

Notulae nomenclaturales 46–59

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Abstract: The former *Saxifraga stellaris* is treated as a member of the genus *Micranthes*; within *M. stellaris* the endemic race of the eastern Central Alps should be separated as subsp. *prolifera*, comb. nov. Generic rearrangement of the *Clinopodium* affinity has caused the amalgamation of *Acinos* with *Ziziphora*; *Z. granatensis* subsp. *alpina*, comb. nov., is proposed for the temperate orophyte so far known as *Clinopodium alpinum* subsp. *alpinum* (or *Acinos alpinus* subsp. *alpinus*). The correct spelling, authorship, and place of valid publication is given for *Scrophularia juratensis* and *Androsace wulfeniana*; the latter name, as well as *Micranthes stellaris* subsp. *prolifera*, is lectotypified and supplemented by an epitype. The original application of the Linnaean *Arenaria multicaulis* is again discussed and confirmed by lectotypification; it is advocated to apply this name to the tetraploid cytotype often known as *A. moehringioides* within the *A. ciliata* complex. *Pilosella tubulata* is shown as the correct name for the aggregate species formerly denominated *Hieracium spurium* or *H. cymiflorum*, and *Ervilia monanthos* for the species known as *Vicia articulata*. *Plantago capitellata* is resumed for the submediterranean plantain usually called *P. holostium*, a name which must be regarded as illegitimate. *Asphodelus albus* subsp. *subalpinus* (instead of subsp. *delphinensis*), *Euphorbia dulcis* subsp. *purpurata* (instead of subsp. *incompta*), and *Hesperis matronalis* subsp. *nivea* (instead of subsp. *candida*) are the correct names of these three subspecies. The discussion of the identity of the name *Helianthemum chamaecistus* demonstrates *H. nummularium* subsp. *obscurum* as the correct subspecific name. *Euphorbia epithymoides* is accepted as correct name for *E. polychroma*. Errors related to *Draba aizoides* subsp. *beckeri* and *Crataegus laevigata* are corrected.

Key words: nomenclature; new combinations; lectotypification; angiosperms; Flora of Central Europe

Zusammenfassung: Die in den östlichen Zentralalpen endemische Sippe der früheren *Saxifraga stellaris* ist als Unterart zu bewerten; in der Gattung *Micranthes* kommt der Name *M. stellaris* subsp. *prolifera*, comb. nov., zur Geltung und wird typisiert. Die taxonomische Reorganisation der *Clinopodium*-Verwandtschaft führte zur Vereinigung der früheren Gattung *Acinos* mit *Ziziphora*; für den Alpen-Steinquendel *Clinopodium alpinum* subsp. *alpinum* (bzw. *Acinos alpinus* subsp. *alpinus*) wird *Ziziphora granatensis* subsp. *alpina*, comb. nov., vorgeschlagen. Korrekte Daten zur Schreibweise, Autorschaft und Erstpublikation des Namens *Scrophularia juratensis* werden mitgeteilt, ebenso für *Androsace wulfeniana*, welcher Name lektotypisiert wird. Eine erneute Diskussion der Linnéschen *Arenaria multicaulis* bekräftigt die Anwendung dieses, nunmehr ebenfalls lektotypisierten, Namens für die tetraploide Sippe des *A. ciliata*-Aggregats der Alpen. *Pilosella tubulata* ist der korrekte Name für das frühere *Hieracium spurium* bzw. *H. cymiflorum* (beides illegitime Namen), *Ervilia monanthos* jener für *Vicia articulata* (das Epithet korrekt nur in dieser Gattung), und *Plantago capitellata* ersetzt *P. holostium* (nom. illeg.). Jeweils prioritätsberechtigt sind die Unterartsnamen *Asphodelus albus* subsp. *subalpinus*, *Euphorbia dulcis* subsp. *purpurata* und *Hesperis matronalis* subsp. *nivea* (für *A. albus* subsp. *delphinensis*, *E. dulcis* subsp. *incompta*, *H. matronalis* subsp. *candida*). *Helianthemum nummularium* subsp. *obscurum* ist weiterhin ein korrekter Unterartname, wie sich aus der taxonomischen Identität des Namens *H. chamaecistus* ergibt. *Euphorbia*

epithymoides ist der korrekte Name für *E. polychroma*. Bei *Draba aizoides* subsp. *beckeri* (Autorschaft) und *Crataegus laevigata* (Schreibweise) werden eigene Fehler korrigiert.

Remark: These “Notulae” continue previous comments (published in the Journal “Phyton (Horn)”: GUTERMANN 1975, 2006, 2009a, b, 2011) relating to nomenclaturally problematic cases of the Central European flora.

46. *Androsace wulfeniana* Steud. & Hochst., Enum. Pl. Germ.: 27 (1826) — **Lectotypus (hoc loco selectus)**: Icon in Jacquin, Fl. Austriac. **5** (App.): 36, tab. 18 (1778); **Epitypus (hoc loco selectus)**: Carinthia. Stangalpe. In glareosis montium Falkert et Rodres supra Kleinkirchheim; solo schistaceo; 2250–2350 m; [Jun. 1884]; [M. Frh. v.] Jabornegg in Flora Exsiccata Austro-Hungarica no. 1394 (WU 0101345) = *Aretia wulfeniana* Sieber ex W. D. J. Koch, Syn. Fl. Germ. Helv., ed. 2: 670 (1844) in observ. ≡ *Androsace wulfeniana* (Sieber ex W. D. J. Koch) Rchb., Icon. Fl. Germ. Helv. **17**: 51 (1855) ≡ *Primula wulfeniana* (Sieber ex W. D. J. Koch) Kuntze, Rev. Gen.: 400 [as ‘*Wulfenia*’] (1891), non Schott (1852) ≡ *Androsace alpina* var. *wulfeniana* (Sieber ex W. D. J. Koch) Fiori in Fiori & Paoletti, Fl. Italia **2**: 318 (1902) ≡ *Primula sieberi* Derganc in Allg. Bot. Z. Syst. **10**: 111 (1904) = *Androsace pacheri* Leyb. in Flora **36**: 585 (1853) ≡ *Primula pacheri* (Leyb.) Derganc in Allg. Bot. Z. Syst. **10**: 110 (1904)

Currently, W. D. J. Koch appears usually as the correct author of this species (e.g. GREUTER & al. 1989, CONTI & al. 2005, MARHOLD in the EURO+MED 2006–, BARTOLUCCI & al. 2018). Koch had briefly characterized two supplementary taxa in a paragraph under his *Androsace glacialis* (a heterotypic synonym of *A. alpina*). Under that heading, he discussed in particular *Aretia brevis* as well as *Aretia wulfeniana* and marked them as species that should be studied furthermore (“ulterius observandae sunt”). However, the latter name was not combined under *Androsace*, as is clearly apparent also from the index of his “Synopsis” (KOCH, op. cit.: 1041 resp. 1044), where only *Aretia wulfeniana* is present, a fact already pointed out by BECHERER (1943: 201) who gave “Reichenbach 1855” as the correct author under *Androsace*. Already much earlier, in 1826, the binominal *Androsace wulfeniana* was published as a new species by Steudel & Hochstetter, the authors of an early checklist. This name is validated by pointing to the previously published description of “*Aretia alpina*” presented by Wulfen (in JACQUIN 1778: 36), and the simultaneous exclusion of the true *Aretia alpina* L. that was separately listed as *Androsace alpina* (L.) Lam. (This is consistent with ICN, Art. 38.1 and 52.2(e), cf. Ex. 3.) Wulfen’s ample description is based on plants from Carinthia and Styria, and leaves no doubt on its identity. The name “is to be typified by an element selected from the entire context of the validating description“ (ICN, Art. 7.8), including the coloured plate that is here selected as the lectotype. It is irrelevant that Steudel & Hochstetter included under their *Androsace wulfeniana* also plants from Switzerland (as *Aretia rubra* Schleich., a nomen nudum) where *A. wulfeniana*, endemic to the Eastern Alps of Austria and Italy, is not known to occur.

The two names dedicated to Wulfen are not strictly homotypic: Wulfen had collected his plants “in supremis Folkartensium alpium jugis” (i. e. mount Falkert in Carinthia), and reported the species also from “Fladnizensibus summitatibus circa Leitersteig” (today: Lattersteig), “in excelso Winterthal“ (Wintertalernock) and “Eisenhut Carinthiaco & Styriaco”, all mountains around the Turracher Höhe Pass. *Aretia wulfeniana* is based on a Sieber collection that most probably came from the Styrian side of Mt. Eisenhut. Finally, the original material of *Androsace pacheri* was collected by Pacher in the same area but on the Carinthian side (mountains between the villages of Flattnitz and Ebene Reichenau), plants which were used later on to design the coloured plate in Reichenbach’s “Icones” (op. cit., tab. 74, fig. IV & V).

The epitype comes from a population of one of the mountains where Wulfen had collected plants which were intended to be depicted in Jacquin’s “Flora Austriaca”. It should complement the selected “iconotype” which does not show the discriminative features taxonomically important within *Androsace* sect. *Aretia*. The epitype is part of a gathering widely distributed also in other herbaria; the collection date (not present on the printed “Exsiccata” label) is documented by a separate duplicate at Vienna (WU 0101351). Plants from the population of the type area (voucher: WU 0024850) more recently were included in phylogeographic studies (SCHÖNSWETTER & al. 2003).

