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Specific Epithet - Apposition

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Report

The current article is part of a large research "Linguistic structure of binomial botanical denominations - specific epithet". According to the ICBN (International Code of Botanical Nomenclature) "The name of a species is a binary combination consisting of the name of the genus followed by a single specific epithet in the form of an adjective, a noun in the genitive, or a word in apposition, or several words, but not a phrase name of one or more descriptive nouns and associated adjectives in the ablative" (Chapter III, Section 4, Article 23.1).

The present article is focused on the specific epithet - apposition, which is the second most frequently used type of specific epithet. The research is based on "Conspectus of the Bulgarian vascular flora", Sofia, 2012. There are about 200 cases described in this article (the number is conditional because with some names it is not quite clear whether it is an adjective that is inappropriately agreed with the generic name or a noun that has not been documented in the available sources). These names could be interpreted in two ways, but within the entire survey they are assigned to a specific epithet - agreed attribute, labeled "error in agreement" and will not be considered in this article.

Nouns in **Nominativus** are used as a function of a specific epithet - application. Most often, these nouns represent the names of another genus or other popular name of a plant, thus pointing a similarity, an external resemblance or proximity to the described species (*Frangula alnus* "Alder buckthorn"). There are also names of animals, objects, abstract concepts as well as compound nouns that provide information about the place of distribution of the given species or for external characteristics such as shape, size, color or practical application of the plant. In some cases, a commonly accepted translation of the Latin name is not found, and these names are quoted in the different sources only by their denomination - referred to as "Scientific name".

Names of Other Botanical Genus

Abies - fir.

- Picea abies (Norway spruce)
- **2. Alcea** hollyhock.
- Malva alcea (Hollyhock mallow)
- 3. Alnus alder.
- Frangula alnus (Alder buckthorn, Glossy buckthorn, Breaking buckthorn)
- **4. Alopecurus** foxtail grass.
- Astragalus alopecurus (Alpine astragalus)
- 5. Alsine-a genus of herbs that includes the chickweeds and stitchworts, type of plant mentioned by Pliny; other authors associate the name with álsos (grove) because some species of this genus grow in the forests.
- Stellaria alsine (Bog stitchwort)
- **6. Alyssum** alyssum (from the Greek *a* "without" and *lyssa* "madness"), referring to the plant's use to cure rabies).
- Camelina alyssum (Stinking flaxweed).
- **7. Andrachne** andrachne, literally "with husky stamens".
- *Arbutus andrachne* (Greek strawberry tree)
- **8. Arctostaphylos** arctostaphylos (from the Greek arkto "bear" and staphyle "bunch of grapes".
- Vaccinium arctostaphylos (Caucasian whortleberry)
- **9. Armeria** armeria, lady's cushion.
- Dianthus armeria (Deptford pink)
- Silene armeria (Sweet William catchfly)
- 10. Calamagrostis reed grass.
- Achnatherum calamagrostis (Spear grass, Needle grass, Silver spike grass)
- **11. cardamine** bitter-cress, litelally "defending the heart" (from the Greek cardia "heart" and amyno "defend"), due to a supposed cardiotonic effect of the plant.

- Andrzeiowskia cardamine (Andrzeiowskia)
- **12. caucalis** caucalis: the Greek name of a plant mentioned by Theophrastus and Hippocrates.
- Caucalis platycarpos Carrot bur parsley, Small bur parsley, Bur parsley
- 13. cicer chick-pea.
- Astragalus cicer (Chick-pea milkvetch)
- **14. convolvulus** bindweed.
- Bilderdykia convolvulus (Black bindweed, Wild buckwheat)
- **15. conyza** horseweed, butterweed, fleabane.
- *Inula conyza* (Ploughman's-spikenard)
- **16. coronopus** type of plantain, literally "crow's foot" (from the Greek corone "crow" and pous "foot": reference to the leaves' shape that resemble the legs of a crow).
- Plantago coronopus (Buckhorn plantain, Cut leaf plantain)
- 17. **doronicum** leopard's bane.
- Senecio doronicum (Chamois ragwort)
- **18. draba** draba (from Greek drabe "sour, pungent" with reference to the leaves' taste); the plant is cited from Dioscorides*.
- Cardaria draba (Hoary cress)
- **19. dryopteris** wood fern (from the Greek drys "oak" and pteris "fern" referring to the plant's habitat).
- *Gymnocarpium dryopteris* (Oak fern)
- **20. elaeagnus** silverberry, oleaster (from the Greek elaia "olive" and agnos "pure", probably referring to the fruit).
- Salix elaeagnos (Bitter willow, Olive willow, Elaeagnus willow)
- **21. elatine** waterwort.
- Kickxia elatine (Sharpleaf cancerwort, Sharp-leaved fluellin)
- **22. jacobaea** ragwort (named for St. James /Jacobus, one of the Twelve Apostles).
- Senecio jacobea (Common ragwort)
- **23. ischaemum** genus of grass plants with stop bleeding properties (from Greek ischano "stop" and aima "blood").
- Dichanthium ischaemum (synonym of Bothriochloa ischaemum Yellow bluestem)
- Digitaria ischaemum (Smooth crabgrass)

