisramosissimis, ramis  
erectis tenuibus pumilis ad nodos aubincrassatis dichotomè vel  
lternatim ramulosis, folus angu^tfe lincanbii'i acuLis umnervns  
basi breviter connatis patulis subrecurvis mlernodns xquilongis\*  
vel sublongionbus, florahbus brevibus angii^latis stnetis, flonbus  
sohtanispedicello stricto calycc saepiis brevion suffultis ad ramu-  
lorum extremilatejn in racemos lavos paucifloros dispositis termi-  
nal lbus saepius binis, bracteis 4-6-ms ad basin calycis angusL6  
Janccoldtis herbaceis viscido-hirlis calyce diraidni brevionbus,  
calyce tubuloso-campanulalo 5 nervis vindibus percun»o inter  
eos membranaceo hirto-viscido, dcntibus quinque ovato-lanceo-  
latus obtusis tubo quadruple brevionbus, pelalis calyce tertul  
parle longionbus linean-cuneatis in unguem virentem sensim  
dLtenuatis albis nervis tibus purpureis apice arcuatim con-  
iluenlibus percurais, filamentis 8 calycis longitndine, anthers  
pallid^ flavin, styliS'duobus, capsuld cylindncd calyce paul6 lon-  
gion ullrj medium \ valvi, seminibus nigns tenuissim^ rugulosi  
reniformibus subcompressis umbilico laterali, radicia recUi  
**elon<sub>g</sub>atá**

*Tunica ortegioides* Fisch et Mey in Ann Sc Nat ex IOLO dL  
descnptione brevi — *T xylorrhiza* Boiss Ann Sc Nat

Hab in monte *Alidagh Cappadoace* piopfe *Cwsaream* cl Balansa  
Fl Aug In *Ponto* meridionali cl TchihatcheT

Rami nnmerosissim] semipedales Folia infenora 5-7 lftiw^longa

PLIII orient iiovar Sei se< N" it

**lineam** diimid.iiit l<sup>U</sup> FJorc<sup>^</sup> niagmludirjfo ooruin *Gypt*, *mmahs*  
**Platylus** *OttegtM* Species djstiiicLis&iuid lionbus (ut ei *Tumcarum*)  
 bracteatis doiiata seel ab hoc gen ere seminibus omnind *Gypsophiloe*  
 discedens Characteribus, seminibus, nervatione petalorum *Sapo-*  
*nanm* Sect *Bolanihom* quâ tamen (lores non bracteati et styli  
 tres capsul.iquo f<sup>b</sup> valvis bent<sup>!</sup> congruens Sect *Bolanthus* ob se-  
 mini-s forma in et petalorum ungnēs non bilamrllatos genus pro-  
 pnium forsā ul term̄s constituet

(TYPISOPIHI v JAPPADOGIGA Boiss et Balansa {Sect *Stntthium* )

G pcrennib glabra glaucescens basi sulTrutesceiis ramosa caules  
 credos alios steriles abbreviatos alios elongalos supernè alterna-  
 lim et subdnliolomè lamoses edens, nod is incrassatis, fohis car-  
 IIOMIIS hueanbUb acutis apice crustaceo-albidis suprA plains  
 so I)lus acule carmatis minutè prsertim ad margines tuberculato-  
 scabns internodiis acquilougis loiiigionbusve, floralibus ad pedun-  
 culorum basim brevissimis subscanosis, capitulis Qorum globosis  
 densis pedunculis cis 3-5-pl6 longionbus suffultis nonnulls ra-  
 nuls subses<sup>i</sup>Ubus, flonbus brvishimfe pedicellatis, bracteis tnan-  
 gulan-lanceolatis acuminatis mterdoralibus calyce brevionbus  
 proeler nervnm medium rubellum membranaceis extenonbus  
 capUuh basin involucranlibus saepè patuto-subreilexis, calyce  
 albido mgncanti-vitlato pilis glandulosis obsito ap<sup>!</sup> quartam par-  
 tem usquè m denies ovato-tngulares obtusos membranaceo-  
 marguiatos diviso, peLalis roseis elliptico-lanceolatis in iniguem  
 atlcnuatis, filamentis longè exsertis

Hab in regione montan<sup>^</sup> supenon montis *Asian Bach Antitaun*  
 in *Cappadocid* cl Balansa Floret ineunte Augusto

Planta pedalis vel sesquipedahs, folia 1 \*/i-2 pollicana basi h-  
 nearn ferè lala Pcduncuh 1-2 polhcares Capitula magnitudims  
**illorum** *GlolmlancB lulgm is* Species elegans affims *G sphisroce-*  
*phalce* Fenzl capitulis minonbus subsessilibus, bracteis latè tnan-  
 gulan-oratis calyces squantibus, calyce albo glabro-tuberculato  
 distincta? *G glomerata* Pallas cujus capitula pedunculata sunt  
 difieri eis dimidi6 minonbus bracteisque lahssimis

## TUNICA PAMPHYLICA JOISS et Dalansa

T annua gtabra caule filiformi a basi dichotomy ramosissimo ramisque tenibus rigidis erecto-patulis, folus sub anthesi jam exsiccatis a basi linearibus sub 5 nervi longè attenuato-acuminati<sup>1</sup>\* internodia inferiora acquantibus, superioribus abbreviatis angustatis, folibus solitane\* pedicello capillan calyce subbreve suffullis, squamis calycis 8-12 oblongis ab infimis ad intimas, \*ensim auctis mucronato-atenuatis albo-marginatis rubro-striatis, calyce rubro-striato cylindrico squamis subnatis longioribus ad tertiam partem usque in dentes lanceolatos albo-marginatos acuminatissimos fissis, petalis roseis oblongo-spatulatis integris calyce paulo longioribus laminatis in unguem sensim attenuate, capsula calyce brevior cylindrical 4 valvi, seminibus magnis compressis oblongis radice praeinua

Hab circa *Adalia Pamphylica* c\ Balan<sup>a</sup> Fl Septembri

Planta semipedalis effusa, folia inferiora 10-12 lineas longa breviter vix lineam lata, calyces eis *T saxifrage?* paulo longiores angustioresque Species distinctissima a *T saxifraga* radice annua, calyce acutissime dentato, a *T hispidula* glaberrime. calyce basi squamato, etc

DIANTHUS TYMPHRESTEUS Heldr. et Sartori (Sect *Ammuibirum*)

D. perennis multicaulis sub lente palidè hirtulus viscidulus caulibus natis erectis vel procumbentibus, folus angustis uncinatis flaccidulis acutiusculis internodio brevioribus, folibus 2-3 terminalibus sessilibus fasciculatis, squamis calycinis quatuor subinflatis pallidis in cuspidem teneram herbaceam eis 2-3 plures breviores subpatulam abruptè attenuatis, calycis squamis vix longioribus tubo cylindrico dentibus lanceolatis acutis, petalorum limbo minoroseo ovato obtusè dentato supra basin macula atropurpurea notata

*D. visidus* var *Tymphrestea* B et Sp Diagu VIII

Hab in montibus excelsis Graeciae, summo *Tai/qHo Clirhnt* o\

*Olenoi*, alt 00U0'-7000' Ili^ldi *Tymphret, Io [Veluthi]* Spruner, Samaritam et Guicciardi, *Pataat, i, o* Heldr Guicciardi

Clan auctores hanc plantain a *D uscido* in eisdem inontibus crescenti consdirjter diversdm et absque trausitu observarerunt, praetor staturam nanam, capitula paucifiora et petala basi maculata, forma limbi divert csL m *D vtscido* longior oblonga

DIANTHIUS pmiNOSus Boiss et Orph

*D* perennis totus minutò pu^tLiloso-pruinosis t>caber eglandulossus, caudicibiib procumbcnLibui) hgnescens, folns ngiduli-^ angusto hncjnub dcummali:\* subincurvis phcatis, cauluns sublationbus vaginâ earura latitudine suljlungion suffultis, nodis tumidis, caulibus parct breviter et stridê ramulosis, flonbus solilarns vel biuis aggregalis, squamis caljcims 4-0-ms prmnsis e basi laid in mucronem heibaceum apice subulatum albidum tubum calycis supiiis buperanlem longê atteuatis, calycis pallidè vireutit) stnati pruinosi denlibus ciliatulis lanceoldtis anstatis, petali laminâ rosed obovato-cuneatfi dentate basin versùs pallidion parct papillosâ

Hab propè *Volo Tbcssahce* ad basin montis *Pettonii*, loco *Cou-nt zu die to cl Orpha nidcis Fl Junio*

Vddè afluiib *I) juhesientt* Sibth diflert indumenlo non glanduloso-pubescenti, squamis calycinis in mucroiiem roultO longiorem attenuatis, laniinA petalorum majon latiori

DIANTHIUS PEINDULUS Boiss et Blanche

*D* perennis, glaber, caulibus hgnosis tenuibus elongatis nudis burculos foliosos elongatoscaulesque flonferos foliosos edentibus, loins surculoruim hneanbus plains acuminatis longis quinque-nervns cancims margine ^cabris, cauliuus angustionbus stnctiusculis internodio longionbus vaginâ brevissimd suffultis, caulibus flonferis elongatis loretibus supernè ramosis ramis longis stnétis, flonbus terminalibus soli tarns vel 2-3 brevissimè pedunculatis approximatis, squamis\* calycinis 12-16-nis flavidis stnatis breviter lanceolatis acutis vel breviter mucronatis aretè imbncatis ab m-fimismenoribusadsupenoressensnm auctis, cdlyce squamis dupW

longiore alleuualo cylitidnco sslridlo dentibus. lanceolate acutis, petalorum unguibus bieviter ex&erli^ lamina<sup>1</sup> palhdè roseS cuneato-spathulata basi pilosii apice subbilobS ad quarlam partem longitudinis digitato-incisd

Hab e panetibus verticalibus rupium pendulus in valle *Bm-ghoutie Libam* suprâ *Satda* (Blanche)

Folia turciorjum 3 pollices ct amplras longa 1 '/, lineam lala caules flonfen s\*pe sesquipedales, calyx 13-14 lineas longuh Affims *D actmopetalo* Fenzl qm distinguitur folns longionbut. iseptemnervus, cauibus flonferis ancipitibus, squamis calycims 6-8-ius ovahbus obtusionbus, petalorQm lamims obovalis deutibus, dimidio brevionbus

DIANTHUS POGONOPETALUS Boiss cl Kot^chy (Sect *Ftmbria*h )

D perenms bas>i dumulosus huffruteiceii!), loins brevibus. ngi-  
~~dis~~ plamubcuhs acutis glaucesconLibub margine scabris bublùs clovato-nervosiis nervo medio cra&sion valdò pronnenni, cauibus abbreviate strict^ vagina brevibsimj, cauibus llonferib btncis fecabns umtlons, tqumis calycims octonis stramineis adpresbis obsolete nervosis ovato-oblongis apico abruptfc et breviter mucronatis, calyce cyhndnco squamis tnplò longion nervoso-stnato vindi apice stramineo ID dentes oblongo-lariceolatos acutos piofundè fisso, petalorum roseorum laming oblongâ elongaU basi valdè barbatfi fimbnatl, fimbnis areac latitudine subbrovionbus

Hab in rupestnbus ad Cedretum *Libani* alt 5000' cl Kolschy

Caules llonfen semipedales vel paulò longiores Folia 0-10 lineas longa lineas V\* lata Calyx 10-11 lineas longua Valdè aflinis *D fimbriato* ab eo foliis aspens brevibus lationbus, calyce lation, squamis deotibusque strammeis, petalorum laminâ valdè barbata breviusque fimbnatd differre videtur

SILENE BBACHYCARPA Boiss et Bal (Sect *Eusilem* )

S perenms dioica, rhizomate crasso lignoso apice m caudiculis breves tortuosos suflrutescents diviso, ramis alus flonfen^ brevibus alus sterilibus brevissimis caespitosis, folns pube brevi papillan deflexâ hirlis gi i>ei< inferioribus breviler el angu^te li-

neanbus caulinis \*>apc oblongo-lineanbus onmibii;. dcutb, raniulis lloralibus brevissimit, dichotomè 3-5 lions ad apicem caulis capitatis vel pauculam brevi^simam p->eudovercillatam formanlibu&, flonbus subscsihbus basi breviter bracteaLis, caljcc membranaceo-albido nervis elevatis virentibus percurso papillan-hirto viscido, petahs albidib limbo obovato-cuneato ultrà tertiam partem in lacunas oblongo-lineafts bilido sensim in unguem attenualo corona obsolete, carpophoro mcrassato subnullo, capsule calyccin aBqudnti distendenlique tnsulcâ breviter ovato-couicci in rostrum attenuata

Hab in parte supenon vallis *Kanwhli Tchai Cappadocim* alt 1400 melr cl Balansa, raedio Janio fructifera

Plants caespitofea 3-4 polhcarislohisteihbus 4-5 lineas longis hneam dimidiam latis supenonbus lationbus Flores masculi 5 linoas longi ovano abortivo carpophoroque marnfpsto donati, foeminci paulo breviorcs, capsula cum rostro icquilongo 3 hneas lata ExaflimtateS *Cappadoctcw etprumoste* cauibus Immihbus, carpophoro subnullo ct formâ capsulae distmctissima

SILENE FENZLH BOIS» et Bal (Sect *Eusilene* )

S perennis cxspitosa, folns omnibus radicalibus ovatis vet oblongis obtusis vel acutiuscuhs in petiolum eis seqiilongum vel breviorcm abruptè attenualis pube brevissimâ cnspulâ hirtis, cauibus gracihbus ereclis glabns um ranûs biflorib, folu^ cauinn 2-4 lineanbus brevissimis, calyce clongato cyhdnco a basi ad apicem sensim attenuato membranaceo-albido rubello-venoso sub lento papilhs brevissunis sparsis hirtulo dentibus breviter ovatis aculiusculis ciliatis, pelahs roseis lamina exserta obovaU ad medium usquè in lacinias obovatas bifidd, corond bipartite Jacinns lirieanbuSj carpophoro ovanum superanti, capsulfl .

*S. Siebm* Fenzl Pugillus ex parLe

Hab in regione alpinâ *Taun Ciliaa* supra *Bulghar Maaden* cl Balansa

Fohorum radicalium limbus 6-10 hneas longub, caules flonfen semipedales Calyx 42-14 hneas longu^ Pulchra species affinis indnmento Pt charactenbus 8 *Stebrrt* e Cietâ qui differt **caulibus**

ftultiflons cjmosis, flonbiu> longè pedunculate, folns caulims  
Nongalis faltalis, calyce lertiJ sallem parle brevion

SILENE G<sup>A</sup>SAnEA Boiss et Dalauba (Sect *Eusilene* )

S perennis glabernma, caule terete, laevi albido folioso ad Do-  
dos mcrassato, folus lat<sup>i</sup>; lanceolatis acutis basi attenuate nerve  
iilbo subtùs promineli inslructis erecto-pa Lulls, pamcuU termi-  
nnh olongatA vi<sup>^</sup>cidfi ramis erecto-patulis 3-5 flons, folus flora-  
libus angastfi lanceolato-linoanbus canahculato-phcatis s>sep6  
InlcaLo-recnrvis, calyce membrauaceo-rabello subnervi glabro  
subcyhndnco a basi ad apicem dilatato dentibus Inangulanbus  
•icalis margine membranaceis, petalis albidis lamini obcordato-  
cuneatfl ad quartam partem usqu6 in lacuna\*\* obovatas fissfi basi  
ecoronatA subbigibbosS, capsuU elongato-obiongJ calyce longion  
carpophoro efl terti3 parte brevion suffulta<sup>1</sup><sub>3</sub> seminibus compres-  
sis tenmter rugulosis

Hab in caciiimine montis *Ahdagh* supra *Ctpsaream Cappadona*>  
<»ll HOOmetr cl Balansa Fl Julio

Planta 2-2 \*/ , pedalis Folia ea *Saponance offiattalis* omnind  
rpreferentia 2 7\*-3 pollices longa 6-8 linear lata vindia Panicula  
pedalis, calyces sub anthesi 10 linear longi Pulcbra species ex  
'i'Imitate S *paradoxe* et *Caramamctz*

SILENE BALANS<sup>E</sup> BOISS (Sect *Eusilme*)

S perennis rhizomate hgnoso cccspitoso, folus radicaibus el-  
liptico-lanceolatis vel obovalis acutiusculis basi long6 atlenuatis  
pube pa tula brevi hirtis vel taihùxn cihatis vel glabrescentibns,  
caulibus erectis &implicibus vel parcè raraosis glabns ssepè sub-  
v<sup>is</sup>cidis, folus caulims angust6 hneanbus, ramis inflorescentis  
**strictis** inflons vel abortu uniflons, bracteis lanceolatis membra<sup>^</sup>  
**naceis**, pedunculis calyce subbrevionbus, calyce cylindnco-clavato  
palhdo membrauaceo glabro obsoletè lmeato dentibus tnangula-  
nbus obtusis ciliatis, petalis sordid<sup>^</sup> albis lamina ultra medium  
in lacunas oblongo-hneares partitfi in unguem dilatatum aequi-  
longum dbeunti, corona ad 2 gibbos reducta, carpophoro capsulae  
oblongae aequilon<sup>^</sup>o.



Hub in regione alpini montU *Mavtieneudayh* el in monio *Asian-dmh Cappadocup* LI Balan^a

Folia radicalu pollicana 3-4 lineas lala rdni- duplò majora, c. iules flonfcn pedales paniculalim 3-9 lion Caliv 8 lineas longus Species dfflnis *S Aimana*\* quse differt folus angustè linpanbus caljce terlul parto brevion alnsque nolis

SILKNU GUICCIAIDH Boiss et Heldr

S perenms dens6 caespiloba rln/omale indurato crasso, folus .inguslo lmcnbus acutis margjnc scabndit Inflmis surculorum radicnliumbrevium pldiiuisculi^ caulnus paucis remolis canahcu- lalis siibuldtis, cauliba<sup>1</sup>^ crclis basi ssepe geniculatis tenuibus viscidii in paniculam sjnphcem 7-0 floram abeuntibus, pedun- cuh^ ercclo-potentibus bā»i breviter bracteatis Infenonbus calyce multo longionbus Mib apice bibracteolatis, florenutanti, calyce brevi sub anthe&i cylnidnco-campanuldlo membranaceo-subco- riaceo glabro albo-rubello denlibus ovalis membranaceo-margi- natis obtu^is, pelalorum unguibus planib valdè cilialis, lamiiifl anguiUl dd <sup>3</sup>/<sub>4</sub> longiLudmis in lacmiab lmcresparLitâ, corond bi- parLiU ldmiiib lmcjribu-. , lilamontib stylisqnc birsutis Ion gò ex- serlis, aulhoris uigiLSCcnlibub, cap^ulà oblongâ calycem disten- denli rioque sublongiori carpophoro brevissiruo

*S gminimfolta* Heldr II Gr Worm N° 687 non Otth

Hab in rupehlnbus *Pamassi* versd^ collem *Leucocastro* suprâ *fjvadi* alt 3500' Cl Samaritam et Guicciardi Fl line Junn

Pedahs, folia radicalu pollicarid <sup>X</sup>l\*-'\*U hnese lala Calyx 4 <sup>l</sup>/<sub>t</sub> lineam longus Affinis *S lasiopetalm* Fenzl quae differt folus glaucis pruiiosopuberuhs ngiduli^ radicalibus oblongo-lanceolatis, ca- lyce breviori, pelalorum ungaibus apice utnnqu6 appendiculalif. >S *g) aminifoha* csl planta Sibirica diversissima

SILENE NIEDERI Heldr

S perennis palhdò virens parte inferiori pube brevissimA patuM hirtellâ supernè glabrata viscida, caulibus e surcuhs brevibus siiffrutescentjbus nascentibus ereclis elatis tenuibus supernè op- positè ramosis vel abortu dicholqm̄is laxè corymboso-pamculatis

folns infimis oblongo-hneanbus oblusis in petiolum attenuatis csetens hneanbus a cut is stnctis, suprenns ad ramorum\* paniculae ortum brevissimis Imcari-subulatis, flonfous terminalibus 1-3 supra bracteolas breviter pedicellatis, calyce cylindrico-campanulato virenti nigricanti-linealo dentibus oblongis obtusis membranaceo-marginatis, petalorum unguibus a basi sensim dilatatis ciliatis limbo flavo-virenti ad  $\frac{3}{4}$  usque in lacmias lineares bipartite, corona ad 2 gibbos reducta, filamentis pilosis long\* exsertis, anthers oblongis nigricantibus, capsulae ovatae carpophoro e& dimidio breviori suffultis

**Hab in sylvis prope Carpenm EurytanuB loco Hagia Paraskevy dicto cl Samaritan\* el Gmccardi Fl fine Julu Gl Docton NtedereMtssolonghi dicata**

Sesquipedalis, folia 2 pollices longa, infima 3 lineas caetera sesquialtera longa, caulis ad nodos incrassatus, calyx 4-5 lineas longus Species distinctissima flonibus mutatis ad *S flavescens* sed petalis ungue ciliatis ad praecedentem et *S lasiopetalam* a quibus folns distinctissima propius accedens

SILENE MODESTA Boissier et Blanche (Sect *Eusilem*)

S annua lota brevissima sub lente papillosa hirtula superne prorsertim viscidula, caule tereti erecto a basi ramosissimo ad nodos incrassato, ramis stnctis, folns vix angustis internodis brevioribus, flonibus in dichotomis superioribus terminalibusque paucis solitariis longiuscule pedunculatis, calyce prominenter 10 nerviis et inter nervos papilloso-scabundo in densis lanceolatis acutis ciliatulis abeunti flonifero angustè cylindrico-subclavato inferne subattenuato basi truncato sabumbicato, fructifero clavato, petalis parum exsertis, capsulae coriacea\* dentes calyces aequanti oblongi carpophoro suo triplo longioribus, seminibus compresso-remiformibus dorso subcanaliculatis undique tenuissimè rugulosis

Hab in Syria ad vias circa Beyrout ubi detexit cl Blanche Maio-1849.

Planta vix pedalis, folia majora 8-10 lineas longa vix imbricata, pedunculi stncti sspè pollicares, calyx flonifer 6 lineas longus Habitus *S naparU* a quo csrberm longe differt Valde

affim\*- *SU ctuetodonlce* Boi<sup>^</sup> Diagn pro cujUb vanetate earn pri-  
 mum habuiinu-> sed qu<B bat differre videtur dentibus calycinis  
 multd minùs papilloso-asperis longè attenuato-\*.ubulatis capsulam  
 latiorems brevioraque long\*<sup>4</sup> superantibus

S[LENE DAMASCENA BOISS et Gaillardot

S atitua tola breviter dense et patulè glanduloso-hirta flavo-  
 virens caule dicbotomè ramoso ramis erectis elongatis, foliis  
 oblongo-Uneanbus obtusiuscuhs basi attenuatis sessilibus, flonbu&  
 in racemos laxissimos dispositis<sup>^</sup> pedicellis flonfens calyce dimidid  
 brevioribus Iructifens elongatis capsuUV longionbus, bracteis 2  
 altrcâ lanceolaU pedicello brevion allErâ linean setaced minimi  
 calyce c\lindnco tenuissime sub lente glanduloso-pellucido 10  
 rubro-hneato, petalorum purpureorum laminS ad <sup>1</sup>/<sub>s</sub> bipartite  
 lobis obovatis coronS recta" e<sup>^</sup>ertfi albS lobis IOovato-subtrun-  
 catis conslanli, styhs exsertis hirtis, capsuU oblongi carpophoro  
 dimidi6 brevion suffulU, seminibus reniformibus IEBVIUSCUIIS  
 dorso profunde canahculatis utraq̃ue facie excavatis

Hab ui ruinis *El Keneiw Anhhham* inter *Jantha* et *Rascheya* cl  
 D<sup>r</sup> Gaillardot Fl Maio

Plauta vjscida pedalis et major, calyce basi Iruncato 6-7 hneas  
 longo, valdè affinis S *Paltsstinee* Doiss qua? eximiè differt pedi-  
 celUs etiana fructifens capsuli et bractea brevionbus, petalorum  
 limbo ad basin bisecto, corona<sup>1</sup> form.}, seminibus dimidid mino-  
 nbm, cjlycc longè hirsuto

SiLENT LACONICA BOISS« el Orph (Sect *Atocion*.)

S annua tenera lota patulè etbreviter glanduloso-viscida, caule  
 crecto humili saepitiis a basi dichotomo, fohis parvis inferioribus  
 oblongis obtusiuscuhs in petiolum attenuatis intermediis sessili-  
 bus acutis summis minutis oblongo-liDeanbus, flonbus in dichot-  
 omus et terminahbus erectis longè pedunculatis, calycis glandu-  
 losi clavati basi altenuaS truncati dentibus ovato-oblongis obtusis,  
 petali rosei lamin.ì cuueatd ad quarlam partem bilobS, appendicis  
 bipartite laciini\*. oblongo-lineanbus obtusis, carpophoro capsu-  
 lam ovato-oblongani s>uLiaequanli, semimbus

Ilab in moute *Malevo* Laconiaa suprA *Platmos* cl Orphamdès  
Fl Apnh

Planta 4-5 pollicans, folia 5-b lineas longa 1 V, lata, pedicelli dichotomianim pollicares, cseteri pauld breviores, calyx 4 lineas longus Inter species sectionis flonhus brevissimis statim dignoscenda, habitu refert *S Pentelicam* floribu\* dimidift minonbus petahs integns, etc , diversam

## ALSINEiE

ARENARIA SAPONARIOIDKS BOISS et Bal (Sect *Eutfiaha* )

A. annua Lota patulè glanduloso-Inspida, caule nauo a basi plunes dichotomo confertim corymboso^ foliis Infimis minutis elliptico-lineanbus acutiusscuhs subtrinervns, cauhnis intermediis majonbus e basi sessili oblongo-lanceolatis acatis subtùs elevatim 7-9 nervus, floralibvis angustè lanceolatis s&pè subrecurvis 3-5 nervus, pedicellis calyce subbrevionbus, sepalis glanduloso-hirtis lanceolatis acumioatis elevatim tnnervns intenonbus basi albo-marginatis, petahs calyce tnplò brevionbus, capsuld ovalo-conica calyce pauld brevion

**Hab. inter Ouchak et YarfuinucMir Kent in Phrygid cl Balansa**  
Fl fine Man.

Habitus *Saponanw Oentahs* vel *viscosw*. Planta 1-2 pollicans. Folia intermedia 5 lineas longa 2 lata Flores valdè conferti Calyx fructifer 2 lineas longus Afflnis *A nanw* Boiss. Diagn quac differt foliis cauhnis ovatis trinervus obtusis, flonbus pauld majonbus, sepalis ovato-oblongis obtusiuscuhs basi subquinquenerviis *A macrosepala* Boiss in *Phrygid* quoque crescens (Balansal) differt inflorescentia laxion, sepalis magis attenuatis 4 lineas longis^ etc

ALSINE EURYTANICA BOISS et Heldr (Sect *Tryphane* )

A perennis glabernma basi indurata, ramis numerosis basi decumbentibus subdenudatis dem erectis ahm stenlibu^ fohosi<?

brevionibus ex axillis fasciculifens, alns apice dichotomy et corymbosè 5 vel pluriflons, folns palhdè vindibus e basi subdilata\* breviter membranaceo-vaginaia anguslè hnean-subulalis bisulcis subfalcaLis apice obtusiuscuhs molliter et brevissimè apiculatis, pedicelhs calycem subaequantibus, calyce basi truncato glaberimo sepahs oblongo-lanceolatis latè albo-marginatis tnnervns nervis latis pardm prominulis apice obtusiuscuhs cum mucronulo mo Hi, pelahs albis elliptic is calyce sublongionibus, capsule oblonga calyce subbrevion

**Hab** in pascuis alpims *Megarheuma* dictis monLis *Veluchi EurytamcB* (Etohae) alt 5000' Cl Samantani et Guicciardi Fl Aug

Gaules 4-8 polhcares, folia lunonum longiora ferè 4 lineas looga angustissima. Flores ferè magmtudinis eorum *Arenance grandiflorce* Affinis *A hirsuta* Fenzl differt indumento, flonbus minonbus, sepahs elevatius 5 nervns> attenuato-acuminatis *A falcata* Grisebach quse forsan *A. hirsuta* tantùm vanetas longiùs differt floribns dimidiA minonbus folns sepahsque acutissimis

ALSINE VELUTINA BOISS et Oroph (Sect *Mmuarttas* )

A biennis lota patulè velutino-hirta subvibcida a basi multicaulis, cauhsbus ascendentibus, fohis e basi lation tnnervi subulatis breviter et obliquè mucronulatis stnctis, axilhs fascicuhgens, cymis l<musculè corymbosis, bracteis tngulanbus acutis nervo medio excepto scarwsis albis, flonbus dichotomiahsbus terminalibusque, pedicelhs calyce brevionibus, calycis basi truDcah post anthesin clausi sepahs hnean-lanceolatis squahbus acuminatis oerro medio vindi hirsuto cannato vix bifasciato marginibus albo-scanosis angustion percursis, petahs albis oblongis calyce subbrevionibus, capsule calyce vix brevion, seminibus seriatim et concentncè tuberculalis

**Hab** in monte *Dtsoron {Korthiah} Macedonia alt 4000' Gl.* Prof Orphanidès Fl ineunte Julio

Affinis *A glomerate* Fenzl quae differt indumento magis glânduloso, cymis confertis, bracteis lanceolatis margme tanLùm scariosis, sepahs insequahbus angustiùs scanosis, petahs et capsuld calyce tnente brevjonibus

ALSINE CORMBULOSA BOISS et Balansa (Sect *Mimartice*)

A perennis multicaulis, caudicibus sublignosis prostratis, caulibus filiformibus erectis glabris vel sub lente brevissimè puberulis ad nodos incrassatis parte superioribus strictè et dichotomè ramosis, foliis breviter inter se connatis e basi triovariatis latè membranaceâ abruptè attenuatis subulatis acutis vel obtusiusculis strictis, floribus bracteisque numerosis ferè omnino membranaceis breviter et latè triangularibus mucronatis, florum pedicellis puberulis calyci aequilongis vel brevioribus suffultis cymas congestas corymbiformes formantibus, calycis basi rotundato-subtruncati sepalis lanceolatis acutiusculis fascia vincto nervo angusto albo bipartite marginibus albo-membranaceis latè percursis, petalis oblongis obtusis calyce triente brevioribus, capsula calyce brevioribus, seminibus oblongis subcompressis tenuiter rugulosis radice longioribus.

**Hab in monte Ahdagh prope Cæsaream Cappadociae. Fl Julio**

Planta 1/2-1 pedalis. Folia 4-5 nervis longa. Caulis stipes paucus brevis foliis strictis. Calyces vix sesquialtem longi. Habitus et characteres A *Anatolicæ* Boiss. bracteis longioribus, florum duplo majoribus, fascia sepalorum angustissimâ, seminibus minutis diversis. A *scleranthoides* Boiss. et Noë affinis quoque habet caules humiles, fascias dorsales sepalorum angustiores. Ejus semina non nota sunt et forsitan ulterius speciei præsertim ut forma alpina conjungenda est.

ALSINE BRACEYCARPA BOISS et Balansa. (Sect *Sabuhnea*)

A annua sub lente indumento patulo glanduloso tenuissimo obsita, caulibus capillaceis a basi palulis et divaricatis dichotomis cum flore in dichotomiâ, foliis subulatis apice callosis obtusis erecto-patulis, ramis pedicellisque setaceis his calyce 5-6-partibus longioribus, florum minimis, sepalis ellipticis acutiusculis glabris vel hirtulis vinctibus angustè albomarginatis nervis parvis prominulis, petalis albis calyce sublongioribus, antheris violaceo-nigris, capsula globosâ calycem æquanti.