47. *Arenaria multicaulis* L., Syst. Nat., ed. 10: 1034 (1759); Sp. Pl., ed. 2: 605 (1762)
 ≡ *A. ciliata* subsp. *multicaulis* (L.) Ces. in Cattaneo, Not. Nat. Civ. Lombardia **1**: 290 (1844), separatim publ.: Cesati, Saggio ...: 38 [as ‘*β multicaulis*’] (1844); Cesati in Linnaea **21**: 32 (1848); Arcang., Comp. Fl. Ital.: 101 (1882), later isonym — **Lectotypus (hoc loco selectus)**: “*Alsine alpina perennis radice lignosa, flosculis albis, facie Sempervivi minoris*. In Pyrenaeis versus Hispaniam” in Herb. Burser XIV(1)90 (UPS; photo! [Fig. 1])
 = *A. ciliata* prol. [“forme”] *polycarpoides* Rouy & Fouc., Fl. France **3**: 247 (1896)
 ≡ *A. ciliata* subsp. *polycarpoides* (Rouy & Fouc.) Braun-Blanq. fide Chater & Halliday in Tutin & al., Flora Europaea **1**: 120 (1964)
 = *A. moehringoides* Murr in Allg. Bot. Z. Syst. **12**: 176 (1906) ≡ *A. ciliata* subsp. *moehringoides* (Murr) Murr, Neue Uebers. Bl.-Pfl. Vorarlberg: 106 (1923) ≡ *A. gothica* subsp. *moehringoides* (Murr) M. B. Wyse Jacks. & Parnell in Watsonia **16**: 382 (1987)

Once and again: In the first instalment of these “Notulae” (GUTERMANN 1975) I had adopted the Linnaean name *Arenaria multicaulis* for the Alpine cytotype with $2n = 40$ within the species complex of *A. ciliata*. Separation at specific rank had been advocated by FAVARGER (1965, as *A. moehringoides*) who interpreted it as one of the “diploid” representatives of this group. I chose the elaborated Linnaean taxonomy of 1762 as the authoritative guideline in regard to the somewhat cryptic and sketchy first publication of *A. multicaulis*, also keeping in mind Stearn’s scholarly advise that “all constituent elements ... must be taken into consideration. The most important of these is the phrase-name” [i. e. the nomen specificum legitimum] (STEARNS 1957: 125–126). According to LÓPEZ GONZALES (1985: 258), the publication of *A. multicaulis* is interpreted just as an

illegitimate replacement for the name *A. ciliata* because the former name appears in Linnaeus's "Systema" of 1759 with the same number "11" as used 1753 for *A. ciliata*.

There are 3 constituent elements of the 1753 *Arenaria ciliata*: (1) the Séguier plant (depicted in SÉGUIER 1745: tab. 5, fig. 2) from the Alps south-west of Trento, (2) the Burser specimen (studied by LINNAEUS 1745: 21, 1749: 162) from the Pyrenees, appended as variety β , and (3) the Haller plant (depicted in HALLER 1742: tab. VII) from Switzerland which represents var. γ .

In 1759, however, Linnaeus had not only changed the nomen triviale to *multicaulis*, but also the important nomen specificum legitimum (!) to "*A. fol[ius] ovatis nervosis sessilibus acutis*" (against "*A. foliis ovatis ciliatis acutis*" of *A. ciliata*), thus connecting the new epithet with a renewed diagnostic phrase that was adopted literally from his 1745 "Dissertatio" (thus referring exclusively to the former var. β of 1753). Moreover, he supplemented this diagnosis (nomen specificum legitimum) with "*Arenaria multicaulis Sp. pl. 11*" but not "*A. ciliata*". Though interpreted by RICHTER (1835: 436) as a typographical error, it clearly shows Linnaeus's intention to define this taxon by restricting it to the former (unnamed) var. β (as presented in 1753, based on a specimen described by Linnaeus as no. 155 in his "Plantae Martino-Burserianae" in 1745). If there was a "typographical error" then it was, after *Arenaria multicaulis*, the omission of the Greek letter β to the number 11. The formal deficiencies of this paragraph are evident, but the conclusion of LÓPEZ-GONZALES (1985) seems premature: Though the sequential number is the same as in 1753, the "exact diagnostic phrase" (leading back to the 1745 plant) is changed as is the epithet itself (cf. Art. 52.3 of the ICN). There is no definite evidence that "all elements eligible as types" were included, nor does the word "ciliata" appear in the nomen specificum legitimum or as nomen triviale.

As I showed in 1975, the situation was adjusted by Linnaeus himself in the 1762 edition of the "Species Plantarum" by the explicit emendation of *A. ciliata* (n° 15) only to the Séguier plant (accordingly selected as lectotype: G. López González in CAFFERTY & JARVIS 2004), and, under the name *A. multicaulis* (n° 5), correctly uniting the two other elements of the former *A. ciliata*, viz. Haller's "*Alsine foliis lanceolatis, petalis integris, calyce majoribus*" (HALLER 1742: 390, tab. VII, corresponding to var. γ of the 1753 edition) with the Burser plant studied by Linnaeus himself and diagnosed as "*Arenaria foliis ovatis nervosis sessilibus acutis*" in 1745 and 1749 (corresponding to var. β of the 1753 edition), both representing the western diploid. This identification follows a continuous tradition since more than 100 years (cf. FRITSCH 1897, A. Kerner in DALLA TORRE & SARNTHEIN 1909: 170, H. v. Handel-Mazzetti in KERNER 1913: 10, JANCHEN 1963, HESS & al. 1967, EHRENDORFER 1973, JALAS & SUOMINEN 1983).

This interpretation is accepted in nearly all contemporary floras (or checklists) covering the range of this species: Spain (BOLÒS & al. 1990, though not in CASTROVIEJO & al. 1990), France (TISON & FOUCAULT 2014), Switzerland (JUILLERAT & al. 2017: 62), Germany (WISSKIRCHEN & HAEUPLER 1998, JÄGER 2011, LIPPERT & MEIEROTT 2014), Austria (FISCHER & al. 2008), and Italy (CONTI & al. 2005, however not so in the recent checklist: BARTOLUCCI & al. 2018).

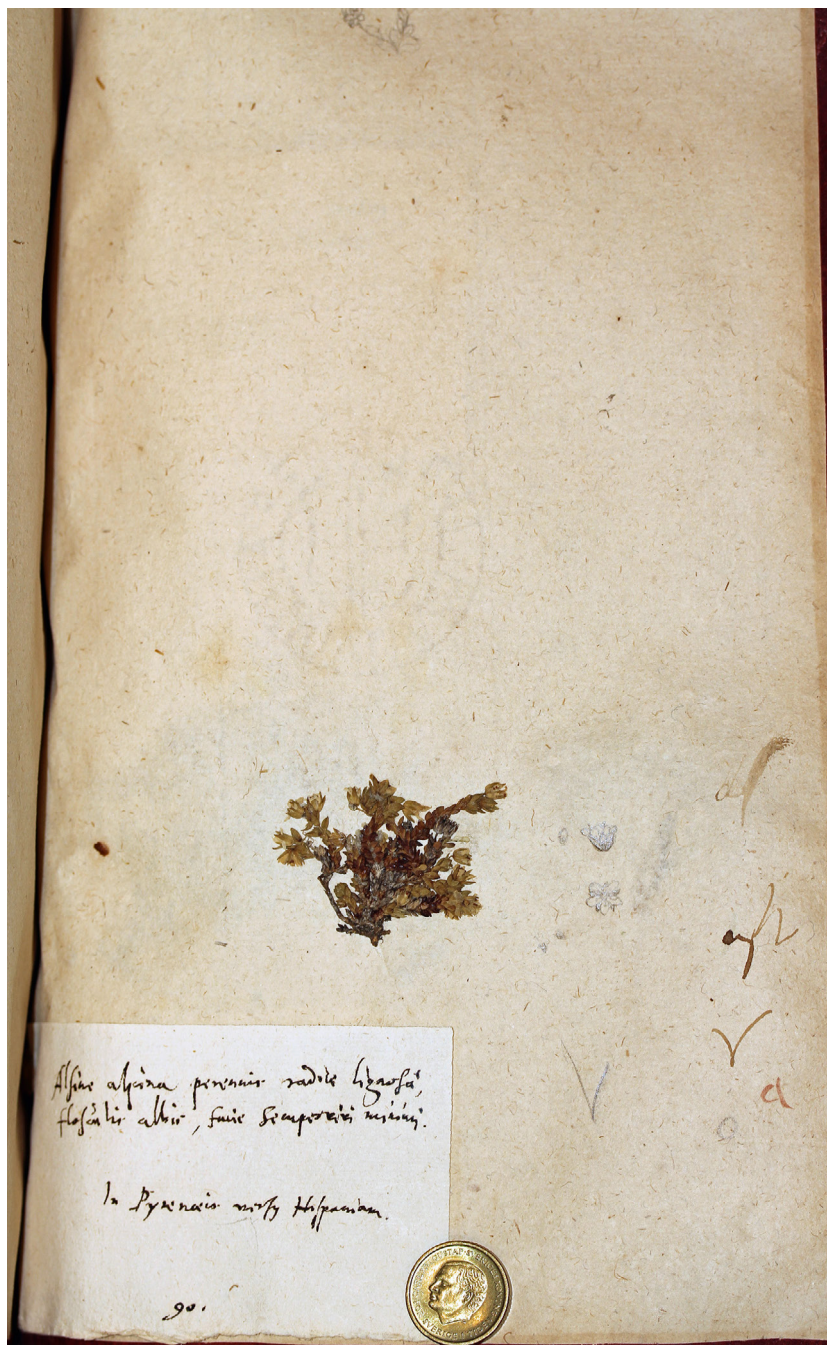


Fig./Abb. 1: Lectotypus of/von: *Arenaria multicaulis* L.: Herb. Burser XIV(1)90 (UPS). – Reproduced under the terms of the Creative Commons Attribution License [CC BY 4.0] (<http://creativecommons.org/licenses/by/4.0>), Museum of Evolution, Uppsala University.