- **24. lagurus** rabbit's tail (due to the ear's shape).
- Verbascum lagurus (Mullein lagurus)
- **25. nepeta** name of a plant mentioned by Pliny (probably the name comes from the Etruscan town Nepi where the plant grew).
- Calamintha nepeta (Lesser calamint)
- **26. odontites** relating to the teeth (from the Greek odous "tooth"): a plant mentioned by Pliny as good for toothache.
- Bupleurum odontites (Round-leaved thorough-wax)
- **27. onobrychis** sainfoin (from the Greek onos "ass" and bryco "to eat greedily" referring to its properties as a forage plant).
- Astragalus onobrychis (Milkvetch)
- **28. otites** relating to the ear (from the Greek ous, otos "ear").
- Silene otites (Spanish catchfly)
- **29. peplis** type of spurge cited by Pliny*.
- Euphorbia peplis (Purple spurge)
- **30. rhaponticum** genus of plants within the sunflower family; the leaves of some species in this genus resemble those of Rheum rhaponticum.
- Rheum rhaponticum (False rhubarb, Rhapontic rhubarb)
- **31. sempervivum** houseleeks, literally "forever alive".
- Saxifraga sempervivum (literally "Living forever saxifrage")
- **32. teucrium** germander (named for Teucer, a king of Troy who, according Pliny, used the plant as a medicine)
- Veronica teucrium (Saw-leaved speedwell)
- **33. trachelium** throatwort (from the Greek trachys "scabrous, rough").
- Campanula trachelium (Nettle-leaved bellflower)
- **34. tripolium** genus of plants in the aster tribe within the sunflower family (from the Greek treis "three" and polios "gray"; literally "whitish" because the flower changes its color during the period of anthesis in different shades of gray and white).
- Aster tripolium (Sea aster, Seashore aster)
- I. Names of Plants that are not Taxonomic Categories

This type of specific epithets is represented mostly by derivative and compound nouns as well as by plants names, cited by ancient authors.

***** The most used morphemes:

- o **Chamae**: low; dwarf chamaedrys, chamaepitys, chamaesyce.
- \circ **Hydro** : water hydrolapathum, hydropiper.
- o **Pseudo** : false pseudoacacia, pseudonarcissus etc.
- o -ago : suffix for derivative nouns with meaning "objects, plants, animals" fabago, liliago, selago etc.
- o **-aster**, **-astrum** : suffix for derivative nouns with pejorative nuance pyraster, alsinastrum, crupinastrum, marrubiastrum etc.
- o **-ellus**, **-ella**, **-illus**, **-culus**: suffixes for derivative nouns with diminutive meaning amellus, myrtillus, puilosella, rapunculus etc.
- **Compound nouns**: they emphasize similarity, feature, practical application of the plant cereifolium, cynocrambe, hippocastanum, onopteris etc.

❖ Names of plants cited by ancient authors

In the works of Pliny, Dioscorides, Theophrastus, Hippocrates, Galen and others there are names and descriptions of many plants, their peculiarities and their impact - aparine, damasonium, libanotis, mariscus, terebinthus etc. The names of ancient authors cited in the article are listed in **Index auctorum antiquorum**.

- **35. absinthium** wormwood (literally "unpleasant"): plant cited by Xenophon as apsinthion.
- Artemisia absinthium (Common wormwood)
- **36.** alsinastrum false alsine (see N_0 5): alsine + suffix -astrum.
- Elatine alsinastrum (Scientific name)
- **37. acarna** a type of thorny plant like a thistle cited by Theophrastus.
- *Picnomon acarna* (Scientific name)
- **38. aethiopis** name of a type of salvia in Piny. The name is derived from the Greek aithos "black" and opsis "image, shape" that characterizes Africans; hence the geographical denomination Aethiopia.
- Sálvia aethíopis (Mediterranean sage, African sage)
- **39. amellus** amellus: plant that Pliny claims to be appreciated by bees.
- Aster amellus (European Michaelmas-daisy)
- **40.** amomum name of an Indian spice plant used in the

Antiquity as an antidote.