Hab in collibus ad ripam dextram fluminis *Kamechly Tchat*

propè/toefte% in *Cappidoctd* all 1300 metr cl Balan^a Floret  
ineunle Junio

Plan tula 3-4 pollicans ramis tenuissimis Folia inferiora tres  
hneas longa lenmssima, caetera breviora Calyces linesc  $\frac{3}{4}$  longi  
Aflims A *Lydice* et A *mbtih* Fenzl Prior differt sepalis acumi-  
natis, posteriorpelalis calyce brevionbus, utraque calyce longion,  
capsulisque oblongis nee subsphffincis

GEHASTIUM ARG<EUM BOISS cl Dal (Sect *Strephodon* )

C perenn caespitosum lotum pubescenti-viscidum cdadicuht>  
prostratis radicantibus, surculis stenlibus abbreviatis densè folio-  
sis, cauibus pumilis filiformibus basi densè dein laxè foliosis, fo-  
lus vindibus elliptico-lmearibus obtusis uninervns caulims inter-  
nodus brevionbus, flonbus ad caulium extremiLatem solitams vel  
2-3 lomè 2-3-nis, pedicelhs flore subdupld longionbus, sepals  
ellipticis puberuhs oblusiuscuhsrubellis exterioribus angustè in-  
tenonbus lahusculêmcmbTanaceo-marginatis, petalis albis calyce  
sesquionbus ad tertiam partem bilobis, filamentis glabns h-  
ncanbus basi vix dilatatis, styhs tnbus, capsuld calyce sesquion-  
gion sexvalvi, valvis extûs rvolutis, semimbus tuberculatis

Hab m regionc alpina` superior montis *Argm Cappadoctm* alt  
3650 metr cl Balansa Fl Aug

Species habitu et florum magnitudine formas condensalas C  
*tingym* referens sed indumento viscido lota obsita et folus angns-  
Lionbus magis stnctis donata. Ab efl insuper distinctissima  
capsulae valvis extûs valdè rvolutis nee rectis Inter sectiones *Ui-  
chodon* et *Strephodon* quasi intermedia, priori numero stylorum et  
petalis breviter bifidis, posteriori capsule valvis apice rvolutis  
accedens Affinis quoque C *Kasbek* Parrot, folus oblongo-spathu-  
latis, petalis semibifldis, numero stylorum distincto

## HYPERICACEIÈ

**HYPERICUM** MACEDONICUM BÖISS et Orph (Sect *Drosocarpium* )

H glabrum viride erectum tupernè laxè paniculato-corymbo-

sum, foliis subcordatis oblongis acutis & parsim nigro et pellucido-punctatis, bracteis sepalsque lanceolatis trinerviis maculis nigris clongatis adpersis margine ciliis glandulosis eorum latitudine & longioribus obsitis, petals nigro-punctatis margine fimbriatis, capsulae glandulis sena libas conspersa".

Habit in Regione superius montis *Korthati Macedonia* et Prorhamdea Fl. Julio

Herbarium et floribus simillimum *H. Sprtm* quod differt sepalibus angustioribus bracteisque breviter ciliatis ciliis glandulis marginatis *H. imkintkum* et *Sp.* differt foliis minutis impunctatis et sepalibus quidem glanduloso-ciliatis sed oblongis ciliis multo densioribus

HYPHEICUM CYMIDIFERUM BOISS. et Balansa (Sect. *Twinwcpmm.*)

*H. glaberrimum* glabrescens pluncaule, caulibus ascendentibus virgatis lineis 2 elevatis decurrentibus percursis nigro-punctatis, foliis subsessilibus punctatis nigris sparsis et glandulis pellucidis conspersis oblongis ellipticisve obtusis inferioribus internodio sublongioribus, floribus in paniculam tenuinalem subpyramidatam dispositis, paniculae ramis raris unifloris saepius subumbratilis scorpioideis plurifloris, foliis floralibus oblongis cymbiformibus obtusiusculis, pedicellis brevissimis, bracteis anastomosis linearibus pedicello longioribus breviter glanduloso-ciliatis, calyce profunde in dimidiis ellipticas obtusas basi subattenuatas nigro-punctatas ciliato-glandulosas fissis, ciliis regulariter pectinatis glandule nigrae terminalis latitudine lacinate multo brevioribus, petals calyce triplici longioribus parvis nigro-punctatis, carpelibus dorso 2 vittis glandularibus percursis praeterea commissuras versus et ad basin glandulis inflatis transversis oblongis obsitis

Habit in collibus ad septentrionem urbis *Ouchak* in *Plinij* et Balansa Floret Junio

Inlorescentia et characteribus affine *H. avicularum* i. e. et *Siftch* foliis augustinibus, floralibus valde diminutis angustis hinc noaridiolatis, sepalibus linearibus lanceolatis acutis distincto



ИИПЕИУЦИИМ АДЕНОИМЧУУ Т et Spach var *mynotnchum* Boist.  
*H* Balansa

Folia intermedia et supenora angustè hneana tolâ facie supe-  
non nee margme tantùm setis basi in tuberculum incrassalis  
obsita 8-42 hneas longa 1-4 /\* lmeas lâta, csetera typi

// *mynotnehum* Boiss et Bal Mss

Hab in *Phrygid* propè *Kaiagmul Der4* cl Balansa

## GERANIACEÆ

ERODIUM GUICCIARDII Heldr

E perenne, caespitosum radice crassl, caulibus prostattis coss-  
pite 2-3-plO longionbus divaricatum ramosis fohosis, folus adpres-  
sissimè senceis uitidis radicaibus uumerosis petiolatis ambitu  
oblongis bipinnatisecelis 1 acinus hneanbus acutmscuhs, cauhs  
diminutis sessihbus tantùm pinnatisectis, pedunculis umbellatim  
5-7 flons pedicellisque lonjtis tenmbus adpressè hirtis eglandu-  
losis, sepalis elhpticis adpressè hirtis eglandulosis membranaceo-  
mbellis vindi-5 nervns membranaceo-marginatis longè mucro-  
natis, pelahs roseis obovatiscalyce subdupl6 longionbus, carpellis  
albo-veluUrs caudâ lotigâ extûs breviter glanduloso-hirtâ mtûs  
hispidâ terminatib

Hab in pascuis siccis alpims montis *Veluchi* [*Tymphrestt*) *Eu-  
rytama*> alt 6000' ubi detexerunt ci. Samantam et Guicciardi Ft  
fine Julu et Augusto

Species pulchella ab *Er absinthm*di et afQmbus indumento albo  
discedens, ailims eddem notS, caracteribus et florum njagmtu-  
dine *Ei. cmereo* Boiss et Heldr quod differt indumento minûs  
nilido, foliorum lacimis magis oblongis et inprimis pedicelhs' et  
sepahs glanduloso-hirtis, his submuticis, carpellorumque caudis  
extûs eglandulosis

ERODIUM GAILLARDOTI **Boiss**

Er perenne, rhizomate elongato subverticali lenui infernè in tuberem globosum vel ovatum incrassato, collo squamoso, caule humili flexuoso patulè et breviter hirto a basi paret et dichotomy ramoso, folus radicalibus longè petiolatis e basi cordatA ovato-oblongis obtusis aliis indivisis minutè crenato-dentatis alns tnsectis segmento terminal! mulld majon basi cuneato-subpetiolalo saepè profundè tnfido omnibus adpressè cano-subargyreis secùs nervos secundanos plicato-hneatis, folus cauhs diminutis sessilibus in lacmias breves oblongo-hneares pmnati-vel subpinnatipartitis, ramis apice umbellatim 5-7 flons, pedicel! is flpre longionbus^ sepalis oblongis obtusis muticis dens6 velutino-hirtis vindi-tnlineatis, petalis obovatis pallide roseis, carpelhs hirsutis cauda<sup>d</sup> eis 4-5-pld longion intùs rufo-cihata superatis

Hab. in rupestnbus ad meridiem montis *Djebd Khmloun* propè *Damascum* Floret floe Martu, fructus maturat Apnh

Cauhs flonfer brevis, frucufer 3-5 polhcans, foliorum radicum hmbus 7-12 lineas longus, flores *E tuberosi* Boiss. quod afflne longè differl eollo csBspitoso-multicauli, folus majonbus omnibus bipinnaliseclis, sepalis mucronatis, etc

**RUTACEÆ****HAPLOPHYLLUM TCHIHATCHEWII BoiSS**

H suffrulescens, cauhs humihbus erectis fohosis patulè hirtis, folns minutis ramoram stenlium obovatis cauhum flonferorum obovato-oblongis vel oblongo-hneanbus acutiusculis punctatis patulè velutinis pallidè virentibus, flonbus in corymbos te/minales compositos dispositis, sepalis elliptico-linearibus obtusis villosis, filamentis parte mferiori dilataia cihatis superior glabris, petalis pallidè luteis calyce tnpld longionbus angustè ellipticis in unguem attenuatis, capsulâ minutd depress^ longè et densè albo-hirsutA

Hab. in *Cataomd* boreah cl. de Tchihatcheff, in regione mon-

lanA monti\* *Asian dach Cappadocia c\* Balansa Fruct ineunte  
A ii gusto

Affine *H vulcanuo* el forsan hujus vanelas, hoc tamen differt  
fchis tnpld raajonbus glabrescentibus supenoribus valdè acutis,  
flonbus majonbns

## LEGUMINOS^E

GENISTA INOPS BOISS et Balansa (Sect *Asterospartwn* Spach )

G fruticulosa inermis ephedroidea ramis ramulisque abbreviatis stnclis sulcato-stnatis junioribus adpressè canescentibus, mternodiis foliohs 4-6-pl6 longionbus, stipulis nulUs, folns tnfohatis foliohs hnean-oblongis adpressè canescentibus obtusis, floialibus mmimis, racemis 3-6 flons lerininalibus flonbus sessilibus allernis vel suboppositis, calvcis flavescentis adpressè tomenlosi lacmns supprionbus ]reviter tnangulanbus aculmsculis tubo diraidio brevioribus», labio inferiori subbrevion ad medium usquò in denticulos tnaugulares acutos fisso, vexillo adpressè serjceo acuto carinã adpressfe ^nceS subbrevion, alis cultriformibus proeter margmem lurtum glabris vexillo subeequilongis, legumine adpress6 hirto minuto ovato-oblongo vix compresso in rostrnm rectiusculum eo dimidio brevms abruptè abeunti 2-3 ovulato monospermOj semme elongato

Ilab. in collibut. mcultis inter *Arapleu Kioi* et *Enehil Cappadoace*  
alt 1460 melr cl Balansa Fl Frnct ineunte Septembn

Habitus *GnmlcB radiatce* vel *G Jaubertii* Spach cui afflnis est  
Foliola sesquilineam ranùs in ramis novellis 2 lineas longa, calyx  
1 V\* lineam, coiolla 5 lineas longa, vexillum cum rostro 4-5 lineas  
longum G *Janimtii* a nostrA specie differt foliolis longionbus  
acutis, vexillo retuso, legumine (junion) elongato 5-6 ovulalo  
*G Cappadocua* dcutibuscaljcinis tubo duplo longionbusel *G Au-*  
*chein* foliohs 6-7 lineas longis spalhulato-oblongis vindibus, Co-  
nbus majonbns longriis diffFerunt

GENISTA SAKKLLAnums Boiss ft Orpli

G tota adpressè senceo-argentea, caudicibus lignosis prostrate

lievibus ramis pumihs ereclis inermibus tenuibus ramosis fohosis, folns simplicibus sessihbus elliplico-linearibus acutiuscuhs basi attenuatis saepè plicato-convolutis angustissimis, flonbus 4-7 subsecundis racemos breves terminales formantibus singulo basi folio eum subsequanti stipato, pedicello longitudine tubi calycini sub calyce 2 bracteohs Hneanbus calycc partum brevionbus obsito, calycis adressè sencei labus tubo sublongioribus supenori in dentes tnangulares acutos profundè parti to, supenori sublongion in 3 dentes lanceolatos acutos fisso, vexillo retuso cannfique obtuse senceis

Hab in regione media montis *Olympi Thessah* suprâ monastenum *Sancti Dwnysti* alt 5000' cl Orpbamdès Fl Jul

Habitus *G sericea* Wulf. quas differt folns obtusis latioribus, racenus capiluliformibus, pedicello 2 squamulas minimas ferenti

#### POGOCKIA ROSTIUTA Boisb et Bal

P annua lota patulè tomentella a collo mullicaulis caulibus erectis vel ascendentibus ramosis, stipuhs e basi semilanceolata" breviter subulato-attenuatis integris, petiolo foliohs aequilongo vel sublongion, foholis obcordatis mucronulatis integns lermmah petiolulato, pedunculis folns sublongioribus 6-7 lions longè anstalis, flonbus confertis breviter pedicellatis deflexis, calycis patulè hirsuti dentibus laneolatis apice subulatis uninervns tubo multoties longionbus, corollâ palhdè luted calyce vix longion, vexillo ahs sublongion, legumimbus deflexis plamssimis semiorbicularibus margme supenori recto inferiori valdè curvato extremitate ID rostrum tenue curvatum abeuntibus patulè papillanlurtis transversè tenuissimfe rugulosis, semimbus laavibus

Hab in colhbus lapidosis ad npam d ex tram lluvn *Eamechly Tchai* propè *Bereketly* in *Cappadoad* alt 4300 metr cl Balansa Floret Maio, meunte Junio

Taules 6-10 polkcares, fohola tres lineas circiter longa. Legumina 4 lmeas longa 2 lata basi subangustata rostro sesquihneara longo terminata Ab aflimP *lunatd* distinctissima legumine tnpld miDon ob marginem supenorem rectum nee curvalum nor semilunatis *P glomerata*, *Cilmca* et *Auchert* affines quoque longiùs

distant leguminibus nuncioribus densè nee laxè capita, foliolis ovatis, etc

TRIGONELIA ISTHMOCARPA BOISS et Balansa (Sect *Fimum Gricum*)

Tr. annua pilis ensuibus brevibus hirta a basi ramosa, caulibus ascendentibus pumilis, petiolo foliis subbrevion vellea aequanti, foliolis cuneato-obtuse angulatis truncatis vel retusis apice acutè denticulatis lateribus sessilibus terminali pedicello, stipulis e basi dilatata denticulate lanceolatis petiolo brevionibus, supremis abbreviatis, pedunculis folio paulo longioribus muticis, flonibus 5-8 per anthesin subcapitatis erectis pedicello calyce brevionibus, bracteis e basi triangulari bracteis pedicellum subaequantibus, calycis adpressi subul6 hirti dentibus e basi latioribus subulatis tubo brevionibus, corolla flavida calyce duplo longior, vexillo obtuso alas aequante superantibus, racemo fructifero abbreviato laxiusculo, leguminibus declivis adpressè hirtis subcurvatis cylindricis 9-12 spermis inter semina utroque latere strangulatis rugis anastomosantibus reticulatis apice in rostrum breve incurvum abeuntibus, semibus oblongis basi tuberculatis nigrescentibus adpersis

Ilab. jirope *Gmarea Cappadociae* alt. 1100 metr. Fl. Jun. cl. Balansa

Caulis semipedalis, foliola 2-2 1/2, lineas longa apice 1/2-lata. Flores tres lineas circiter longi. Legumina 12-15 lineas longa, sesquilinea lata. Species distinctissima propè *Tr. strangulatam* Boiss. collocanda

TRIGONELLA RHYTIDOCARPA Boiss et Balansa (Sect *Fimum Gracum*.)

Tr. annua tota mollior villosula a basi ramosa, caulibus erectis vel ascendentibus pumilis, petiolo foliis subaequilongis vel brevionibus, foliolis e basi breviter cuneato-obtuse angulatis apice rotundatis vel subtruncatis minutè et crebrè denticulatis, stipulis e basi dilatata denticulate lanceolatis, pedunculo folio longioribus mutico, flonibus 5-8 per anthesin subcapitatis erectis pedicello

calyce brevion suffultis, bracteohs e basi tnaogulan setaceis pedicelh longitudine, calycis palulè hirti denlibus e basi lation subulatis tubo sublongionbus, corolla flavá" calyce dupld longion, vexillo obtuso alas alisquecanam subsuperanlibus, racemis fructifens abbreviate laxiusculis, legumimbus praeter suturam supernorem hirtam glabns raniis tota<sup>1</sup> superficie hirtulis valdè curvatis subcompres>sis 1-9 spermis inter semina praBsertim latere extenon convexo strangulatis rugis elevatis transversis crebns sulcalis in rostrum breve abeuntibus, seminibus ovato-oblongis nigncantibus obscurt tuberculatis

Hab in colhbus lapidosis ad ripam dextram flumiuis *Kamechly Tchai* propè *Bereketly* in *Cappadoud* alt 1300' Fl .Inn cl Balansa

Valdè afflois *TV isthmocarpw* a qu3 tamen propter indumentum copiosiuSj fohola formaB diversae, legumioa mulW magis arcuala magis compressa lmeam ferfc lata rugis transversis elevatis notata speciflcè diversam esse autumamus.

TRIGONELLA PHHYGIA BOISS et Balansa (Sect *Baeeias*)

Tr annua hirta caulibus humilibus decumbentibus, stipulis ao gust is semisagiltatis Ian ceo la Us liifenonbus obsolete 1-2 dentatis, petiohs capillanbus infenonbus elongatis summis brevissimis, foliolis minutis obcordatis elevato-hneatis denticulalis terminah pedicello suba^quilongo suffulto, peduncuhs folio longionbus, flonbus densè capitatis aurantiacis bubsessilibus, bracteolis linean-setaceis, calycis hirti campanulati dentibus lanceolatis acuUs tubo aequilongis, corolld calyco 2 '»-plò longion, legumimbus adpressè hirtelhs transversè reticulato-rugosis valdè arcuatis cylindncis vix compressis.'

Hab ID agrjs derehctis ad *Ouchak Phrygia* alt. 900 metr cl Balansa Flor Maio Fr Julio.

Planta 4-5 polhcans, foliola 2 hneas circiter longa, flores magnitu^inis eorum *Tnfolu patentis*, legumen seroicircularanter recurvum 7-9 hneas longum '«<sup>linef</sup>e latum. Affinis *Tr. auranhacw* Boiss quae differ! staturl majon, foliohs ovatis, legumipibus longionbus minùs arcuatis valdè compressis. *Tr Persica* quae habet folia similia leguminaque valdè mcurva cylindrica differt eis polUcanbus longionbusque, flonbus majonbus, dentibus calycinis

tubo brevionibus, etc *Tr cantellala* Desf = *tennis* Fisch = *stnata*  
Fl Alt distinguitur flonbus minonbus, legumine compresso

TRIGONELLA ANATOLICA BOISS et tialansa (beet *Buceras* )

Tr annua a collo multicaulis adpressiusculè lurtula virens, cau-  
libus procumberilibus ascendenlibusve simplicmsculis, stipuhs  
semisagittatis lanceolatis, petiolo foliohs brevion, foliohs e basi  
cuneatd obovatis apice rotundatis vel subtnincatis argute denticu-  
latis terminali petiolulato, flonbus minutis 4-6 in capitula axil-  
laria sessiha dispositis, calycis angustè tubuloso-carapanulali  
adpressè hirtuli dentibus lanceolatis tubo subbrevionbus, corolla  
luted calyce pauld longion, legummibus divergentibus rectius-  
culis linean-subcompressis adpressè hirtis longitudinahter reti-  
culato-nervosis, semimbus pallidè flavidis leevibus

Hab. in incultis circà *Erzeroum* Huet du Pavilion, ad basin  
montis *Ahdagh* prop6 *Ccesaream Cappadocice* cl Balansa.

Hæc plan la quam primùm pro *Tr polyc&ratd* affim habuimus ab  
efi differt legummibus brevionbus angustionbusque vix polhcan-  
bus lineam diraidiam lalis (in *Tr polyceratd* legumina sesquipol-  
licem longa ferè lineam unam lata sunt) obscunùs nervosis, stipuhs  
basi non dentatis *Tr orthoeras* Kar et Kir magis affim differt  
legummibus lalionbus sesquipolhcanbus, calycis dentibus longio-  
ribus, semimbus longionbus luberculato-puncticulatis

MELILOTUS BICOLOR DOISS. et Balansa (Sect *Lopholobus* Boiss.)

M annua saepiùs pluncauhs, cauhs erectis pumihs a basi  
ramosis subflexuosis subangulato-stnatis adpressè et brevissimè  
hirtis, stipulis a basi dilatatS lanceolatis minutis integris, peliohs  
hirtulis infenonbus foliolo longionbus supenonbus abbreviatis,  
foliohs glabrescentibus pallidè virentibus carnosulis terminali  
breviter petiolulato Miorum infenorum obovatis superiorum  
oblongis basi attenuatis omnibus obtus^ et brevissimd denticulatis,  
flonbus in racemos breves etiam sub anthesi laxmsculos dein  
elongates breviter pedunculatos folns longiores dispositis paten-  
tibus, pedicellis calyce brevionbus stnctis, calycis breviter cam-  
panulati adpressè hirtuli dentibus lanceolatis obtusiusculis tubo

sequilongis, corollâ calyce subnpld longion glabri alba vexillo medium versus apicibusque alarum et carinai intensè caeruleo-vio-laceis, leguminibus deflexis calyce triple longionbus ovato-globosis abruptè et breviter mucronatis, pencarpio albo-membranaceo fra-gili ID 8-10 costas fungoso-inflatas parùm elevalas obtusè undu-latas expanso, semine ovato-rotundo subcompresso gnseo-virenti subpunctato

**Hab in Phrygid ad Kaiagueul Deri propè Ouchak cl Balansa FJ** fine Man, fructus maturat fine Junn

Caules sub anthesi semipedales, foliola inferiora 4-5 hneas longa Racemi flonfen 6-8 lineas longi, fructiferi sesquipolhcares Flores *el* fructus magmtudinis eorum *M elegantis* Salzm Species corollâ vanegatâ et pencarpio non conaceo rugoso sed membra-naceo-fungoso undulato-costato insignis novam in genere sec-tionem constituens

TRIFOHUM LONGISETUM Boiss et Bal (Sect *Lagopus*)

Tr annum totum patulè velutino-hirtum, caule erecto flexuoso patulè et dichotomè ramoso, slipulis membranaceis nervosis ad medium usquè peliolo adnatis parte hberA setaceâ, fohohs sessi-libus elhptico-hneanbus mucronatis practer apicem obsoletè den-ticulatum mtegris, peduocuhs capitulo ovato-oblongo brcvionbus, calycis longè albo-plumosi dentibus sctaceis tubo 4-5-pld longio-nbus, corollâ albidâ dentibus calycims long6 superatâ vexillo at-tenuato, semine ovato flavido apice foveolato radiculâ prominuld

**Hab ad Katagheul Keui Pkrygia propè Ouchak cl Balansa FI** Junio, Julio

Ex affimtate *Tr arvensis* et *Presham* ab utroque egregiè dis-Untum dentibus calycims tres lineas longis corollam minulam longè superantibus Foliola eis *Tr Presham* majora 6-9 hneas longa 1-1 \*4 lineas lata Semen magnitudine eo 3V. *PresUm\** senile

TRIFOUUM NIGROCINCTUM BOISS et Orph (Sect *Lagopus*.)

Tr annum caule lenui erecto a basi dichotomè ramoso, sti-puhs angustis parte hberâ angustè fihformibus longè et remotè



cilialis, tolas uiferionbus longè supremis breviter petiolatis foliolis pihs adpressis longis sparsis obsitis ciliatuhs remote el obtusè denticulatis fohorum inferiorum oblongis retusis supenorum hnean-oblongis acutis, peduncuhs capitulo flonfero ovato fructifero obi on go denso demum 2-3-pl6 longionbus, flonbus sessilibus, calycis tubo glabro valdè stnato-costato ad basin dentium nigro-cincto, dentibus subinsequilongis tubo sublongionbus acutis pectin a to-ciliatis lanceolatis inferiori tnnervi dupld lation, caetens uninervibus, calycis fructifen dentibus erecto-patuhs, corollae calyce tnplti longions vexillo attenuate alas et carinam multd superanti

**Hab in Peloponneso prop6 Tyrnthum Nauphw cl Prof Orphanides Floret Junio**

Species elegans *Tr supmum* referens sed capituhs et flonbus minionbus, calyx sub anther sesquilineam loDgus fructifer non multum augetur, brevitate dentium calycinorum inter omnes *Tr manttmo* magis affine quod diiTert capitulis dupld majonbus sessilibus fructifens ovatis, tubo calycis Immaculato dentibus suis multd brevion

TRIFOLIUM CHLOROTRIGIUM BOISS et Balansa, (Sect *Tnchocephalum*)

*Tr armuum* glabrum a basi multicaule cauibus brevibus humi expansis simplicibus, stipulis breviter semiovatis obtusis angustè albo-margmatis, petiohs elongatis, foliolis rainulis cuneato-trun\*catis obcordatisve lineatis apice obsoletè el minutè denticulatis, pedunculis axillanbus et termmalibus crassis subincums folio longionbus, capituhs densis flonbus subsessilibus extenonbus corollatis inlenonbus stenlibus corollid destitutis sub anthesi non perspicms, calyce tubuloso glabernmo dentibus subulatis patenti (eflexis tubo corollâque pauld brevionbus, calycibus florum stenlmm centralium numerosorum posl anthesin expansis supra fertiles reflexis dentibus selaceis longissimis vindibus intertextis capitulum meduseum formantibus

**Hab ad Kamgheul Dere Phrygia Dropè Ouchak. Cl Balansa legit flonferum fine Man**

Gaulea 2-3 pollicares, fohola eis *Tr subterranea* dimidid minora,

pedunculi sesquipollicares fructiferae caule crassiores, capitula fructifera eum coma magnitudinis avellanae. Species cunosa affinis *2V subterranea* quod a nostra specie egregie differt caulis elongatis, stipulis oblongis acuminatis, pedunculis etiam fructiferis tenibus, dentibus calycinis florum fertilium setaceis plumosis, corolla nuda, florum sterilium multo pauciorum dentibus in stellam expansis abbreviatis.

TRIFOLIUM RIVULARE BOISS et Balansa (Sect. *Chmnosemium*)

Tr. perenne vnde, caulibus procumbentibus herbaceis adpressiuscule birtalis simplicibus elongatis, foliis radicalibus petiolo longo caulis petiolo foliis brevioribus hirtulo suffultis, foliolis glabrisculis foliorum inferiorum obcordatis obsolete superiorum oblongis acutiuscule denticulatis omnibus sessilibus, stipulis hinc longis longe petiolo adnatis parte hinc lanceolatis acuminatis, superioribus latis, pedunculis sublimis folio multo longioribus, capitulis densis ovatis, flonibus aureis dein dilute castaneis breviter pedicellatis dein deflexis, calycis pallidi submembranacei dentibus hinc lanceolatis superioribus tubo glabro paulo longioribus, inferioribus duplo longioribus parce ciliatis, corolla calyce plus duplo longior, vexillo oblongo-spathulato obtuso alas superanti fructifero longitudinaliter nervoso-sulcato, legumine (junio) oblongo breviter stipitato apice breviter rostrato.

Hab. in vniculis regionis alpinae montis *Aslan-Dach Antitauri* in *Cappadocia* cl. Balansa. Fl. ineunte Augusto.

Caulibus procumbentibus, foliolis minoribus, stipulis angustioribus, flonibus minoribus a *Tr. badio* distinctum *Tr. rytidosemium* et caulis procumbentibus affine differt corolla nuda, calycis dentibus superioribus brevissimis, stipulis dilatatis.

LOTUS CORNICULATUS L. var. *Tchthatchewti* Boiss.

Totus pilis patulis mollior hispidus multicaulis caulibus dichotomia ramosissimis, folia floresque dimidio minora, bractea elliptico-lanceolares calyce sub breviores, calycis palulis et longe hispidi dentes lanceolati tubo sublongiores, legumen abbreviatum.

*L. Tchthatchewti* Boiss. in Bal. pi. oxi. 1857

orient, novar. Ser. sec. N° 0

Ildb in *Astd Minon* cl de TcJuliatcliefT, in *Pkiygitl* ad **Varcha-UtcMnt Kern propè Outhah** cl **Balaita**

Habitus proprms, lpgumina 0-8 lineas Unlùm longa sed characteres bat firmi inter eum et *L cornmilatum* desunt

ASILU.ALUS SETULOSUS Doiss et Dalansa (Sect *Hypoglothdei*.)

A tolas setulis albis adpressiusculis stngulosus, caudice lignoso ramoso casspitoso, ramis abbreviatis ascendentibus fohosis, fohis 0-8 jugis foholis ovatis obtusis subtùs magis canescentibus, sli-puhs valdè albo-setosis in unam oppositifoham bidentatam coalitis dentibus e basi lanceolate acuminatis, peduncuhs in ramo bubbinis altero axillan altero tenminali capitulo 1 <sup>1</sup>/<sub>a</sub> vel dapld Ion-gionbus., florum capitulis ovato-rotundis densis patul6 setoso-hispidis, bracleis liucan-setaccis calyce subbrevionbus, calycis patul^ albosctost denlibus setaceis lubo aequilongis, corollà intensè violaceâ glabri calyce plùs dupl6 longion, vexillo lanceolalo retuso recto alascarinellongioresmultd superanti, legumine.

Ilab in collibiis lapidosis prope *'Karahissar Cappadocim*. Gl Balansa legit ilonferum fine Junn

Elami cum pedunculis 2-3 polhcares densifolu Foliola majora 2 <sup>1</sup>/<sub>a</sub> bneas longa Gapitula multiflora magnitudims nucis parvse, corolla G linear longa Species afGms^ *Lydio* et *canescentt* DC a qmbus caudice crasso hgnoso, indumento setoso nee senceo, capitulis hirsutis majonbus distingmtur A *Karputanus* aflnis quoque differt mdumento adpressè cano, foholis elhptico-hneanbus, calycis dentibus non setaceis et est planta siibacaulis

ASTRAGAITTS KARAMASICUS BOISS et Bal (Sect *HypogloUidei* }

A lotus adpressè senceus caudice hgnoso abbreviato multicauli, cdulibus tenuibus abbreviatis ereclis angulatis, stipulis membranaccis brevibus in unam oppositifoham breviter connatis caspidibus tnangulari-bnccolalis, fohis 9-11 jugis foholis approximate ellipuco-line.inbus obtusis secùs nervum medium subphcatis pc-Liolo brevissimo, peduncuhs axillanbus terminahque folio ^-3-pld longionbus, capitulis oblongis laxnHcuhs, bracteohs mgro-alboque pilosis pedicello brevissimo sequilongis, calycis albidi pilis albis

nignsque inermis > adpressis hirsulis densibus hincan-setaceis tubo inpleto brevioribus, corollae glabrae e sicco basi palidè carnea flavescens apice violaceae vexillo sursum curvato retuso alas superanti, canna abbreviata alis multo brevioribus, legumine adpressè hirsuto breviter mucronato recto tereti sulcato calycem paulo superanti

Hab in monte *Karamas Dagh Cappadociae* 5 leucis ad orientem urbis *Casareae* si to cl Balansa Floret fine Junii

Caulis vel potius rami cum 11 nodis semipedales, pedunculi 2 pollicares, foliola 2 Uneas vix longa Capitula pollicana, corolla 6 lineas longa sed sursum curva. Ex. alba nitida *A medicaginis* Coiss qui foliis multo majoribus, vexillo lineari longissimo habi tuque longè distat *A expansus* ramis prostratis spicisque densis, *A Lycms* habitu affinis leguminibus aduncis, etc , discedunt

ASTRAGALUS MACHOPUS DOISS et Balansa (Sect *Hypoglottidet*)

A caudicibus repentibus denudatis dens, totus patulè tomentosus canescens, ramis erectis abbreviatis parce fohosis, foliis longè peliolatis ambitu longè et angustè hincanbus sub 30 jugis foholis praeler infima contiguis ovato-orbiculatis retusis, stipulis in unam albo-membranaceam tomentosam longam oppositifoliam apice breviter bidentatam coalitis, pedunculo ex axilla supra in ramo solitario longissimo, floribus in capitulum ova turn densè congestis, bracteis setaceis hirsutis calycem aequantibus, calycis longè albo-hispidi dentibus setaceis tubo sublongioribus, corollam palidè rubello-violaceo calycem paululum superanti, vexillo oblongo acutiusculo alis cannae paulo longioribus, legumine oblongo densè et longissimè albo-lanato in rostrum eo subsequens longum sensim attenuate.