48. *Asphodelus albus* subsp. *subalpinus* Nyman, Consp. Fl. Eur.: 720 (1882) ≡ *A. delphinensis* Gren. & Godr. in Mém. Soc. Émul. Doubs, ser. 2, 6 (2): 13 (1854) [= *A. subalpinus* Gren. & Godr., Fl. France 3: 224 (1855), nom. illeg. superfl. ≡ *A. albus* subsp. *delphinensis* (Gren. & Godr.) Z. Díaz & Valdéz in Boissiera 52: 95 (1996), nom. illeg. superfl.

= *A. neglectus* Schult. & Schult. f., Syst. Veg. 7: 488 (1829)

= *A. pyrenaicus* Jordan in Bull. Soc. Bot. France 7: 732 (1869)

– *A. albus* subsp. *pyrenaicus* Braun-Blanq. in Monogr. Estac. Estud. Piren. 9 [= Commun. Stat. Int. Géobot. Médit. Montpellier 98]: 21, 197 (1948), nom. inval. [nudum] DÍAZ LIFANTE & VALDÉS (1996) restricted the type subspecies of *A. albus* to the diploid populations of Western Europe opposed to the tetraploid mountain plants occurring from the Pyrenees and Alps to the Balkan Peninsula. They missed, however, to address this subspecies with the correct name. Nyman was free to select any epithet at the subspecific rank (ICN, Art. 58.1), and he re-used the final epithet of the superfluous name coined by Grenier & Godron against the rules (ICN, Art. 52.1).

49. *Draba aizoides* subsp. *beckeri* (A. Kern.) Nyman, Consp. Fl. Eur., Suppl.: 31 (1889); Hörandl & Gutermann in Phytion (Horn) 35: 94 (1995), later isonym ≡ *D. beckeri* A. Kern., Fl. Exs. Austro-Hung., Scheda no. 891 (1883)

When treating the large-flowering populations of the north-easternmost Alps and of the Malé Karpaty at subspecific rank (HÖRANDL & GUTERMANN 1995), we have overlooked that the corresponding combination had already been performed in Nyman's supplements.

50. *Ervilia monanthos* (L.) Opiz, Seznam: 41 (1852) ≡ *Ervum monanthos* L., Sp. Pl.: 738 (1753) ≡ *Vicia monanthos* (L.) Desf., Fl. Atlant. 2 (7): 165 (1799), nom. illeg., non Retz. (1783) ≡ *Lathyrus monanthos* (L.) Willd., Sp. Pl. 3: 1083 (1802)

= *Vicia articulata* Hornem., Enum. Hort. Haun., ed. 2: 41 (1807) [n. v.]; Hort. Bot. Hafn.: 690 (1815) ≡ *Ervilia articulata* (Hornem.) H. Schaefer & al. in Coulot & Rabaute, Monogr. Legum. France 4 [= Bull. Soc. Bot. Centre-Ouest, num. spéc. 46]: 402 (2016), nom. superfl.

The group of the former *Vicia hirsuta*, i. e. *Ervilia hirsuta* (L.) Opiz requires generic separation from *Vicia* considering recent molecular-based phylogenetic studies (SCHAEFER & al. 2012). The aim is to obtain monophyletic genera aside from *Lathyrus* and *Vicia*. When transferring *Vicia articulata* to the genus *Ervilia* the authors (cf. COULOT & RABAUTE 2016) have overlooked the complication linked to the epithets. Notwithstanding that the Linnaean name has absolute priority under *Ervum*, under *Vicia* the epithet had to be changed because of the existence of the different species *V. monanthos* Retz., and was therefore known as *V. articulata* since. However, under *Ervilia*, the use of the Linnaean epithet *monanthos* is mandatory.

51. *Euphorbia dulcis* subsp. *purpurata* (Thuill.) Murr, Neue Uebers. Bl.-Pfl. Vorarlberg: 193 (1923); Rothm. in Feddes Repert. 67: 7 (1963), later isonym ≡ *E. purpu-*

- rata* Thuill., Fl. Env. Paris, ed. 2: 235 (1799) ≡ *E. dulcis* var. *purpurata* (Thuill.) W. D. J. Koch, Syn. Fl. Germ. Helv.: 628 (1837) ≡ *E. verrucosa* subsp. *purpurata* (Thuill.) Ces. in Cattaneo, Not. Nat. Civ. Lombardia **1**: 312 (1844) [n.v.]; separatim publ.: Cesati, Saggio ...: 60 (1844); Cesati in Linnaea **21**: 52 (1848) ≡ *E. dulcis* var. *leiocarpa* Neilr., Fl. Wien: 578 (1846), nom. illeg. superfl. ≡ *Tithymalus dulcis* subsp. *purpuratus* (Thuill.) Holub in Folia Geobot. Phytotax. **8**: 174 (1973)
- = *Euphorbia incompta* Ces., Bibliot. Ital. Giorn. Lett. **91**: 348 (1838) [n.v.] ≡ *E. dulcis* var. *incompta* (Ces.) Nyman, Consp. Fl. Eur.: 649 (1881) ≡ *E. dulcis* subsp. *incompta* (Ces.) Nyman, Consp. Fl. Eur., Suppl. **2**: 275 (1890) ≡ *Tithymalus dulcis* subsp. *incomptus* (Ces.) Soják in Čas. Nár. Mus., Odd. Přír. **140**: 172 (1972)
- = *Euphorbia alpigena* A. Kern. in Oesterr. Bot. Z. **16**: 337 (1866) ≡ *E. dulcis* var. *alpigena* (A. Kern.) Nyman, Consp. Fl. Eur.: 649 (1881)

This western race of *Euphorbia dulcis* L. is sometimes neglected as a “minor variant”. However, it is usually well separable from the eastern subsp. *dulcis* using the characters highlighted by SCHÖNFELDER (1970) who also illustrated the chorological differentiation (maps K40 and K41, loc. cit.: A25). His findings can be affirmed for Austria where both races are known, and where only rarely populations are met that are ambiguous even in areas of sympatric occurrence of both subspecies.

AS SOLDANO (1991) has shown, Vincenzo de Cesati had been a pioneer to apply the rank “subspecies” (“sottospecie” resp. “Unterarten”) for infraspecific taxa. This rank does not appear, however, as term linking the species name with the infraspecific epithet (these are preceded by Greek letters only) in his account of the Lombardian flora which was later published also in German (CESATI 1848). That these infraspecific taxa are to be interpreted as subspecies follows from the statistics in the text (“2578 specie, col soprapiù di 204 sottospecie o forme secondarie assai distinte”) preceding the taxa list, and similarly in the additional tables (“sub-species”). Unaware of these facts “subsp. *incompta*” was accepted in recent years as correct name e. g. by WILHALM & al. (2006), FISCHER & al. (2008) and TISON & FOUCAULT (2014).

52. *Euphorbia epithymoides* L., Sp. Pl., ed. 2: 656 (1762)
= *E. polychroma* A. Kern. in Oesterr. Bot. Z. **35**: 395 (1875)

Kerner had interpreted the Linnaean name through the figure of “*Tithymalus Epithymi fructu*” (COLONNA 1616: 51) cited by Linnaeus, that is identified comprehensibly with *E. fragifera* Jan. However, at least since the account in “Flora Europaea” (SMITH & TUTIN 1968) the name *E. epithymoides* is now widely used for the species previously often known as *E. polychroma* as e. g. in FISCHER & al. (2008). This is now justified by the formal lectotypification performed by GELTMAN (2008) based on a Scopoli collection in the herbarium LINN (630.37).

53. *Helianthemum nummularium* (L.) Mill., Gard. Dict., ed. 8: Helianthemum no. 12 (1768) ≡ *Cistus nummularius* L., Sp. Pl.: 527 (1753)
= *Cistus helianthemum* L., Sp. Pl.: 528 (1753) ≡ *Helianthemum vulgare* Gaertn., Fruct.

Sem. Pl. 1: 371 (1788) \equiv *H. chamaecistus* subsp. *vulgare* (Gaertn.) Coutinho, Fl. Portugal: 416 (1913)

= *Helianthemum chamaecistus* Miller, Gard. Dict., ed. 8: Helianthemum no. 1 (1768)
[subsp. *chamaecistus* per Čelak., Prodr. Fl. Böhmen: 483 (1875)]

The name *Helianthemum chamaecistus* was treated as a synonym of *H. nummularium* subsp. *obscurum* (Wahlenb.) Holub [\equiv *H. vulgare* var. *obscurum* Wahlenb. (1824), based on *H. obscurum* Pers. (1806), nom. illeg.] in the “Med-Checklist” (GREUTER & al. 1984; still so in the “Euro+Med Plantbase”: RAAB-STRAUBE 2018–). Furthermore, it was quoted as a homotypical synonym of the Linnaean *Cistus helianthemum* in “Flora Nordica” (WIDÉN 2010). If this would be correct, the appropriate name for subsp. *obscurum* as commonly defined had to be changed to subsp. *chamaecistus* in conformity with the ICN (Art. 11.6 and 26.3) as the autonym was established in 1875 by the valid publication of the combination *H. chamaecistus* subsp. *obscurum* Čelak.