- Sison amomum (Bastard stone-parsley)
- **41. androsaemum** a plant cited by Dioscorides, literally "man-blood" due to the color of berries juice.
- *Hypericum androsaemum* (Sweet-amber, Tutsan)
- **42. aparine** Greek name of the plant called cleavers due to its hooked bristles; the plant is cited by Theophastus,
- Gallium aparine (Cleavers, Catchweed, Stickyweed, Styckybud and others)
- **43. aphaca** sort of vetch cited by Theophrastus (from Greek aphak*e*).
- Lathyrus aphaca (Yellow pea, Yellow vetch)
- **44. aquifolium** plant cited by Pliny, literally "with thorny leaves".
- *Ilex aquifolium* (Common holly)
- **45. calamus** reed: the name is related to the myth of Kalamos, which drowned in the Meander River (now Büyük Menderes in Turkey), and his body was turned into a reed.
- Acorus calamus (Sweet flag)
- **46. carota** carrot (the name is found in Diphilus a Greek physician of Siphnus island, 3rd century BC).
- Daucus carota (Wild carrot)
- **47. cassia** from an ancient Greek name Kasia used by Dioscorides.
- Stachys cassia (Scientific name)
- **48. caucalis** a plant cited by Theophastus and Hippocrates.
- Anthriscus caucalis (Bur chervil)
- **49. cerefolium** literally "waxy leaf".
- Anthriscus cerefolium (Chervil, French parsley or Garden chervil)
- **50. cerris** a type of oak cited by Pliny.
- Quercus cerris (Turkey oak)
- **51. cervaria** type of poisonous grass used for spreading arrows (Pliny).
- Peucedanum cervaria (Scientific name)
- **52. chamaedrys** literally "dwarf oak" (from the Greek chamái "to the ground, creeping" and drys "oak"). The name is used by Theophrastus for a type of low-stem plant with leaves similar to those of oak.
- Teucrium chamaedrys (Wall germander)
- Veronica chamaedrys (Germander speedwell)

- **53. chamaemespilus** low mespilus.
- Sorbus chamaemespilus (False medlar, Dwarf whitebeam)
- **54. chamaepitys** dwarf pine (from the Greek chamái "to the ground, creeping" and pitys "pine" due to the similarity of the leaves).
- *Ajuga chamaepitys* (Yellow bugle)
- **55. chamaesyce** low fig (from the Greek chamái "to the ground, creeping" and syce "fig": creeping fig because like the fig tree it produces latex).
- Euphorbia chamaesyce (Prostrate spurge)
- **56. chamomilla** small apple (from the Greek chamái "to the ground" and mêlon "apple" due to the smell of flowers that vaguely resembles those of apples).
- *Matricaria chamomilla* (Chamomile, German chamomile)
- **57. cicera** chickpeas.
- Lathyrus cicera (Red vetchling, Flatpod peavine)
- **58. clematitis** plant cited by Dioscorides and Apuleius (an ancient Greek name for vine or twig).
- Aristolochia clematitis (European birthwort)
- **59. cneorum** type of flowering plant cited by Pliny.
- Daphne cneorum (Rose daphne)
- **60. coggygria** smoketree (Pliny attributed this name to an Apennine shrub with red wood and from which a purple dye was obtained).
- *Cotinus coggygria* (European smoketree, Eurasian smoketree)
- **61. cracca** latin name of wild vetch in Pliny.
- *Vicia cracca* (Tufted vetch)
- **62. crupinastrum** false crupina (crupina + suffix -astrum).
- *Crupina crupinastrum* (Scientific name)
- **63. cyanus** blue (from the Greek cyanos "light blue" due to the its color).
- Centaurea cyanus (Cornflower)
- **64. cynapium** literally "celery canine" (from the Greek cyon "dog" and from Apium "celery").
- Aethusa cynapium (Fool's parsley)
- **65. cynocrambe** literally "cabbage canine" (from the Greek cyon "dog" and krambe "cabbage").
- Theligonum cynocrambe (Dog cabbage)
- **66. cyparissias** derivative noun for "cypress"; often