Hab in regione montana superius montis *Bedt dagh Anh Tauri* ad orientem *Cmaro* in *Cappadocia* siti cl Dalansa Fl Julio, Aug. Rami 2-3 pollicares Folia 6-8 pollicana, foliis adultis diametro tres lineas latis Pedunculi 8-10 pollices longi Capitula flonfera magnitudine nucis, flores sex lineas longi Species pulchra statura suffraganea affinis *A emmgmato* et *Listoma* Ambo foliis hincan-subquadratis, prior legumine breviter rostrato, posterior **spica** longè cylindrica differunt

ASTRAGALUS OVALIS BOISS et Balansa (Seel *Hypoglottidci*)

A basi suffrutescens lotus adpressissimè pihs biparlitis canus, ramis arcuato-procumbentibus adgularis, folns radicalibus post anthesi nulhs cauhs abbreviatis a basi 5-7 jugis costA media\* crassfl abbreviate patulo-subrecurva<sup>d</sup>, foliolis ovato-oblongis obtusis, stipuhs ID anam adpressè hirtam oppositifoham breviter bidenlalam coalitis, peduDCulis 1 vel 2 ex axilhs supremis folio subsequilongis, flonbus 5-7 sessilibus racemum terminalem ovatum laxrasculum fonnantibus, bracteis membranaceis tnangulanbus minutis, calycis albo-membranacei pihs albis adpressis hirti dentibus tnangulanbus brevissimis, corolla e sicco flavidd glabrd calyce dupl6 loDgion, legumimbus parvis ovatis densè et long& albo-hirsutis brevissimè rostratis calyce vix longionbus

Hab in colhbuslapidosisponeffflirafassar *Cappadocus alt* 1250 metr ubi medio Jnmo frucLiferam legit cl Balansa

Rami 3-4 pollices longi, peduncuh cum racemo 1 <sup>1</sup>/<sub>i</sub>-2 polhcares Fohola 2 <sup>1</sup>/<sub>></sub>-3 lineas longa, legumina 3 hneas longa Species afflms A *Amalecitano* qui differt ramis erectis, stipulis duplo longionbus glumaceis nee subherbaceis, foliolis acutis, calycis dentibus hneanbus, legumine oblongo acuto.

ASTRAGALUS CEBOTRYIS BOISS. et Dalansa (Sect *Synochreatt*)

A percnnis caespitosus totus adpress6 hirtus cinereus, radice durâ caudiculos breves subterraneos duros edenti, foliis secùs caules brvissimos condensatis subrosulatis, stipulis in unam oppositifoliam vindem adpressè hirtam latè et tnangulanter bilobam coalitis, foliolis 12-14 jugis approximalis ellipticis acutiusculis, pedunculo folqs brevion, racemo ovato, capitulo paucifloro, calycis pilis mgris adpressis hirti dentibus brevibus, corolla glabra ., legumimbus patulè hirtis oblongo-cylindncis laterahler vix compressis arcuatis in rostrum longiusculum arcuatis ad daturas Don sulcatis

Hab in *Phrygus* monte *Almadagh* cl Balansa qui legit fructiferum ineunLe Junio

Folia 3-4 polhcaria foliolis 3-5 lineas longis, peduncuh subra-

doles, (lores ignoti, legumen 6-7 lineas longum diametro ferè 3  
 latum rostro 2-1/2, lineas longo Affinis *A fragranti* W et *resupin-*  
*nato* MB qm forsàn specified non differunt *A fragrans* cujus  
 legumina ignota glabrusculus est *A resupinati* legumina adpres-  
 sissimè el parcè hirta lineamudam tantùm lata hnean-cyhndncd

ASTRAGALUS CICERELLUS BOISS et Balansa (Sect *Synochreati* )

A. Tindis pilis rans adpressis hirtulus, caudiculis tenuibus bre-  
 vibus prostratis, ramis ascendentibus abbreviate simplicibus vel  
 parcè ramosis, stipulis inferioribus basi membranaceis breviter  
 connatis oppositifolis bifidis supenonibus herbaceis libens inan-  
 gulanbus margine ciliatis, folns a basi 10-12 jugis foliolis elhpti-  
 cis obtusis suprâ glabris subtus sparsim et adpressè hirtis, pedun-  
 culis folio 1 1/2-2-pl6 longioribus, flonbus minutis subsessilibus  
 in spicam ovatam vel oblongam densmsculam congestis, bracteo-  
 hs inangulanbus membranaceis calyce tnpld brevioribus, calycis  
 palhdi pilis albis aliisque paucis nigris adpressiusculis hirti den-  
 tibus angustè lanceolato-lineanbus tubo dimidid brevioribus, co-  
 rolla (e sicco) flavidâ", vexillo calyce tnpld longior leucophaeo an-  
 gustè hoean retuso ahs cannam pauld superantibus dupld longior,  
 legummibus parvis calycem >ix excedentibus adpresse albo-hirtis  
 ovato-oblongis breviter mucronatis suprâ sulcatis

Hab ad margines paiudum ad occidentem urbis *Cmarece* sila-  
 rum cl. Balansa. Fl ineunte Julio

Rami semipedales, foliola majora tres lineas longa 1 1/2, lata  
 Pedunculi 2-3 pollicares, capitula fructifera magnitudinis avel-  
 lans, legumen 2 lineas longum. Species distinctissima prope *AM*  
*odoratum* collocanda qui foliolis majonibus, flonbus demùm pen-  
 duhs, calyce brevidentato, legumine eloagato abisque differtnotis

ASTRAGALUS ARGÆUS BOISS. et Balansa. (Sect. *Badtaflon* )

<sup>c</sup> A. caudicibus crassis hgnosis, ramis brevissimis densè ca3spi-  
 tosis vestigiis petiolorum vetustorum densè squamosis nigrcanti-  
 bus apice solùm folufens, fohis brevibus longmsculè et adpressè  
 senceis 4-5 jugis cum lmpan, foliolis approximatis ellipticis pli-  
 catis obtusis subsessilibus, slipulis albo-membranaceis longè pe-

Uolo ddnatis parlc hberâ lanceolalâ elongata, flonbus 1-3 ex axillis supremis rosularum sessilibus caespitem vix superantibus, calycis patulê hirsuli albi denhbus sctaceis tubo dimidid brevionbus, corollis e sicco palhdê carneis glabns calyce dupl6 longionbus, vexillo oblongo-hncan alas pauld excedenti, canni recW apicc obtuso violacea" ahs pauld brevion, leguminc

Hab in regione alpind superior! montis *Argwi Cappadocice* alt 3200 metr. c\ Dalansa Floret fine Julii

Species distinclissima habitu *Astragalos Radiafloros* Andicolas praesertim *A. umflorum* DC el *A. gemimflorum* omnind rferens, stipulae 4-5 lineas, folia 7-8 lineas, fohola 1 '/\* lineam longa Flores 7-8 lineas longi

ASTRAGALUS PifciLANTIus Boiss elHcldr (Sect *Radtaflori*DC.)

A perenms caespitosus radice cameti brevissimos vel caudiculos subterraneos cum adsunt nudos abbrevialos edenli, Tohis adprcssê canescentibus senceis, stipulis lanceolato-lineanbus vindibus ciliatis petiolo ad tertiam. partem adnatis margine oppositifolio inter se brevissimê coahtis, foliohs 10-12 jugis elhptico-lincanbus obtusis mucronulalis, peduncuhs folio longionbus pihs uigns albisque adpresso-patulis hirLis, capitulo ovato denso, bracteis lanccolatis densê hirsutis calyce subbrevionbus, calycis dens6 albo-hirsuti lacinus lanceolalis tubo subbrovionbus, corolld glabrâ calyce dupld longion pnmum flavcscenti dein purpureo-latentid, vexillo oblongo-hnean retuso ahs cariDd longionbus tertia saltern parte longion, legumine calyce sublongion iadpressmsculê hirto oblongo acuto recto mucronato eulura ventrali sulcato

Hab in saxosis montis *Davros dagh Pisidii*E cl. Heldreich, all 5000',circa *OuchahPkrygicBGI*Bahnsaalt 3000' Fl Maio,fructus maturat Junio

Folia 2-2 7i polhces longa, foliohs 3-4 lineas longis. Gapitula magnitudme nucis, corolla 8 lineas longa, legumen 4 lineas longun 1 V» latum. Hanc plan tarn pnus cum *A. Sibthorpiano* conjunxi sed fructu nunc noto specificê distinctam esso existimo. In *A. Sifrthorpiano* caudicull repenlcs elongati vesligus membrauaceis foliorum cmortuorum vesliti, folia abbreviata foliohs minonbus oblongis

s>ubrelusis voxillum non adeO clongalum, lepmen brevius crassius obtusum

ASTRAGALUS IIIIGIDUS Boiss et Balansa (Seel *Veucani*.)

A caulibus ascendentibus tenuibus lignosis, ramis erectis brevibus adpressè cernis, foliis virentibus pube bipartite adpressissimè obsitis remotiusculè 5-6 foliolatis, petiolo tenui brevi, foliolis linearibus obtusis, stipulis herbaceis lanceolatis hberis, pedunculis longissimis rigidis adpressè hirtis ad apicem ramorum solitarnis, floribus 7-9 sessilibus terminalibus densè capitatis, bracteis linearibus nigro-pilosis calyce dimidiò brevioribus, calycis pilis albis nigrisque intermixtis hirti dentibus nigris linearibus tubum nudum aequantibus, corolla violacea" glabra calyce duplo longior, vexillo obluso alis paulo longior, legumine oblongo-cylindrico densè albo-piloso recto in rostrum tenue breve attenuate calyce lacero tandem duplo longior.

Hab in parte superioris montis *Ahdagk* prope *Cwsaream Cappadocum*, cl Balansa. Fl Jun Julio

Var 8 paucijuga —Folia 4 juga foliolis remotioribus oblongis

**Hab. ad *Bulghar Maaden Taun Cihan* cl Balansa.**

Folia tripollicana, foliola 8-9 lineam longa lineam aut paulo amplius lata Pedunculi 8-9 pollices longi, flores 10 lineas longi, legumina 7-8 lineas longa. Affinis *A nitenh* B et Heldr qm differt foliolis sericeis minoribus calycis dentibus tubo multo brevioribus, leguminibus arcuatis

ASTRAGALUS PICTUS BOISS et Gaillardot (Sect. *Bucerates*.)

A annuus caule simpliciter erecto brevi folioso glabro, stipulis parvis inangulato-linearibus acuminatis albo-membranaceis ad latera extenuatis petiolo inter se brevissimè coalitis, foliis sexjugis praeter pilos nonnullos adpressissimos secus petiolum et ad nervum medium foliorum glabris, foliolis breviter petiolulatis orbiculatis inferioribus a basi petioli remotis, pedunculis axillaribus unifloris folium aequantibus vel subsuperantibus apice anastulatis, flore cernuo, calyce pilis adpressis nigrescentibus minus ultra medium in dentes lanceolatos acutos partito, corolla<sup>d</sup> alba calyce



duplO longion, vcxillo obi on go cannam subaequanli, alis hnean-  
bus brevionbus, legumme horizontal! vel dellexo oblongo sub-  
compresso acuto lalere superiori rectiusculo inferiori curvato  
canaliculato semibiloculan raembranaceo llavo-virenti maculis  
nigns consperso

Hab in colhbus lapidosis propè *Merri* ad occasum *Damasa* cl  
GaiUardot Floret Apnh Eandem speciem ut ex specunine Im-  
perfecto dijudicare possum legit cl. Aucher sub N° 993 in *Meso-  
potamia*

Plan tula bipolhcaris fructifera 4 pollicans, fohola 2 7,-3 lineas  
longa, (lores parvi, legumen 10 lineas longum 3 latum AfBne  
*A stnaello* MB qui dilTerl petiolis jam a basi foliohgens, pedun-  
cuhs plunflons; calyce brevion, corollâ apice violacea", legumine  
dinudid minon sublûs profundè sulcato margmibus acutis nee  
obtusis

ASTHAGALUS DAMASCENIIS BOISS et GaiUardot (Sect *Bucerates* )

A annmis vindis, caule erecto fohoso ut et folia sparsim pihs  
mimmis adprcssis centro afiixis obsito, stipuhs membranaceo-  
virentibus triangulan-lanceolalis acutis, fohis sexjugis foholis  
petiolulatis Jineanbus elongalis apice rctusis, peduncuhs axilla-  
nbus parte supenon mgro-hirtis flores 5-6 breviter pedicellalos  
laxmsculè racemosos ferentibus, bracteis breviter lanceolatis pe-  
dicello subbrovionbus, calycis adpressè et sparsim mgro-hirti  
denlibus lanceolatis tubo brevionhus, corollâ albd glabrd ealyce  
subtnpld longion, rexillo hnean alas cannamqus subsquales su-  
peranti, fructu junion adpressè sericeo lanceolato recto, legu-  
**mine**

Hab ad *Boustan Seldom* ad occasum *Damasa* cl GaiUardot  
Fl flneMartn

Planta florens 4-5 polhcans, fohola 9-10 lineas longa sesqui-  
hneam lata, flores eis *A hamosi* pauld majores et laxiùs raceiuosi  
Fructu ignoto adhùc imperfectè notus, affinis est *A hamoto* ct  
*Inme&tn* a quibus formâ et longitudine foholorum, fructu jumon  
recto differt

ASTRAGALUS ELATUS Boiss et Balansa (Sect *Alopecuroidei*)

A perennis caule crasso elato simplici sinato sub lente breviter et adpressiuscul6 hirtulo, stipuhs membranaceis Ubens e basi latè tnangulan lanceolato-acuminatis ngiduhs, petiohs crassis ngidis suprâ canahculatis patuhs a basi sub 20 jugis, foliolis prater pilos brevissimos adpressos sparsos in facie inferion lente perspicuos glabratis lato-linearibus plicatis apice obtusissimis obsolete mucronato-subrecurvis, capituhis magnis axillanbus breviter pedunculatis ovatis, bracteis angustissimè hnean-lanceolatis calyce brevionbus, calycis patulè et dense albo-hirsuti dentibus lanceolatis tubo quadrupld brevionbus, corom glabrd calyce sesquilon-gion, calyce fructifero ovato exlremitate rubello, legumine calyce incluso hirtulo ovato-subtriquetro apice lation fungoso truncato brevissime et abruptè mucronato

Hab in cacumine montis *Ahdagh Cappadoam* ad onentem *Ccesarete* siti alt IG00inetr. cl Balansa Fl Julio

Planta 3-4 pedalis Folia 8-10 polhcana, foliola ssepè polhcem longa 4 hneas lata, capituld ovo pauld mmora Aflinis *A Pontico* capituhis minonbus sessihbus, calyce breviter hirtulo dentibus brevissimis, legumine ovato non fungoso apice attenuato distincto *A. alopecuroides* et *A. maximus* Willd calycims dentibus setaceis, capituhis oblongis, etc , longiùs distant

ASTRAGALUS CHTONOGEPHALUS BOISS et Balansa (Sect *Tragacanthce Macrocalyctm obvallati*)

A suffrutescens caespitoso-ennaceus humilhmus ramis brevissimis petiohs brevissimis-horridis apice confertim paucil'olns, fo-his brevibus tnjugis spinA flavidfi foliolis brevion terminatis, foliohs adpressè senceis oblongis plicatis spinulA brevi terminatis, stipuhs tomentosis in unam ovatam petiolo adnatam in dentes dhos tnangulares brevissimos abeunlem coalitis, florum glomemhs tn-vel quinqueflons latè bracleatis in axillis inferioribus sitis in unoquoque ramulo 1-4-nis capitulum folia centralia circumdans formantibus, bracteis densè ét breviter tomentosis ovatis cucullalis oblufaisimis calyce terlid parte-brevionbus, calyce den-

sissime albo-hispidissimo dentibus Lubo demùm flssih subaequilongis, corolla palhd6 ocbroleucâ vel albidâ calyce vix quarta parLe longion, vexilli alis cannâque parùm longioris ungue in limbum exaunculatam basi in angulum obscurè abeuntem sensim dilatato, ovano oblongo albo-hispido

Hab in regione subalpina montis *Ded6 dagh Anktaun* 12 leucis ad onctcm *Cwsarece* in *Cappadbad* cl Balansa Fl Aug

Folia 8-0 lineas longa, foliola tres hneas longa, capitulum terminale e glomeruhs 2-4 constans, bractLoae 2<sup>1</sup>/<sub>a</sub>-3 hneas longae lataeque extenores latiores apice aliquando retusas, mtenores ovato-oblongae Calyces 4 hneas, corollaB 5 longisB. Species **Donbus lat6 bracteatis affinis A *lepidantho*, *Anlabico* et *dipkthentidi*** a quibus staturâ humilimfl multisque notis differt.

A-STRAGALLS TAUSSEUS Boiss et Balansa (Sect *Maerocalymu Pterophon*)

A suJTrutescens ennaceus ramis parte inferiori petiohs vetustis tenuibus elongatis erectis acerosis horridis supernè laxmsculè fohosis, folus palhd6 virentibus sparsim et adpressiusculè hirtis 5-6 jugis spinâ terminah tenm fohohs subaequilongâ, foliohs oblongo-lanceolatis phcdtis suprâ glabns in spinulam flavidam attenuatis, stipuhs tomentosis ^m uuara ovatam petiolo adnatam in dentes 2 breviter triangulares abeuntem coactis, flonbus in undaque axilla G-7-nis capitula c^lindnca folns intermixta formantibus, bracteis tomentosis cucullalis exLenonbus bilobis ovatis intenoribus oblongis obsoletè acuminatis calyce paul6 brevionibus, cal^cis longè et densissimè albo-hispidissimi basi bracteohs albo-plumosis dentibus suis sessilibus eequilongisque suffulti deritibus tubo iissih sublongionibus, corolla pallidè Tiolaced calyce vix longion, vexilli alas cannamque parùm superantis limbo in angulum obtusum basi dilatato, legmmne \*

Hab in collibus suprâ pagum *Talasse* prope *Ca&aream* cl. Balan- ce Floret Julio

Dumus 10-14 pollices allus. Folia bipolhcana Tel pauld longiora, foliola 4-5 hneas longa, calyces 5 hneas vix longi. Species inter ***Pterophoros*, *Astragali*\* *obvallatis* Fischer ob bracteas latas accedens**

ASTRAGALUS BAXANSE BOISS. (Sect *Macromlycim Pterophori*)

A suffruticosus ennaceus ramis infernè petiohs erectis longis acerosis parcè horndis supernè laxè fohosis, folus longis vindibus adpressè et breviter hirtis 7-8 jugis spinâ lenui foliohs subbre-vion terminate, foliolis lanceolatis plicatis facie supenon glabris in spinulam Jbrevis-simam abeuntibus, florum glomerulis 3-5 flons axillanbus capilula oblonga ramo elougato fohoso coronata for-mantibus, bracteis tomentosis latè linean-spathulatis breviter acuminalis calyce subbre-vionbus, calycis densè et longissimè albo-hirsuti basi 2 bracteolis dentibus suis aeqmlongis linearibus plumosis suffulti dentibustubo fissili aequilongis, corolla purpu-rascenti calyce terLii parle longiori, vexillo alas anguslè lineares cannl paulò longiores parùm saperanti basi aunculato auncuhs obtusis deorstum flexis, legumine

Hab. in collibus ad occidentera urbis *Cmarem* sitis cl Balansa exs 4856 N» 204.

Hæc planta quam pnmùm pro *A. Talassei* fortni majon habue-ramus accuratiùs observata ab eo distinctissima est, folia majora suqt quadnpollicana validiora, fohola 7 lineas longa, capitula breviora crassiora non sublerminalia sed ramo elongata coronata, bracleæ formse diversae, corolla calyce multò longior, vexillum ad limbi basin distinctè aunculatum, etc

EBENUS PLUMOSA BOISS et Balansa (Sect *Hedysaroides* )

E basi suffrutescens pluncaulis, caulibus herbaceis erectis vel ascendentibus simplicibus pihs longis patulis albis molhter hispi-dis, stipuhs in unam oppositifoham stnatam patulè hispidam oblongo-linearem apice in 5 lacunas subulatas efi pauld breviores abeuntem coahtis, folus jam pauld suprâ basin quinquejugis cam impari, petiolo patulè hispido, foliolis approximatis longè et ad-frcssiusculè hirsutis elliptico-lineanbus obtusmsculis mucronu-latis, peduncuhs i-2 altero ex axillâ supenon altero terminali longi^simis patulè hispidis, spied cylindrical laxiusculâ, bracteis lanceolatis longè acuminatis citò deciduis, flonbus sessilibus, ca-lyce patulè hirsuto in dentes a basi lation abruptè setaceos plu-

mobos tubo quadruple longtorcb corollam gldbram subsuperantes partito, vexillo oblongo lutescenti pallidfe stnato cannam angulo subre clo subLiis curvatam obtusam lulcscentem margine superiori roseam IUquanti, alia minuti&simis obcunealis

Hab ad *Yapai lar Keui* ad oncntcm urbis» *Oitehah* in *Phrygid* cl m colhbns inLultis prop6 *Smyrnam* cl Balansa Fl Jumo, Julio

Plan la cleganlissima pcdahs Folia 1 's-2 pollicana foliohs 6-8 hncas longis 2 lalis Peduncuh 4-5 polhcares Spicae post anthesin 4-5 pollicarcb Gollocanda juxLl *E macrophyllam* indumento itTiceo, foil is Irijugis foliolit. Inpld majonbus aculis, vexillo ca- i m<sup>a</sup> lougion **distinctam**

EBENUS DEPRESI Boiss et Balansa (Sect *Hedysmoides*)

Kb suffrutescens, caulibus brevissnnis proslratis adpress6 albo- setosis slipuhs fohorum omimio tectis, slipuhs in unam oppositifoliam membranaceam supernê hir^utam petiolo suLaeqmlongam ad quartam partem u^qiió in lacinias 4-5 sctaccas plumosas fissam coalids, folns brevissimó polioliatis tnfoliolatis foliojls omnibus sessilibus longé et adpressiusculè albo-toraefitosis clliptico-lanceo- latis allcnualib aculis, pedunculo ex avilli superior! loho vix long- gion, spicâ breviter cjindraccâ densâ, bracteis lanceolatis acu- minate luspidis, calycehispido ad terliam partem usquê in lacinias setaceas plumosas corolla glabrâ purpureii sublongiores flsso, ve- xillo oblongo carinâ obtusâ sublús angulo recto curvatâ subbre- viori, ahs brevissimis obversê cuncalo-truncalis subbilobis.

Hab in collibus lapidosis ponê *Karahitsar Cappadocim* sitis alt 1300melr cl Balansa medio Jumo llorare incipiens

Caules ex rhi/omate hgnoso plures vixpollicares, foliola 6 lineas longa 2 lata, fohorum mfenorum minora Spica flonfera 2 polh- cans Ab aflim *E macrophyllid* folus tnfoliolatis fohohs multd mi- nonbus, vexillo canni brevion, etc , distincta

EDENUS LONGIPES Doiss et Balansa (Sect *Hedysarotdes*)

Eb caudicibus suflrutescentibus, cauibus brevissimis %scen- denLibus adpressè lomentosis, stipulis in unam oppositifoham membranaceam hir^utam ovalo-oblongam apier 6-42 lacimatam

coalitis, lacinus stipularum inferiorum brevissimis superiorum subulatis stipulâ triplicibus brevioribus, foliis longiusculè perfoliatis remotiusculè ternis foliolis adpressè senceis elliptico-hincanibus obtusis cum mucronulo, pedunculo angulato-striato adpressè lomentoso foliis multoties longioribus, floribus densè globoso-capitatis, bracteis angustè linearilanceolatis acuminatis, calycis subpatulè hispidi tubo turbinato lacinis splaccis plumosis valde inaequalibus demum curvato-patuli superioribus & tubo parum longioribus multifloris duplicibus longioribus latioribus longitudine intermediis, corolla (e sicco) purpureâ glabrâ, vexillo carinam obtusam sulcus angulo recto obtuso curvatam dequantibus, alis canaliculatis unguibus brevioribus acutis gibbosis

Habit in regione superiorum montis *Dedë dagh Anti Taun* in *Cappadocia orientem Cabatece* Cl Balansa legit fructiferam mense Augusto

Gaules herbacei 1-2 pollicares, pedunculi pedales, foliola pollicem et amplius longa 3-4 lineas lata Capitulum fructiferum nuce paulo majus Species distinctissima foliis *E macrophyllae* accedens sed ab eo speciebus globosis aliisque non us longè remota

ONOBRYGHIS ARGENTEA BOISS et Balansa (Sect *Eubrychis*)

On perennis tota praeter faciem superiorem foliorum sessile glabrescentem adpressè sencea, rhizomate crasso caespitoso, caulibus humilibus tenuibus procumbentibus ascendentibusve, stipulis unam oppositifoliam apice bideulatam albam rufo-binervem coalitis, foliis quinquejugis foliolis minutis obovato-ellipticis obtusis cum mucronulo, pedunculis gracilibus folio longioribus, floribus sessilibus in capitulum post anthesin non elongatum confertis, bracteis lanceolatis acuminatis calycinum tubum aequantibus, calycis hispidi lacinis lanceolato-subulatis plumosis tubo subduplicibus longioribus, corollâ glabra rosed striatâ, vexillo oblongo emarginato sursum curvato canaliculato subtus angulo recto obtuso curvatâ longioribus, alis linearibus carinis dimidio brevioribus, legumine calycis duplicibus longioribus adpressè sculè hirsuto obovato compresso dimidio irregulariter 5-6 foveolato foveolâ mediâ alis sub majoribus 4-5 echinato, enstita in aculeos 5-6 rubros ei subsquillos producit

Hab in regione alpina montis *Argm Cappadoam* all 2500 inetr  
cl Balansa Fl Julio

Caules 1-3 polhcares, peduncuh 1-3 pollicares, fohola 2-2  $\frac{1}{2}$ ,  
lineas loaga Capitulum floriferum magmtudine avellaneae Flores  
dimidiò minores eis *O saliva* Legumen 2 V\* lineas longum acu-  
leis vix hneam longis. Species elegans flonbus capitatis distincta,

ONOBRYCHIS ELATA BOISS et Balansa (Sect. *Eubrychis* )

On perennis cauhbus striatis erectis elatis stnctè ramosis m-  
fernè adpressissimè senceo-albicantibus supernè ramisque gla-  
bratis, slipuhs disinctis parvis e basi lanceolate subulatis, folns  
remold 5-7 jugis petiolo angulalo foliohs ellipUco-hneanbus aculis  
adpressè canescentibus, foliorum summorum angustissimis, pe-  
dunculis longis in racemum etiam per anthesm laxum abeuntibus,  
flonbus striclis, bracteis angustfe lanceolatis pedicello longion-  
bus, calyca adpressè hirsuti Lacinus lanceolato-subulatis tubo  
tnplò longionbus corollá glabrâ roseâ Inente brevionbus, vexillo  
slnato obovato integro canni subtùs rotundatâ acutiusculi terLiâ  
parLe longion, alis cannâ dimidiA brevionbus, legumine parvo  
calycem multò superanli adpresso et breviter lurto cuneato-obovato  
vix corapresso disco InaGquahter \-i foveolato breviter 2-5 acu-  
leato cnstA in denies 5-6 e basi laiç triangulan acutos disco bre-  
viores partitA

Hab in colhbus ad meridiem paludumcirci *Cmaream Cappa-*  
*doctw* sitarum cl Balansa Fmct Julio

Planta quadnpedalis tenms, fohola foliorum inferiorum 6-8  
lineas longa 2 lata superiorum ssepè pollicana anguslissima Ra-  
cemi florifen bipollicares, flores e minimis generis, legumen cum  
aculeis tres lineas tan turn longum Species distinctissima

ONOBRYCHIS CARNEA BOISS. et Heldr (Sect. *Eubrychis*.)

On perennis e rhizomate indurato multicaulis, cauhbus diffusis  
sub lente sparsim et adpressè puberulis tenuibus striatis, stipulis  
in unam membranaceam rafam longè bidentatam oppositifoliam  
coahtis, folns remotè 7-8 jugis foliohs linearibus acutis subtùs  
pilis parcis adpressis obsitis, pedunculis gracilibus folio multd

longioribus, flonbus in racemos densos etiam fructiferos ovatos dispositis sessilibas, bracteis oblongis acummatis, calycis corolla subdimidid brevions dentibus hnean-subulatis tubo dupld longioribus, corolla earned glabrfi, vexillo non stnato retuso, caring sabtùs angulo recto cunata, ahs calyce brevionbus, "legamine densè albo-lanato calyce subduplò longion semiorbiculato disco foveolato bisenatim el tenuiter aculeato enstd ad basin usquè in 6-7 aculeos tenues diametro fructùs subbreviores divid.

Hab. in regione mediã montis *Veluchi Eunjtamw* loco *Rovia* dicto Aug legerunt cl SamaritanI et Guicciardi

Species elegans caracteribus et legumims indumento aflinis *On ebenouli* Boiss. et Spruner qua) differt indumento senceo, cauibus procenonbus, spicis longioribus, dentibus calycims corollã stnatd parùm brevionbus Antamen hujus vanetas alpina ?

ONODRYCHIS SULPHURED BOISS et Balansa (Sect *Eubrychis*)

On perennis pluncauhs tota adpressissimè cinerascens, caulibus erectis stnatis, stipulis in unam oppositifoham apicelongè bidentatam coactis, folus remotiusculè 6-7 jugis foliohs petiolulatis linearibus obtusis mucronulatis, peduncuhs longis racemum flonferum ovatum fructiferum etiam deosum oblongum ferentibus, bracteis lanceolatis acummatis, flonbus subsessihbus, calycis hispidissimi dentibus subulatis corollam dimidiam sequantibus tubo subduplò longioribus, corollS glabrâ sulphured pallidè stnatd, vexillo oblongo hnean cannã subtùs angulo recto rotundato curvat& sublongion, ahs hneanbus corollam dimidiam subaequantibus, legumine densè hirlo semiorbiculan calyce longion subcompresso, disco inaequaliter 6-8 foveolato ad penphaenam breviter 3-4 aculeato, ensta angustd breviter et tenuiter 7-9 aculeatd

Hab. in latere septentnonah montis *Alidagh Cappadocics* alt. U30metr cl Balansa. Fl Julio

PlãDla sesquipedalis, fohola 6-8 hneas looga 1-1'/'«lata. Flores snagmtudinis eorum On *sativce*, legumen 3-3<sup>1</sup>/<sub>«</sub> <sup>1meas</sup> longum. Species distinctissima, spicis densis villosis prope *On ebmoidem* et *lasiostachyam* collocanda.