However, Miller’s “first sort” (*Helianthemum chamaecistus*) is the common plant of “the chalky hills and banks in many parts of England” that shows leaves “of a grayish colour on their under”. According to British floras (STACE 2010, SELL & MURRELL 2018) in the UK only *H. nummularium* subsp. *nummularium* does occur. Therefore, the taxonomic identity with the latter must be accepted even in the absence of the typification of Miller’s binominal. *Helianthemum chamaecistus* is not a replacement name for *Cistus helianthemum* as Miller’s diagnostic phrase is not identical with the “phrase-name” [i. e. the nomen specificum legitimum] of the Linnaean name (see Art. 52.3 and 52 Ex. 13 of the ICN).

The Linnaean name *Cistus helianthemum* has not yet been lectotypified by one of the three present syntypes (cf. JARVIS 2007) of which at least two (those in BM and LINN) indeed seem to represent *H. nummularium* subsp. *nummularium*.

54. *Hesperis matronalis* subsp. *nivea* (Baumg.) E. P. Perrier, Cat. Pl. Vasc. Savoie 1: 49 (1917); Kulcz. in Szafer [Red.], Fl. Polska 3: 181 (1927), later isonym \equiv *H. nivea* Baumg., Enum. Stirp. Transsilv. 2: 278 (1816) \equiv *H. inodora* subsp. *nivea* (Baumg.) Simk., Enum. Fl. Transsilv.: 82 (1887)

= *H. candida* Kit. [apud Schulzer & al. in Verh. K. K. Zool.-Bot. Ges. Wien 16: 143 (1866) pro syn. *H. matronalis* var. *integrifolia* Neilr.] in Hayek, Sched. Fl. Stiriac.: no. 538 (1907), Fl. Steiermark 1: 504 (1909) \equiv *H. matronalis* subsp. *candida* (Kit.) Hegi & E. Schmid in Hegi, Fl. Mittel-Eur. 4: 467 (1919)

= *H. moniliformis* Schur [in Oesterr. Bot. Z. 8: 22 (1858), nom. nud.] in Verh. Mitth. Siebenbürg. Vereins Naturwiss. Hermannstadt 10: 166 (1859), Enum. Fl. Transsilv.: 52 (1866) \equiv *H. matronalis* subsp. *moniliformis* (Schur) Borza, Conspect. Fl. Romaniae: 123 (1947)

? incl. *Hesperis inodora* var. *vrabelyiana* Schur in Verh. Naturf. Vereins Brünn 15(2): 81 (1878) \equiv *H. vrabelyiana* (Schur) Borbás in Magyar Bot. Lapok 2: 21 (1903) \equiv *H. matronalis* var. *vrabelyiana* (Schur) Soó in Tisia 3: 90 (1939) [n. v.], Tisia 4: 54 (1940).

The autochthonous, white-flowering populations of *Hesperis matronalis* traditionally

were classified as *H. candida* or as *H. matronalis* subsp. *candida* in Austria, where they are confined to two small areas in Upper Styria (mountains with Palaeozoic limestones, near the village of Mixnitz, and north-east of the town of Trofaiach). In respect to the stem leaves (the upper ones nearly sessile) and to the indumentum of stem and leaves (usually with only a few bifid hairs in addition to the prevailing simple bristles), there is no substantial difference from the Carpathian subsp. *nivea*. This latter epithet holds priority at subspecific rank (by the combination under *H. inodora*) and is already in use for equivalent populations of northern Italy (BARTOLUCCI & al. 2018). This indigenous mountain taxon was broadly conceived already by DVOŘÁK (1968), a definition also accepted in the Flora of Slovakia (ZAHRADNÍKOVÁ & al. 2002, as *H. matronalis* subsp. *candida*) in which country it is mainly known from the Malé Karpaty, the Fatra and Tatra mountains. Plants from the Bükk mountains in northern Hungary are separated (even as species: *H. vrabelyiana*, e.g. TIBOR 2008) on account of the glandular indumentum, but glandular hairs may occur though sparsely also in otherwise typical populations of subsp. *nivea*.

55. *Micranthes stellaris* subsp. *prolifera* (Gornall) Gutermann, **comb. nov.** ≡ *Saxifraga stellaris* subsp. *prolifera* Temesy in Phytion (Horn) 7: 103 (1957), nom. illeg. ≡ *Micranthes stellaris* var. *prolifera* Gornall in New J. Bot. 6: 56 (2016) — **Lectotypus (hoc loco selectus)**: Icon [tab. ad no. 3] “*Saxifraga stellaris* fig. e” [Fig. 2] in Sturm, Deutschl. Fl., Abth. I, Heft 35 (1813); Epitypus (**hoc loco selectus**): Kärnten. Saualpe, quellige Stellen unterhalb der Wolfsberger Hütte bei 1700 m; 14. 8. 1932: F. J. Widder, as *S. foliolosa* (GZU-Widder 000335762; photo! [Fig. 3])
– [*Saxifraga stellaris* var. *prolifera* pro parte: Sternb., Rev. Saxifr. Suppl. 2: 13 (1831), nom. illeg., quoad plantam ex Carinthia solum, excl. syn.]

This peculiar saxifrage occupies a well-defined area within the eastern Central Alps of Austria and adjacent Slovenia (cf. STAUDINGER 2009). Such viviparous plants, with the flowers replaced by vegetative bulbils except usually the terminal one(s), obviously seem to have also a slightly different ecological preference in respect to subsp. *robusta*, as on average they occur at lower altitudes, and on siliceous substrate. *Micranthes stellaris* subsp. *robusta* is widely replaced by subsp. *prolifera* within the latter’s area, and intermediates between both taxa are documented only from the few localities where they meet. Here, subsp. *robusta* prefers habitats found on calcareous bedrocks. It is preferable to treat such eco-geographical races at subspecific rank (as did TEMESY 1957 in this case) even if WEBB & GORNALL (1989, under *Saxifraga stellaris* subsp. *alpigena*) and GORNALL (2016, under *Micranthes stellaris* subsp. *robusta*) reduced them to varieties, arguing that the latter “is rather local in its occurrence”.

The nomenclatural situation is somewhat intricate and tricky: the “basonym” of Temesy’s combination originally comprised also the arctic-subarctic plants which presently are classified as separate species, *Micranthes foliolosa* (R. Br.) Gornall. Furthermore, Sternberg’s variety is an illegitimate name because *Saxifraga stellaris* var. *comosa* Retz. (1779) was included (though indirectly by citation of Poiret 1805 and Seringe in Candolle 1830). Temesy excluded these plants and synonyms, and emended her taxon

to Sternberg's plants from Carinthia and the illustration in Sturm, and presented in addition an elaborate description in Latin referring to these Alpine plants only, thus technically creating a new name at subspecific rank. However, this name is to be treated as homonym (ICN, Art. 53.3) of *S. stellaris* var. *prolifera* Sternb., which in turn is automatically homotypical (ICN, Art. 7.5) with *S. stellaris* var. *comosa*. Under the generic name *Micranthes* the combination is possible: Even if Gornall formally was referring to Sternberg's variety (but simultaneously excluding *S. stellaris* var. *comosa*) his combination must be interpreted as identical with and therefore based on Temesy's subsp. *prolifera*. The lectotype figure (which represents plants from "alpibus ... Savi (Sausalpen dictis) in Carinthia ipse legi": STERNBERG 1810: 11, under his var. β) is part of the protologue of Sternberg's variety as well as of Temesy's subspecies. The epitype sheet was collected in the region of Sternberg's "locus classicus" and was cited by Temesy.



Fig./Abb. 2: Lectotypus of/von *Saxifraga stellaris* subsp. *prolifera* Temesy: Icon [tab. ad no. 3] "*Saxifraga stellaris* fig. e" in Sturm, Deutschl. Fl., Abth. I, Heft 35 (1813).



Fig./Abb. 3: Epitypus of/von *Saxifraga stellaris* subsp. *prolifera* Temesy (GZU-Widder 000335762).

56. *Pilosella tubulata* (Vollm.) Soják in Preslia **43**: 184 (1971) \equiv *Hieracium cymiflorum* subsp. *tubulatum* Vollm. in Denkschr. Königl. Bot. Ges. Regensburg **9**: 73 (1905) \equiv *H. anchusoides* subsp. *tubulatum* (Vollm.) Vollm., Fl. Bayern: 793 (1914)¹ \equiv *Pilosella cymiflora* subsp. *tubulata* (Vollm.) Schuhw. in Ber. Bayer. Bot. Ges. **83**: 199 (2013)

= *Hieracium spurium* Chaix ex [Froel. in DC., Prodr. **7**: 204 (1838), nom. inval., pro syn. *H. hybridi*] Arv.-Touv., Hieracium Alpes Franç.: 11 (1888), nom. illeg., non Brügger in Jahresber. Naturf. Ges. Graubündens **29**: 133 (1886) \equiv *Pilosella spuria* Soják in Čas. Nár. Muz. Praze, Řada Přír. **150**: 129 (1988)

– *Hieracium cymiflorum* Nägeli & Peter, Hierac. Mitt.-Eur. **1**: 424 (1885), nom. illeg., pro parte: quoad subsp. *cymiflorum* [loc. cit.: 426, sed excl. syn. *Pilosella anchusoides* Arv.-Touv. (1873) \equiv *Hieracium anchusoides* (Arv.-Touv.) St.-Lager (1878)]

– *Pilosella cymiflora* S. Bräut. & Greuter in Willdenowia **27**: 133 (2007), nom. inval.