- meaning "false or like cypress" due to the leaves' shape.
- Euphorbia cyparissias (Cypress spurge)
- **67. damasonium** name of an aquatic plant, derived from the Greek damázein "tame", referring to its supposed antidote properties against the toads poison.
- *Cephalanthera damasonium* (White helleborine)
- **68. daucorlaya** a hybrid name composed of the generic names Daucus "carrot" and Orlaya "Orlaya".
- Orlaya daucorlaya (Scientific name)
- **69. ebulus** elder (the name is found in the works of Virgil, Pliny and other authors).
- Sambucus ebulus (Danewort, European dwarf elder)
- **70. endivia** diminutive form from the Greek entybon "January", probably referring to the month the plant is grown.
- *Cichorium endivia* (Endive)
- **71. erucago** derivative name from eruca (herbaceous plant with acrid taste).
- Bunias erucago (Crested warty cabbage, Corn rocket)
- **72. esula** type of spurge (latinized form of Celtic name "sharp", referring to the acrid juice).
- Euphorbia esula (Green spurge, Leafy spurge)
- **73. fabago** derived denomination from Latin name faba (bean).
- Zygophyllum fabago (Syrian bean-caper)
- **74. frainetto** erratum in the name farnietto (small English oak).
- Quercus frainetto (Hungarian oak or Italian oak)
- **75. galeobdolon** stinking nettle (from the Greek galée "weasel, marten, skunk" and bdólos "stench" due to the fetid smell of crumpled leaves).
- Lamium galeobdolon (Yellow archangel)
- **76. githago** a name used by Pliny for *Nigella sativa* because of the similarity in the seeds.
- Agrostemma githago (Agrostemma githago, Common corn-cockle)
- 77. **harmala** derivative noun from the Arabic vernacular name harmil, because of its medicinal use.
- Peganum harmala (Wild rue)
- **78. helenium** a plant named for Helen of Troy (according to the legend she was collecting this plant when she was abducted).
- Inula helenium (Elecampane)
- **79. hippocastanum** horse chestnut (from Greek).

- Aesculus hippocastanum (European horse-chestnut, Conker tree)
- **80. hydrolapathum** water dock (from the Greek prefix hydro- "relating to the water" and lápathon "dock").
- Rumex hydrolapathum (Great water dock)
- **81. hydropiper** water pepper (from the Greek prefix hydro-"relating to the water" and from the Latin piper "pepper").
- Persicaria hydropiper (Water-pepper)
- **82. intybus** endive (derivative noun from Egyptian tybi (January), referring to the month the plant was usually developed).
- Cichorium intybus (Common chicory)
- **83. helleborine** a derivative noun from the Greek elléborus "hellebore" due to the resemblance in the leaves.
- Epipactis helleborine (Broad-leaved helleborine)
- **84. jujuba** probably latinized form of an Arabian name of this plant.
- Ziziphus jujuba (Jujube)
- **85. lappa** burdock (plant mentioned by Virgil and Pliny).
- Arctium lappa (Greater burdock)
- **86. lathyris** an ancient name for some types of spurge (in Dioscorides and Galen).
- Euphorbia lathyris (Caper spurge)
- **87. libanotis** incense (in Theophrastus and Hippocrates) or other aromatic plant (in Dioscorides).
- Seseli libanotis (Moon carrot, Mountain stone-parsley)
- **88. liliago** a derivative noun from lilium "lily" (due to an external resemblance).
- Anthericum liliago (St. Bernard's lily)
- **89. mariscus** a type of reed (in Pliny).
- Cladium mariscus (Swamp sawgrass, Great fen-sedge, Saw-sedge, Sawtooth sedge)
- **90. marrubiastrum** false marrubium (marrubium a noun of Hebrew origin with meaning "bitter juice").
- Leonurus marrubiastrum (Scientific name, synonym Chaiturus marrubiastrum)
- **91. myrtillus** small myrtle.
- *Vaccinium myrtillus* (European blueberry; also Bilberry, Whortleberry")
- **92. napus** turnip.
- Brassica napus (Rapeseed)

- **93. onopteris** donkey fern (from the Greek ónos "donkey" and ptéris "fern").
- Asplenium onopteris (Irish spleenwort, Western black spleenwort)
- **94. opulus** a type of maple (due to the leaves resembling those of the maple).
- Viburnum opulus (Guelder rose, Water elder)
- **95. ornus** ash (Virgil, Columella).
- Fraxinus ornus (Manna ash, South European flowering ash)
- **96. pelecinus** name of a plant cited by Hippocrates, Theophrastus and Pliny.
- Bisserula pelecinus (Scientific name)
- **97. peplus** a type of spurge (in Pliny and Dioscorides).
- Euphorbia peplus (Petty spurge)
- **98. peuce -** fir.
- Pinus peuce (Macedonian pine, Balkan pine)
- **99. pilosella -** hairy, with small hairs (diminutive noun from pilosa "covered in soft, long hair).
- *Hieracium pilosella* (Mouse-ear hawkweed)
- **100. polium** a plant cited by Celsus and Pliny (probably from the Greek *polios* "grey, greyish).
- *Teucrium polium* (Felty germander)
- **101. pseudacorus** false acorus (sweet flag).
- Iris pseudacorus (Yellow flag, Yellow iris)
- **102. pseudarmeria** false armeria.
- Dianthus pseudarmeria (Scientific name)
- **103. pseudoacacia** false acacia (thorny, spiny).
- Robinia pseudoacacia (Black locust)
- **104. pseudocyperus** false cyperus.
- *Carex pseudocyperus* (Cyperus sedge)
- **105. pseudonarcissus** false narcissus (generic name with meaning "to numb, numbness").
- Narcissus pseudonarcissus (Wild daffodil)
- **106.** pseudopilosella false pilosella (see № 99).
- *Hieracium pseudopilosella* (Scientific name)
- **107. pseudoplatanus** false plane tree.
- Acer pseudoplatanus (Sycamore maple)
- **108. pulegium -** roman mint (probable etymology "repels fleas").