ONOBRYCHIS BALANSAE BOISS (Sect *Eubrychs*)

On perennis multicaulis praeter foliolorum faciem superiorem glabrescentem adpressè hirsuta, caulis decumbentibus elongatis, stipulis in unam oppositifoliam apice bidentatam coalitis, folis 5-6 jugis foliolis ovatis ellipticisve obtusis mucronulatis facie superioribus obscurè hirsutis, pedunculis axillaribus elongatis, racemis per anthesin ovato-oblongis densiusculis fructifens elongatis, calycis corollam dimidiam sequentis lacinis subulatis hirsutis tubo glabrescente subduplo longioribus, corolla glabra purpurea striata, vexillo oblongo-lineari reflexo canaliculo subtus angulo recto obtuso curvato subbreviter, alis immixtis canaliculi ungue brevioribus, legumine rugoso nitido sub lente adpressè hirsuto semiorbiculato compresso disco inaequaliter 8-10 foveolato breviter 3-4 echinato ensatis latiusculis in 0-7 aculeos et sublongiores pungentes abeunt

Hab in regione alpina montis *Aslandach Antitaun* in *Cappadocia* cl Balansa pi exs N° 92G sub *On Cadmea*

Hanc plantam penam *On Cadmea* conjunximus cujus caules prostratos habitum et folia habet sed specificè differre videtur alis immixtis carinis ungue brevioribus nec eo longioribus et imprimis legumine nitido cum aculeis sex lineas longo duplo majore dorso profundius areolato margineque longius et validius aculeato

ONOBRYCHIS PULGIELLA Heldr (Sect *Eubrychs*)

On c rhizomate indurato multicaulis, caulis tenuibus ascendentibus brevibus, stipulis in unam oppositifoliam membrata naceam bidentatam coalitis, folis 7-9 jugis elliptico-lineariibus minutis supra glabris subtus adpressè subsensatis, pedunculis longissimis, racemia florum sub anthesi breviter ovatis densiusculis fructifens breviter cylindricis, bracteis ex ovata basi acuminatis, calycis corolla dimidiam brevioribus lacinis hirsutis lanceolato-subulatis tubo glabrescente duplo longioribus, corolla glabra pallide rosea, vexillo striato oblongo reflexo canaliculo subtus angulo recto obtusissimo curvato longiori, alis longitudine calycis legamine calyce vix longioribus minuto obovato-cuneato pilis brevibus patulis hirsutis, disco inse-

qualiter 6-7 areolato breviter 2-4 aculeato, crista disco aequilata" ad medium usque in aculeos 3-4 e basi latè subulatos dividit

Hab in pascuis regionibus abietinae montis *Tymphresh* (*Yeluchi*)  
***Eurytamea supra Carpentzi* alt 4000'**

Caules 2-4 pollicares, foliola 3-4 lineas longa, pedunculi fructiferae saepe pedales. Flores magnitudinis eorum *On. Cadmeae*. Legumen cum aculeis 3 lineas longum. Ab *On. earned* cujus faciem habet racemis fructifera elongatis, fructu minus pauciaculeato, calyce breviter valde diversa. Ab *On. Cadmeae* cui magis affinis foliis angustioribus, spicis floriferis abbreviatis, calycis dentibus multo brevioribus, vexillo cannae aequilongo, etc., distinctissima

ONOBRYGHIS TENUIS BOISS et Balansa (Sect. *Eubrychis*)

*On.* perennis pluncaulis tota praeter foliorum faciem superiorem saepe glabrescentem adpressè canescens caulibus erectis elalis tenuibus, stipulis in unam oppositam adpressè hirsutam bidentatam coarctatis, foliis sub 7 jugis foliolis remotiusculis elliptico-linearibus aculeis inaequalibus, pedunculis longis axillaribus multifloris racemos elongatos fructiferos laxos ferentibus, floribus strobiliformibus breviter pedicellatis bracteis oblongis acuminatis sulcatis, calycis parvis ciliatis dentibus subulatis strictis tubo longioribus corolla purpurea angustis paulo brevioribus, vexillo oblongo-linearibus retuso longitudine cannae subtus angulo recto curvatis, alis tubo calycino longioribus, legumine parvo calyce breviter obovato-cuneato rix compresso adpressè hirsuto disco inaequaliter 5-6 foveolato breviter 1-3 echinato, costis angustis in 3-4 aculeos e basi latè subulatos diametro fructus subbreviores parti id.

**Hab** *mco* | *i* | *b* | *issnd* | *s* | *id Ottchak Phnjgie BaU* 910 metr. cl **Bal**  
FI. Julio ineunte. Fr. fine ejusdem mensis.

Planta bipedalis tenuis, foliola 4-6 lineas longa lineam vel sesquilineam lata. Racemi per anthemiam pollicares fructiferae tripollicares. Flores inter affines minuti. Corolla angustis et legumine affinis *On. Kotschyance* caulibus prostratis divaricatis ramosis, corolla minus albidâ, vexillo cannae breviter, legumine apice truncato nec rotundato distincta?

**Plant orient novar Ser sec. N° ft.**

**HEDYSARUM UXIM** DoihS {Sect *Etilinolobium* }

II basi suirrutoscens caulibus annoLims ascendentibus elongalis patulè hirlis, stipule in imam opposilifohdm rurjin brevem breviter bidenlatam coactis, folus 7-8 jugis pilis brevibus subpatuhs lnrlis loliohs minutis cllipticis petiolulatis acutmsculis, pcdunculis ex axillis supenonbus folio multo longionbus in racemum longmsculum laxum abeuntibus, pedicellis calyce brevionbus, calycis pilis cnspis birti dentibus lanceolatistubosublongionbus, corolla glabra purpurea vexillo obovato alas oblongas carinamque sublùs angjlo obtuso ciirvaLam bubsupcranti, logumine sLipitalo biarliculato vel aborlu umarticulato brevitpr tomentello prtEleredque rcticulato-venoso vcms ad ponplijeriam prominentionbus verstus margmes el ad centrum disci in aculeos tenues breves basi UiborculaLos abeuntibus

Had nd basin raontis *Dede dagh Cappadocue* Gl Balansa legit fi'ucliferum meuntc Augusto

Planla Jen's pedahs, folia cum petiolo 2-3 polbces, foliola 3-4 lineas longa Habitus *II vam, Lydu* et aflinmm a quibus mdujnto palulo ncc adpressissimo difTctL *U vanum* differt msuper ractiims tlen^is^ flonljus majonbus // *Lydtum, calhchtoum, dume-tmwn*, etc , ipgumiiNj non echinulalo

**HEDYSARUM PmYGIUM** Boiss etBalansa (Sect *ErMnolobiwn.*)

H basi suflrutoscenu caulibus clalis virgatis liexuosis pilis adpressi3simis canescntibus, stipuhs minutis inferioribub coactis bidentatis supenonbus libens triangularibus acutis, folns 7-9 jugis petiolo adpressfe canescenti fohohs minutis parcfè et adpressfe hirlis glabrescenubusve carnosulis elliptico-lincjnbus obtusis margine subrcvolulis, pedijTicuhs axillaribus numerosis folio longionbus, racemis laxmsculis, pedicellis striclis calyci aequilongis, calycis pilis brevibus adpressis hirti dentibus triangularibus acutis tubo subdimidió brevionbus, corollâ glabr& sulphured calyce sextuplè longion, vexillo canft apice subangustatâ subtùs angulo recto rotundalo curvata sublongion, alisangustè oblongo-hneanbus carinâ subbre\ionbus, legumine biarticulato breviter ct ad-

pressè hirto reticulato-venoso venis versùs margines magis elevatis  
lunc indè in aculeos breves setaceos excurrentibus

Hab IU collibus incultis ad *Ouctok Phrygwe* alt molr 050  
Floret et fruct Julio

Planta sesquipedalis, folia tres pollices, foliola 4-5 lineas longa  
Racemi 3-4 pollicares, corolla 7 lineas longa Legumine breviter  
echinulato affine *H vano* et *laxo*, ab eis differt colore florum, calycis  
dentibus brevissimis *H Caherti* prater caules brevissimos  
habet corollam calycetantum triple longiorem *H. mhdum Villd*  
differt foliis majonibus cernis, corollam hirtu

LATHYRUS CHLORANTHUS DOISS et Balansa

*L. perennis* lotus pilis parvis breviter hispidulus, caulis ramosus  
angulatus angustis alatis, stipulis parvis lanceolatis acutis  
semisagittatis auncula acula minio in inflexionibus obsolete, folis  
unijugis cirrhosis petiolo foliis breviori planiusculo anguste  
alato foliis oblongis tinnerris obtusis mucronulatis tinnervis,  
cirrho semel bisve inflexo, pedunculis axillaribus unifloris folio  
brevioribus in anastomata terminalem pedicello longiorem debentibus,  
pedicello calyce breviori arcuato, calycis patule hirti dentibus  
triangulari-lanceolatis tubo sublongioribus abrupte et longe seta-  
ceo-mucronatis, corolla vix flavescens, vexillo obovato obtusiusculo  
hirto alas multo superanti, canna subtus rotunda latè  
obtusè alas aequanti, stylo apice subtequali, legumine compresso  
lineari tuberculato-piloso basi attenuato margine supero recurviusculo  
in fenestra extremitate curvato in rostrum attenuato

**Hab inter segetes ad Yachamichlar Kern propè Ouchak Phrygiae**  
cl Balansa, circa *Erzeroum Armenia* Galverl in Boiss herb

Hanc speciem olim a cl. Gal vert lectam pro *L. chrysantho* habui  
sed specimibus magis completis a cl. Balansa missis valde diversam  
esse compenimus *L. chrysanthus* praeter foliola minora sub-  
5 nervia habet pedunculos multifloros muticos, lacinas calycinas  
muticas, corollam minorem glabram intense flavam, vexillum re-  
ctum alas cannamque vix superans, stylum apice valde dilatatum,  
legumen submuticum lalere supero subconcauum

## LATHYRUS CHIUS Boiss &gt; et Orph,

L annuus glaber caulibus angulatis alatis alæ cauli subaequala<sup>1</sup>, foliis unijugis cirrhosis petiolo angustè alato foliolis 2-3-pld brevion, foliolis foliorum mfimorum et supremortira angustè hneanbusintermediorum oblongo-lanceolatis acuminatis cirrho ramoso, stipulis semisagittatis angustè lineanbus acuminatis integns, pedunculis 2-3 folio axillan brevioribus 2-4 flons, pedicelhs calycc brevioribus, flonbus cernuis glabns e 3icco rubello-roseis, calycis dentibus a medio surstüm altenuato-acuminatis tubo subaeqmlongiv<sup>s</sup>, vexillo rotundato valde retuso alas carinamque rotundatam valde excedentij ovario glabro latiusculo sectis margmem inferonem mcurvum angustissim6 bialato, legumine .

Hab HI insula *Ohio* propè *Siphi* cl Orphandès, Fl Apnli.

Caules in meis specimnibus pedales longioresque, foliola 2-2 1/2 • pollicana 1 1/9-6 linea^ata Affinis *L annuo* et *Hierosolymitano* a quibus flonbus duplO majoribus, calycis lacimis longius acuminatis differt, ex ovarn formd legumina eis earum specierum latiora esse \identur,

## Vicu CAPPADOCICA BOISS. et Balansa

V annua glabra a basi pluncauhs caulibus erectis angulatis parcè et strict6 ramosis, folus tnjugis foliolis elongatis hneanspathulalis basi sensim attenuatis apice truncato acutè 3-5 denticulatis, petiolo basi dilatato apice in cirrhum simpliccm foliolis breviorcm vel longiotcm abeunti, stipuha semisagittatis alterd bipartite lacinus linean-lanccolatis maequalibus alterlacion latere extenon profundè inciso-dentatl, peduncuhs axillanbus erectis folio longionbus uniflons sub flore minutissimè bibracteolalis, flore subcernuo, calycis glabn nervoso-stnati dentibus lanceolatis acutis tubo pauM brevioribus erectis inferon sublongion, corollae glabrae vexillo violaceo retuso alas absque cannam pallidam superantibus, legumine deQexo subcompresso linean in rostrum brevissimum uncinatum abeunti glabro, semiis olivacei subcompressi hilo brevissimo

Hab in planitie *Karahissar Cappadoctce* alt 1200 metr. cl Ba-lansa Fl. Jumo

Habitu eL folns simillima *V. peregrina* L quae differt slipuhs angustioribus inter se similibus, pedunculis brevissimis, calycis abbreviati dentibus superioribus erectis, legumine latiore magis compresso adpressè hirtulo

YIGIA (LESAREA Boiss. et Balansa

Y. annua tota patulè et molter hispidula a basi multicaulis caulis ascendentes stantibus, folns a basi 5-6 jugis foliolis alternis subpedicellatis elliptico-heteroformibus acutis, petiolo in cirrhum brevem simplicem abeunti, stipulis integerrimis alae lanceolatae curvatà alterà subulata, pedunculis axillaribus folioaequilongis 3-4 floris apice brevissimis anstatis, pedicellis calyci subaequilongis, calycis patulè hispidi dentibus a basi lanceolata tenuissimè subulatis flexuosis tubo longioribus, corollis glabrà pallidà dentibus calycis paulo longioribus, spillo subtretuso violaceo-lineato alae paulo superanti, canaliculo a<sup>o</sup> violaceo angulo recto sed rotundato extrimitate incurvato alae rectis 7ix brevioribus, leguminibus patentibus deflexis glabris rectis linearibus tenuiter recurvatis compressis breviter mucronatis, seminibus torulosus nigricantibus lenticularibus compressis subcannatis, hilo brevissimo.

*Vicia tonilosa* in Bal. pL. exs. 1856 non Jordan

Hab. inter segetes plantae prope *Carmaram Cappadociae* alt. 1200 metr. cl. Balansa Fl. Jun. Fruct. Jul.

Petalis vel sesquipedalis, foliola 5-8 lineas longa lineam aut paulo amplius lata. Flores 3-4 lineas longi. Legumen 9-11 lineas longum 2 latum. Species distinctissima habitu *V. glaucam* Presl referens sed ob radicem annuam prope *V. Bivona* et *erviformem* potius collocanda,

## ROSACEJE

POTENTILLA NUDGAULIS Boiss. et Balansa (Sect. *Awe*)

P. perennis pallidè virens caudice crasso brevi ramoso callosissimo nigricanti, folio digitalis vel subpinnatis omnibus radicalibus

petiolo patentim hirlo fohohs> pluries longion, fohohs quinis sub-  
 maiquahbus obovatis basi in pctiolulum longè attonuatis oblusis  
 roLundatim 7-9 denials brevitcr cL adpressiusculè hirtis praeter-  
 eâquo glandalis crcbris minutis sessihbus adspersis, stipuhs mem-  
 branaceis adpressè hirsutis brevitcr triangulanbus acutis, cauli-  
 bus erectis palulè hirtis subnudis a medio dichotomy ramosis  
 folus multd longionbus, folns caulims minutis sessihbus 3-5 fo-  
 liolalis foliolis oblongo-lanceolatis obtusis mtegn> pedicellis hir-  
 sutis calyce sublongionbus, sepalis adpressè hirsutis praeteredque  
 glanduhs sessilibus adspersis extenonbus elliptico-lineanbus ob-  
 tusis intenonbus pauld lationbus longionbus lanceolatis acutis,  
 petalis aureis calyce tertiA parte longionbus, carpellis glabris lae-  
 vigatis dorso subcannalis in rostrum breve uncinatum obtusum  
 abeuntibus reticulato-venosis

Hab in region e supenori alpind montis *Asian dach Anti Taun*  
 in *Cappadocid* cl Balangfc Floret fine Juln

Petioli i 'i-2 'i» pollicares, foliola 6-8 hneas longa 4-5 lata,  
 caulcs 6-10 pollicares, flores magnitudinis *P aurece* In sectione  
 cauhs erectis crassmscuhs non ascondentibus, carpellis magnis  
 subuncinalis insignis Ob folia nonnulla mxum subpinnatum ha-  
 bentia Seel *Subpalmatce* Lehm quoque approximanda

POTENTILLA ARGJEH BOISS ct Bdlansa (Sect *Pmnatm* )

P pumilacollorcliquiispetiolorumvelustorumsquamoso, fohis  
 radicaibus humi expansis breviter et adpressiusculè hirtis praer-  
 ttr<5que glanduhs minutis sessihbus adspersis petiolo brevi cras-  
 smsculo insidentibus ambitu oblongis approximatum 3-4 jugis  
 segmentis sessihbus obovatis basi cuneatis ultrà medium in lobu-  
 los hneares obtusos confertos partitis, folus caulims diminutis  
 sessihbus vel subsessilibus in lacinias pauciores partitis, stipuhs  
 magnis ovato-lngulanbus obtusis, cauhs brevibus humi ex-  
 pansis dichotomis subcorymbosè 1-5 flons, calycis glandulosi  
 pihsque patentibus hirti lacinus extenonbus elhpticis obtusis in-  
 tenonbus aiquilongis accpiilatisque acutionbus tnaDgulantius, pe-  
 Uih aureis retusis calyce tertid parte longionbus, carpellis ISBVI-  
 bus glabris

Hab in regione supenori montis 4/ *gm Cappadocm* alt 3200'  
 melr cl Balansa Fl fine Julu

tladicis collum irassum Caules bipolhcares Fols hmbus pollicem circiter longas 5-6 lineas latus Flores magmtudinis eorum *P geramotdis et nudcB* Ab utrflque folns plunjugis rachide etoagatl 1 acinus confertionbus facil^ distinguenda

AMYGDALUS BALANSE BOISS (Sect *Euamygdalus* Spach )

A fruticosa ramis fuscis pruinoso-glauculentibus tortuosia apico Landem spinescentibus, folns lanceolato-oblongis obtusis basi in petiolum brevem attenuatis minutè et obtusè crenulatis supra glabns sublùs adpressè et cnspulè lanatis albidis, calycis breviter campanulati basi HOD ventncosi lacinnis oblongis obtusis margine lanato-ciliatis, filamentis omnibus fauci calycis inserts, drupis brevissimè pedicellatis basi truncatis ovatis acutiusculis breviter et adpressè cnspo-lanalis subcompressis, putamine eforaminato ad suturam ventralem angustè et min^d& cannato ad doraalem cSnabculato acuto sulcis profundis reticDtatim et laxè exarato.

Hab. ad *Ouchak Phrygm* alt. 910melr cl Balansa Aug fruct maturo

Folia pleraque 6-8 lineas longa 2-3 lala gemmarum terminatum pauca majora polhcem longa 4 lineas lata Flores ex reliquis emarcidis tantum descnpti Drupa *eH. A communs* tertid parfe\*\* minor Putamimss sulci duo utnquè suture ventrali paralleli non anastomosantescaetenirregularilerreticulati Species abj4 *Ouentah, Webbn* et *elwagmfohd* quibus quodammodd affinis putamine profundè sulcato nee laevigato distincta

AMYGDALUS SALICIF6LIA BOISS et Balansa (Sect *Euamygdalus*)

A fruticosa ramis tortuosis fuscscscentibus pruinoso-glauculentibus, folns glabernmis angustè hnean-lanceolatis utnquè attenuatis acutis minutè crenulatis crenatuns ascendentibus glandulifens, flonbus. drupd ovato-oblonga compress^ brevissimò et parcè velutina virenti obtusft acuminulatd, putamino suturd ventrali cannato dorsah non canaliculalo faciebus parcè foraminato el propè basin 4-3 sulcis brevibus notalo mucronulato

Hab in sepibus propè *Ouchak*, cl Balansa legit fructiferam fine Juln



Folia 9-12 lineas longa 2-2 1/2 lata. Drupa<sup>1</sup> pollicem longa  
 A specie precedenti forma et glaberrime foliorum, pulcherrimo caractere egregio differt, sed cetera descriptione proximo accedere videtur ad *A. Webbii* Spach foliis glabris quoque donatum sed ut videtur magis oblongis brevioribusque et cujus petala ad utrumque latus sutura ventrali sulcatum est. Ulterius tamen cum ea conferenda.

ROSA RAPINI BOISS. cl. Balansa. (Sect. *Pinnatifida*)

R. ramis coriaceis rubris vestitis aculeis glandulosis, aculeis subaequalibus flavicantibus compressis e basi dilatata patentibus subrecurvis, stipulis parte liberis angustis lanceolatis aculeis inlegnismargine glandulis sessilibus regulariter pectinatis, petiolotenui glandulosis sessilibus asperso, lobiis 5-7 obovatis subtus pallidioribus ad nervos praesertim hinc denticulatis denticulis inferioribus minutis glanduliferis superioribus argutis, (lobis subtus pedunculo calycis aequilongis glabris suffultis, lacinis calycinis lanceolatis hirsutis marginibus ciliatis acuminatis integris vel denticulo lineari auctis tubo ovato-rotundo glabro duplo longioribus, petalis luteis retusis calyce longioribus, fructu credo globoso apice subtrilobato calycis lacinis persistentibus corona to

Hab. prop. *Ouchak Phrygiae* alt. 910 metr. cl. Balansa Floret fine Man.

Var. 8 *Cypriaea* — Magis glandulosa, foliola oblonga dentibus argutioribus.

Hab. circa *Casai eam Cappadociae* cl. Balansa pi. exs. 1856 sub *B. Casai* Boiss. et Bal. Mss.

Pulchra specie cl. et de Rosis Helveticis bene merito *D. Rapinilicata* *A. It. lulea* Mill. aculeis validioribus arcuatis ne tenuibus rectiusculis, stipulis non glandulosis-denticulatis, foliolis minoribus obtusioribus non duplicato-serratis subdiscoloribus distincta.

*E. sulphurea* habet stipulas laciniato-dentatas, petiolum aculeolatum, foliola majora magis profundius dentata approxinata, flores ad extremitatem ramorum elongatorum sitos, calycis tubum setuloso-aculeolatum, caeterum. Dandum nota est flore simplici et cum spontanea detecta fuerit cum nostris specie conferenda.

## SALIOARIKE

LYTURUM SALICARIA L var *Syiiaca* Boiss et Gaillardot

Praeter margines foliorum et bracteanum scaberrimos glabrum,  
spicam bracteis margine undulato-crispis

Hab in valle fluvii *Burrada Antthbant* propè *Damascum* cl.  
Gaillardot

## UMBELLIFERIE

BUPLEURUM SEMIDIAPHANUM Boiss (Secfc *Annua*)

B annuum, caule erecto gracili dichotomo ramosissimo, foliis  
anguste linearibus subternerviis nervis venulosis basi attenuatis  
caulinis abbreviate hinc basi squamulis caulem cingentibus,  
involucro phyllis 5 lanceolato-linearibus cuspidatis ternerviis, um-  
bellis radiis subinsequantibus, involucello phyllis quinque lanceo-  
latis longius cuspidatis trinerviis margine hyalinis enerviis, area  
inter nervos vix subopacis venulis nervi medio parallelis usque  
ad nervos laterales non productis inter se non anastomosantibus  
percursum

*B. ajaculatwn* Boiss. PI Ancher Ann Sc Nat 1844 non Fnw  
nec Gnebach Fl. Rumel nec Orph Fl Gr exs N° 236

Hab. in Graecia a Macedonia ad Peloponnesum, insula *Zacyntho*  
Margot.

Hanc speciem prius non distinxeram a *B. apiculato* Fnw, vero  
*B. glymaceo* var *anstato* B et H Diagn Ser. 2<sup>o</sup>, N° 10 hucusque  
circ4 *Themfomcum* Fnw! Heldreich! Orphandes! tantum lecto  
et quod a cl Gnebach in Fl. Rumelica bene descriptum habet  
involucella inter nervos ut et ad margines at in *B. glutmceo* om-  
nino diaphanos sed ab eo differt phyllis longe cuspidatis non  
omnino aveniis sed ad utraque latera nervi medii et saepe ad latera  
exteriora nervorum lateralium venulosis.

Plant orient novar Ser sec N»

fl

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Bupleurum SULPHURKUM Boiss et Dalansa (Sect. *Annua*)

*B. annuum* glabrum caule gracili erecto dichotomo et patulo ramosissimo, foliis angustè linearibus e basi subdilatatis quinque-nervi uninervis elongatis, involucri phyllis lanceolatis cuspidatis trinerviis, umbellis 3-4 radiatis radice strictis inaequalibus brevibus, involucelli phyllis 5 ovato-oblongis longè cuspidatis sub lente eroso-denticulatis sulphureis subhyalimis trinervis nervis omnibus utriusque ramulosis, petalis apice argute denticulatis, fructu hinc cespitibus jugis obsoletis

**Hab** in monte *Ahdagh Cappadoce prope Ccesaream alt 1450 metr cl Balansa*, in parte inferiori montis *Mameneu Dagh Cappadociæ*, in collibus aridis prope *Ouchak Phrygiæ alt 910 metr cl Balansa Floret Julio*, fructus maturat Augusto.

Pulchella species ex affinitate *B. glumaei* cujus involucella omnia) aequa petalorum Integra et praesertim *B. semidaphnæ* quod differt involucri phyllis oblongo-linearibus nervis marginibus latere exteriori eximie hyalino non anastomosantibus, petalis apice breviter denticulatis, fructu multo brevior *B. Aleppicum* habet involucella quinque-nervia petalorum Integra

Bupleurum FLAVICANS Boiss et Heldreich (Sect. *Annua*.)

*B. annuum* glabrum caule gracili erecto dichotomo ramoso foliis linearibus lanceolatis strictis acutis 3-5 nervis, involucri phyllis breviter lanceolatis trinervis acutis, umbellis breviter et inaequaliter 3-4 radiatis involucelli phyllis quinque ovato-oblongis longè cuspidatis uniformiter flavicantis hyalimis trinervis nervis omnibus utriusque nervulosis, petalis integris

**Hab**, in *Eunjtam* prope *Chartza* ad fluvium *Carpen* cl. Samaritam et Guicciardi Floret Julio

Habitus praecedentis a quo involucelli phyllis petalisque distinctè in omnibus integris eximie differt, a *B. glumaceo* et *semidaphnæ* involucelli phyllis lateralibus latere exteriori nervulosis uniformiterque hyalimis longius differt *B. Aleppicum* involucellis submuticis latere exteriori quinque-nervis distinctè

BUPLEURUM HELDREICII BOISS et Balansa (Sect *Annua* )

B annuum glabrum glaucescens, caule a basi dichotomy ramoso corymboso, folns Inlegernmis membranaceo-marginatis mfenonbus amplexicaubus ovato-oblongis obtusis plunnervus supenonbus perfoliatis orato-orbiculatis, umbelhs 9-10 radians exin-Volucratis, involucelli 3-5 phylli foholis valdè inaequalibas radiantibus palhdè virentibus oblongis acuminatis ad tertiam partem usquè connatis umbellulas,superantibus pedicelhs brevissimis, petalis integris apice convolutis, mencarpus oblongo-hneanus acutè angulato-sulcatis jugis brevibus valleculis sabtransvers& et elevatim luberculato-rugosis

\* Hab ID arvis *Pisidim* cl Th de Heldreich. in agris arenosia ad occidentem *Cxsarei* B in *Cappadoad* cl Balansa

Folia orbiculata et inflorescentia flavida *B crocet* quod involucelhs flonfen phyllis angustionibus flores vix excedenlibus et fructu brentissimo eximiè differt. *B protractum* eadem ferè fructiis sculpturâ don a turn differt folns caulims oblongis apice atenuatis, involucelhs phyllis ovatis brevissimè mucronatis, froctu valdè turgido ovato nee oblongo-hneanus

Dupleunum COMMUTATUM Boiss et Balansa (Sect *Annua* )

B. annuum giabrum caule el a to ternii virgato tereti dichotomè ramoso rarais el on ga Us erecto-palulis, folns hneanus basi aequali caulem cingentibus acutis basi 5 supernè tnnervns, supenonbus abbreviatis acuminatis, umbellis longiusculè pedunculatis maequaliter et longè 5-7 radiatis radns acutè angulatis, lsvolucns involucellisque angustè lanceolalis acuminatis hisce umbelluhs subbrezionibus, petalis intensè aureis, fructu oblongo pedicello suo subaequilongo, mencarpns laevibus obsoletè sulcatis jugis filifornubus obscuns

' Hab. in vmeis suprâ *Bergni Tmoh* occidentalis cl Balansa pi exs. 1854 sab *B graali* N° 36, in colhbus incullis propè *Ouchnk Phrygu* B cl. Balansa 1857.

Planta gracillima 2-2'» pcdalis Folia basi sesquilmcam la La Habitus £ *trichopodi* et *Ketaidi* quae involucelhs sclaccis {lores

superantibus dislaul *B K&thehi* cL *B Cappadoacum* ram is ob  
ambellas 1 ale rates aborlivas flexuosc fractis, etc , *B a/fine* mvo-  
lucollis setaceis, *B jnnceum* fructu dupld majon ut caetera prae-  
teream, diffFerurjt Magis affine *B Kurdico* Bois> caule divancatim  
ramoso, involucellis longionbus, radns umbellae abbreviatis sub-  
sequahbus et praesertim fructu profundè sulcato jugis crassis di-  
verso Hanc specim per errorem priùs *B. gracih* fruclu granu-  
lato diversissimo adnumeravimus Planta elegans ab omnibus\*  
suprfl memoratis pctalis majonbus aureo-subaurantiacis distincta

DuPLEURUM ASPERULOIDES Heldr (Sect *Annua* )

B annuum glabrum, caule erecto tereti stria to subflexuoso di-  
chotomè ramosissimo, umbelhs nullis, umbelluUs minimis 4-5^  
floris terminalibus et secùs ramulorum extremitatem subsessilibus  
remotmsculis, folns lineanbus basi subaequali caulem cingentibus  
acuUs sub 7 nervus margine scabndis supenonbus abbreviatis  
angustatis summis bractesformibus lanceolato-subulatis ad basin  
umbellarum laterahum eas aequantibus, involucelli phyllis 5 an-  
gustè lanceolatis acutis flores subsessiles snbsuperantibus, petalis  
purpurascntibus scabndulis, fructu prismatico laevi margine ca-  
lycino brevi subdentato superato

Hab. in vineLis propè *Rachova* in regione inferiori *Parnasst* cl  
Guicciardi. Planta serotma line Augusti tantùm flonfera

Habitus et inflorescentia *B tenwssimi* sed caules procenores  
bipedales ramosiores, ramuh tenuiores, umbellula laterales in  
unoquoque ramulo 2-3 minores sessiles nee pedunculats, ab eo  
msuper egregiè distincta fructu pnsmatico ISTI nee ovato granu-  
lalo Species distinclissuna,

BUPLEURUM EXALTATUM MB var *brackystegmm* B et Bal

Involucelli phylla elliptica breviter mucronata flonbus sub-  
sequilonga

*B hrachy&tegium* B et Bal Mss.

Hab. in monte *Asian dock Antitaun* in *Cappadocid* cl *Balansa*

Planta flonfera tantùm nota et quae praeter notam indicatam a  
*B. exaltato* sal distincta non vifletur

## RUMIA RHIZOMA Boiss et Heldr

R monocarpica glauca dioica, radios cylindrical collo fibroso, caule humili erecto glabro acutè angulato-sulcato a basi divaricatum et patulè pyramidato-ramoso, foliis radicibus humi expansis brevibus anibilibus oblongis tripinnatisectis lacinis carnosius hinc acutis margine scabundis, caulibus vaginâ ovatis albo-membraceis msidentibus lacinis linearibus abbreviate, involucris involuclis nullis, umbellulis inaequaliter 4-5 radiatis rigidis, umbellulis 6-9 floris, pedicellis inaequalibus majoribus fructu dupli longioribus petalis albidis latè vinctis in laciniam involutam attenuate, fructu ovato a latere subcompresso stylis \* deflexis stipulodis longioribus superato, menciis a basi ad apicem subcurvatis jugis primariis quinque elevatis albis secundariis 4 in valliculis albis corticosis sublationibus obsolete denticulato-rugosis ante basin et apicem menciis evanidis, vittis sub jugis primariis solitariis, commissura concava 2 jugis secundariis accessoriis percursa evitata.

Hab. IU cacumine *Petra montis Tymphrestis (Velugo)* alt. 6000' undè jam attulit cl. Spruner et sub nomine *Tinnm frigidum* flonferam communicavit. Eodem loco Aug 1857 fractiferam legerunt cl. Guicciardi et Samantam.

Flanta magnitudine habitu fructusque forma *Tinnm vulgum* similis sed ab eà distincta foliis scabundis, pedunculis fructiferis brevioribus et praesertim jugorum secundariorum corticosorum subundulatores praesentia quod nota *RUMIA* potius quam *Tinnus* (genibus caeteris affinis) nobis adnumeranda visa est.