Piloselloid hawkweeds similar to *Pilosella cymosa* but with the synflorescence less compact, somewhat bigger involucre, and occasionally furnished with short stolons, have been interpreted as transitional forms in the direction to *P. officinarum* (under *Hieracium*: “cymosum>pilosella”) that are presumably results of hybridization. They were thoroughly described by Nägeli & Peter in 1885 (as *H. cymiflorum*) who regarded the constituent “subspecies” not as (primary) hybrids but, reasonably, as autonomous taxa (“selbständige Sippen”). However, unfortunately, they cited the earlier *Pilosella anchusoides* as synonym making the name illegitimate and inoperative under *Hieracium*. (*Pilosella anchusoides* is a different species in today’s taxonomy, corresponding to the formula “zizianum>pilosella”.) Similarly, the name *H. spurium* used for the present aggregate species and defined as in Zahn’s works (ZAHN 1923, 1929) is defective as it is a later homonym. The epithet “*cymiflorum*” could be used under *Pilosella* referring to the description of Nägeli & Peter but excluding simultaneously the name *P. anchusoides* (as in BRÄUTIGAM & GREUTER 2007: 129, 133; these authors missed, however, to additionally specify a nomenclatural type as required for a “new name”).

Thus the correct name of the collective species is *P. tubulata*, which, in its strict sense, refers to the morphotype endemic to Bavaria (southern part of the Fränkische Alb), a pentaploid apomict (SCHUHWERK & LIPPERT 1997, 2002) with \pm involute ligules. Other morphotypes are mainly known from the Western Alps (as e. g. *P. spuria* s. str.), the Abruzzi mountains and the Trentino. These are supposed to be at least partly of accidental hybrid nature (GOTTSCHLICH 2009: 52), and of temporary existence only. An isolated occurrence near the Austrian border was known from Moravia, in the Thaya/Dyje

¹ This combination was erroneously cited as binominal (“*Hieracium tubulatum*, Vollm. ...”) in the Index Kewensis, Suppl. **5**: 134 (1921), an entry that can still be found uncorrected – as a species name – in “The International Plant Names Index” (IPNI website). Since 1913, the Index Kewensis is “a straightforward Index ... without passing taxonomic judgements” (MEIKLE 1971: 297). In spite being just a reference quoted incorrectly (or erroneously) in respect to the reported taxonomic rank, such binominals are used in recent years as valid (new) combinations, a practice that I cannot follow.

valley west of Znojmo (described as *H. spurium* subsp. *cymelliflorum* Zahn; cf. CHRTEK jr. 2004). Once it had been collected there near Hardegg within Austria (GOTTSCHLICH 2019), and also in Upper Austria, from Gründberg in Linz (HOHLA & al. 2009: 230).

57. *Plantago capitellata* Ramond ex DC. in Lamarck & Candolle, Fl. Franç., ed. 3, **3**: 414 (1805) ≡ *P. subulata* var. *capitellata* (Ramond ex DC.) DC., Prodr. **13**(1): 730 (1852) ≡ *P. recurvata* var. *capitellata* (Ramond ex DC.) Nyman, Consp. Fl. Eur.: 618 (1881) ≡ *P. recurvata* subsp. *capitellata* (Ramond ex DC.) Arcang., Comp. Fl. Ital.: 499 (1882)
- = *P. carinata* Schrader ex Mert. & W. D. J. Koch in Röhling, Deutschl. Fl., ed. 3, **1**: 810 (1823), nom. illeg., non Moench (1784) ≡ *P. subulata* var. *carinata* Béguin. in Fiori & Paoletti, Fl. Anal. Ital. **3**: 100 (1903)
- = *P. acanthophylla* Decne. in Candolle, Prodr. **13**(1): 730 (1852)
- *P. holosteam* Scop., Fl. Carniol., ed. 2, **1**: 108 (1771), pro parte (excl. syn.), nom. illeg. (superfl. pro *P. alpina* et *P. maritima* L. 1753)
- *P. wulfenii* Spreng., Fl. Hal. Tent. Nov.: 54 (1806) pro parte: quoad syn. “*P. subulata* Wulff. in Jacqu.” (et quoad “Lectotypum” design. ab IAMONICO & al. 2017: 79), sed non quoad plantam descriptam e Saxonia!

Contemporary floras and checklists prefer the nomenclature presented by PILGER (1937: 197) who accepted *Plantago holosteam* as the valid name for this species in consideration of the region of Scopoli’s flora, though Pilger criticized the short description, and noted that Scopoli “meint, daß *P. alpina* L. und *P. maritima* hierher gehören könnten” (PILGER 1937: 197, footnote). Howsoever, Scopoli introduced his new binominal *P. holosteam* with the sentence “*Huc reduci posse videntur Plantagines linnaeanae*² 8. 10. [i. e. *P. maritima* and *P. alpina*] *ac forte etiam* 9. 11. 13. *Spec. Plant.* [= *P. cretica*, *P. subulata* and *P. loeflingii*] *Holostea strictissimo Folio C. Bauh. Coronopi serpent. maritim. et omnium minima I. Bauh.*” (SCOPOLI 1771: 108). Though IAMONICO & al. (2017) suppose that he “described *Plantago holosteam* through a short diagnosis”, Scopoli did not present a “DIAGN[osis]” as is otherwise present, and typographically emphasized, in all the other species in his flora (! – and he refrained from citing localities). He only repeated (though with slightly modified wording) the descriptive features already presented in the previous edition of his flora (SCOPOLI 1760: 281, under no. 3) for plants then identified with the Linnaean nomen specificum legitimum for *P. alpina*. He finishes this paragraph with the statement that he, in fact, did not find any sound differences or limits between various specimens of *P. maritima* and *P. alpina* and even of *P. loeflingii* communicated to him by friends from abroad.

Obviously, he had more than considerable doubts on the identity of his plant as well as on the taxonomic concept of the Linnaean species. Though “*posse videntur*” may be interpreted that he refrains from definitely lumping the two (or even five) Linnaean spe-

2 It is possible to reduce the Linnaean *Plantagines* ... hereunto [to this species]

cies, it expressed only his due respect towards Linnaeus. At any rate, Scopoli summarised his view on these taxa at the end: “*Conveniunt enim omnes*” – that they all coincide (and one of these is *P. alpina*). It is therefore implausible to regard the name *P. holosteuum* as the introduction of a new species separate from *P. alpina* rather than a new name for the whole *maritima-alpina* complex, and consequently as a superfluous name (ICN, Art. 52.1), nomenclaturally referable to *P. alpina* L.

Keeping in mind the uncertain taxonomic situation in this critical group it is unfortunate that a “new” nomenclature for this taxon is to be introduced. Though some authors seem to resign in finding a consistent diacritical feature against the (eu-) Mediterranean *P. subulata* L. (cf. HASSEMER 2018) it still seems appropriate to maintain the sub-Mediterranean taxon under discussion that is kept separate from the former species in relevant floras (NIKOLIĆ 2000, 2015–, AESCHIMANN & al. 2004, CONTI & al. 2005, FISCHER & al. 2008, TISON & FOUCAULT 2014).

58. *Scrophularia juratensis* Schleicher in J. Bot. (Schrader) 1801(1): 245 [nomen, as ‘*iuratensis*’], 248 [diagn.] (1803) [= *S. juratensis* Schleicher ex Wydler in Mém. Soc. Phys. Genève 4: 164, separatim publ. ut: Essai Monogr. Scrophularia: 44 (1828), pro syn. *S. caninae* var. γ , sine epith.; W. D. J. Koch pro syn. *S. hoppei* (vide infra!)] = *S. hoppei* W. D. J. Koch in Mert. & W. D. J. Koch, Deutschl. Fl. 3(4): 410 (1833) as ‘*hoppii*’, nom. illeg. superfl. [incl. *S. juratensis*!] = *S. canina* subsp. *hoppei* Pau, Pl. Prov. Huesca (6–18 Julio 1903): 29 (1908) [= separatim repr. ex Bol. Soc. Arag. Ci. Nat. 7]; Bég. in Nuovo Giorn. Bot. Ital., ser. nov. 17: 118 (1910), later isonym; P. Fourn., Quatre Fl. France: 770 (1937), later isonym
= *S. canina* var. *nana* DC. in Lamarck & Candolle, Fl. Franç., ed. 3, 3: 582 (1805)

The taxonomic treatment of the orophytic morphotype of the *Scrophularia canina* group differs in contemporary floras in respect to its rank. Presently, only the recent French flora (TISON & FOUCAULT 2014) follows “Flora Europaea” in treating it at subspecific rank (RICHARDSON 1972), though in a quite different circumscription (i. e. including Pyrenean plants that are identified with *S. crithmifolia* by ORTEGA OLIVENCIA 2009 in “Flora Iberica”). The majority of floristic accounts concerning the other countries of its distribution area (Italy, Switzerland, Austria, Slovenia) prefer the specific rank for the taxon in discussion (EHRENDORFER 1973, PIGNATTI 1982, AESCHIMANN & al. 2004, WILHALM & al. 2006, MARTINČIČ & al. 2007, FISCHER & al. 2008, LANDOLT 2010) which is usually called *S. juratensis*, but in the latest checklists for Italy (CONTI & al. 2005; BARTOLUCCI & al. 2018) the name *S. hoppei* is preferred.