- Mentha pulegium (Pennyroyal, Squaw mint, Pudding grass)
- **109. pyraster** derivative noun from pear with pejorative nuance; wild pear.
- *Pyrus pyraster* (European wild pear)
- 110. rapa turnip.
- Brassica rapa (Turnip)
- **111. raphanistrum** derivative noun from Greek meaning "appears quickly" in reference to the rapid germination of radish seeds.
- Raphanus raphanistrum (Radish)
- **112. rapunculus** small turnip.
- Campanula rapunculus (Rampion bellflower, Rover bellflower)
- **113. rhoeas** from the Greek rhoía "pomegranate", referring to the bright red color.
- *Papaver rhoeas* (Common poppy)
- **114. selago** an ancient Latin name for *Lycopodium selago* (moss-like plant).
- Huperzia selago (Northern firmoss)
- 115. silaus a type of celery (in Pliny).
- Silaum silaus (Pepper saxifrage)
- **116. siler -** a type of willow (in Vergil and Pliny).
- *Laserpitium siler* (Laserwort)
- **117. stramonium -** spiked fruit.
- Datura stramonium (Jimsonweed)
- **118. terebinthus** turpentine (plant cited by Theophrastus).
- Pistacia terebinthus (Terebinth, Turpentine tree)
- **119. trixago** germander (in Pliny).
- Bellardia trixago (Mediterranean lineseed)
- **120. unedo** Latin name of the strawberry tree, derived from unum edo "I eat only one", referring to the content of an alkaloid in the fruit that advises do not eat so many.
- *Arbutus unedo* (Strawberry tree)
- **121. virgaurea** = virga aurea golden twig (because of aureate flowers).
- Solidago virgaurea (European goldenrod)
- **122. vitalba** = vitis alba white vine.
- Clematis vitalba (also known as Old man's beard)
- **123. viticella -** small vine.

- Clematis viticella (Italian leather flower, Purple clematis)
- II. Names of Animals
- **124.** asterias sea star.
- Silene asterias (Scientific name, literally "Campion seastar")
- **125. carduelis** goldfinch, probably referring to the fact that the goldfinches are greedy of its seeds.
- Carduus carduelis (Scientific name, literally "Plumeless thistle-goldfinch")
- **126. elephas** elephant: due to its large size or to the presence of organs that resemble a proboscis.
- Rhynchocorys elephas (Scientific name)
- **127. gryllus** cricket (the spikelets are in groups of three and as a whole have a vague resemblance to a cricket).
- Chrysopogon gryllus (Scientific name, literally "Golden beard cricket")
- **128. lupulus** little wolf.
- *Humulus lupulus* (Common hop because it chokes the young shrubs to which it clings, like the wolf with its prey)
- **129. scolopendrium** centipede.
- *Phyllitis scolopendrium* (Hart's-tongue, synonym of Asplenium scolopendrium)
- **130. simia** monkey (because of the blossom's shape resembling a monkey's muzzle).
- Orchis simia (Monkey orchid)

III. Names of Objects and Abstract Nouns

The specific epithets of this type could be divided into several semantic groups:

- o resemblance calceolus (small shoe), lagopus (hare's foot), myurus (tail of mouse);
- features as shape (*martagon* "turban", *apios* "pear"), coloration (*flammula* "small flame"), dimension (*pumilio* "dwarf"), solidity (robur "strength");
- particular characteristics of the plant calcitrapa "heel trap", patientia "patience", podagraria "remedy against gout", sophia "wisdom";
- use ladanum "resin with a pungent odor", *elaterium* "juice with purgative action".
- **131. agnipilus** lamb's hair.
- *Corothamnus agnipilus* (Unresolved name)
- **132. anthora** literally "admirable flower" (from the Greek

ánthos flower and oráo I look, I admire).