\*

## RUMIA GUICCIARDII BOISS. et Heldr.

R monocarpica glauca dioica, radios collo apice paret fibroso, caule humili erecto glabro angulato-sulcato a basi ipsè patulè pyramidatimque ramoso ramisque purpureis, foliis radicibus humi expansis brevibus ambitu ovatis tripinnatisecto-decomposito lacinae carnosius glaucis acutis margine scabundis, caulibus vaginâ oblongo-linearibus margine albo-membraceis msidentibus lacinis paucioribus abbreviatis, involucris involuclisquo nullis,

umbellis subinajquahler 3-5 radiatis radus sincli^ angulalis, pedicellis majonbus Jruclu subduplo longionbus, pcLahs albidis dorso latè vindi-vittatis in lacmiam convolutam aLlenuatis, fructu junion globoso-didymo a lalere compresso styhs deflexis stjlo-podu longitudine superato, mencarpiis 5 jugis prim an is 4 sccondarnsque albidis omnibus crassis elevatis undulalo-tuberculatis percursis

Hab in cacumine monlis *Kytheron Beohm* cl Guicciardi et Hcl-dreich Fl fine Man

Habitus ommnd praecedentis a quA fructu subgloboso didymo non Lantùm ad juga secundana sed undiquè undulato rugoso sal differre videtur Maturum fructum nondùm vidi

PIMPINELLA AKISETUM Boiss et Balansa (Sect *Tragium*) 4

P monocarpica, radius collo crasso vestigiis peiolorum emortuorum vestilo, caule erecto brevissim6 puberulo angulato a basi ramosissimo ram is elongatis gracihbus ramulosis terelibus paniculam corymbosam formantibus, folus sub lente immulissim6 puberuls et areolato-punctatis pinnatisectis segmentis utrinquè 2-3 remotis peliolulalis e basi cuneali ovatis profund6 dentatis sspè tnfidis dentibus oblongo-hneanbus obtubis, folus cauhnis petiolo brevi subdilatao msidentibus in lacinias paucas angustè lioeaes parlilis, umbellis 8-10 radiatis, involucro nullo, involucelli phyllis 1-3 linean-setaceis pedicellis squilongis, petalis alibis glabns, pedicellis insquahbus longionbus fructu triplo longionbus, fructu parvo ovato undiquè scabndo jugis obsoletis, stylopodio depresso, styhs longissimis.

Hab. in plantie *Cappadocm* intef fluvium. *Zamante sou* et montem *Asian dock* sitd cl Balansa qui legit fructiferam Augusto Fructus sapore *Antsi* donati sub nomine *Amsetum* a Turcis colhguntur.

Planta pedahs habitu *P. corymboste* et *Ohwen*, folia ferè *P aromaticcB* qu£ ab e& radice collo denudato petahsque hispidis differl *P anisitmlongius* distatradice annuà, fructu majonstylopodio breviter conico superato Aptiùs approximanda *P Olwien* quee differt inflorescentiS ob pcdunculos abbreviatos magis corymbosi, folus radicaibus bipinnatisectis, umbel Us mvolucralis et *P Kot-*

*sihyanip*, cuius folia refert sed qua pelalis fructuque longè albo-pilosis dislinguilur

**PIMPINELLA** CAPPADOCICA BOISS. et Dalansa (Sect. *Tragium* )

P monocarpica tota sub lente minutè pruinoso-puberula canescens ranüs glabrescens collo radius fibns foliorum vetustorum vestito, caulo erecto subflexuoso ad vel infrd medium paniculato-ramoso substnato, folns radicalibus longiusculè petiolatis pinnatisectis 3-4 jugis, segmentis petiolulatis ovatis bipartitis dentatolobatis vel in lacimas lineares partilis, caulims petiolo brevi rosi-dentibus lacimis paucionibus angustissimè lineanibus, umbellis 8-15 radiatis exinvolucratia, radns tenuibus pedicelhsqic hirtellis, involucelli phyllis 3-5 pedicellos subaequantibus, petalis albis densè velutino-hirliSj fructu globoso densè et patulè hirtello stylopodio depresso styhsque longis coronato

**Hab copiosissimè in monte Ahdagh-pro^b CeBsareamCappadocice** alt 1500'metr. cl. Balansa Fl medio Julio, fruct medio Augusto.

Pedais, affims foliis et petalis villosis P *Kotschyance* sed distinctacaule gracilioriadramorumLumnon incrassalo,umbellis non involucratiSj radns tenuionibus, fructu minon mintüs densè albo-villoso.

(ENANTHE TENUIFOLIA BOISS et Orph

(En radice tenuiter Abrosd, caule a collo ramoso tenui virgato angulato-sulcato, folus mlerionibus ambitu oblongis tnpinnatisectis lacinus brevibus setaceis caetens pinoatisectis lacimis paucIR longis angustissimè Jineanibus, supenonibus simpheibus, umbellis longè pedunculatis breviter 5-6 radiatis, invohicellis breviter polyphyllis, flonbus extenonibus subradiantibus, pedicelhs\*frnc-tifens incrassatis, fructu cylindnco basi subattenuatfl non calloso styhs longis superato

Hab. ad radices montis *Kor'thiatt Macedonia* cl. Prof. Orph

Affims (*En angulosce* Gnsch a quà diflerre videtur folns radicalibus ambitu parvis lacimis setaceis, cauhbus tenuibus, fibns radicalibus tenuissimus, fructus (jumores) non ut in eâ basi callosi sunt An note mdicalae sat firms?



SESRLI PAHN<sup>^</sup>SICUM Boiss<sup>></sup> et Heldr (Sect *Hippomaralhroides* )

S perennc collo fibroso, caule erecto crasso stnato fohoso siraplici umbellam terminalem ahasque laterales ranùs opposilas saepius abortu allernas fereifli glabro, folns glabns petiolo dilatato suprâ canaliculate insidentibus ambita ovatis palhdè virentibus supridecompositis lacinns hnean-setaceis subdivergentibus costs pnmanâ secundarusque crassis, involucro breviter 1-3 phyllo, umbelld 20-25 radiatfi radns inaequalibus umbellulâ 3-5-pl6 longionbus pcdiceihsque brevibsimis velutinis, inrolacelli phyllis lanceolatis acuminatis membranaceo-marginatis flores subaBquantibus basi subconnatis, ovano velutino, petalis glabns, fructu

Hab rarum in rupibus excelsis regionis abietins *Parna&si* ad<sup>H</sup> *Gournad* Guicciardi ex Heldreich Alt 4000' Fine Augusti florere incipit

Sesquipedalc, umbella terminalis diametro 2-3 pollicans, lacinae fohorum longiores pollicarcs. Inter omnes habitu et caracteribus magis apline *S leucospermo* quod differt caule tenuion, laciniis tenuioribus et longionbus foliorum, radns umbellarum brevionbus et involucelli phyllis ex basi ovatâ acuminatis.

JOHRENIA. PLITYGARPA Boiss. (Descriptio emendata )

J glabra glaucescens radicis collo petiohs vetustis persistentibus elongatis scpiamoso, caule erecto tenuiter virgato flexuoso dicholomè ramoso nudo, folns omnibus radicalibus petiolo crasso basi longè dilatato albido suffultis pinnatipartitis ambitu lanceolatis ^segmentis oppositis sessihbus *A-b* jugis in 5-7 lacimas lanceolatas acutas partitis, umbelhs inaequahter pauciradiis, involucro nullo, involucelli phyllis brevissimè tngulan-lanceolatis, petalis flavis, fruclu pedicello dupld longion oblongo-elliptico stylopodio breviter comco styhsque brevibus divergentibus coronato, jugis quinque subsquidistantibus vittâ suâ tantùm prominentibus lateralibus margini albido subinflato valleculis aequilato contiguus

*J platycarpa* Boiss Ann Sc Nat— *Johrmia Meyen* BQI&S ADD

Sc Nal quoad specimina Aucheri o Persia, iik monte *Demawend*  
Persise borealis Kotschy pi exs N°625

Hanc speciem pnûs a *J Meyen* cujus fructus tune mihi ignotus  
erat non distinxi nam desentpio fructûs *J Meyen* in Ann. Sc. Nat.  
ad *J. Auckm* spectat Nunc ambas e specimmibus completis com-  
**parare hceat. *J Meyen*=*Ferula seselotdes*C. A M e *GeorgidCauh-*  
*caswd* onunda habet collum radice fibrosum nee longê squamatum,  
folia bipinnatisecta, MYOIUCCIII phylla longê setacea, fructus mi-  
nores 2 \*/>> nec 3 /•-\*<sup>1m</sup>e<sup>as</sup> longos non lantâm ad juga sed etiam  
in valleculis umvitlatos vittis omnibus fihformibus aequahbus pro-  
minuhs Invito caractere vittarum in vallecula *Johrenice* nec *Di-*  
*plotmnce* adnumeranda est ob calycmos dentes obsoletos habitum  
que totum**

JOHHENIA AUTIEA Boiss et Balansa

*J.* glabra radice pluncipiti, collo llbroso, folns omnibus radt-  
calibus caespitosis expansis brevibus ambitu oblongis pinnatis seg-  
mentis subquinis per pana approximalis inferior]bus distantibus  
omnibus sessihbus ID lacimas oblongo-lmeares acutas basi cunea-  
tas profundfe 2-3 fldas partitis, cauhbus pumilis ascendentibus  
vel procumbentibus simplicibus ranûs bifidis nudis vel ad divi-  
sionem \aginl hnean instructis, umbellâ breviter et insqualiter  
3-4 radiatd exinvolucratâ, umbellulis parvis, involucelli phyllis  
5-6 hnearibus acutis flores aureos squantibus, fructu pedicello  
suo stricto longion elliptico stylopodio breviter conico stylisque  
deflexis brevissimis coronal©, jugis tnbus mtenonbus fihfoFmibus  
elevatis extenonbus margini albido valteculis subangustion con-  
tiguis omnibus vittifens

Hab ID parte supenon montis *Asian dock Antitaun* in *Cappa-*  
*dociA* Gl Balansa Floret Augustlo

Folia cum petiolo bipollicana 5-6 lineas lata caules, 5-7 polh-  
cares, fructus 3 lineas longus vix sesquilineam latus Habitu et sLa-  
turâ referens /. *olpvnam* Fenzl fohorum lacinns crassioribus majon-  
bus et Inprimis fructu minimo pencarpio fun go so jugisque subm-  
distioctis donalo distinctlam FormS et magnitudine fruclûs magis  
affinis / *platycarpce* staturâ clati, fohis, caule ramoso diverse.

## FEIULAGO MWRONCHDIA Hois\* ct Balan&amp;a

F glabra, collo den\*<sup>l</sup> Ubroso. caule lorn slnaLo lerett ereclo %uperne parc£ conmboso-ramoso. foliis radicalibus petiolo basi subdiUlalo >uflulti> ambitu longt lauceolalis pinnaliparlitis par-Lilionibus per pana opposila approximatis brevibus ova us sessilibus in lacinulas mininias breves ^elaceas confertas longè mucronatas decompositis, foliis cauhnis brevibus bipinnatis lacimis paucis crassionbus, umbellis inultiradiatis radus elongatis, involucri involucelhque pliyllis Uneanbns brevibus, fructu pedicello subdupli) longion ovato basi apicque subreluso, stylis deflexis st>Lopodio comco-depresso sublongionbus, dentibus catyums tngulanbuSj jugis interioribus subcorlicosis parum elevatis, exlenonbus in marginem corticosum vallecuhis dupld latiorem abeuntibus, vittis conni^suTalibuq sub 12, dorsalibus tenuibus copiosissimu

Hab. in vineis circa *Ouchak PhrygitP* alt 910 melr cl. Balansa.

Bipedahs et longior, folia ferè pedalia medium versùs pollicem lala Umbellaicentralisradiitripolhcares, mencarpia 5-5 '• Imeas longa 4 lala Foliis sinnllima *F humih* Doiss quse caule ramotion, foliorum cauhnorum lacmulis non crassionbus etpraeseriim fructu minori acuto jugi\* mult^ magis elevatis, dentibus calycims longionbus differt

## FERULAGO i&gt;L\nc\RPA Boiss et Balansa

F glabra, radice collo squamoso, caule humih subangulalo ' <sup>supem\*<sup>l</sup></sup> corymboso, foliis radicalibus expansis brevibus petiolo dilatato sufTulUs ambitu lanceolatis pinnatiparlUis partitiombus per pana oppositis se<silibus> brevissimis in lacmulas mimmas confertas lanceolalas mucronatas decomposiUs, cauhnorum abbreviatorum lacimis paucionbus summis ad vaginas oblongas acuminates reducLis, umbellis pauci el breviler radiatis, involucri involucelhqne **ph>llis** 3-4 luteis breviter oblongo-lanceolatis acuminalis, pelalis pallidè luteis, fructu pedicello pauld longion o\ato-oblongo, sh\opodio depresso slylibque brevissimis, jugis inlcnonbus inbut. corlicosis elevatis exlcnonbus in marginem

online subangustiore abscuntibus, commissure 10-12 vilitate dorsibus leniibus copiosis

Hab in latere septentrionali montis *Alidagh Coppadoci* (s copiosis alt 1500 metr Fl medio Julio, fructu raedio Augusto, cl Balansa

Planta 1-1 1/\* pedalis habitu *F humilem* omnino referens Ab ea egregie differt foliis 3 pollices tantum longis codem modo dissectis sed lacinis crassioribus brevioribus, involucelli involucellique plerisque non linearibus sed oblongo-lanceolatis, fructu utnunquam obtuso nee attenuato pro longitudine latior

#### FERULA CANDELABRUM Heldr et Sari Mss

F caule procero crasso tereti striato medulla farcto rubello pruinoso-glaucopernitochotomo-paniculato, foliis glabris triternatis supra decompositis ambitu ovatis, radicalibus amplexiformibus petiolatis, caulibus successive minoribus et minus decompositis vagina amplata suffultis, summis ad vaginas subaphyllis Has reductis, petiolis foliorum radicalium longis in vaginam dilatatis ejusque divisionibus in foliis omnibus crassis medullosis striatis subangulosis glaucis, vaginis foliorum caulium litorum amplis oblongis semiamplexicaulis canaliculato-cucullatis extus rubescentibus glaucis, vaginis supremis minoribus cucullatis ovatis summis saepius aphyllis, foliorum segmentis ambitu oblongis approximalis pinnatisectis, lacinis crassiusculis supra saturate vinctibus rugulosis subtus glaucis venosis plerisque margine subrevolutis lato-linearibus longitudine vasis integerrimis acutis mucronulatis subinde falcatis decussa Um 3-5 fidesve raris induratis basi limbo inter se confluentibus et in rachides ultimi ordinis decurrenibus, involucris involucellisque nullis, umbellulis umbellulisque mulliradialibus, umbellulis soletis terminalibus primariis breviter pedunculatis ampullonibus fertilibus, 4-ateribus plerisque longe pedunculatis minoribus stenilibus, floribus aureis, dentibus calycinis triangularibus minutis, petalis oblongis margine undulatis apice inflexis, stylopodio lato disciformi margine crenulato-subrepando, stylis arcuato-recurvatis stylopodio longioribus subsistentibus, fructibus pedicellis non incrassatis paulo longioribus ellipticis leniculan-compressis caesis, raencarpis dorso convexiusculis, jugis dorsibus tribus filiformibus prominulis late-

ralibus oblitteratis in alam marginalem abeuntibus, valleculis distinctè invittatis, facie commissurali tomentosulo 4 vittata, vittis latis fuscis

Hab ID declivibus apncis reg medire *Parnethos Attica* copiose circà *csBnobmm PanagiM Khslon pr. Phltn et pr. Pyrgos Vanpojn* suprà *Mmidi* Flor. d. 25 Maj, fruct d 21 Jun 1852. Folia ejusdem speciei vidimus etiam ad lapidicinas in *Pentehci*. (Heldr. et Sart)

Planta speculabilis, caulis plùs quam orgyalis infernè crassissimus diametro saepè 4-5 polhcans, folia radicalia cum petiolo 3-4 pedes loDga, lacinias ultimo ordinis 5-12 lin. longaB hneam circ. latae, umbellas primaries 30-40-laterales 20-30-radiatae, radii subaequales in umbelhs pnmanis circà 2 poll in laterahbus 1-1<sup>1</sup>/<sub>2</sub> poll longi, umbellulae 18-22 florum, pedicelhs fructiferi 4-5 hn longi, fructus 6-7 Lin longi 3-4 ho. lati. (Heldr. etSart. descrips Nov 4852,)

MALADAILA PASTINOC^FOLIA Boiss et Dal

M totabrevissimfeetpatulStomentella cauleerecto elato stnato ramoso ramis elongatis ereclo-patuhs lterùm dichotomy ramosis, folns radicalibus expansis abbreviatis pinnatis 5-6 jugis petiolo basi valdè dilatato segments sessihbus oblongis obtusè crenato-dentalis obtusmsculis, folus caulims ad vaginam lanceolatam reductis, urabellà maequalUer 5-9 radiatfi, mvolucris phyllis brevissimis setaceis deciduis, mvolucelhs 5^1 angnstè linean-lanceolatis pedicellos patulfi hirtos non aequantibus, petalis aureis glabns, fructu pedicello suo sublongion obovato breviter tomentello, slylopodio cupulan emarginaturà clausa subbrevion, slylis divergentibus stylopodio longionibus, alae utrinque diametro seminis pauld angustions parte exlenorf interior subaequilata utraque pellucid, vittis semini subacquilongis, commissurà glabri 4 vittata vittis interioribus abbreviatis saepè nulhs

**Hab m monte Alulagh Cappadociw all 1350 metr cl Balansa,**

Planta 3-4 pedalis, folia radicalia 4-5 polhcaria segmentis 9-10 lineas longis Umbellss fructiferae subcontractis radus majoribus 2-3 polhcansbus Mencarpia 3'/, hn. longa 3 la La. Forma foliorum aflinis *M giaveolenh* et *lasiocarpa* Prior prater segment a

**multò** majora foliorum involucri nullum differt fructu minus glabro Posterior habet caulem humiorem profundè sulcatum, indumentum longum palulium, fructum majorem obcordatum patulè hirtum, commissuram pubescentem

MALABARIA CAHVIFOLIA Boiss et Balansa

M brevissimè hirtula glaucescens, collo squamoso, caule erecto tenui tereti paret ramoso, foliis radicalibus petiolo basi dilatato suffultis ambitu anguste oblongis pinnatis 7-9 jugis segmentis sessilibus inferionibus remotiusculis caeteris approximatis ovatis in lacinulas oblongo-hneares confertas acutiusculas apice callosas bipinnatipartitis, foliis caulinis superionibus ad vaginas hneares elongatas apice lacinulatas reductis, umbellis subinaequaliter 12-18 radiatis, involucri nullo, involucri phyllis linearibus acumioatis pedicellis subbrevionibus, petalis glabris, fructu pedicello suo longior glabro ovato, stylopodio cupulari emarginaturam clausam aequanti, stylis deflexis stylopodio subbrevionibus, als utriusque seminis diametro angustior pars in tenon angustissima, vittis angustissimis pallidis, commissure pruinosa utriusque; bivitta.

Hab. in vineis partis inferioris montis *Ahdagh* prope *Capsaream Cappadocw* alt. 1300'. Balansa. Fl. Julio

Sesquipedalis, folia 3-4 pollicana 9-10 mensura lata ea Cart *carvt* referentia sed lacum minoribus magis abbreviate Umbella fructifera diametro tripollicans, fructus magnitudo eorum *M pimpinella folie*. Species forma foliorum atque marginibus fructibus parte inferioribus pellucidis subnulli egregiè distincta

PEUCEDANUM HUPESTRE BOISS. et Balansa

P glaberrimum caule elato laevi tenuiter striato supernè corymbosè et subverticillatim ramoso, foliis radicalibus petiolo longo inferiè sensim dilatato suffultis amplissimis, ambitu late ovatis superdecompositis divisionibus primariis secundariusque longè petiolulatis crassiusculis tertiis et quaternis ut et laciniae linearis setaceis divergentibus aculis, foliis caulibus vaginam cucullatam ovatam membranacea amplexicauli insidentibus diminutis, involucri involucrique nullis, umbellis breviter 10-15 radius, pedicellis

duplò longionbus, petahs luteis in lacinulam brevissimam inflexam subcoarctatis, fructu obovato-oblongo pedicello sublongion, styhs slylopodio depresso longionbus, jugis intenonbus tribus erasmisculis approximatis extenonbus in marginem crassum an gasturn abeunlibus, vittis crassis vallecucas Implenlibus commissurahbus binis

*Ferula rupestris* B et Dalansa pi Anat exs

Hab. in praeiuptis rupium verticalium ad pagum *Taksse* propè *Ccesaream Cappadoewe* alt 1270 metr Fl. Jul Fr. Aug

Planta elata Folia radicalia cum petiolo sesquipedalia pedem lata, vaginae fohorum cauhnorum 1 1/2-2 pollicares UmbellaB fructifersB diametro tnpollicares Meņcarpia 4 1/2 lineas longa 2 1/2 lata Afline *P onentah* folus papilloso-aspens et umbellulis involucralis distincto et *P Schlechtmdahi* quod difTert folns ambitu oblongis in lacunas multū confertiores divisis, cauhsms vaginā laxā suffultis, pedicellis fructu longionbus, ob valcculas univittatas **potiūs Peucedano quam Ferules adnumerandum** *Ferula Anatohca* Boiss Ann Sc Nat e vicinns Smymae ormnda nostrae speciei afflms et ab ei ramis elongatis mult<J ramosionbus ad ramificationes vaginulatis nee nudis, foliorum laciims conferLionbas, flonbus mājonbus, pelalis in lacinulas longiores attenuatis, dentibus calycinis elongatis nee obsoletis diversa, quamvis fructus adhuc ignolus sit *Peucedano* quoque sub nomine *P Anatolia* Boiss adnumeranda est Huic erronee in Ann Sc Nat. umbellulas involucellatas adscripsi ex commixtione speciminis flonfen ad aliam plantam spectantis

PEUCEDANUM GIIRYSANTHUM BOISS et Balansa. (Sect *Sehnoides*)

P perenne caule elalo tereti substnato virgato basi puberulo caeterum glabro ramoso ramis elongatis gracihbus angulatis erectis, foliis radicaibus petiolo basi dilatato suffultis dmbitu angustè oblongis tripinnatipartitis, partitiombus pnmanis 6-7 jugis sessilibus, lacinnis breviter lineanbus acutis subdivergentibus margine scabridis, folns cauhsms ad vaginam hnearem elongatam reductis, involucro nullo, umbelhs 12-15 radiatis radns tenuibus msquahbus flavidis, involucelli phylhs 6 angust6 laoceolatis acuminatis tandem deflcxis pedicellos aureos capillares sequantibus, petahs

nureis, fructu elliplico compressissimo apice oblusio stylis deflexis stylopodio depresso longioribus, mencarpiorum jugis tribus mtenonbus fihformibus lateralibus in marginem album parte interiori dngustioeremexpan&is, valliculis univittatis, commissure papillose bivittaliL

Hab in *Lydid* Boiss 1842, in vineis propè *Ouchak Phrygw* Balansa 4857 Hùe eliam mihi spectare videntur specimina flonfera a cl Sarton ex caenobio *Gola Taygeti*, a cl Orphamdes ex monte *Chelmo Peloponnesi* et a cl Heldreich a radicibus montis *Veluchi jEiohcB* missa et qua) hucusque pro *Silao carvifoho* G A. Meyer habueram.

Planta 3-4pedalis, folia ea *Can carvi* vcl *Silai* cara/b Ju referenda limbo 4-5 pollices Ion go sesquipolhcem lato Umbellce majores diametro tnpollicares Mencarpia matura 3 hneas longa sesquilineam lata. Habitu *Silaum carvifoltam* referens sed ab eo fructu omnind distincta et *Peucedano* genenin quo praeter flores luteos nee albos propè *P. Auslnacum* et aflines formd fmctùs mihtat adnumeranda

PEUCEDANUM PLATYLENIUM BOISS. et Balansa. (Sect *Eupeucedanum*.)

P. glabernmum, radicis crasse collo fibroso, caule tereti tenuiter stnalo fohoso erecto parcè ramoso, folus petiolo tereli slnato basi subdilatato, canahculato insidentibus tnternatisectis partitionibus long6 petiolulatis lacinus longis tenuiter lineanbus acnliuscuhs ngidulis, folus supenonbus ad vaginam linearem acuminatam reductis, umbellae multiradiatae involucro polyphylo fohohs setaceis brevibus, involucelli phyllis 3-5 setaceis pedicellis dimididbrevionbus, pelahs luteis, fructu {junior}) oblongo-elliphco margine angustè dilatato, stylis stylopodio breviter conico brevionbus deflexis, vittis latis

Hab in cacumine montib *Ylane dagh Cappadocice* ad occidentem urbis *CasaretB* alt 1550 metr cl Balansa.

Habitus et folia *P. officinalis* sed radimbellarum dimidid **bre-**  
**vioresj** involucrum polyphyllum et fmctus anguslatus.

**HERACLEUM** ARGIGUM BOISS et Balansa (Sect *Wyha* )

H radicib collo elongato squamis petiolorum vetuslorum veslilo,



caule erecto pumilo acutè multistnato infernò adpressè hirlulo parcè a basi ramoso, fohis inferioribus petiolo basi in vaginam dilatato suffultis pinnatis segmentis tibus laterahbus subsessihbus Icrminah longè petiolato omnibus e basi cordatA ovato-rotundatis plùs minùs profundè 3-5 fldis praeteredque margine crenato-dentatis dentibus ovato-tnangulanbus, fohis supenonbus vagina brevion magis inflate insidentibus segmentis minonbus acutiùs dentatis summis ad vaginam reducLis omnibus utnnquè sed subtùs praesertim breviter hirtuhs, umbelhs longiusculè pedunculatis subinasqualiter 7-12 radiatis radus hirtis, involucris phyllis 1-2 brevibus lanceolato-acuminatis, mvolucelph phyllis 4-6 lanceolato-acuminatis margine membranaceis pedicellis glanduloso-hispidis brevionbus, petalis alb is glabris partum radiantibus, fructu parvo glabro ovato pedicello suo brevion, sljlopedio conico, styhs longis deflexis, viltis clavato-incrassatis fructu dimidio brevionbus commissure evittata

Hab in monte *Argceo Cappadoaw* alt 2200 metr et in monte *Asian dach Anhtaurt* cl Balansa

Gauhs pedalis, foliorum segments 2 't/polhces longa lataque, umbelloB fructifersB radii bipolhcares, mencarpia tres lineas longa, affinis // *Austriaco*, foliorum 2-3 jugorum segmentis dimidi6 minonbus ncutionbus, petalis valdè radiantibus, fructùs orbiculali vittis vix clavatis distincto

#### FREYERA CONGESTA BOISS et Heldr

Fr glabra, radice tuberosâ globosâ, caule tenui erecto substriato simplici vel sgepiùs supernè semel bisve dichotomo, folns radicanbus cauhs petiolo hnean subdilatalo insidentibus in lacunas angustissim6 hneares acutas paucas multifidis, l^mbelhs exinvolucralis subaequaliter et tenuiter 5-7 radiatis fructifens subcontractis, mvolucelph phyllis 6-7 hnean-lanceolatis acuminatis pedicellis sublongionbus tandem reflexis, petalis albis subradiantibus, fructu pedicellis stnctis subbrevion mgro nitido linean-oblongo pentagon o apice subattenuato stylopedio conico in stylos divergentes attenuato

Hab in cacumine *Petra montis Veluchi sEtohce* alt 6000' cl Samantani et Guicciardi Fl et fr. Augusto

Plan La 8-9 polhcaris, umbellae ratlu 5-7 lweas long), fructus sesquihneam longns Afflnis *F Parnassiccp* qua differt umbellaB radns longionbus pedicellis que divergenti-arcuatis, involucelli phylhs lationbus paucionbus, pedicellis fmctifens multo brevioribus, fructu raamfestẽ longion

CHIEHOPHYLLUM LIBANOTICUM BOISS el Kotschy

Gli perenne caule erecto elalo stnalo glabro folioso dichotomly ramoso, folus radicalibus bilernalisectis segmenlis 9, caul in is mfcnonbus subbipinnllisectis segmenlis 15 omnibus e basi rotundata vel cuneatd rard subcordaU oblongis aculmscuhs subtus adpressi et tenmssim^ puberalis crenato-dentatis dentibus ascendentibus ovatis obtusis caltoso-mucronatis, folus supenonbus brevissim^ petiolatis segmentis elongatis aculis, umbelhs subinaequaliter 12-15 radiatis, involucri involucellique phyllis brevissimis 5-7 oblongis acuminatis, petalis albis vix radiantibus, umbellulaB flore centrali plerumque solo fertih, fructu linean-cylindnco breviter pedicellato stylopodio breviter conico slyllisque reclis divergentibus superato

Hab in hortis umbrosis pagi *Becherre Libani* alt 4500' cl. Kotschy Floret Julio

Valde affine *Ch aromalico* cujus forsã vanetas. Hoc tamen distingmtur a nostrl specie segmentis foliorum acuminatis argale denlatis, umbelhs exinvolucratis, pihs copiosionbus et longionbus foliorum *Ch Byzanhnum* longius distat

CAUCALIS STOGKSIANA BOISS

G annua tota pihs adpressis sparsis obsiia palhdẽ virens, folus ambilu tngulanbus tnpinnalis lacinnis laliuscuhs hnean-lanceolatis acutis, peduncuhs axillanbus foljp brevionbus breviter et maequaliler triradiatis, umbellulip^paf /is compactis, fructu ovato jugis pnmarns ad setulas miniir^j^iductis, secundanorum aculeis 2-3fanis brevmsculis apicc^f&r,fudiatis, bljhs brevibus denies calycinis tngulares aculos \* /rantibus

Hab in ditione *Beloutschislan* cir .,tAiozdarc\ Griffith

Haec planta quam pnmum pro *C leptophyllid* habui ab ea differt

foliorum lacinus minus tenuibus, fructus insuper brevior et ovatus  
nec oblongus aculeis brevioribus obsitus, dentes calycini breves  
nec stigmata subsessilia longius superantes

## RUBIACEAE

*ASPERUUA DIVERGENS* Boiss. et Balansa (Sect. *Cynanchum*)

A perennis glabra multicaulis, caulis elongatis erectis vel  
ascendentibus tenuibus subinfractis flexuosis alternatis ramosis-  
simis parce fohosis, fohis quaternis linearibus setaceis elongatis mar-  
gine convolutis acutis nervo medio crasso, ramorum abbrevialis  
binis, floribus parvis ad apicem ramulorum paniculae sessilibus  
bracteis brevibus acuminatis basi suffultis, corollae albae  
campanulatae glabrae lobis rauticis tubo subaequilongis, antheris  
nigris ovano sub lente granulato

Habitat in collibus incultis prope *Ouchak Phrygiae*, in *Tmolo occi-  
dentali supra Boz&agh Lydiae* et *Balansa*

Caules sesquipedales, folia inferiora pollicem longa lenissima,  
corolla lineae  $\frac{5}{4}$  longa. Habitus *A. temellum* Heuffel sed ramis magis  
divaricatis. Valde a dimis *A. Rumehem* Boiss. fohis brevioribus,  
corollae hirsuta sublongioribus tubo brevioribus diversis

*ASPERUUA CILICENTIA* Boiss. et Heldr. (Sect. *Cynanchum*)

A glabra e rhizomate suffrutescens multicaulis, caulis erectis  
tenuissimis ad angulos scabundulos pellucidis vinctibus infractis  
subtlexuosis superius dichotome ramosis ramis brevibus divergen-  
tibus, fohis quaternis hinc obtusis margine scabundis basi  
in petiolulum aequalis internodus nullus brevioribus, superioribus  
binis abbreviatis, floribus ex axillis et dichotomiis superioribus  
ramorum in cymas trifloras vel abortu 1-2 floras breviter  
pedunculatas dispositis, pedicellis florum brevioribus, bracteis  
hinc brevissimis, corollae glabrae virenti-flavidae lobis  
oblongo-hinc obtusiusculis mucronatis tubo sublongioribus,  
antheris hinc nigricantibus, stylis exsertis, stigmatibus glo-  
bosis, ovano ovato laevi

**Hab ad rupes montis Arapokephala propè Prustova JEtohce cl.**  
Samantani et Guicciardi Fl Juln fine.

Planta pedalis vel humior Folia circ 3 lineas longa dimidii  
linea" angustiora citd ad basin cauhum tenuissimomm evamda  
Flores in fasciculos numerosos secùs ramulos panicula? breves dis-  
positi. Corolla hneam unam longa. Species distinctissima propè  
**A. scutellarem inter Brachyanthas collocanda**

GALIUH ASPAMGIFOLIUMBOISS etHeldreich. (Sect. *Xanthogaha* )

A. perenne glabrum, cauhbus basi suiTrutescentibA prostratis  
dein ascendentibus nitidis albidis flexuosis r<imosis, folus sems  
linean-setaceis laevibus convolutis subincurvis brevissimis mu-  
crone tenui lerminatis, floralibus abbreviatis summis bims, flo-  
rum cymuhs 7-13 flons breviter pedunculatis numerosis panicu-  
lam elongatam formaDtibus pedicellis capillanbus divergentibus  
flore sublongionbus, corolla?, glabrs pallidè ochroleucs lobis  
oblongo-tngulanbus in mucronem longmsculum reflexum at-  
tenuatis, anthens ovatis nigncantibus, stylo ad basin usquè biparj  
tito, stigmatibus ovatis, ovano lsvi

Hab in saxosis calcareis region is inferioris *Parnassi* propè *Ra-  
chrwaet Gourna* alt. 2000'-3000' cl Samantani et Guicciardi Fl.  
medio Julio

Fedalevelsesquipedale, folia ea *Asparagi acutifolu* referentia  
mternodus multd breviora, longiora 34 lineas longa, supenora et  
ramorum steriliu breviora, flores eis *G erech* et *ochroleuci* mi-  
nores E grege *G. ochroleuci* et *melamntlwn* a quibus dilTert fohis  
brevibus tenuissimis

GALIUH GAUDATUU BOISS var. *Chum Boi&s* et Orph

Omnia speciei praeter lacimas corolloB in caudam brevera nee  
lacimam ipsam saepè aequanlem abeuntes

Hab in insult *Chto* supra *Vrontado* alt 3000' cl Orphamdes

## VALERIANEJE

VALERIANELLA CAPITATA BOISS et Balansa. (Sect *Locust*® )

V caule erecto simplici vel saepius supernè semel vel bis bifido ad lineas 4 elevatas tenues rostrè scabundulo ceterum glabro, foliis inferioribus oblongo-spathulatis in petiolum attenuate, superioribus nearibus, foliis sessilibus densè capitato-congestis pedunculis crassis, bracteis lanceolatis, fructu papillis pellucidis echinulato obtusissimum utrumquè ad loculos hisulcatum loculis stenilibus angustis septo crasso sejunctis, fertili sublatione dorso gibbo spongioso latissimo extus latè prominenti aucto

**Hab. ad Kaiagueul deri propfe Xkichak Phrygi cl. Balaasa fine Man fructiferam**

Planta 6-8 pollicans, capitula magnitudinis *V. ohtonw* propè iuam collocanda et quae valde differt fructu minori ovata compresso, loculis stenilibus lateralibus, parte spongiosa dorsali multo angustiori in rostrum terminale breve acutum nec gibbum horizontalem obtusum prominentissimum abeunt

VALERIANELLA. MICROSTEPHANA BOISS et Balansa (Sect *Platycaela* )

V a basi ramosa, humilis tota inferè papilloso-hirtula ramis elevato-lineatis plerumque et subdivisatim dichotomis, foliis radicalibus linearibus lanceolatis obtusis, ramis angustè linearibus omnibus integris, foliis sessilibus in capitula breviter pedunculata congestis, pedunculis non incrassatis, bracteis oblongis latè membranaceis densè ciliatis, fructu densè hirtello minime breviter oblongo-cylindrico coronulfo brevi e leni vincto suboblique obsolete terminato dorso convexo facie ventrali sulco profundo et alius duobus ad latera instructo, loculis lateralibus fertili transversè dilatato multo minoribus.