When Koch described *Scrophularia hoppei* he expressly included *S. juratensis* in his species. The latter name is not a nomen nudum as is often supposed, but its publication is linked with a short diagnosis against *S. canina* (“folia bipinnata, pinnulis profunde incisis”). This had been amply demonstrated already by FUCHS (1954). The original spelling “*iuratensis*” is to be corrected into “*juritensis*” (ICN, Art. 60.1). *Scrophularia hoppei* is nomenclaturally a nomen superfluum pro *S. juratensis* though the two names were based on different materials by their authors.

At subspecific rank the combination *S. canina* subsp. *hoppei* is valid (cf. ICN, Art. 58) but must be treated as nomen novum with the corrected authorship of Pau alone.

59. *Ziziphora granatensis* subsp. *alpina* (L.) Bräuchler & Gutermann, **comb. nov.**
 ≡ *Thymus alpinus* L., Sp. Pl.: 591 (1753) ≡ *Calamintha alpina* (L.) Lam., Fl. Franç. 2: 394 (1779) ≡ *Acinos alpinus* (L.) Moench, Meth. Pl.: 407 (1794) ≡ *Calamintha alpina* subsp. *alpina* (1881) [per *C. alpina* subsp. *meridionalis* Nyman, Consp. Fl. Eur.: 589] ≡ *Clinopodium alpinum* (L.) Kuntze, Revis. Gen. Pl. 2: 513 (1891) ≡ *Ziziphora alpina* (L.) Melnikov in Bot. Žhurn. (St. Petersburg) 101: 89 (2016), nom. illeg., non Miller (1768) ≡ *Z. alpicola* Melnikov in Novosti Sist. Vysšh. Rast. 47: 106 (2016)

In 2010, BRÄUCHLER & al. left those species often separated as *Acinos* within a medium-sized *Clinopodium*, as the complex relations of this “*Clinopodium* group” as yet seemed not solved with reasonable certainty from the present molecular data, though the proximity of *Acinos* to *Ziziphora* already had become apparent, and morphological similarities were known (cf. LÓPEZ GONZÁLES & BAYER 1988) and are evident. Based on these facts MELNIKOV (2016a, b) has drawn the nomenclatural conclusions and, following an extreme splitting approach, he presented new combinations for almost all names involved at species level under *Ziziphora*, including that of *Z. alpicola* for the former *Acinos alpinus*. This variable complex is, with some reason, usually rather broadly defined as e. g. in “Flora Europaea” (BALL & GETLIFFE 1972). Even when splitting off some marginal taxa, it is inadequate to separate at specific rank our temperate taxon from the Mediterranean orophytes for which collectively the correct name is *Z. granatensis* (Boiss. & Reut.) Melnikov. We maintain the taxonomic concept as proposed by ŠILIC (1979, under *Acinos*), also adopted in the “Med-Checklist” (GREUTER & al. 1986 under *Satureja*).

Corrections

The correct spelling of the basionym of *Crataegus laevigata* is *Mespilus laevigata* (not *M. levigata* as reported in the previous Notulae, no. 41: GUTERMANN 2011). The late K. P. Buttler had kindly called my attention to this error. I was misled by an obviously suboptimal reproduction of the text seen on the Internet without having checked the book itself.

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References

- AESCHIMANN D., LAUBER K., MOSER D. M. & THEURILLAT J.-P. (2004): *Flora alpina* 2. – Bern: Haupt.
- BALL P. W. & GETLIFFE M. (1972): *Acinos*. – In TUTIN T. G., HEYWOOD V. H., BURGESS N. A., MOORE D. M., VALENTINE D. H., WALTERS S. M. & WEBB D. A. (Eds.): *Flora Europaea* 3: 165–166. – Cambridge (U.K.): University Press.
- BARTOLUCCI F., PERUZZI L., GALASSO G., ALBANO A., ALESSANDRINI A., ARDENGI N. M. G., ASTUTI G., BACCHETTA G., BALLELLI S., BANFI E., BARBERIS G., BERNARDO L., BOUVET D., BOVIO M., CECCHI L., DI PIETRO R., DOMINA G., FASCETTI S., FENU G., FESTI F., FOGGI B., GALLO L., GOTTSCHLICH G., GUBELLINI L., IAMONICO D., IBERITE M., JIMÉNEZ-MEJÍAS P., LATTANZI E., MARCHETTI D., MARTINETTO E., MASIN R. R., MEDAGLI P., PASSALACQUA N. G., PECCENINI R., PENNESI R., PIERINI B., POLDINI F., PROSSER F., RAIMONDO F. M., ROMA-MARZIO F., ROSATI L., SANTANGELO A., SCOPPOLA A., SCORTEGAGNA S., SELVAGGI A., SELVI F., SOLDANO A., STINCA A., WAGENSOMMER R. P., WILHALM T. & CONTI F. (2018): An updated checklist of the vascular flora native to Italy. – *Pl. Biosyst.* 152: 179–303. <https://doi.org/10.1080/11263504.2017.1419996>
- BECHERER A. (1943): Zur Entdeckungsgeschichte und geographischen Verbreitung von *Primula daonensis* Leybold (*P. oenensis* Thomas). – *Ber. Schweiz. Bot. Ges.* 53: 200–201.
- BOLÒS O. DE, VIGO J., MASALLES R. M. & NINOT J. M. (1990): *Flora manual dels Països Catalans*. – Barcelona: Editorial Pòrtic.
- BRÄUCHLER C., MEIMBERG H. & HEUBL G. (2010): Molecular phylogeny of Menthinae (Lamiaceae, Nepetoideae, Menthae) – taxonomy, biogeography and conflicts. – *Molec. Phylog. Evol.* 55: 501–523. <https://doi.org/10.1016/j.ympev.2010.01.016>
- BRÄUTIGAM S. & GREUTER W. (2007): A new treatment of *Pilosella* for the Euro-Mediterranean flora. – *Willdenowia* 37: 123–137. <https://doi.org/10.3372/wi.37.37106>
- CAFFERTY S. & JARVIS C. E. (2004): Typification of Linnaean plant names in Caryophyllaceae. – *Taxon* 53: 1049–1054. <https://doi.org/10.2307/4135573>
- CASTROVIEJO S., LAÍN Z. M., LÓPEZ GONZALES G., MONTSERRAT P., MUÑOZ GARMENDIA F., PAIVA J. & VILLAR L. (Eds.) (1990): *Flora Iberica. Plantas vasculares de la Península Ibérica e Islas Baleares* 2. – Madrid: Real Jardín Botánico, C. S. I. C.
- CESATI V. VON (1848): Gestaltung und Verhältnisse der Pflanzenwelt in der Lombardei. – *Linnaea* 21: 1–64.
- CHRTEK J. jr. (2004): *Hieracium*. – In ŠTĚPÁNEK J. & ŠTĚPÁNKOVÁ J. (Eds.): *Květena České Republiky* 7: 540–701. – Praha: Academia.
- COLONNA [= COLUMNUS] F. (1616): *Minus cognitarum rariorumque nostro coelo orientium stirpium* Εκφρασις, pars altera. – Roma: J. Mascardus.
- CONTI F., ABBATE G., ALESSANDRINI A. & BLASI C. (Eds.) 2005: An annotated checklist of the Italian vascular flora. – Roma: Università degli Studi di Roma “La Sapienza” / Palombi Editori.
- COULOT P. & RABAUTE P. (2016): *Monographie des Leguminosae de France, tome 4: Tribus des Fabaeae, des Cicereae et des Genisteae*. – *Bull. Soc. Bot. Centre-Ouest, num. spéc.* 46. – Jarnac: Société Botanique du Centre-Ouest.
- DALLA TORRE K. W. V. & SARNTHEIN L. V. (1909): *Die Farn- und Blütenpflanzen (Pteridophyta et Siphonogama) von Tirol, Vorarlberg und Liechtenstein, 1. Teil: Die Farnpflanzen, Nadelhölzer und Spitzkeimer (Pteridophyta, Gymnospermae et Monocotyledoneae [Flora der gefürsteten Grafschaft Tirol, des Landes Vorarlberg und des Fürstenthumes Liechtenstein. VI. Band, 2. Teil]*. – Innsbruck: Wagner.
- DÍAZ LIFANTE Z. & VALDÉS B. (1996): Revisión del género *Asphodelus* L. (Asphodelaceae) en el Mediterráneo Occidental. – *Boissiera* 52: 1–189.
- DVOŘÁK F. (1968): Rod *Hesperis* v Československu. – *Biol. Práce Slov. Akad. Vied* 14 (3): 1–54.
- EHRENDORFER F. (Ed.) (1973): *Liste der Gefäßpflanzen Mitteleuropas, 2. erweiterte Aufl.* [GUTERMANN W.; unter Mitwirkung von NIKLFELD H.]. – Stuttgart: G. Fischer.
- EURO+MED (2006–): Euro+Med PlantBase – the information resource for Euro-Mediterranean plant diversity. – <http://ww2.bgbm.org/EuroPlusMed/> [accessed 5. Dec 2018].