- Aconitum anthora (Anthora, Yellow monkshood, Healing wolf's bane)
- **133. apios** pear (reference to the shape of the tubers).
- Euphorbia apios (Scientific name, literally "Spurge -pear")
- **134. botrys** bunch of grapes.
- *Chenopodium botrys* (Jerusalem-oak goosefoot)
- *Teucrium botrys* (Cut-leaved germander)
- **135. bulbocodium -** woolly bulb.
- Romulea bulbocodium (Crocus-leaved romulea)
- **136. cadmea** zinc ore (probably because of the coloring).
- *Myosotis cadmea* (Scientific name, literally "Forget-menot zinc ore")
- **137. calceolus** small shoe.
- Cypripedium calceolus (Lady's slipper orchid)
- **138. calcitrapa** literally "heel trap" (probably due to the long thorns that could injure the foot).
- *Centaurea calcitrapa* (Red star-thistle, Purple starthistle)
- **139. candelabrum** branched candlestick (because of the common look of the plant with patent branches arched upwards).
- Cirsium candelabrum (Scientific name, literally "Common thistle candlestick")
- **140. cotula** small cup (reference to the cupped area at the base of the leaves).
- Anthemis cotula (Stinking chamomile)
- **141. dactylon** finger (due to the inflorescence' shape).
- Cynodon dactylon (Vilfa stellata dūrvā grass, Bermuda grass)
- **142. elaterium** juice with strong purgative action (reference to the forceful expulsion of the seeds from this plant).
- Ecballium elaterium (Squirting cucumber, Exploding cucumber)
- **143. ficaria -** fig plantation.
- Ranunculus ficaria (Lesser celandine, Pilewort, literally "Fig buttercup" because of the nodules on the roots resembling small figs)
- **144. flammula -** small flame.
- Ranunculus flammula (Lesser spearwort, Greater creeping spearwort)
- Clematis flammula (Fragrant virgin's bower)

- **145. frutex** shrub.
- *Caragana frutex* (Russian pea shrub)
- **146. helix** winding around (reference to the stems that wind around themselves).
- *Hedera helix* (Common ivy, English ivy)
- **147. irio** rainbow.
- Sisymbrium irio (London rocket)
- **148. ladanum** a resinous juice emitted from some plants and used in the perfume industry.
- Galeopsis ladanum (Red Hemp-nettle)
- **149. lagopus** hare's foot (from the Greek lagós "hare" and pus "foot"): a type of clover cited by Galen and Dioscorides.
- Plantago lagopus (Mediterranean plantain)
- **150. leontopetalum** lion's petal.
- Leontice leontopetalum (Leontice)
- **151. lingua** tongue (reference to the shape of the blossom or of long undivided leaves).
- Ranunculus lingua (Greater spearwort)
- **152. lychnitis** candlestick, lamp (referring to the ancient use of one species as a wick).
- *Verbascum lychnitis* (White mullein)
- **martagon** turban (due to the flower's shape).
- Lilium martagon (Martagon lily, Turk's cap lily)
- **melanoxylon** black wood.
- Rubus melanoxylon (Scientific name, literally "Blackberry with black wood")
- **melissophyllum** lemon balm leaf.
- *Melittis melissophyllum* Bastard balm)
- **156. millefolium** thousand leaves.
- Achillea millefolium (Yarrow)
- **157. morio** crazy, fool, silly (probably reference to the very variable color of this orchid).
- Orchis morio (Green-winged orchid, synonym Anacamptis morio)
- **158. myurus** tail of mouse.
- Vulpia myurus (Annual fescue, Rat's tail fescue)
- **159. patientia -** patience (reference to the adaptability of this species).
- Rumex patientia (Patience dock)

- **160. pneumonanthe** flower of the wind (from Greek).
- Gentiana pneumonanthe (Marsh gentian)
- **161. podagraria** remedy against gout (from the Greek *pus* "foot" and agreúo "catch").
- Aegopodium podagraria (Ground elder)
- **162. portula -** small door.
- Peplis portula (Water purslane, synonym Lythrum portula)
- **163. pumilio** dwarf.
- Chenopodium pumilio (Clammy goosefoot, synonym Dysphania pumilio)
- **164. radula** scraper (due to the presence of small teeth or spines that resemble a rasp).
- Rubus radula (Hairy bramble)
- **165. robur -** hardness, strength.
- Quercus robur (Common oak, English oak)
- **166. securidaca -** compound noun (securis "hatchet" and daga ("short sword").
- Securigera securidaca (Hatchet vetch, Goat pea)
- **167. serriola** small saw (reference to the serrated leaves).
- Lactuca serriola (Prickly lettuce, Milk thistle)
- **168. siliquastrum** pod (with pejorative nuance due to the suffix -astrum).
- *Cercis siliquastrum* (Judas tree)
- **169. soda** soda.
- Salsola soda (Opposite-leaved saltwort, Opposite leaf Russian thistle)
- **170. sophia** wisdom.
- Descurainia sophia (Flixveed, Herb Sophia)
- 171. **xylosteum** wood hard as a bone (from Greek).
- Lonicera xylosteum (Fly honeysuckle, Dwarf honeysuckle)