Hab in *Phrygia potf Boulghas Kem* alt 950 metr cl Balansa, Junio iam fructifera

Plaula 4-5 pollicans, folia inferora saep̄ pollicana 2 hneas lata, fmctus lines  $\frac{5}{4}$  longus Ab affimbus *V auriculâ etpwnild* dislinctâ corona fructûs multd magis evoluta nee rostriformi, fructu ob loculos stenos angustissimos cyhndnco nee ovato Loculi stenos basi inter se non confluere videntur quo caractere et habitu potius *PlatyccelcB* quam *Stphonomlw* adnumeranda.

VALERIANELLA CHLOROSTEPHANA BOISS et Bal (Sect. *Platyatlcb*)

V. a basi ramosa in fern 6 papilloso-hirtella, cauibus pumilis dichotomè ramosis, folns inferioribus hnean-spathulatis basi attenuatis obtusis subdentatis supenonbus angustè linearibus acutis basi subpinnatis, flonbus sessibus densè capitato-congestis, peduncuhs brevibus non incrassatis, bracteis triangularibus glabriuscuhs, fructu breviter lanato crasso brevi subangulatò ffiquahter coronalo latere ventrah angustè sulcato locuhs stenibus fertili TIX lationibus basi non confluentibus, coronâ viridi nervi subglabrâ brevi subaquali bremsimè et obsoletè lobata lobis mucicis vel brevisimè mucronulatis.

Hab in agris otiosis *Phrygia* propè *Ouchak* cl. Balansa Junio ineunte jam fructifera, in *Aniihbano* cl «<sup>f</sup> Gaillardot.

Gaules et rami expansi 3-5 pollicares, frucius subpnsmaticus hneam longus crassusque, corona vix  $\frac{1}{5}$  TineaB lata Flores inter affines magoi, Ulacim. Affinis *V Kotschyi* quae differt coronâ nervosâ subbilabiata multd longior ad tertiam partem lobatd lobis longè acunuoato-uncinulatis *V. microstephana* fructûs tenuissimi locuhs stenibus tenuissimis multò longius differt.

VALEHIANELLA GLOMERATA BOISS. et Balansa (Sect. *Platycxke*.)

V. tota sub lente papilloso-puberula, caule nano apice breviter et saBpè bis bifido, fohis lanceolalis breviter et obsoletè denticulatis supenonbus angustè linearibus basi puinatifidis, flonbus densè capitatis, peduncuhs brevibus non incrassatis, bracteis latè ovatis ciliatis, fructu hirsuto campanulato latere ventrah latè sulcato corona to, coroni fructu subbrevis aequali intûs hirtè in 5 lacinias oblongas longiusculè uncinato-aristatas tnnerves ad basin usquè partita, loculis stenibus fertili squilatis basi non confluentibus.

Hab in valle fluvii *Kamechly Tchai Cappadoace* cl Balansa 1856  
**sub *V Kotschy*, in demissis occidentibus *monlia Boulghas Bagh***  
*Phrygice* 1857 Jumo jam fructifera

Planla 2-3 pollicans habitu *V discoideam* referens sed humi-  
 lior Fruclus absque corona<sup>l</sup> lines <sup>f</sup>/<sub>3</sub> Ion gus latusque *V discoidea*  
 differt corona<sup>l</sup> longior ad medium usque lobala<sup>m</sup> lobis ssop6 2-3  
 dentatis reticulato-nervosis, *V. platyloba* Dufur corond ad me-  
 dium usque in lobos breviter ovatos mucronatos eximiè reticu-  
 latus, *V Kotschy* corond bilabiate brevissimè; sinuato-lobatd gla-  
 bernma. *V. discoidea et coronata me judice inter Siphonocwlem*  
 non militant nam lobi sterries basi non confluentes sunt

## DIPSACEIE

### MORINA SUBINERMIS BoiSS

M. tola pallidè virens piUs albis brevibus patulo-subrelrorsis  
 velutina indumento in j>arte supenon planta3 praesertim secùs  
 caulem longior densior glandulifcro, caule erecto tereti stnato  
 foliato, folus radicahbus inferioribusque .. intermedns lanceo-  
 latis acutis Integemmis infernè sensim in petiolos alatos basi  
 breviter inter se connatos sensim angustatis, supenonbus sessili-  
 bus elhptico-lanceolatis mucronulatis integris omnibus ternatim  
 verticillatis uniherviis, verticillis florum 3-4 intervallis corollarum  
 longitudine pauld brevioribus sejunctis, folus floralibus ternatis  
 ovato-oblongis calyces excedentibus basi rotundatis utnnquè re-  
 motè et breviter 3-4 lobulato-spmulosis apice in\*pinulam brevem  
 flavidam abeunlibus, flonbus breviter pedicellatis ebracteolatis,  
 involucello obconico-tubuloso membranaceo albo-hispido apice  
 truncato lobulato lobulis brevissimis abeuntibus in spinulas tenuis-  
 simas quarum duo majores involucello ipso tnplo" breviores caly-  
 cem non aequantes cssters muH6 minores inaeqnales, calycis  
 limbo suprâ tubum brevissimum arliculato campanulato basi la-  
 tere inferiori barbato ad medium fer6 usqu6 bilabiato tabus bre-  
 viter bilobis glanduloso-ciliatis muticis, corollse extùs gland aloso-  
 hirU-e lubo longissimo apice incurvo in limbum sensim amphato

bilabjaLo, labiis» aequilongis superior! ad <sup>B</sup>/s Infenon profundius  
 tnlobo lobis obovalm, filamenlis apice praeserlim villosis labio  
 supenon styloque glabcrnmo brevionbus

[tab in *Bithymd* herb Maille

Caulis cum inflorescentia ferè bipedalis, folia cauhna inferiores  
 5 pollices longa 5-7 lineas tantum lala Verticilli llhs *M Persicce*  
 et aflinmm pauld minus multiflori &esquipolhcem distantes bracteis  
 10-15 lineas longis involucrali Calyx florifer 6-7 hneas longus  
 mvolucelh anslas superans Corolla 20 lineas longa Species in-  
 signis habitu *Salmam phlomoidem* referens a *M Persicd* el affini-  
 bus indumenta velutino totius plantSB, folns non ngidis conaceis  
 pinnatipartito-spinosis scd mollibus herbaceis praetor florales te-  
 nuiter et remote spinulosas mtegermmis, involucelli spinis bre-  
 visBimis tenuibus nee validis involucello ipso longionbus inter  
 omnes distmctissijna

GEPHALARIA CALVA BOISS ct Balansa (Seel *Lcpicephalus* )

C. annua tota setis sparsis e tuberculo ortis patulè hispida, caule  
 erecto virgalo rigido supornè opposite ramoso ramis angulatis  
 ngidis erecto-patuhs iterum ramulosis, folus inferioribus . , cau-  
 hms supenonbus pinnatiparlilis lacinns lateralibus utnnquè-1-3  
 lineanbus terminali majon oblongo-lanceolatd acute dentata" vel  
 integri, capitulis longè pedunculatis, involucri paleis adpressms-  
 culè villo3is e basi membranacea oblongA albi attenualis mgn-  
 cantibus mucronato-anstalis, corollis ochroleucis adpressè hirtii  
 non radiantibus, involucello oblongo apice attenuato calvo 8 sulcato

Hab in neglectis propè *Erzeroum* Huet, Calverl (sub *C anstated*  
*C Koch*), inter segetes propè *Cmaream Cappadociw* cl Balansa.

Planta 2-2 <sup>1</sup>/<sub>></sub> pedalis, fohorum inferiorum Iacinia intermedia  
 saepebipoUicaris, superioramuUumdiminuta Capitula eis *C. Tranr*  
*sylvamccB* dupl6 majora, fructus 1 \*/\* lineas longus. Species invo-  
 lucello calvo nee anstato distmctissima quam prunum ex speci-  
 minibus jumonbus pro *C anstated* distinctissiraa" habueram.

KNAUTIA AMBWUA BOISS et Orph. {Sect *Tncheip* )

Kn perennis caulibus elongatis ascendentibus vel infernè de-



cumbentibus loretibus lislulosis pilis patulis vel retrorsis lupidis, folns pilis adpres&iusculis hispidis inf cnoribus lyralo-pinnatoseclis Idcinus lalerahbus oblusmscuhs lerminali majon oblongo acuto subdenLalo, foliis supcnonbua indivisis oblongis dentatis vel pin-nahsectis laciniis angustalis, capitahs longēpedunculatis, mvo-lacn phyllis lanceolalis aculis hi&pidis inaequalibus flores sub-Bcquanlibus vel superanlibus, corollis ochroleucis adpressē hirlis subradian tibus, fructu palulē hispido Letragono, involucelli mar-girie angustissimo 4 lobis brovissmiis denliculatis, calycis limbo •subsessili basi nigro hirsuto 8 anstato

*Stabiosa ambtgua* Fnw *Kn arven&is* 3 *amhgua* Gnseb Spicil  
*Kn ochroleuca* Boiss in Orph. exs

Hab in cacuminc monlis *Korthiali Macedonia* cl Prof Orpha-rudfes, in *Thiacid boreah* Frrw

Affims *Kn Nympharum* a quā formd foliorum, involucris phyllis longis et florum colore differ *Kn arvensis* praeter colorem flo-rum corollis vald6 radiantibus distinguilur

SCADIOSA. PimYGia Doiss et Balansa (Sect *Asterocephalus*)

Sc annua, caule erecto virgalo tenui ngidalo supernē parcē ot oppositē ramoso piljs brovibus cnspuhs retrorsis hirlo prsBter-efjqc supernē ut et peduncuh patul6 hispido, folns scabndulis infenoribus linean-lanceolatis acutiusculis basi attenuatis, su-penonbus hneanbus basi breviler pinnatipartitis peduncuhg long-gissimi?, capituhis parvis, involucris phyllis oblongo-lanceolatis aculmscnlis densē hirsulis flonbus subbrevionbus, (loribus raar-ginalibus brevilor radian tibus hirsutis apice breviter 3-5 fidis laciniis 2-3 dentalis violaceo-caerulescentibus, involucelli tubi pilis albis eo longionbus densē villosi basi tereti foveolis brevion co-ronS lubo subaequilongi 30 ncm, calycis limbo breviter stipitato setis nigris scabns corona sublongionbus.

Hab in vineis propē *Ouchak Phrygtce* cl Balansa. Fl Julio.

Sesquipedahs gracihs, folia mfenora 4 <sup>1</sup>/<sub>i</sub>-2 pollicaria 2 <sup>1</sup>/<sub>i</sub>, li-neas lata Affims *Sc calocephalm* indumenli patuli defectu, folns lationbus dentajis, corollis extenonbus longē radiantibus dis-linctae

## CORYMMFEUJS

ANTHEMIS ARGEA DOISS et Balansa

A perenois cespitosa vinctis praeter papillulas lente per^picuas ad partem inferiorem ramorum et petiolorum glaberrima, caulibus brevibus prostratis valde radicanibus, ramis erectis natis foliosis in capitulum solitaneum breviterpedunculatum abeunlibus, folius parvis limbo ovato petiolo eo longior suffulto bipinnatisecto lacinis parvis confertissimis oblongis obtusis, involucri phyllis adpressis imbricatis oblongis obtusis virentibus eleganter fusco-marginatis, paleis receptaculo linearibus plicatis. Us apice nigricantibus sublacens mucronalis flosculo^ sequantibus, ligulis albis oblongis obtusis sublobis disco brevioribus demum reflexis, achenis tenuibus obsolete quadrangulis basi attenuatis apice truncatis aequaliter et obsolete marginulatis sub lente crebre punctulatis

Hab in parte summi montis *Argaei Cappadociae* alt 3700' metr cl Balansa Fl Augusto

Rami crebre cespitosi subbipollicares, foliorum limbus circ 3 lineas longus latusque, capitula magnitudinis *Anth nobtilis* Species distinctissima facie *Pyrethrae Kotschyae* vel *fruticosa* Feistl

ANTHEMIS MACEDONICA BOISS. et Orph

A annua glabrescens virens a collo pluncaulis caulis ascendentibus abbreviatis parce ramosis, folius in lacinas angustas lineares mucronatas pinnatisectis superne indivisis, capitulis pedunculis longis nudis insidentibus, involucri squamis ovatis obtusis margine scarioso palido adpresso erosulo, receptaculo ovato, ligulis albis oblongo-lanceolatis cucullato-plicatis acutis, achenis calvis basi subangustatis costatis ad costas tuberculatis, marginalibus subtetragonis.

Hab in regione superne monti^ *Korthati Makedoniae* cl Prof, Orphanides

Habitu *Nciheuhtt, inelampodtnam*, olt, reterens, ab eis gki-  
bntie IjLimisqne leambus loliorum distinctd

GHAMAMELVUM GONOCLINIUM liuisb el Balau&a

Ch aimuum vei bienue glabrum, cauibus erectis snatis a medio  
corymbosè rainosis ramis elongatis erecto-patulis apice monoce-  
phalis, folns ambitu oblongis sessilibus m lacimas tenuissimas  
Uneares apice albido-mucronulatas bipinnatisectis, laciouis ad  
basin costas primaria) inferno dilalatae decrescentibus, involucri  
squamis ovatis oblusis YirenUbus Ialmscul6 et pallid^ fusco-mar-  
ginatis, I]guhs albis subtridentatis disco subbrevionbus, recepta-  
culo elongato coruco-oblongo, achenus crassfe albo-coslatis yen-  
treque profund6 bulcatis leevibus apice biglandulosis calvis

Hab. m pascuis *Tmoh Yaila de Bozdagh* dictis Bal pi exs 1854  
sub *Ch tncophyllo*, in pratis humidis ad *Yachamichlar Keui*  
*Phrygit* B cl Balansa 1857 Fl. Jumo

Afiine habitu et foil is *Ch tncophyllo* corymbi ramis abbreviatis,  
mvolucri squamis lanceotatis palhdis, achemo minon et inprimis  
receptaculo hemi^phEBnco rtistiucto

ACHILLEA GONIOCEPHALA Boi<\* et Balansa

A basi suffruLicosd, mullicaulis, cauibus erectis aogulatis ad-  
presse cams fl on tens sub anthesi ferè denudatis sLenlibus fohosis,  
folus pinnatisectis ob segmenta brevissima minuta Lransverso acU»  
imbricala ovata circumcircA denticuiato-mucronulata villo con-  
lexa linean-teretmsculis vermiculatis, corymbo terminali denso  
subcomposito 15-20 cephalo pedunculis capitulo 3-4-pld longio-  
ribus, capiLulis ovatis ob phylla involucln extenora obtusè cannata  
oblonga obtusa prater dorsum subvirens adpressè cana angulatis,  
Ugulis albi^ obtusè tridental subrotundis mvolucro vix brevio-  
nbus.

Hab in regione raontanâ supenon montis *Asian dachAntitaun*  
c\ Balansa Fl Augusto

Caule? tlorifen pedales, stenles semipedales, folia 9-10 lineas  
longa lineam lata Gapitula magmtudinis eorum *A. venntciilaris*  
caulibus ramose teretibusligulisquebrevibus distinct© A spmv-

*hfoha* caule lenui Lcreli llcxuo<sup>o</sup>, capiluli<sup>^</sup>que dcrusso-globosi-\*,  
*A Damasrena* el *A Lycaomca* liguli\* <sup>^</sup>ulphurcis, etc , dislm-  
 guuntur

ACIILLEA PHINTGIA Boibt. et Balan<sup>a</sup>

A. Iota land longi patuld albo-floccosa, cauibus pumilis foho-  
 sis erectis, fobis pinnaUsectis ob segmenta minutissima transversa  
 densissimè imbcata circumcircâ denticulato-mucronata vermi-  
 culafas hnean-teretibus, corymbis termmahbus densis 5-10 ce-  
 phalis, capitulisbrevisim<sup>^</sup>pedunculatis oblongis, involucri lanati  
 squamis oblongis arct6 imbricatis obtusis, hgulis flavia rotundatis  
 obsolete et obtus<sup>^</sup> dentatis brevibus

Hab. in monte *Boulghas dagh Phrygiec* cl Balansa Fl Julio.

Gaules 4-5 pollicares, habitus *A tomentosm* sed folia ob seg-  
 menta minora arctiùs congestd angustiora capitulaque dupid raa-  
 jora ea *A. filipenduhnce* ferè superanlia

SENECIO TYMPHRESTEUS Boibs ct Heldreich (Sect *Otxsjaca.*)

S. annuus tolus breviler glanduloso-pilosus viscosissimus, cau-  
 hbus crassmsculis ascendentibus foliosis supern6 corymbosis ra-  
 mis flexuosis, folus e basi attenuate semiamplexicauh oblongis  
 sinuato-dentatis vel pinnatilobatis lobis breviter oblongis oblusis  
 eroso-denticulatiSj peduncnlis capitulo saepm̄s plunes longionbus  
 squaniuhs angustS lineanbus, capituh̄s ovatis, involucri phyllia  
 lineanbus acutis vindibus pihs patulis papiUosis viscidis obsitis  
 flosculoa subsquantibus, accessonis 2-3 dimidid brevionbus, h-  
 gulis lineanbus obtusis subndentatis demùm revolutis disco lon-  
 gionbus, achenns mgns tenuiter cyhdncis stnatis pappo mveo  
 brevionbus

Hab in regione supenori monlis *Veluchi Ewrytamm c\ Saman-*  
*tani et Guicciardi* Fl ineunte Augustlo

Affinis habitu et charactenbus *S vis\$so* qui differt folus bipin-  
 na tifidis, involucri phjllis anguslionbus, ligulis brevionbus

SENECIO JURINEMEFOLIUS BOISS el Balansa {Sect *Sarracentci*}

S perennis rhizomale pluncipiti, cauibus adpressè mveis lenui-

bus basi fohalis in pedunculum longum apice Inonocephalum  
 nmplicem vel basi ranis ramulo auctum abeunLibus, folus supri  
 parcè arachnoideis glabrescentibus subtùs adpressè arachnoideo-  
 niveis oblongis in petiolum attenuatis vel indivisis obtusis vel sub-  
 lyratis lobis laterahbus 1-2 ovatis parvis terminali oblongo an-  
 gulalo-sublobato vel saepiù^ lyraLo-pinnatilobatis acutis lobis  
 oblongo-tnangulanbus, squamulis 1-2 lineanbus secùs peduocu-  
 lum, capitulo terminali magno, involucn albo-lanati phylls li-  
 neanbus acuminatis dunuscuhs, accessonis basilaribus 1-2 seta-  
 cois brovissimis, liguhs intensè aureis linean-oblongis subintegns  
 involucro longionbiis

Hab in regione alpinj monlis *Asian dock Antttaurt in Cappa-  
 doa* cl Balansa

Planta cumpedunculis 6-9 polhcanbus pedales. Folia radicalia  
 cum petiolo 3-5 polhcana 15 lineas lata ea *Jtmnece tnohls* quodam  
 modd referentia Capitula soli tana ferè magnitudinis eorum *S. Do-  
 tomci* Species pulchernma juxtA *S farfamfolmm* Boiss et Kol-  
 schy collocanda

SENECIO ARGJEUS BOISS et Balansa (Sect *Crocisens* )

S perennis collo squamoso, caulibus erectis foliosis mfernè  
 araiieo^o-canis supernè glabratis visciduhs, folus radicalibus et  
 Infcnonbus longmsculè petiolatis lalè cordalis ovato-tnangulari-  
 bus obtusissimis margine obsolelissimè repando-sinuatis, cauliols  
 supenonbus sessilibus oblongis inferne' supra' basin auricula to-  
 dilalata attenuatis, omnibus &suprà parcè araneosis vindibus  
 subtùb cams, capitulis 4-5 terminalibus corymbosis longè pedun-  
 culatis peduncuhs glandiilosis, folus florahbus ad basin peduncu-  
 lorum lanceolatis hneanbusque acutis glabratis, capitulis majus-  
 culis, involucri phyllis lineanbus inter se remotiuscuhs parle  
 inlonon obtusè cannato-mcrassatis breviler glaoduloso-hirtis  
 llosculis subbrevionbus, accessonis 2-4 dimidiò brevionbus, h-  
 j> ul i> elliptico-hneanbus disco duplo longionbus flavis intensiùs  
 mullmlnalis, achenns glabris sLnatis pappo albo subbrevionbus

Hab in regione alpinâ monlis *Aigm Cappadotm* alt. 2-200 metr  
 11 Balansa Floret Julio

**Planta** 1 'V2 p^lahs, folionun radicalium limbus 3 polliccs

longns basi  $i \frac{1}{2}$ , latus aunculis divergenlibut. obtusissimis Capitula eis *S Tom nefortu* majora A films £ moHiWilld. folus oblongis dentalis basi non cordatis et *S hypothioneo* Boiss folus macron ulato-denta Us, inflorescenua non glandulosS, capitulis tertifl parto minonbus compositè corymbosls, distinct is.

SENACIO BARCKHAUSLEFOLIUS Boiss. et Heldr. (Sect. *Croasens* )

S. perendis, caule recto crassiuscuJo *slnato fohoso glabrescenti* apice in coryrabum 4-7 cephalum congestum abeunti, fob is radicalibus et inferioribus caulims oblongo-lanccolatis subbruncinato-pinnatipartitis acutis in petiolum basi sensim et longè attenuate lobis utnquè 2-3 breviter tnangulanbus honzontalibus. vel subreflexis 1-3 denticulate, interraedus hnean-lanceolatis sessihbus subdentatis slnctis, floralibus lineanbus acuminalis integris, peduncuhs capitulo 1-2-pld Jongionbns hirtuhs, involiicn phylls inter se conligms glabns duns lineanbus dorso cannato sulcatis disco subbrevion^us, accessorns numerosis angustè lineanbus tctifi parte brevionbus, Uguhs croceis disco dupl6 longionbus lineanbus 6-1 slnalis.

Hab in regione abietina^ supenon montis *Patterns Atttcw* rariassimus cl Guicciardi ex Heldreich Fl fine Mdi

Planta pedalis vel paulò procenor Folia 2-3  $\frac{1}{9}$  polhces longa 8-10 lineas la la in petiolum eis breviora atenuata Capitula pedunculis pollicanbus vel paul6 longionbus suffulta eis *S }\$~cobem* paul6 majora Species distinctissima

SENECIO INOPS BOISS et Balansa (Sect. *Croasendes*)

S perenms radice prsemorsa fibnferâ, caule bumili simplici fohoso arachnoideo apice 1-3 cephalo, folus parcè arachnoideis demtm giabratiss inferioribus oblongo-lanceolatis obsoletè denticulalis in petiolum brevem attenuatis caBtens lanceolato-lmeanbus aculis sessihbus intogris, peduuculis capitulis subaeqmlongis, ujjvolucn tandem glabnuscule phylls lineanbus acutis dorso elevato subbicannatis flosculos suba?quanUbus, squamis accessorns arachnoideis lineari-sptaceis brevibus ad apicem pedunculi, hguhs aureis lineanbus ludent^ulalm 'i slnalis di^co dupl6 Ion-

gionbiib, acieniib brevibus snalis hirlulis pappo fugau albido

Hah in regione alpin^ monlis *Asian dach Antilaun* in *Cappadocid* cl Balansa Ft meunlc Augiislo

Semipedahs, folia inferiora subbipolhcaria 5G linear lata, superiora anguslissima Capitula minora eis *S Orientalis* el *Pistdici* a quibus caule huraili, foliis angustionbus, involucri squamis accessornis angustissimis differt

GNAPHALIUM RCESERI BOISS el Heldr (Sect *Omalotheca* )

Gn perenne caespitosum lotum adpressissim6 senceum canum, radice fibrosa, caudicibus repenlibus nullis, cauibus simplicibus 1-3 phyllis foliis radicalibus vix longionbus, tolas linean-lanceolatib trinerviis apice breviterbasi longè attcnuatis aculis utnque cams, radicalibus confertis cauibus erecto-paluis patulisve, capituis breviter peduoculatis spicam oblongam brevem terminalem basi Interruptam formantibus, folns florahbus ad insertionem capitulorum 1-2 Infimorum ranus spicam excedfintibus scepius angustatis eique brevionbus, involucri phyllis valdd inaequahbus infenoribus ovato-rotuadis lanatis apice angustè scariosis capitulo plus tnpld brevionbus, supenonbus late lineanbus dorso parce lanatis nervo an gusto vindi percursis apice brunneis glabns omnibus obtusissimis^ floscuhs involucrum aequantibus extenonbus fcfimneis umsenatis, achenus subcompressis adpressè sericeis pihs apice elongatis calyculum brevem album ad pappi basin simulantibus, pappo niveo sub lente subscabndo flosculos subtequanli

Hab rarum in fissuns rupium regions abietina3 *Pamassi* prop6 *Goumo* et *Jhpotamo* Gl de Heldreich legit ineunte Augusto

Gaules bipolhcates, folia majora sesquipollicana, laliora 2 1/\* lineas lata, capitula eis *Gn supim* paululum minora spicam 6-10 lineas longam formantia Species affinis *Gn. supino* quod egregie differt caudiculis repentibus, foliis uninervis angustionbus, mumento dension magis lanalo partmm florahum, spicis magis lavis, involucri phyllis aculis exlerionbus dimidiam partem capituli cDquanibus, achenio parce ctbrevilersetuloso ecalyculato

HELICHRYSUM PICARDI Doiss et Reut (Sect *Stachadma* )

H perenne totum secus ramos et folia lanata adpressissima veluti adglutinatis pilis minus obscurum canescenti-virens, ramis tectis densiuscule foliosis parte superioribus saepe glabrescentibus, foliis odonatis linearibus uninerviis obtusis utraque paginae concoloribus subtus margine late revolutis erecto-patulis inferioribus magis approximatis saepe recurvis superioribus brevioribus magis sparsis basi subdilatatis, corymbo terminali bis vel ter composito denso ramis subdivicatis brevibus, capitulis brevissime pedunculatis dense coactis obconico-cylindricis minutis, involucri phyllis valde inaequalibus eximie imbricatis obtusissimis infinite breviter ovatis dorso lanatis, intermediis ovato-oblongis dorso puberulis glandulosisque apice cucullato-mucatis, in teneribus hinc antheribus glabris dorso pellucido-glandulosis apice spatulato-cucullatis, flosculis paucis, achenis junioribus eglandulosis

**Hab** in pinetis prope *Puerto de Santa Maria* prov. *Gaditana* (Picard 18311 Reuter! Bourgeau, pi exs. 1849, N° 317), in arenosis montibus *Extramadura Lusitana* (Welwitsch pi exs. Lusit anno 1839 sub. *H. serotino*) Fl Julio, Augusto.