- FAVARGER C. (1965): A striking polyploid complex in the alpine flora: *Arenaria ciliata* L. – Bot. Not. **118**: 273–280.
- FISCHER M. A., OSWALD K. & ADLER W. (2008): Exkursionsflora für Österreich, Liechtenstein und Südtirol, 3. Aufl. – Linz: Biologiezentrum der Oberösterreich. Landesmuseen.
- FRITSCH K. (1897): Excursionsflora für Oesterreich (mit Ausschluss von Galizien, Bukowina und Dalmatien). – Wien: C. Gerold's Sohn.
- FUCHS H. P. (1954): Kleine Beiträge zur Nomenklatur und Systematik der Schweizer Flora. (Vorarbeiten zu einer «Flora Helvetica»). – Ber. Schweiz. Bot. Ges. **64**: 207–209.
- GELTMAN D. (2008): Konspekt sekcii *Chamaebuxus* Lázaro roda *Euphorbia* L. (Euphorbiaceae) [Synopsis of *Euphorbia* L. section *Chamaebuxus* Lázaro (Euphorbiaceae)]. – Novosti Sist. Vysšh. Rast. **40**: 109–158.
- GORNALL R. J. (2016): *Micranthes* (Saxifragaceae) and its infraspecific taxa in Europe. – New J. Bot. **6**: 50–57. <https://doi.org/10.1080/20423489.2016.1167581>
- GOTTSCHLICH G. (2009): Die Gattung *Hieracium* (Compositae) in der Region Abruzzen. – Stapfia **89**: 1–328.
- GOTTSCHLICH G. (2019): Bisher nicht bekannte oder nicht berücksichtigte Nachweise von *Hieracium*- und *Pilosella*-Taxa für Österreich. – Neilreichia **10**: 85–96.
- GREUTER W., BURDET H. M. & LONG G. (Eds.) (1984): Med-Checklist. A critical inventory of vascular plants of the circum-mediterranean countries **1** (ed. 2). – Genève: Conservatoire et Jardin botanique de la Ville de Genève.
- GREUTER W., BURDET H. M. & LONG G. (Eds.) (1986): Med-Checklist. A critical inventory of vascular plants of the circum-mediterranean countries **3**. – Genève: Conservatoire et Jardin botanique de la Ville de Genève.
- GREUTER W., BURDET H. M. & LONG G. (Eds.) (1989): Med-Checklist. A critical inventory of vascular plants of the circum-mediterranean countries **4**. – Genève: Conservatoire et Jardin botanique de la Ville de Genève.
- GUTERMANN W. (1975): Notulae nomenclaturales 1–18 (Zur Nomenklatur einiger Arten der mitteleuropäischen Flora). – Phytion (Horn) **17**: 31–50.
- GUTERMANN W. (2006): Notulae nomenclaturales 19–25 (Neue Namen und Kombinationen zur Flora Südtirols). – Phytion (Horn) **46**: 71–81.
- GUTERMANN W. (2009a): Notulae nomenclaturales 26–28 (Zur Nomenklatur dreier *Festuca*-Arten der Alpen). – Phytion (Horn) **49**: 1–7.
- GUTERMANN W. (2009b): Notulae nomenclaturales 29–40 (Zur Nomenklatur von Gefäßpflanzen Österreichs). – Phytion (Horn) **49**: 77–92.
- GUTERMANN W. (2011): Notulae nomenclaturales 41–45 (Neue Namen bei *Cruciata* und *Kali* sowie einige kleinere Korrekturen). – Phytion (Horn) **51**: 95–102.
- HALLER A. (1742): Enumeratio methodica stirpium Helvetiae indigenarum. – Gottingae: A. Vandenhoeck.
- HASSEMER G. (2018): Advances to the taxonomic knowledge of *Plantago subulata* (*Plantago* section *Mari-tima*, Plantaginaceae). – Turk. J. Bot. **42**: 653–661. <https://doi.org/10.3906/bot-1801-51>
- HESS H., LANDOLT E. & HIRZEL R. (1967): Flora der Schweiz und angrenzender Gebiete **1**. – Basel: Birkhäuser.
- HOHLA M., STÖHR O., BRANDSTÄTTER G., DANNER J., DIEWALD W., ESSL F., FIEREDER F., GRIMS F., HÖGLINGER F., KLEESADL G., KRAML A., LENGLACHNER F., LUGMAIR A., NÄDLER K., NIKLFELD H., SCHMALZER A., SCHRATT-EHRENDORFER L., SCHRÖCK C., STRAUCH M. & WITTMANN H. (2009): Katalog und Rote Liste der Gefäßpflanzen Oberösterreichs. – Stapfia **91**: 1–322.
- HÖRANDL E. & GUTERMANN W. (1995): *Draba aizoides* subsp. *beckeri* (Brassicaceae), ein Endemit der östlichsten Alpen und Kleinen Karpaten. – Phytion (Horn) **35**: 83–101.
- IAMONICO D., HASSEMER G., RØNSTED N. & DI PIETRO R. (2017): The intricate nomenclatural questions around *Plantago holosteum* (Plantaginaceae). – Phytotaxa **306**: 75–80. <https://doi.org/10.11646/phytotaxa.306.1.6>
- ICN (International Code of Nomenclature): see TURLAND & al. 2018.

- JACQUIN N. J. (1778): *Florae austriacae, sive Plantarum selectarum in Austria archiducatu sponte crescentium, icones, ad vivum coloratae, et descriptionibus, ac synonymis illustratae* 5. – Viennae: Gerold.
- JÄGER E. J. (Ed.) (2011): *Exkursionsflora von Deutschland* (Begr.: W. Rothmaler). *Gefäßpflanzen: Grundband*. 20., neu bearb. u. erw. Aufl. – Heidelberg: Spektrum Akademischer Verlag.
- JALAS J. & SUOMINEN J. (Eds.) (1983): *Atlas Florae Europaeae. Distribution of vascular plants in Europe* 6. – Helsinki: The Committee for Mapping the Flora of Europe and Soc. Biol. Fenn. Vanamo.
- JANCHEN E. (1963): *Catalogus Florae Austriae. Ein systematisches Verzeichnis der auf österreichischem Gebiet festgestellten Pflanzenarten. I. Teil: Pteridophyten und Anthophyten (Farne und Blütenpflanzen)*. [Erstes] Ergänzungsheft. – Wien: Springer-Verlag.
- JARVIS C. (2007): *Order out of Chaos. Linnaean plant names and their types*. – London: The Linnean Society of London.
- JUILLERAT P., BÄUMLER B., BORNAND C., EGGENBERG S., GYGAX A., JUTZI M., MÖHL A., NYFFELER R., SAGER L. & SANTIAGO H. (in Zusammenarbeit mit AESCHIMANN D.) (2017): *Flora Helvetica Checklist 2017*. – <https://www.infoflora.ch/de/flora/taxonomie/checklist.html> [accessed 5 Dec 2018].
- KERNER A. (1913): *Schedae ad floram exsiccata austro-hungaricam ... libell. X* [Ed.: WETTSTEIN R. v.; adjuv.: HANDEL-MAZZETTI H. v., DOERFLER I.]. – Vindobonae: Institutum Botanicum C. R. Universitatis.
- LANDOLT E. (Mitautoren: BÄUMLER B., ERHARDT A. E., HEGG O., KLÖTZLI F., LÄMMER W., NOBIS M., RUSMANN-MAURER K., SCHWEINGRUBER F. H., THEURILLAT J.-P., URMI E., VUST M. & WOHLGEMUTH T.) (2010): *Flora Indicativa. Ökologische Zeigerwerte und biologische Kennzeichen zur Flora der Schweiz und der Alpen/Ecological indicator values and biological attributes of the flora of Switzerland and the Alps*. – Bern: Haupt.
- LINNAEUS C. (1745): *Dissertatio botanica, qua Plantae Martino-Burserianae explicantur ...* – Upsaliae.
- LINNAEUS C. (1749): *Amoenitates Academicae I.* – Holmiae & Lipsiae: G. Kiesewetter.
- LIPPERT W. & MEIEROTT L. (unter Mitarbeit von AHLMER W., FÜRNRÖHR F., GOTTSCHLICH G. & SCHUHWERK F.) (2014): *Kommentierte Artenliste der Farn- und Blütenpflanzen Bayerns. Vorarbeiten zu einer neuen Flora von Bayern*. – München: Selbstverlag der Bayerischen Botanischen Gesellschaft.
- LÓPEZ GONZÁLES G. (1985): *El nombre correcto de *Arenaria lithops* Heywood y otras aclaraciones nomenclaturales sobre las especies españolas de este género*. – *Anales Jard. Bot. Madrid* 42: 258.
- LÓPEZ GONZÁLES G. & BAYER E. (1988): *El género *Ziziphora* L. (Labiatae) en el Mediterraneo occidental y sus relaciones con *Acinos* Miller ¿parentesco o convergencia?* – *Lagascalia* 15(Extra): 49–64.
- MARTINČIČ A., WRABER T., JOGAN J., PODOBNIK A., TURK B., VREŠ B., RAVNIK V., FRAJMAN B., STRGULC-KRAJŠEK S., TRČAK B., BAČIČ M., FISCHER M. A., ELER K. & SURINA B. (2007): *Mala flora Slovenije*. – Ed. 4. – Ljubljana: Slovenije tehniška založba.
- MEIKLE R. D. (1971): *The history of the Index Kewensis*. – *Biol. J. Linn. Soc.* 3: 295–299. <https://doi.org/10.1111/j.1095-8312.1971.tb00196.x>
- MELNIKOVA D. G. (2016a): *O taksonomičeskome statusu roda *Acinos* (Lamiaceae) [On the taxonomic status of the genus *Acinos* (Lamiaceae)]*. – *Bot. Žurn. (St. Petersburg)* 101: 80–94 [+1 tab. ad p. 86].
- MELNIKOVA D. G. (2016b): *Taxonomic and nomenclatural notes on *Clinopodium* L. and *Ziziphora* L. (Lamiaceae)*. – *Novosti Sist. Vysšh. Rast.* 47: 103–107, t. 1.
- NIKOLIĆ T. (Ed.) (2000): *Flora Croatica. Index florae croaticae, pars 3*. – *Natura Croatica* 9 (Suppl. 1): 1–324.
- NIKOLIĆ T. (Ed.) (2015–): *Flora Croatica Database*. – <http://hirc.botanic.hr/fcd> [accessed 5 Dec 2018].
- ORTEGA OLIVENCIA A. (2009): *Scrophularia*. – In CASTROVIEJO S. (Coord.) (2009): *Flora Iberica* 13: 97–134. – Madrid: Real Jard. Bot. CSIC.
- PIGNATTI S. (1982): *Flora d'Italia* 2. – Bologna: Edagricole.
- PILGER R. (1937): *Plantaginaceae*. – In ENGLER A. (Ed.): *Das Pflanzenreich* IV. 269 (Heft 102). – Leipzig: W. Engelmann.
- RAAB-STRAUBE E. VON (2018–): *Cistaceae*. – In Euro+Med Plantbase – the information resource for Euro-Mediterranean plant diversity. – <http://ww2.bgbm.org/EuroPlusMed/> [accessed 5 Dec 2018].
- RICHARDSON I. B. K. (1972): *Scrophularia*. – In TUTIN T. G., HEYWOOD V. H., BURGESS N. A., MOORE D. M.,