IV. Names, Indicating Habitat

Compound names formed through the verb stem -cola (colo, colui, cultus 3 - dwell, indwell) are predominant. There are also 3 derivative nouns formed through prefixes epi-, hypo- (epilinum, epithymum, hypopytus); 1 ethnonym - juruk; 4 toponyms - kapela, mahaleb, padus, telmateia; 2 cases of assumed but insufficiently clarified meaning - beccabunga, locusta.

- **172. alpicola** living in high mountains, alpine.
- Hieracium alpicola (Alpine hawkweed)
- **173. arenicola** living in sandy areas.
- Festuca arenicola (Scientific name, literally "Sandy fescue")
- **174. banaticola** from Banat (geographical and historical region in Central Europe).
- *Hieracium banaticola* (Scientific name, literally "Hawkweed from Banat")
- **175. beccabunga** букв. крайпоточна грудка (from German bach "creek" and bunge tuber).
- *Veronica beccabunga* (Brooklime, European speedwell)
- **176. epilinum** literally "growing on flax" (genus favored by this parasitic plant).
- *Cuscuta epilinum* (Flax dodder)
- **177. epithymum** literally "growing on thyme" (host of this parasitic plant).
- Cuscuta epithymum (Lesser dodder)
- **178. hypopitys** literally "under pine" (reference to the natural habitat of the plant).
- *Monotropa hypopitys* (Yellow pine-sap, Pinesap)
- **179. juruk** yuruk: shepherds in Rhodope mountains and Balkan mountains).
- Verbascum juruk (Scientific name, literally "Mullein juruk")
- **180. kapela** mountain in Western Croatia.
- Paronychia kapela (Silver nailwort)
- **181. locusta** growing in an enclosed space (locus "place").
- Valerianella locusta (Corn salad, Common cornsalad, Lamb's lettuce)
- **182. mahaleb** term used by medieval Arabs for a plant of uncertain identity.
- *Prunus mahaleb* (Mahaleb cherry, St. Lucy cherry)
- **183. monticola** mountain dweller.
- Alchemilla monticola (Hairy lady's mantle)
- **184.** padus of the river Po in Italy).
- Prunus padus (Bird cherry, Hagberry, Mayday tree)
- **185. petricola** dweller of the rocks.
- *Cerastium petricola* (Scientific name, literally "Mouse-ear chickweed of the rocks")

- **186. pindicola** living in Pindus (mountain in Greece, dwelling of Apollo and the muses).
- *Onobrychis pindicola* (Scientific name, literally "Sainfoin from Pindus mountains")
- Potentilla pindicola (Scientific name, literally "Cinquefoil from Pindus mountains")
- Soldanella pindicola (Scientific name, literally "Snowbell from Pindus mountains")
- **187. pirinicola** living in Pirin (mountain in Bulgaria).
- Hieracium pirinicola (Scientific name, literally "Hawkweed from Pirin mountain")
- **188. pratericola** living in marketplaces (from the Greek pratérion "marketplace").
- Chenopodium pratericola (Desert goosefoot)
- **189. rupicola** living on the rocks.
- Festuca rupicola (Scientific name, literally "Fescue from the rocks")
- **190. sylvicola** inhabitant of woods.
- *Poa sylvicola* (Scientific name, literally "Bluegrass from the woods")
- **191. telmateia -** of marshes (from Greek).
- Equisetum telmateia (Great horsetail, Northern giant horsetail)
- **192. xanthicola -** from the region of Xanthi (town in Northern Greece).
- Salix xanthicola (Scientific name, literally "Willow from Xanthi")

V. Names, derivative from verbs

- **193. lantana** from lento "bend, twist"; according to other opinion the epithet comes from common Italian name of this plant.
- Viburnum lantana (Wayfarer, Wayfaring tree)
- **194. mezereum** probably from Persian verb with meaning "kill" (relating to very poisonous plants).
- Daphne mezereum (February daphne, Mezereon)
- VI. Names with uncertain etymology for further defining
- **195. muricellum** probably diminutive noun from murex "genus of tropical sea snails".
- *Hieracium muricellum* (Scientific name, literally "Hawkweed snail")
- **196. mutellina** latinized of motellina, Italian popular name of the plant.