Hae species quam *H. serotino* nos quoque prius adnumeramus eadem facie florescentem sedque serotina quoque gaudet sed ab ea gravioribus distinguitur nolis Gorymbi terminates saepe multo magis compositi sunt, capitula pauciflora sunt, duplice triplice angustiora eis *H. microphylla* magis elongata, squamae infimis exceptis apice eximie inflato-cucullatae Folia ejusdem indumenti et longitudinis sed manu trite manifesto odora. Rami rigidi crassiusculi 8-12 pollicares Hae planta anthesi ineunte ob corymbos densos compositos capitulorum minuta *Achilleas Santohnoideas* quodam modo refert

HELICHRYSUM CHIONOPHYLLUM BOISS et Bal (Sect *Stachadma* )

*H. caespitosum* caudicibus prostratis brevibus radicanibus, caulibus floriferis erectis nanis et folia adpressis lanatis cernis, tomentosis radicalibus oblongo-spathulatis obtusis in petiolum longe attenuatis, caulibus 1 metrum longis aculis breviter et anguste decurrenti-



bus, capitulis. tenniitalibu<sup>^</sup> 1-3 breviter pedunculate majuscule globosjs, involucri squama ovali-, cucullalib<sup>^</sup> subpatenlibu<sup>^</sup> inferionibus obtusis apice fissi«> mterioribus aculis erobulis flosculo-> tjubsupcrantibus

Hab in regione alpina superior! montis *Asian dock AnMaun* in *Cappadocid c\* Balansa Floret Augusto

Caule& flonfen bipollicares, folia radicalia cum pctiolo 5-6 lineas longa apice 2 lata, caulina hneam lala Capitula eis *H calhehry&t* quocum crescil paululum minora *H calltchrysum* cui ex specmunibus numerosis collatis ut synonymon adnumerandum est *H chryso&phcerum* Boiss et Bal pi ex.s differt fohis etiam radicaibus elongatis angustionibus, involucri squamis laLioribus adpressionibus vix cucullatis

HEUCIHYSUM NOEANUM BOISS (Sect *StBchadina* )

H perenne rhizomate crasso brevi hgnosocespitem compactum edenti, foliis adpr<sup>^</sup>sibsim<sup>^</sup> canibus lineari-spathulatis basi alternatis obtusis, caulibus brevis-simis subnullis e foliis vix exsertis capitula 1-2 sub<sup>^</sup>sessilia folu<sup>^</sup> caulinis involucriata superatave ferenlibus, antheridio globoso phyllis praeter extenores ima basi lanatas glaberrimis nilidis sulphureis ovatis obtusissimis fissis subinaequibus

Ilab in subalpinis *Anatoli*® prope *Tocat*. Gl Noc legit Junio 4852 flonibus nondam evolutis

Hujus speciei insignis descriptionem magis completam ob specimina nimis juniora dare non posse doleo Folia in caespitem coogesta 8-10 lineas longa parte supernon ferè 2 lm lala, caules subnulli et idem capitula solitana vel bina e caespite vix exserta magnitudinis eorum *H Anatolia* Indumentum plantae tenue adpressissimum nivcum

HELICHRYSUM GUIFFITHSII Boiss (Sect *Stisckadna*)

H perenne toLum tomento molli denso albo-lanatum, caulibus decumbentibus vel ascendentibus brevibus densè fohosis, foliis sessilibus lato-lanceolatis obtusis mucronulatis basi marginibus **brevis-simis** decurrentibus supremis flores aequantibus<sup>^</sup>, capitulis in

**glomerulos** dcnso breviker peduncular doibt! eapUJlo-cougeslo-  
disposilis parvisglobosis sessilibus, pedunculi\* Ijnatissiini\* crassi-,,  
invofucn glabn nilidi citnni pliyllu adpressis ovalo-obtongis acu-  
liusculis subacqualibus lloscolorum longiludine, achenus cylin-  
dncis papillosis mini mis

Hab in regione *Ajfg Mnistan* loco *Chughur Serai* dicto cl Griffith

Caules ferè semipedales folus 15-18 hneas longis 3-4 latis mol-  
**libus** substantiae tenenons ad apicem usqf; veslili Capitulum  
terminalc c glomeruhs dcnsis breviler pedunculatis conslans Ga-  
pilula propna ]]]]\$ *II arenani* pauld) minora Huic speciei mtoi  
omnes magis affDne differt foil is lauonbus lenmonbus, capitulis  
densiis congests et liipnmis involucris pliyllis adpressis planis  
^ubsequalibus ncc insqualibus apice cucullatis squarrosulis

UELICIIWSUM \unANTIACUM Coiss et Huel (Sect *Shertiadwa* )

H cEspitosum adpressc et Leuulcr araneo^o-cinerdscens, cau-  
libus creclis pumilis simphebas ad apicem usquè foliosis, folus  
radicahbus tanonumque lineari-spalhulali^ ba&i longe allenualis  
caulinis hncanbas aculmscuhs basi subdecurrentibus, capituh  
plunbus peduncuhs eis brevionbus suffiltis dens6 capitato-con-  
globatis aurantiacis subglobosis, involucris squamis ovatis cucul-  
latis obtusiusculis apice seepius tassis inLimis Qosculos occquantibus,  
pappo lutesccnli

Hab in summo monte *Techdagh* propfi *Erzeroum* all 9000'  
(Huet du Pavilion! Calvert 1)

Caules vix semipedales Folia pollicem longa, sesquihaeam lata.  
Capitula Uhs *H arenani* pauld majora in globum terminalem  
densiusculum nucem aequantem vel majorcm saepe compositum  
agglomerata SquamaB involucris Illis *H. arenani* majores minus  
obtusfe. *H. glohferum* Boiss differt caule clato, capitals minori-  
bus palhdi luteis sessilibus. *H Anatolicum* deniquec habet capi-  
lualongius pedunculata majora citnna, squamas involucris majores  
et pappum sordide album nee luteuiQ

III knuYSUM ANAIOIILUM var *sienopkyllum* Bois\* el Iluet

Folia prEscrln caulina angustissima apice linearia basin versus lineam d much am lata, indumentum canescens, caules tenues glabrescentes

Hab ad radices montis *Teckdagh* propè *Erzeroum* cl. Huet du Pavilion alt C000'-7000'

OTIIONNOPSIS INTERMEDIA BOISS

Oh caulibus trueosis procumbentibus flexuosis glabris loli longiludine crebre ramulosis corlice alM vcstitis, ramulis annolinis brevibus basi dense foliosis ex axillis supremis 1-3 capitulos longipendunculatos emittentibus, foliis carnosis glaucis oblongis vel oblongo-linearibus oblongis vel acutiusculis integerrimis basi breviter attenuatis sessilibus, receptaculo obconico glabri glaucescentis phyllis oblongis ovatisve acutis ad tertiam partem vel altius connatis pappo brevibus, hylis 5-G oblongis radio sesquolongibus, achenis adpressis tomentosis subangulatis dorso sinatis exlcrionibus subcurvatis pappo niveo eis sesquolongis superatis

Hab in ditone *Bcloutschstan* et *Scinde* cl. Stocks et regno *Cabulmc* Griffith

Minis *Oh angustifolia* Jaub et Sp yustr. qua? differet foliis filiformibus, capitulis paulo minoribus, involucri phyllis oblongo-linearibus ad basin usque fere lineari, achenis teretibus pappo vix brevibus *Oth cheirifolia* L (sub *Othonna*) differt foliis majoribus, pedunculis tripliciter crassioribus, involucri phyllis ad basin usque hederatis

CALENDULA AI (JAMJIENSIS BOISS)

Genus biennibus vel perennans basi inclinata pluricaulis, caulis tenuibus elongatis ramosis sparsim et minutissime glandulosis praeter glabris, foliis vmdibus concoloribus utrinque sparsim tuberculato-glandulosis inferioribus oblongo-spathulatis obtusis infuturionibus oblongo-linearibus acutis omnibus basi angustatis semiamplexicaulibus denticulatis repandisve, pedunculis longiusculis squamulosis crebrius glandulosis, capitulis medio-

cribus, involucri phyllis angustis lanccolatis dorso virenti glanduloso-aspens marginibus membranaceis ciliatis, ligulis intense (lavis involucri dupli longioribus, seminibus extensoribus cylindricis curvatis persistentibus longis tuberculato-mucatis aspens involucri dupli longioribus, interioribus albis cymbiformibus inflato-membranaceis papillato-hirtis, albis minoribus annularibus dorso rugoso-tuberculatis glabris

Hab. in rupibus montium Algarbiæ prope Lagos in Lusitania Bourgeau pi. exs. 4853 sub N° 2080

Caules pedales sesquipedalesque. Folia pro parte magnitudine mediocria inferiora sesquipedalem longa sex lineas lata, superiora sensim diminuta. Capitula magnitudine inter ea *C. arvensis* et *C. marginata* differunt indumento tomentoso, caulis basi suffruticosis, foliis majoribus, capitulis *ievb* dupli majoribus, acheniorum intermediorum majorum membranis planis *G. suffruticosa* *C. Algarhensi* magis affinis tamen differt caulibus foliisque glanduloso-viscidissimis, foliis omnibus acutis, pedunculis nudis, ligulis involucri dupli longioribus, seminibus extensoribus tuberculatis nec longis mucatis. Nostra species est forsitan *C. suffruticosa* Tint. Fl. Lusit. non Vahl.

CALENDULA MARGINATA Willd. var. *aiutifolia* Boiss. et Reut.

**Hab.** in lapidosis montis Santa & ia prope Ormaiztegui (Boiss. et Reut.), in Atlante supra B. Mah (Reuter)

Capitula, indumentum, caules basi suffruticosa *C. maiguu* Ua> Gibraltaris sed folia plerumque angustiora magis repando-lobata, omnia etiam radicalia acuta. Ligulae plerumque aurantiaceae. Semina extensora semper elongata saepe involucri triplo longiora dorso vel aspera vel muriculato-costata. *C. suffruticosa* Vahl differunt indumento glanduloso bituminoso, foliis minoribus denticulatis, capitulis minoribus flavis seminibus extensoribus involucri vix dupli longioribus.

CALENDULA BALANS. BOISS. et Reut.

T. perennis loba indumento tirachnidio flo. caulis as-

cendonlibu>> ramosae, (olus infenonbusoblougo-spallmlaiit, obtu-  
MS in pcliolum attcimaU^ integns vel obsolete repandis supeno-  
ribus lineanliUb acutis, capitulis maguis, involncn phyllis lanceo-  
laLis acuminate papillosis membranaceo-marginatis, ligulis intense  
aureis involucro dupld longionbus, seminibus extenonbus cylin-  
dncis asperuhs apice truncate involucro dupld longionbus, in-  
termedns ovatis utnnquè membranJ planâ latâ acut6 denlatâ mar-  
gmatis, Intimis annulanbas dorbo profundè rugoso-tuberculalis

*Cal stellata* in Calansapl. Alger. exs 4852 N° 515 non Cavan

Ilab in fruticctis maritimis el arenosis ad onentem urbis Oran  
loco *la Grande falaise* dicto (Doiss. et Reut.! Balansa!)

Ilabitn, in du men to, capitulorum magniLudme *C. margmatai*  
Willd valdûaffinis ab eâ ilitferl scimibus Intermedns non cymbi-  
formibus sed niembrana plana dentaU margin a Us An haec nota  
in genere difficillimo et in quo characteres nondiim satis explo-  
rati probatque sal constans est? *C Monardi* quac eAdem no 15  
gaudet differt mdnmento viscido nee araucoso, capitulis folusque  
minonbus, seminibus oxtenonbus cjilindncis intermedia vix su-  
pcrantibu<< *Cal stellata* Gav cst species annua loto caelo diversa

CVLEINDUIA MoNANm Doi^s cl Reul

*C. peremm* vel biennis caulibus basi sufirulescenlibus ascen-  
dentibus parce ramosis papilloso-a&pens aculé angulatis, foliis  
infenonbus obovato-spalhulatis obtusissimis mucronulatis basi  
longc in pcliolum altenualis integns vel subrepando-denticulatis,  
intermedns linearl-spalhulatis basi se\*ssih subamplexicauhbus su-  
penonbus lanceolato-lineanbus acutis longfe mucronatis parvis,  
omnibus vindibus carnosis papillis viscidis lindiquè obsitis mar-  
gine obscurè sub leute ianosis, capitulis mediocnbus, involucn  
phyllis lanccolatis acuminatis dorso valdè papilloso-viscidis mar-  
gine angustè membranaceis cihatis, hgulis aureis involucro dupl6  
longionbus, disco concolon, seminibus extenonbus alus cyhndn-  
cis subcurvatis immargmatis dorsobrovitertuberculalis involucro  
scsqmlongionbuSj alus lateie extenon planis intenon tnquetns  
ovais ulnnquè membrani laU plani Integrâ vel denlatfi auclis  
apice inulicis vol breviler cornigeris, intprionbns annulato-cym-

biformibus nulld minonhus immarginatis do^o bisenahter ot  
obscurè luberculalis.

Hab in maritimis *Algencp* ad *Sidi Ferruch* cl fratres Monard in  
herb. Fauchd

Folia inferiors cum petiolo sesquipollicana supernè 4-5 hneas  
tata, capitula Illis *C suffruticoscp* Vahl pauld minora ligulis ferè  
sex lineas longis Semina cylindnca circ sex lineas long-a, com-  
planata circ. 4 lineas longs 3 1/a **Iala** Species ex affiimate *C. suf-*  
*fruticostE* et *C. marginal*® a qafll differtseminibus in termed us non  
cymbiformibiis sed ut in *Cat stellatd* membrand plani marginatis

#### CALENDULA SINUATA BOISS. et Gaillardot

C perennans basi suffrutescens tota mdumento brevi cnspulo  
viscidulo ad nervum medium et margines fohoram parcè ara-  
neoso obsita cauhas abbreviate ascendentibus parcdtaraneoso  
obsita caulibus abbreviate ascendentibus parc6 ramosis, **folu**^  
oblongo-lanceolalis acutis margine smuato-repandis subundulatis  
supremis hneanbus, capitulis majusculis, involucris phjlhs lanceo-  
latis acummatis rubellis dorso papilloso-viscidis, ligulis flavis in-  
volucro plùs dupM -longionbus, achenus extenonbus incurvis  
subinflali3 dorso muticis vel sparsim muricatis apice in cornu  
breve saepè attenuatis involucrum non superantibus, intermediis  
subtnquetns utnnqaé angustissim6 aldtis, intimis curvatis cylin-  
dncif dorso rugoso-tuberculalis

Hab. in *Synd* circà *Saida* cl Gaillardot, propè *Byzantium*  
cl Noe.

Capitula magnitudims *C ofikinalis* Habitu alfinis *C manhmat*  
Guss qns differt folus integris seminumque fabricfl

#### CALENDULA ALGERIENSIS BOISS et Reut

C annua virens breviter et cnspulè hirta caulibus ascendentis  
bus ramosis, foliis inferioribus oblongo-spathulalis obtusis basi  
attenuatis integris vel obsoletè undulato-repandis supenonbus p  
basi snbamplexicauli lineanbus aculis, involucris phjllis lanceolalw  
acuminalis papillo^is anguslè marginatis, ligulib anranliacis vol  
croceis mvolucrn plùs dnpld longionbus, scminibus oxlcnonbus

subtriquelrib basi valdfc curvatis dorso longi cristate jpicc in cornu tnqaclrum merino apicc Iruncatum abeuntibus invohicro subduplO longionbus, inLormedus Inflato-cymbifonmbus subro-  
lundis, mUmis annulanbus planiuscuhs ad dorsi transverse rugoso-  
luberculali utrumque latus angustè membranaceis

Hab m arvis et cultis circà *Algenam* et *Oran* frequens (Boiss et Real)

Capitula pau!6 minora cis *C. offianahs* Dm̄ habuimas pro *C fulgidd* Rafin. cujus tamen specimina differunt folus magis den-  
taLis supenonbus latifis amplexicaulibus, seminibus cxtenonbus pollicem et ultrà ncc 5-7 hneas longis Capitula in *C fnlgtda* praetereâ majora uunt ca *C margmatm* aequantia

CALENDULA REPANDA BOISS et Noe

G aooift, caule gracili angulato erecto pauld suprâ basin dichotomy ramoso sub lente parc6 puberulo, folus ad collum congests lanceolatis ulnnqu6 attenuatis acutis repando-denticulatis donti-  
cuhs nigns, cauhnis minonbus sessilibus summis angustd linea-  
nbus acutissimis mtegn̄s d̄mnibus tenens utrflque facie glabres-  
centibus vel sparsissunē papillosis margine brevissiraè pubescenti-  
lanatis, peduncuhs gracilhmis elongatis rectis, capituhs parvis, involucri phyllis lanceoiato-hneanbus acummatis cihatis, Ugulis involucro non longionbus, seminibus omnibus circulanter mcur-  
vis extenonbus utnnqui membranâ latS plan a dentate margmatis dorso unisenahter muncatis laterc in tenon acutè cannatis apice in rostrum membranaceum dentatum planum curvalione basi seminis contiguum abeuntibus, Intermediis cymbiformiter mflatis subrotundis dorso obscurd tuberculatis velutinis, intimis minimis annulanbus transversè costatis

**Hab in cultis \$To\$Motonmera Mesopotamia til Noe April 1851**

Planta ex specimmibus rneis semi pedal is, folia radicalia bipol-  
hcana 3-4 hneas lata, capitula ilhs *C graahs* minora, semina oxtenora cum membranfi diametro 2 hneas aut pauld ampliùs lata. AffBnis *C graafo* et *P&rsi&s* differt folus angustis repandis pcduncuhs gracillimis^ Ugulis involucrum non superantibus Prior insuper achcnus omnibas subconformibus oxtcnoribu<sup>1</sup>\* nunquam ulnnquç raembranft horizon tali rlonali^, posterior indiimento la-

unguoso caubub ramjsque abbreviate, tmemibus cterionbus angusliùs marginalo-denlatis dor-o biserulim muncaLis distinguantur

CALENDULA MICRANTIA DOISS el Noe

C annua a collo ssBpiùs multicaulis, caulibus simpheibus vol plùs minùsve subdicholomè ramosis erectis glabns stnatis, foliis lanceolato-lineanbus basi apiceque breviter attenuatis acutis mfenonbus breviter in petiolum attenualis remotè et obscurè denticulatis csetens sessilibus lutegnis omnibus uninerviis viridibu^ sub lente sparsim et minutissimè papillosis, peduncuhs terminalibus folium supremum non superantibus apicc incrassatis, capitulis minimis, involucn phylhs laoceolatis acumiatis vindibus obscure uninerviis margine scabndis, ligulis flavis involucro vi\ longionbus, seminibus omnibus semicirculanler mcurvis dorso bisenahter luberculatis mtenonbus vel omnibus immarginaUs exteriorum uno allerove s»pè raargimbus in membranam integram productis cucullato.

Hab in *Mesopotamia* propè *Kutl* C\ D<sup>r</sup> Noe legit in pascui^ Maio 1851

Planta bipollicans sabpè autom eliam 6-8 polhcans, folia 1-1/a pollices longa 1 1/i-2 1/j<sub>t</sub> lineas lata, capUula e mmimis fniclifera piso pauld majora depresso. Foliis angustis, capitulis minimus pnmâ facie ab omnibus alns dislinguilur; achenus vix dissimihbus affinis est *C grmh* ligulis involucrum superanlibus, iorma foliorum, seminibus annulanbus, etc , diversd.

## CYNAREÆ

CENTAUREA miNGEPS Boiss et Heldr (Sect *Phalolepts* )

C moDOcarpica, caule erecto angulato paulò suprâ basin compositè et corymbosè ramosissimo rarais slnctis cra^B papilh crispulis patulis obsito scabrido subviscido, foliis vindibus papillobo-soabndis radicalibus sub anthesi jam exsiccalis bipinnatisectis



**laurmsublungo-lmoaiibu!., caulujis s»C!.s]libusldlè lanceulalis pin-unlilobalis lohnb lineanbus summis oblongo-lauceolaUs Inlegris, capilahs folna suniims suftulUs. ovaLis, mvolucn squamissquarroso-palenlibus oinniuò bcanoso-membranaceis palhdis nilidis contro fu^cesceutibus oblongb cucullatis mtegn ssepè fissis in cuspidem seliferum atenuatis<sub>3</sub> floscuhs albidismarginalibus breviler radiantibus, achenus minutis adpressè hirtis sericeis pappo brevissimo Miperatis serie interiori triplo brevion**

Hab in summo jugo *Pelut* montis *Veluchi Ewytamw* alt 6000' \* I Samantam et Guicciardi Fl ineunte Augusto

PI an la pedal is, corymbus 40-20 cepbalus, capitula dupld saHcin majora eis *C splendens* propè quam collocanda (5sl et qua) pretereà difTert flosculis roseis, achcniorum pappo dimidiù brevion *el* folns cauhnis etiam dissectie

CENTAURE\ \MVEN\ BOISS et Dalaosa (Seel *Acrolophus*)

G glabra vindis, cauhsus crectis tenuiter virgalis angulaio-stnalis corymboso-paniculalis ad apicem usquù foliosis, fohis amlutu lanceolate in lacimas linean-filiformes clongalas callo brevissimo apiculatas pinualiseclis rachide mtegemma" lacinus vix In Lion, cauhsus et rameib abbrevialis lacimis paucionbus valde dbbrevalis snmmis integris, capiluhs mediocnbus ovatis, mvolucn glabn squamis brcviter ovatis 3-5 nerviib abeunlibus in dppendicem membranaceam palhdam ovatam oblusara adpressissimam cilialam inermem, **cilits.** appendicis latitudine subbre-vionbus terminali brevion, squamarum lntenorum appendice breviter lacero-dentalà, floscuhs roseis extenonbus breviler radiantibus, achenus minutis pallidis hirtuhs pappo eis brevion superatib, serie intimS brevissimd

Hab ID fissuns rupium ad colics prope *Çwsaream Cappadocuv* ad occasum sitas cl Balansa All 1250 mctr Fl Julio

Sesquipedalis, foliorum lacuna: termissimae 6-12 lineas longae, capitula magnitudims eorum *C cyum* se^ brevissimè radiantia Species pulchra el dislinctissima DUIII seclioma propnùs affinn

CENTAUREA CONNTHIACA Boiss. et Heldr. (Sect. *Acrorentton*)

*C. glabrescens* nana, caule credo angulato 1-3 cephalo, foliis radicalibus ambitu lanceolatis pinnatisectis segmentis minutis oblongo-lanceolatis mucronatis subfalcatis intermediis longioribus iterum pinnatisectis, caulibus abbreviate paucis pinnatisectis, capitulo ovato, involucri squamis glabris in appendicem breviter ovatam scariosam eis subliorem tenuiter ciliatam in spinam longam pallidam lenuem acerosam reflexam abeuntibus, squamis interioribus appendice luermi cuculla terminatis, flosculis palhdibus basi aurantiaco-striatis

Habit in jugo *Isthmi Connthiaci* inter *Kalamaki* et *Loutrah* et *Samanlam* et *Guicciardi*. Fl. Junio

Semipedalis. Folia radicalia 2-3 pollicana laciniis lineis unguibus 2-3 lineas longis. Capitula magnitudine eorum *C. eryngoidis*, spinarum involucri 8-9 lineas longas. In *gas* (*I enjngi Qidw*) a *Tims* omnes forms a nostris differunt, praeter laciniis foliorum multo majores squamis involucri non in veram appendicem latam membranaceam abeuntibus sed margine tantum ciliatis et in spinam plerumque validiorem attenuatis

CENTAUREA MEGALONIA BOISS. et Sartoni (Sect. *Crocodyhum*)

*C. pcrenoj*, radice crassa fusiformi, foliis radicalibus numerosis hinc expansis praeter petiolum longiusculum hirtulorum glabris in medio uno alterutroque indiviso oblongo obtuso csetens pinnatisectis elongatis segmentis remotiusculis ovato-oblongis obtusis vel acutiusculis basi vix decurrentibus intermediis multo minoribus triangulatis intermixtis Us terminalibus alius 2-3-pluribus majore ovato. In caule tantum 2 cephalo foliis subbreviter papilloso-birto, foliis caulibus paucis in laciniis vel lobos paucos partitis, summo lineam integram ad basin capituli, ocapitulo ovato glabro, involucri squamis adpressis ovatis abeuntibus in appendicem brevem Diagram breviter et pallide ciliatam spini basi valida fusciscenti ssep margine spinulosa erecta subarcuata involucri sublongior terminata, squamis infimis submuticis, interioribus appendice ovata se-

nosâ fus&S inernii supuratis, corolla palhdè earned, anlhens purpureis

Hab in rupibus mantmus insulee *Myconos* cl Sarlon Floret Tine Aprilis.

Folia cum peliolo semipedaha segmentis laterahbus 4-5 lineas longis. Caulis tripollicans, capitulum magnitudims *C eryngtoidis* Habitus *C carduncellte* et *raphamna* quæ involucris squamis brevissimè spinosis margme non ciliatis differunt, cbaractenbus accedens ad *C Urvilleet* capitulis dupld majonbus, squamis in spinam longiorem multd validiorem basi non nigram distinctissimam

Obs *C enophylla* Boiss et fial. exs e *Cappadoad* 1856 videtur tantum varietas involucris araneoso-lanati squamis ad basin spins copiosius spinulosis *C aciculans* Sibth \*

OnoronDON MYRIAGANTIIUM BOISS

O totum adpressfe araneoso-caescens, caule ramisque a basi ad apicem alalis, alis angustis lobulatis lobis in spinas tenues flavidas innumeras abeuntibus, folns lanceolalis pinnatipartitis rachide spinulosâ, lacinnis lanceolalis apice etssepibus margme longè spinosis supenonbus angustè lanceolatis^ capiLuhs 1-3 terminahbus breviusculci pedunculatis ovatis basi plamuscuhs, involucris phyllis glabnis lanceolatis longè attenuato-spinosis plains flosculos aequantibus purpurascensibus recurvisinferioribusbrevionibus

Hab. in regione media montis *Malevo Laconia* cl Prof. Orphanidfes Fl Graeca exs N° 55, in regione media *Parnassi* inter *Rachova* et *Gourna* Heldreich, N° 3203

Planta 1 \*/i-2 pedalis folns profundè sectis cauleque spinosissimis *Carduum carhnoidem* Gou quodammodo referens Hoc pnus pro formS involucris elongatis *C Illynci h.=elongah* Lam habueram sed ab eo 1 acinus foliorum profundionbus multb angustioribus, alls caulis spinosissimis et involucris squamis elongatis valdè curvato-reflexis sat distioctum videtur *O heteracanthum* caule quoque alato-spinosissimo donatum differt folns minus profundè dissectis involucris squamis multd magis angustatis

ONOPORDON PAFUVASSICUM BOISS et Heldr

On parcè el adpressè araneosum, caule apice longiusculè et

corymbose ramoso 2-4 cephalo ramisque angulè alatis alis lobulatis breviter spinulosis, folus oblongis obtusè sinuato-lobatis lobis latis brevibus breviter spinulosis, radicaibus ovato-oblongis basi vix attenuatis cauhs oblongis, capitulis ovatis basi planmscuhs, uivolucris araneoso-lanatis phyllis flosculis brevionibus lanceolate subcannatis brevissimè spinosis extenonibus reflexis

*O. Argolicum* Heldr Fl Graeca exs. N<sup>o</sup> 666, non Boiss. Diagn

Hab ID Parnassi regione abietina\*prope\**Gourna* et *Tnpia Spilea* cl. Samantam et Guicciardi Fl Jul et Aug.

Folia radica 6 pollices longa 3 lata, cauhs mfenora longiora, capitula magtudims eorum *O acanthm* cm inter omnes folus parùm profundè lobatis affine est sed a quo spins foliorum et caul is muHd mmoribus, alis angustissunis Dec latis, Involucn squamis multò brevius spinosis sat differt. *O. Argolicum* involucris araneoso-lanatis quoque donatum est planta folus profundè pin-natipartitis alnsque notis diversa

KENTROPHYLLUH ALEXANDRINUM BOISS. et Heldr (Sect *Tham-macantha*)

K. totum pallidè virens pilis cnsulis alns brevissimis nscidulis obsitum, caule albido supernè patulè et divancatim corymboso, folus mfenoribus lanceolatis basi attenuatis ultrà mediam pinna-tipartitis lacinus triangulanbus spinosis, supenonbus e basi latiorl attenuatis subrecurvis pmnatilobatis acerosis lacinus angustis spinosis omnibus conaceis elevatim-nervosis, peduncuhs capitulo paucifloro sublongionibus, involucn phyllis extenonibus folus summis siinilibus patulo-recurvis canahculatis flores superantibus utnnqu6 basi 2-3 lobatis denticulatisque, intenoribus lanceolatis spinosis Integemmis breviter papilloso-tuberculatis, flosculis albido-ceerulescentibus basi nigro-stnatis, antherarum tubo mgri-cantij achenus omnibus paleaceis paleis ab extenonibus hnean-spathulatis ad intiinas lanceolatas seDsim elongatis

Hab. prope *Alexandnam* iEgypti cl. Samaritaoi. Floret fine Man

Habitu *K gliiumm* referens sed involucn phylla extenon longiora et ab eo et affimbus praeter colorem flosculorum serie intima palearnm alns longion distinctissimum et prope *K Mareohcum* in-

volucn phyllis Inlenoribus oblusis cilia Lo-lacens distinelum collocandum

COUSINU C/ESAREA Boiss et Balansa

G perennis ramosissima, caule erecto ramisque albidis paret araneosis, foliis radicalibus caulibus oblongo-lanceolatis breviter decurrentibus ad medium usque pinnatilobatis lobis ovatis breviter spinosis margine spinulosis, ramis oblongis margine spinoso-subdentatis summis capitula non aequantibus omnibus supra nervoso-reticulatis glabris subtus pallide arachnoideis, capitulis numerosis ad apicem ramulorum inflorescentiae corymbose brevissimorum solitariis ovatis multifloris basi truncalis, involucri phyllis parte arachnoideis virentibus hinc obtuse ciliatis integris ID spioam flavidam abeuntibus inflexis brevissimis reflexis, intermediis parte superioribus patentibus utrinque rectis scariosis flavidis lanceolatis subpungentibus flosculos subsequantibus, corollis flavidis, antherarum tubo purpureo

Hab in planitie prope *Cmariam Cappadocice* alt 4100 metr cl BalaDsa Floret fine Julii

Caules pedales et procumbentes, capitula pedunculo 6-7 lineas longo suffluta magnitudinis eorum *C hamosce* et *Hohenacken* quae foliis pinnatisectis, caule humili aliisque differunt notis *C brachyptera* DC habet folia pinnatisecta capitulaque dimidiata minora

GOUSINIA FOLIOSA Boiss et Balansa

G caule erecto albido parte araneoso humilo dichotome ramoso, foliis supra nitidis pallide virentibus subtus araneosis glabris nervoso-reticulatis radicalibus oblongis ID petiolum attenuatis caulibus ovato-oblongis breviter et late decurrentibus omnibus pinnatilobatis lobis brevibus ID spinas longiusculas abeuntibus ovatis, capitulis solitariis subsessilibus foliis summis oblongis eis sublongioribus bracteatis oblongis, involucri virentibus glabris phyllis lanceolatis spinosis subciliatis margine scariosis exlenibus paulo brevioribus interioribus scariosis omnibus erectis, corollis luteis, antheris pallide purpureis

Hab in regione montana baperion monlis *Asian dach Cappadoace* cl. Balansa

Planta 6-9 pollicaris, folia radica cum petiolo 5 polhces longa poUicem lata, caulina etiam lata Valde C *ramosissimw* DC. affinis HSBC tamen sat difierre videtur caule ramosion, folns caulmis angustionbus profundiusetlongiuisspinosQ-lobatis, lovolucn phylhs infenoribus brevissunè sponosis

COUSINIA CIHSIOIDES Boiss et Balansa.

G. pumila caulibus lanatis apice breviter et corymbosft ramosis ramisque ad apicem usquè foliosis, radice collo lanato, folus supra birsutis subtòs albo-lanatis pnnatisectis rachide latmsculà parc^ spinulosâ lacinnis lanceolatis in spinam tamen abeunUbus lotegns vel spinuhs 1-2 lateralibus auctis, **folus** summis lanceolato-hneanbus spinalosis capitula saept subffiquantriras, capituhb ovatis, involucri laxèlanati squamisangustG lanceolatis long6 subulatis cannatis prster lanam scabridulis iufcnoribus erecto-patulis pauld brevionbus csctcris erectis, corolla flavescenti, tubo antberatum roseo.

Hab ad *Berehetly Cappadma* alt 1500 metr cl. Balansa Floret Septembri.

Planta 6-9 pollicans, folia 4-5 polhces longa polhcem lata, capitula magmtudinis eorum C *serratuUndts* Boiss =*Ohv&rn* J et Sp Aflims C *çmptei* el Sp caule gracih, peduncuhh elongatis nudmscuhs j involucri phjlhs minùs tenuibus brevius acerosis et squarroso-subpalulis vald6 diverse

## CICHORACE^

LAMPSANA ALPINA> Boiss. et Balansa

L perenms pluncaulis, caulifius pumilis dichotomè et parcè ramosis ramisque patulè glanduloso-pilosis, folus radicaibus oumerosis cauhnisque infenonbus longè petiolatis lyratis, lobis lateralibus 2-6 oblongo-lanceolalis vel ovatis angulatis parvis ter-

minah multd raajon e basi subcordatd tnangulart-ovalo aculo acutmsculè dentato, folns caulims sapenonbus lanceolatis acuminatis denticulatis omnibus patulè glanduloso-hirtis, pedunculis nudis capitulo longionbus, involucn basi breviter calyculati Digri phylhs lanceolatis acutiusculis medio dorso glanduloso-pilosis caBterùm glabns, flonbus croceis involucro duplfl longionbus

Hab in regione alpinS montis *Asian dock Antitaun* in *Cappadocia* cl Balansa Floret Augusto ineunte

Planta 3-10 pollicans, radis praemorsa, folia radlcaha cum petiolo 5-6 polhcana lobo term in ah polhcem longo latoque Capitula magmtudmis eorum *L grandiflora* a quâ fohorum forms, caule humih oligocephalo, inilorescontid valdè glandulosâ differt. *L adenophora* differt radice annuâ, folns supenonbus multè lationbus, capituhis minonbus, etc.