- VALENTINE D. H., WALTERS S. M. & WEBB D. A. (Eds.) (1972): *Flora Europaea* 3: 216–220. – Cambridge (U.K.): University Press.
- RICHTER H. E. (1835): *Caroli Linnaei Systema, genera, species plantarum uno volumine. Editio critica, adstricta, conferta sive Codex botanicus Linnaeanus ...* – Lipsiae: O. Wigand.
- SCHAEFER H., HECHENLEITNER P., SANTOS-GUERRA A., MENEZES DE SEQUEIRA M., PENNINGTON R. T., KENICER G. & CARINE M. (2012): Systematics, biogeography, and character evolution of the legume tribe Fabaeae with special focus on the middle-Atlantic island lineages. – *B. M. C. Evol. Biol.* 12: 250. <https://doi.org/10.1186/1471-2148-12-250>
- SCHÖNFELDER P. (1970): Südwestliche Einstrahlungen in der Flora und Vegetation Nordbayerns. – *Ber. Bayer. Bot. Ges.* 42: 17–100, A1–A46.
- SCHÖNSWETTER P., TRIBSCH A., SCHNEEWEISS G. M. & NIKLFELD H. (2003): Disjunctions in relict alpine plants: phylogeography of *Androsace brevis* and *A. wulfeniana* (Primulaceae). – *Bot. J. Linn. Soc.* 141: 437–446. <https://doi.org/10.1046/j.0024-4074.2002.00134.x>
- SCHUHWERK F. & LIPPERT W. (1997): Chromosomenzahlen von *Hieracium* (Compositae, Lactuceae) Teil 1. – *Sendtnera* 4: 181–206.
- SCHUHWERK F. & LIPPERT W. (2002): Chromosomenzahlen von *Hieracium* (Compositae, Lactuceae) Teil 4. – *Sendtnera* 8: 167–194.
- SCOPOLI J. A. (1760): *Flora Carniolica, exhibens plantas Carnioliae indigenas ...* – Vienna: J. Th. Trattner.
- SCOPOLI J. A. (1771): *Flora Carniolica, exhibens plantas Carnioliae indigenas ...* – Ed. 2, 1. – Vindobonae: I. P. Krauss.
- SÉGUIER J. F. (1745): *Plantae veronenses seu Stirpium quae in agro Veronensi reperiuntur methodica synopsis* 1. – Verona: Typ. Seminarii.
- SELL P. & MURRELL G. (2018): *Flora of Great Britain and Ireland* 1. – Cambridge (U.K.): University Press.
- ŠILIC Č. (1979): Monografija rodova *Satureja* L., *Calamintha* Miller, *Micromeria* Benth, *Acinos* Miller i *Clinopodium* L. u flori Jugoslavije. – Sarajevo: Zemaljski Muzej BiH.
- SMITH A. R. & TUTIN T. G. (1968): *Euphorbia*. – In TUTIN T. G., HEYWOOD V. H., BURGESS N. A., MOORE D. M., VALENTINE D. H., WALTERS S. M. & WEBB D. A. (Eds.) (1968): *Flora Europaea* 2: 213–226. – Cambridge (U.K.): University Press.
- SOLDANO A. (1991): Le sottospecie di Cesati; altre novità e precisazioni nomenclaturali e tassonomiche su fanerogame d'Italia e dell'area Mediterranea. – *Atti Soc. Ital. Sci. Nat. Mus. Civico Storia Nat. Milano* 131: 245–256.
- STACE C. (2010): *New Flora of the British Isles*. – 3rd ed. – Cambridge (U.K.): University Press.
- STAUDINGER M. (2009): *Saxifraga stellaris* L. subsp. *prolifera* (Sternb.) Schönb.-Temesy 1957. – In RABITSCH W. & ESSL F. (Eds.): *Endemiten – Kostbarkeiten in Österreichs Pflanzen- und Tierwelt*: pp. 230–231. – Klagenfurt: Naturwissenschaftlicher Verein für Kärnten.
- STEARNS W. T. (1957): An introduction to the *Species Plantarum* and cognate botanical works of Linnaeus. – In LINNAEUS, C., *Species Plantarum: A facsimile of the first edition 1753, vol. I*: i–xiv, 1–176. – Publ. Ray Soc. 140. – London: Ray Society.
- STERNBERG C. (1810): *Revisio Saxifragarum iconibus illustrata*. – Ratisbonae: H. F. A. Augustin.
- TEMESY E. (1957): Der Formenkreis von *Saxifraga stellaris* Linné. – *Phyton (Horn)* 7: 40–141.
- TIBOR S. (2008): A Magyarországi edényes flóra határozója, Harasztok – virágos növényeked. 4. – Budapest: Nemzeti Tankönyvkiadó.
- TISON J.-M. & FOUCAULT B. DE (Coords.) (2014): *Flora Gallica. Flore de France*. – Mèze: Biotope.
- TURLAND N. J., WIERSEMA J. H., BARRIE F. R., GREUTER W., HAWKSWORTH D. L., HERENDEEN P. S., KNAPP S., KUSBER W.-H., LI D.-Z., MARHOLD K., MAY T. W., McNEILL J., MONRO A. M., PRADO J., PRICE M. J. & SMITH F. G. (Eds.) 2018: *International Code of Nomenclature for algae, fungi, and plants (Shenzhen Code) adopted by the Nineteenth International Botanical Congress Shenzhen, China, July 2017*. – *Regnum Veg.* 159. – Glashütten: Koeltz Botanical Books.
- WEBB D. H. & GORNALL R. J. (1989): *Saxifrages of Europe*. – London: C. Helm.
- WIDÉN B. (2010): *Cistaceae*. – In JONSELL B. & KARLSSON T. (Eds.): *Flora Nordica* 6: 53–59. – Stockholm: The Swedish Museum of Natural History.

- WILHALM T., NIKLFELD H. & GUTERMANN W. (2006): Katalog der Gefäßpflanzen Südtirols. – Veröff. Naturmus. Südtirol **3**. – Wien: Folio Verlag.
- WISSKIRCHEN R. & HAEUPLER H. (1998): Standardliste der Farn- und Blütenpflanzen Deutschlands. – Stuttgart: Ulmer. [HAEUPLER H. (Ed.): Die Farn- und Blütenpflanzen Deutschlands **1**]
- ZAHN K. H. (1923): Compositae–*Hieracium*. Abteilung II. *Pilosella*. – In ENGLER A. (Ed.): Das Pflanzenreich **IV. 280** (Heft 82): 1147–1705. – Leipzig: W. Engelmann.
- ZAHN K. H. (1929): *Hieracium* [pro parte]. – In ASCHERSON P. & GRAEBNER P. (Eds.): Synopsis der mitteleuropäischen Flora **12**(1): 161–400. – Leipzig: Gebr. Borntraeger.
- ZAHRADNÍKOVÁ Á., PENIAŠTEKOVÁ M. & ŤAVODA O. (2002): *Hesperis*. – In GOLIAŠOVÁ K. & ŠIPOŠOVÁ H. (Eds.): Flóra Slovenska **V/4**: 230–251. – Bratislava: Veda.

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