- Ligusticum mutellina (Alpine lovage)
- **197. negundo** from a Sanskrit name for *Vitex negundo*, referring to the similarity of the leaves to those of Vitex.
- *Acer negundo* (Boxelder maple)
- **198. orontium** unidentified aquatic plant, cited by Galen as a remedy against jaundice (literally "from the river Orontes in Syria").
- *Misopates orontium* (Linear leaf snapdragon, Weasel's snout, Lesser snapdragon, Calf's snout)
- **199. ritro** probably thorny plant cited by Theophrastus and Hippocrates.
- *Echinops ritro* (Globe thistle)
- **200. stoebe** unidentified plant cited by different ancient authors.
- *Centaurea stoebe* (Scientific name)
- **201. tragium** a name of a plant, derived from the Greek trágos "goat" (due to the unpleasant odor).
- Pimpinella tragium (Scientific name, literally "Goat's anise")

Conclusion

The specific epithets-appositions as well as the other types of specific epithets carry versatile multi-layered information on particular botanical species. Therefore, a good knowledge of their etymology and meaning contributes to the further development and refinement of the knowledge of the species themselves.

Index Auctorum Antiquorum

- 1. **Apuleius** (Lucius Apuleius Madaurensis, 125 -170 AD) a Latin-language writer, philosopher and rhetorician. His most famous work is the bawdy novel "Metamorphoses", also known as "The golden ass".
- **2.** Celsus (Aulus Cornelius Celsus, 25 BC c. 50 AD) a Roman encyclopaedist, known by his work "De medicina".
- **3.** Columella (Lucius Iunius Moderatus Columella, 4 c. 70 AD) a famous writer on agriculture in the Roman empire. Author of "De re rustica" and "De arboribus".
- **4. Dioscorides** (Pedanius Dioscorides, c. 40 90 AD) a Greek physician, pharmacologist and botanist. His work "De materia medica" about herbal medicine and related medicinal substances was widely known in the Roman empire.
- **5. Galen** of Pergamon (Aelius *or* Claudius Galenus, 129 c. 216 AD) a Greek physician, surgeon and philosopher in the Roman empire, with extraordinary influence on the development of various disciplines, including anatomy, physiology, pharmacology as well as philosophy and logic. Author of many specialized works.

- **6. Hippocrates** of Kos (460 c. 370 BC) a Greek physician, called "Father of Medicine" due to his enormous contribution to the medicine and medicinal education. The works of Hippocrates and other scientists are collected in so called "Corpus Hippocraticum", containing about 70 medical writings.
- 7. Pliny (Gaius Plinius Secundus, 23 79 AD) a Roman writer, natural philosopher, encyclopedist. The most important work is "Naturalis historia" into which is collected much of the knowledge of his time.
- **8. Theophrastus** (371 -287 BC) a Greek writer, philosopher, successor to Aristotle in Peripatetic school. He is often considered father of the botany due to his botanical works "Historia plantarum" and "De plantis".
- **9. Virgil** (Publius Vergilius Maro, 70 19 BC) an ancient Roman poet of the Augustan period.
- **10.** Author of three of most famous poems in Latin literature "Bucolica", Georgica", Aeneis".
- 11. The "Aeneis" has been considered the national epic of ancient Rome.
- **12. Xenophon** (430 534 BC) an ancient Greek philosopher, historian, student of Socrates. Author of "Anabasis", "Cyropaedia" and other works.
- 13. Brummit, R. K. (eds) 1992. Vascular plant families and genera.

- Royal Botanic Gardens, Kew. 804 p.
- **14.** Brummit, R. K. & Powel, C. (eds) 1992. Authors of plant names. Royal Botanic Gardens, Kew. 732 p.
- **15.** Castiglioni, L., Mariotti, S. 2007. Vocabolario della Lingua Latina. Loescher Editore Quarta edizione, Torino. 2272 p.
- **16.** Glare, P. G. W. 1982. Oxford Latin Dictionary. Glarendon Press, Oxford. 2126 p.
- 17. Heywood V (1993) Flowering Plants of the World. B T Batsford Ltd, London. 336.
- **18.** Strasburger's Textbook of Botany. 1976. Longman Group Ltd., London. 877 p.
- **19.** Stuessy T (2009) Plant Taxonomy. The Systematic Evaluation of Comparative Data. Columbia University Press, New York. 568.
- **20.** Zander R (2014) Dictionary Plant Names. Plant Press. 19th Edition. 990 p.
- 21. www.actaplantarum.org.
- 22. www.davesgarden.com.
- 23. www.jardinsdugue.eu/le-latin-botanique.