SCORZONERA usiosPOM Boiss et>Balansa. (Sect *Laswspora*)

Sc pluncauhs, cauhs erectis elatis foliosis mferoè adpressit senceis supernè glabrescentibus longè thyrsiodeopamculatis, paniculB raum stnctis 1-3 floris ssep^ elongatis, folns glabrescentibus lanceolatis acuminatis basi atenuatis 5-7 nervus erectopatuhis rameis brevibus tnnervus angustissimis, capituhis longè pedunculatis abbreviate, involucn phylhs parcè velutims mferioribus tripld brevionbus tnangulan-lanceolatis acuminatis mucrone patenti-recurvo, interioribus lanceolato-Jjneanbus flosculis luteis pauld brevionbus, achenus densè et longè lanatis pappo ad apicem usquè plumoso denso eis aiquilongo superatis

Hab. in monte *Alidagh Cappadocice* prôpe *Cvsaream* cl. Balansa Fl. Julio.

Planta bipedalis, pamcula pedahs vel longior, folia inferiora 4-6 hneas longa. Gopilula flonfera 8 hneas circ. longa Achema cum pappo 8-9 hneas longa. Affinis *Sc Auchenanw* DC. cujus specimina juniora tantùm exstant sed quse differre videtur indumento adpressè velutino totms nlantaB, staturâ 5 polhcana, capituhis etiam peractd anthesi 4 iffieas tantùm longis

*Scorzonera* HISPANICA L var *brmfolia* Boiss et Balansa

Folia radica obovata vel oblongo-lanceolata tenuiter et longè acuminata, caulis angustissima, caules corymboso-ramosi 3-5 cephah capitulis longè pedunculatis.

*Scorzonera acuminata* Boiss et Balansa pi. Anat. exs. 1851.

**Habitat in monte Boulghasdagh Plmjgiceatt 1400 metr. cl. Balansa**

HIERACIUM BALANSJE BOISS (Sect *Piloselloidea*)

H. perenne radice praemorsa fibriferi, caule erecto elato foliato superne compositè corymboso-ramoso ramisque ciliis longis patulis obsitis e tuberculo ortis praetereque sub lente minutè stellato-puberulis, foliis eodem duplici indumento obsitis oblongo-lanceolatis integris inferioribus oblongis superioribus lanceolatis acatis, capitulis globosis breviter pedunculatis, involucri phyllis hinc subleucophseis setis longis albis eas ferè omnino occultantibus densè obsitis

Habitat in monte *Boulghas dagh Phrygiae* cl. Balansa. Medio Julio florere incipit.

Bipedale, folia inferiora 5-6 pollices longa pollicem lata, capitula magnitudinis eorum. *ET pilosella* Affine indumento longè et copiosè ciliato *H. macrotricho* et *H. setigera* o Tausch Ab utroque distinctum capitulis dupli majorebus, a priori Uerum caule non denudato, a posterioribus ciliis longissimis

## CAMPANULACEJE

CAMPANULA ARGÆA BOISS et Balansa (Sect *Sttcodon*.)

G. monocarpica radice fusiformi, caulis crassis foliosis setis patulis albis strogosis praetereque breviter tomentosis superne in paniculam longam strictam spiciformem abeuntibus, foliis paginè superioribus tuberculato-scabris breviter setosis inferioribus ciliatis-tomentosis, inferioribus oblongo-spathulatis in petiolum



lalum attenuate, caetens oblongis sessilibus breviter decurren-  
 bus oimbu') obtusiusculis margine undulato-deiilatis dentibus  
 minuLis ovalo-triangularibus erosulim racemis numerosis in axillis  
 superioribus solum axi sicutis folio floral] sublongioribus bre-  
 vissimae et crasse pedunculatis 3-7 floris fionibus sessilibus brae-  
 leatis profiler 1-2 inferiora sicutis remotiuscula capitato-congestis,  
 bracteis ovato-triangularibus integris calyce subbrevioribus brae-  
 leolis lanceolatis sinuosis, calycis adpressiusculis sinuosis la-  
 ciniis lanceolatis obtusiusculis margine subrevolutis rectis tubo  
 sicutaequilongis, corollae parvae violaceae extus densis tomentellis  
 cylindricae calyce duplo longioribus lobis tubo quadruplo brevioribus,  
 stylo incluso, capsula globosa basi dehiscenti.

Hab in fissuris montium regionis montanae superioris montis  
*Erga* Cappadoceae alt 4400 metr cl Balansa Fl Julio

Planta sesquipedalis, spica 12-15 pollicans, folia inferiora 3-4  
 pollices longa 9-12 hinc lata, corolla 5 hinc, capsula cum ca-  
 lyce 6 hinc longae. Habitus *Echin Italia*. Species distinctissima  
 ex affinitate *C. spicalce*

TASIONE HELDREICHNI Doi<sup>s</sup> et Orph

J biennis papilloso-hirta, foliis hinc undulatis, caulibus  
 simplicibus vel parvis ramosis superius nudis, bracteis lanceolatis  
 capitulo subsequilongis pinnatifidis margine incrassatis lobis utrin-  
 que 2-3-dis bracteisque apice anstatis, pedice calyce sublon-  
**gioribus**, calycis dentibus & tubulatis tubo triplo longioribus dimi-  
 diam corollam superantibus

*S. montana* Gussone Spicil. L

Hab in Macedonia in monte Korthiatt prope Thessalomm  
 Heldr ! Orph t

## JASMINES

JASMINUM SYRUCUM DOISS. et Gaillardo L (Sect *Trifoliata*)

J glabra non scandens ramis angulatis, foliis alternis infolio-

lads foholis laleralibus ellipLico-ujlongis term mail majori obo-  
vaLo-oblongo<sub>3</sub> folns mfiniis nonnulhs simphcibus ovatis, calycis  
tubo brevissimo apice Iruncato in dentes angustè bueares a basi  
aeqmlatos tubum corollas suba&quantas abruptè abeunti, corolla?  
lutes lacinns elongatis.

Hab. in *Caetesynd* inter *Libanum* et *Anttlibanum* cl. Gaillardot.  
Floret Maio.

Frutex simihs *J fruhcantt* a quo ex specimine UDICO mihi obvio  
differt foholis pauld majonbus, flonbus majoribns, calycis denti-  
bus dupld Iongionbus2 '/^lmeas longis non utin *J fruticanti* basi  
dilatatis sed ex ipsi basi aequilatis, corollas lacinns longionbus  
angustionbus

## GENTIANE^E

ERYmRvEA RHODENSIS BOISS et Reut

E. annua glabra, caule fohoso ad angulos angustè alatos sca-  
bnusculo supemē breviter ramoso densfi corymboso, fohis tn-  
nervns radicalibus oblongo-lanceolatis in petiolum brevem an-  
gustatis caulims pauld angustionbus oblongo-hneanbus stnctis  
omnibus acutmsculis, bracteis angustè lineanbus acutis scabndis  
calycem aequantibus, calycis dentibus subulatis cannatis tubo 5  
plicato-cannato dupl6 longionbus medio tubo corollino subbre-  
vioribus, corollae \*roseae lacinns tubo parùm brevionbus acutis,  
capsule angustissimā cyhndncâ

Hab in insulA *Rhodo* ubi legit cl. Cadet de Fontenay Fi Junto.

Affirm habitu et folns *Er. grandiflarce* Bivona a quâ corollse la-  
cinns longioribus acutissimis, anthens longionbus, etc , differt

## ASCLEPIADE^

VINATOXICUM UNDULATUM **Heldr**

V mullicaule sub lente secùs caudem et peliolos parcè et ad-  
pressè puberiilum, radice iibnferS, cauibus erectis foliosis tlexuo-

sib simplicibus vel parce ramosis, loins breviter petiolatis e basi iri incaia vel subcordatâ ovatis vel oblongis aUeuuaio-acuminaus margine grosse undulatis subtis ad costam mediam puberal is caeterum glabns, fasciculis umbelhformibus 3-6 flons axillanbus pedunculatis folns floralibus brevionbus, pedicelhs flon subsequi-longis pedicelhsqae hirtulis, calycis corolla tnpld brevions lacimis angustè lanceolatis acutis, corollae flavida extis glabrs lacinnis elhptico-lineanbas obtusis iDtis pihs longis cnspuhs sparsim hispidnhs, coronee stamineae lobis crassmsculis gymnostegio paulo longionbus, stigmate depresso

Hab in saxosis montis *Velucht Eurytânice* loco *Qmcelha* dicto alt 5500' cl Samanlam et Guicciardi Fl. Augusto

Valdè affine habitu et ctiarctenbus *V nivah* a quo milu tao-tum foliis loDgius petiolatis margine subundulatis et corolla inlû^ parc^ hispiduld differre videtur et forsan hujus forma

## CONVOLVULACE^

CONVOLVULUS DAMASCENUS BOISS et Gaillardot (Sect *Strophocaulos*)

*C* perenms mullicaulis cauibus elongatis procumbentibus retrorsim hirtis, foliis utnquè adpressè hirtis canescentibus vel subargyreis cordalo-oblongis Inferioribus longè petiolatis ovatis obtusè crenatis obtusis vel retusis supenonbus breviter pedunculatis acutè dentato-lobatis, peduncuhs axillaribus folia axillana multo superantibus racemosè 2-4 flons ad pedicellorum ortum bracteis setaceis obsitis, pedicellis calyce demum 2-3-pl6 longionbus, sepahs ovatis obtusissimis margine membranaceis dorso hirlis, corolW purpureo calyce subtnplô longion extis ad plica> hirtid

Hab in cultis submontans circi *Damaseum* cl Gaillardot

Caulis 2-4 pedales grosse filiformes Habitus *C alttuEoidts* qui differt flonbus dupl(} majonbus, sepahs oblongis mucronulatis *C Pulcvstarns* colore florum alnsque nolis longius distar

## UORRAGINEiE

NONNEA STENOSOLEN Bows et Balansa (Sect *Cryptanthera*.)

N perennis tota setis albis basi tuberculatis secùs caules brevibus retrorsis stngosa praterS sub lente minute hirtula., caulibus diffusis ramosis brevibus, folus oblongo-lanceolatis acutis. florahbus longè stngoso-ciliatis calyce sublongionbus angustè lineanbus, flonbus breviter pedicellatis, calyce prater indumentum brevius setis longis albis patulis obsito flonfero ovato dentibus ovatis densè et breviter albocihatis tubo quadrupld brevionbus fructifero subwflato, corolla rubra" angustd tubulosd calyce dimidii parte longion rotundatim et brevissime lobatfl, fllamenlis sub medii corolld msertis, fornicibus ad fasciculos densos pilorum ad basin limbi sitoram eo dimidid breviorum roductis, nucuha annulo basilan plicato afixis mucrone horizontali brevi terminatis rugis obtusis tubercuhformibus percursis et praeterea tuberculis albis minonbus obsitis

**Hab. ad basin montis *Karamas dagh Cappadocus propk Casaream***  
cl Balansa Fl. Julio

Gaules semipedales, folia 3-4 tineas lata, racemi demùm tn-pollicarfis Afflnis flonbus mmutis tubulosis et habitu *N Persicce* quai differt calycis minùs singosi lacinnis lanceolatis acutis, pilis formcum brevissunis ad filamentorum insertionem nee suprâ antheras sitis, nuculis acutè rugosis

ALKANNA GAFFADOGIGA BOISS et Balansa

A. tota setis albis longis patulis molliusculis hispida inter eas breviter pubero-viscidula, caule erecto jam ferè a basi pamculato-ramoso, folus radicaibus lanceolatis basi longè attenuate acutiusculis, floralibus e basi sessih lmean-lanceolatis calyces paulù excedentibus, racemis fructifens abhreviatis, calyce flonfero oblongo prater setulas breves densè glanduloso hirto, fructifero nutanti globoso lacmus lanceolatis aequilongis superato, corolla?

vioJacesB tubo calyce dupld longion, limbi lobis parvis, nuculis incurvis rcticulato-rugosis gnseis rostratis areolA basilan

Hab. in monte *Alidagh Cappadocue* propè *desaream* cl Balansa Fl. Julio

Planta 8-9 polhcans, folia radicalia et surculorum stcnlium 3-4 pollicana 4-5 lineas lata Corolla 5 liueas longa. Affinis formã et sculpture nuclearum *A macrocarpw* DC et *strtgosce* Boiss Iliã differt folns florahbus ovato-lanceolatis, corollie tubo calycem parùm excedenti, nuculis duplò majonbus, ilia mdumento stngoso, corollas breviùs exserts limbo amphon, nuculae areolfl non basilan distinguitur

PARACARYU GAPPADOCICUM BOISS et Balansa (Sect *Euparacaryum*)

P caule crocto elato crasso pilis albis patulis setoso-scabndo supernt pamculato-ramosissimo, folus eisdem pilis basi tuberculatis adpressiuscuhs velutino-scabndis, Infenonbus oblongis in petiolum attenuatis supenonbus e basi sessih rotundatd oblongo-lanceolatis acutiuscuhs, flonbus minimis in racemos demùm laxmsculos dispositis pedicelhs eis pauld brevionbus suffultis, calycis adpressiusculé hirsuli lacimis ovatispost anthesm vald^ auctis, corollcB violaceaa tubo calycem non excedenti lobis erecto-patulis brevissimis, DUCUIIS ovatis concavmscuhs disco glochidiato margine recto subinflato denticulato denticuhs triangulanbus minuté glochidiatis, stylo nuculas brevissimè excedenti

**Hab in monte *Altdagh Cappadociw* propè *Ccesaream* alt 1400 melr cl Balansa. Fl Julio.**

Planta 2-2 7s pedalis, racemi fructifen semipedales Flores magmtudims eorum *P. micranthi*, Kuculse 3 hneas circiter longs, Species collocanda propè *P Canense* cauhs brevibus diffusis, flonbus majonbuSj nuculis margin©subintegns diversum *P. Persicum* et *hirsutum* prster flores majores nuculis margine mtroflexo urceolatis longms differunt

PARAGARYUM STENOLOPHUM BOISS et Balansa (Sect *Euparacaryum*)

P caule credo elalo pilis inferne' palulis albis hirsulo super nõ

paniculato-ramoso, foliis eodem indumento basi tuberculato molliusculo obsitis inferioribus oblongo-lanceolatis in petiolum attenuatis superioribus sessilibus lineari-lanceolatis acutis, floribus dimidiatis in racemos laxiusculos dispositis pedicellis eis aequilongis suffultis, calycis adpressi hirti lacinus oblongis acutiusculis, corollae violaceae tubo calyci sequilongo, limbi lobis minimis, duobus ovatis disco laevibus margine recto angustissimo subotegro, stylo nuculas partem excedenti

Hab. in collibus ad occasum urbis *Comanae* sitis in *Capadocia* alt. 1250 metr. Fl. Julio

Statura, foliis, floribus minimis, indumento etsi mollius sit praecedenti speciei affinis, ab ea differt pedicellis paulo longioribus, calyce fructifero partim aucto et praesertim duobus ovibus minoribus margine dimidiato angustissimo integro nee dentato circumscissis. AD nihilominus ejus varietas?

PARACARYUM GALYGINUM BOISS. et Balansa. (Sect. *Maitiastrum*)

P totum pilis adpressis basi tuberculatis asperulom, caulibus erectis jam infra medium paniculato-ramosis, foliis oblongis in petiolum attenuatis, ramis hinc inde, floribus in racemos demum laxos dispositis, pedicellis flore fructuque brevioribus, calycis adpressi hirti lacinis lanceolato-linearibus acutis post anthesin auctis pedicello longioribus, corollae violaceo-rubellae tubo calyce paulo longioribus lobis ovatis, stylo exserto, cuculis ovalibus planis disco glochidiatis membrane marginali plane integro marginem minutè denticulato-glochidiato.

Hab. ad basin montis *Argem* et in collibus circa *Casaream Capadociae* alt. 1200 metr. cl. Balansa.

Pedale vel sesquipedale, racemi fructiferi 3-5 pedicellares, calycis lacina fructifera 3 lineas longa, corolla 4 lineas longa, nuculae 4-5 lineas longa stylo longo superata. Affine *P. corymbiformi* multifloro corymboso, pedicellis calyce longioribus et floribus majoribus distincto. AP *Aucheri leptophylloides* alias notae duobus longioribus, calycis lacinus post anthesin valde elongatis distinctum.

PAAACAHYUM LONGIPES DOIS et Balansa (Sect *Malliastmm* j

P totum pihs adpressmscuhs e tuberculo ortis hirsulum scabridum, caulc erecto supernè paniculato-ramoso, foliis lanceolato-hneanbus mfenonbus obtusis in petiolum attenuatis, supenonbus sessilibus angustis acutis, racemis demuŕm laxissimis flexuosis, pcdicelhs fructifens arcuatis fructu dupld longionbus, calycis lacinns lineanbus obtusis adpressè hirsutis, corollae intensfe violaceae tubo mcluso limbi lobis breviter ovatis, stylo mcluso, nuculis ovatis disco seeds lineam mediam glochidiatis tnargine erosulo-denticulatis

**Hab in monte Ahdagh Cappadocics propè Cmaream alt 4400 metr Floret Julio**

Bipedale, cauhs apice bifidus, racemi fructifen semipedales longioresque, pedicelli fructifen 6-9 lineas longi, corolla 3 tineas longa A *P. calyano* differt pedicellis elongatis, corollsb tubo mcluso et hoc characlere distinguitur a *P. angustifoho* (Matud DC ) LQhi ex descnptione taDtum Doto et in quo csterum stylus corollam longè superat

## SCROPHULAEIACEIÈ

CELSIA. GORONOPIFOLIA BOISS et Balansa (Sect *Nefflea* )

C perenms glabra caudice indurato pluncipiti collo squamato, (ohis radica^iHs congeslia csspitosis mfimisque caulinis lmeanbpalhulatis in petiolum longè attenuatis acutè inciso-dentatis, cauhs basi excepta nudis simpUcibus ranùs parcè ramosis viscidulis in racemos longos Jaxos abeuntibas, pedunculis ngidis filiformibus erecto-patulis ssp& subarc%atis minutè glandulosis capsulâ 2-3-pIò longionbus, bracteolis Unean-setaceis brevissimis ad pedunculorum basin 3 sepahs oblongo-lineanbus acutiuscuhs capsulâ Iripl6 brcvionbus, corolla luted calyce 4-5-pld longion, filamentis omnibus hasi violaceo apicc flavido-Ianatis, an-

tliens omnibus reniformibus, capsulâ oblongâ apicè attenuate breviter mucronata

Hab in regione montana\* jugi *Mourad Dagh Phrygiæ* cl Balansa Fl Junio

Caules com racemo fructifero simplicipedes longiorve pedales, folia cum petiolo sesquipollicaria 2 lineas lata dentibus utrinque 5-8 ascendentibus ea *Menminlea*⁷, referenda. Pedunculi fructiferi pollicares, corolla diametro 7 lineas lata, capsula 2 V, lineas longa Affinis *C. Pemphig* k. M. quæ differt folia pubescentibus bipinnatifidis, caulibus densius glandulosis, pedunculis numerosibus

VERBASCUM SAMARITANII Heldr (Sect. *Thapsus*)

V. totum indumento stellato tenui in pagina superiorum subdetersiti obsitum, folia inferioribus oblongis acutiusculis crenatis in petiolum attenuatis, superioribus e basi sessilibus ovatis acuminatis, caule simpliciter in racemum simplicem densum abeunti, floribus fasciculatis pedicellis tomentosis calyci æquilongis vel longioribus, bracteis linearis-setaceis, calycis tomentosi lacinis breviter lanceolatis, corolla calycis lacinis sextuplo longioribus extus lomentosis, filamentis violaceo-barbatis longioribus apice nudis, antheris duabus majoribus obscure decurrentibus.

Hab. in *Samaria* *Vehicki* (*Tymphresli*) *Eurylem* / *EaH 5000*, Joco *Saitam* dicto cl Samaritam et Gucciardi Herb. Norm. Grac. N°745

Planta 1 V, -2 pedalis, folia radicalia cum petiolo 8-9 pollices longa. Corolla diametro 7 lineas circ. lata. Affinis *V. eptasantkno* et *fntido* ab eis differt statura minor, <sup>TMTM</sup> iu fœrtimiriâ minoribus, antheris vix decurrentibus

VERBASCUM GUICCIARDII Heldr (Sect. *Thapsus*)

V. caule elato simpliciter rubro glabro nitido in racemum longum laxissimum abeunti, folia indumento tenui stellato in pagina superiorum ferè evanido obsitis inferioribus oblongis basi breviter attenuatis petiolatis repando-crenatis superioribus sessilibus, flo-



nbus breviter pedicellatis fasciculos glomenformes dissilos formantibus, bracteis lanceolatis calyces aequanlibus, calycis stellato-tomentosi lac in us triangularibus aculis, corolla\* ampia extis lomentelli, filamentis ad apicem ferè usquè albobarbatis anlhens finis decurrentibus, capsulae glabrata" pisiformi mucronulatd calyce sublongion.

Hab in dumosis ad radices *Parnasst* loco *Pagera* dicto alt. 2000 cl Gmccardi Heldr. Herb Norm. N° 696

Folia infera petiolo non computato 4-5 pollices longa, racemus saepè bipedalis Corolla 1/2 lineas diametro lata. Capsula magnitudinis pisi Affine V *Prusiano* quod sat differre videtur folis amphorjjus, indumento glanduloso-viscido parvis superioribus plantis filamentis majoribus apice longius denudatis, calycis laciniis linearibus lanceolatis, capsulae majoris ovatae

VERBASCUM GAILLARDOTI BOISS (Sect. *Lychmidea*)

V lotum tomento tenui griseo fulvo obsitum, foliis oblongo-lanceolatis obtusè crenulatis infimis in petiolum attenuatis obtusis, superioribus sessilibus basi rotundatis non decurrentibus integris acutiusculis, floralibus abbreviatis e basi latioribus ovato-triangularibus aculis, caulibus pyramidato-ramosis ramis tenuibus tergis elongatis laxifloris, floribus minimis 3-0 m glomerulos dissitos dispositis, pedicello calyci aequilongio tandem subelongato, calycis teniter rugoso-tomentosi dentibus lanceolatis acutis tubo longioribus, corolla flavida tomentella calyce triplo longiori, filamentis inferè parvis albo-barbatis, antheris omnibus reniformibus, capsula .

Hab inter *Dimar* et *Djedaide Antihbam* cl D<sup>r</sup> Gaillardot. Floret ineunte Junio-

Planta 2-pedalis, folia infera 4-6 pollices longa 1-1/2 lata, panicula sesquipedalis ramis pollicem dimidium et amplius longis, calyx 1/2 lineas longus, corolla diametro 1/2 lineas lata. Ex affinitate V *Heldreichi* et *slenocarp*i ut ea floribus minoribus ad *Letanlha* accedens

VERUASCUM ADENOCAULON BOISS et Balansa (Sect. *Leiantha*)

V caule basi breviter folioso ut et folia arachnoideo-lanceolato su-

peroe paniculato-ramosissimo «t tota inflorescentia breviter glanduloso-piloso, folns radicalibus rosulalis ovatis obtusissimis breviter peUolatis obsolete repando-crenatis, caulmis paucis conferlis sessihbus obloagis acutmsculis, racemis longẽ virgatis laxis, flonbus solitanis pedunculo calyce brevion suffultis, bracteis hneanbas pedunculo aBqmlongis, calycis lacimis hneanbus acutmsculis capsuia glabrũ oblonga brevuer mucronatã dimidid brevionbus

Hab in colhbus propẽ *Bereketly Cappadocw* sitis cl fialansa

Sesqmpedale, cauhs jam pauld suprã basin ramosus, ramis a basi racemosis 6-8 polhces longis. Folia radicaha cum petiolo 2-3 polhces longa Affine *V ruhncauh* quod differt indumeDto panoso, caule longõ fohoso, calycis lacinns ovatis, etc

VERBASCUM INSIGNE BOISS. et Balansa (Sect. *Blattanoidea* )

V radice collo petiohsque fohorum radicalium albolanatis, caule tereti elato simplici vel parcẽ ramoso in racemum longẽ virgatum abeunti, folns radicalibus oblongis acutmsculis in petiolum attenuatis obtusẽ crenalis, caulinis sessihbus diminutis omnibus laxẽ albo-lanatis, flonbus soli tarns laxẽ racemosis pedunculo calyce subbrevion suffultis, bracteis ut et peduncuh racemique axis glanduloso-hirtis lmeanbus pedunculo loDgionbus, calycis densẽ glanduloso-hirti nigricantis lacinns lmeanbus acutis, corolla purpureS glabrd, filamentis ad apicem usquẽ violaceo-barbatis, anthers omnibus remformibus, peduncuhs fructifens Incrassatis stnctis, capsula tomentellfl ovato-oblongd mucroDaUl lacinus calycem vix longion

Hab in collibus lapidosis propẽ *Karahissar Cappadocus* cl Balansa Fl fineJumi

Folia radicaha cum petiolo 4-6 polhces longa ^licem vel sesquipolhem lata Racemus fruclifer 1-2 pedes rongus Corolla (e sicco) magnitudinis ess *V blattanw*

LINARIA PYCNOPHYLLA. Boiss. et Balansa. (Sect *Grandcs* )

**L**innæonic *rnn* |e> ffluhr/i val/IA fplinsn SIIDfirnẽ jãsMqia^Tm ra\_ ~~Linnaeus~~ *Halansa IRnc.ifrr/ln/tes* \ moso subcorymboso, folns glabns pallide virenUbus caulinis mfenoribus oblongo-lanceolatis m petiolum brevem attenuatis, inter-

Plant orient novar Ser sec N° 6

|1

medns et bupcnonbus c basi sessili ovato-oblongis acuminate 5-7 nervus ramcis dimmutis oblongo-lanceolatis acuminatis, flonbus brevissimò pedicellatis in racemos densos confertis, bracteis lanceolalis pcdicello longionbus, calycis pilis cnspuhs tomentelli lacinus ova Us obtusis, corollae lute© calcare recto cor oils ipsd brevion, palato hirto, capsuli subrotundft, semimbus discoideis Isevibus

Ilab in regione alpina montis *Asian dach Cappadoaw* cl *Balansa* Fl Augusto.

Pedalis, lolia caulina 9-12 lineas lata sesquipollicana, corolla cum calcaic sex lineas longa Habitu et folns latis affini *L fastigiata* cp quac differt racemis brevionbus, calcare tenuion arcuato, calycis glabernmi lacinus lanceolate acutis

Obs *L calyuna* Boiss et Bal in pi Cappad exs accuralion iubjecta cxamini videtur lantum *L grandiflorte* Desl forma folns omnibus ovato-oblongis lationbus basi ssepfe subcordaUs, calycis lacinus dilatatis capsulam valdc superantibus

**LINARIA DAMASCENA.** BOLSS et Gaillardot (Sect *Linana&trum Grandes*)

*L pcrennis* glabra glaucescens pluncauhs caulibus ascendentibus densfe foliosis simplicibus in racemum per anthesm densiusculum dein elongatumabcuntibus, folns alterois lanceolatis aculks, pedicelhs calyce dimidio brevionbus basi bracted oblongo-hnean eis longion suffultis, calycis parcfè et bre\iter glanduloso-hirti lacinus oblongo-elhpticis acutis, corolla\* flavaa calcare aculo ei subaequilongo, palato concolon, capsuU rotundi calycims laciniib subbrevion, semimbus discoideis laevibus

Hab in collibus *Djebel el Assouad* ad meridiem *Damascet* si Us cl Gaillardot

Aflinis charactenbus et florum magmtudine *L vulgan* quas differt folns longionbus anguslionbus<sub>3</sub> corollae palato discolon, capsull ovaU sepala angustiora longc superanti Locus «*Damascus* 9 a cl Bentham sub *L Biebersteiniana* BoiSS citatus ad nostram speciem probabihter spectat, sed planta cl Bessen longè diktat racemis dcnssissimis brevibus, scpalis angustls, corolla dimidirt minori

VERONICA CINEREA BOISS et Bal (Sect *Chamaedrys struttiflora*)

V o basi suffruticosi multicaulis ramis erectis vel ascendentibus pumihis, foliis illa tota planta adpressissimè canescenti-cinereis m-fenonbui, hneari-oblongis utroque obtusissimè 2-4. denticulatis supenonbus axillanbusque margine convolutis lineari-cyhdricis, racerais ex axillis supremis breviter pedunculatis in racemum laxiusculum abeuntibus, bracteis oblongo-lineanbus obtusis, pedicellis strictis bractej longioribus, calycis adpressè cum lacinis quatuor oblongis obtusis capsula subbrevioribus, corolla rubella, capsula minutè brevissimè hirtula triangulari-obcordata transversè latiori

Hab in regione subalpina montis *Katamas dag Cappadociae* propè *Cesaream* Floret fine Junii cl Balansa

Caulis 3-5 pollicares, folia 3-4 lineas longa lineam aut paulo amplius lata, capsula 1 1/4 lineam longa Valde affinis *V. polifolia* Benth et forsitan hujus varietas *V. polifolia* differre videtur indumento longioribus partibus superioribus pilositate patulo viscidulo, foliis oblongis et praesertim pedicellis capsulae et bractea brevioribus neque sulcatis longioribus

VERONICA MICROTHECA BOISS et Balansa (Sect *Omphalospoia*)

V. annua breviter et conspurcè hirtula caule e basi oppositè ramoso, foliis caulis oblongis obtusis obtusè denticulatis in petiolum breviter attenuate, racerais terminalibus longis laxiusculis, bracteis elliptico-obovatis acutis strobilicis pedicello demum incurvo-patulo capsula brevioribus, calycis partibus hirtula lacinis lanceolatis acutis, corolla rubella calyce brevioribus, capsula calyce subbrevioribus glandulosis-hirtis ad 1/4 longitudinis bilobis lobis obtusis, stylo lobis dimidiò brevioribus, seminibus minimis oblongis cymbiformibus rugulosis

Hab in arvis otiosis propè *Ouchak Phrygiae* alt 010 metr cl Balansa Fl Maio

Species characteribus et habitu nimium affinis *V. campylopoda* a qua tamen differre videtur bracteis minoribus, capsulae fere-

dimidiis lobis multifidis divaricatis et praesertim semibus  
tripliciter minoribus lineam dimidiam longis

LESQUELLEUX SYRIACA Boiss,

Hujus plantae specimina fructifera legit cl. Dalman in Cilicia  
in rupestribus inter *Mersina* et pagum *Ala dagh* et descriptionem  
Diagn. pi. Or. Xtl, p. 44, characteres fructus addere possum  
Capsula recta oblongo-hinc acuta triax compressa utroque mar-  
gine ciliata utraque facie sulcata calyce tubuloso inclusis bi-  
locularibus natis loculis (demum a basi ad apicem productis?)  
dehiscens calycemque rumpens. Semina numerosissima scobi-  
formi-subtetraemula margine cellularum angusto

Capsula 6-7 lineis longa paulo ultra lineam lata



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 N« Z, p. 38, CinerHK, leg *Cynarw*  
 W° 3, p 141, *Gemeraceae*, leg *Gmmacea*  
 N" 4, p 149, lin. 9, *Ouehak*, leg *Ouchak*  
 N° 4, p 93, *Vicia hypoleuca* Bow. el HoS, leg *Boas et Kulschi*/  
 N° 4, p. 98, hn 10 *P rapettn*, leg *rupestn*  
 N« 6, p. III, *Finafoxwum aodulatum*, leg *Fincehutrum*