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SPECIFIC BOTANICAL EPITHETS MEANING SENSORY PERCEPTIONS

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ABSTRACT

The present article deals with specific botanical epithets, expressed by adjectives and participles, that indicate sensory perceptions such as the feeling of touch, smell, and taste. The article contains a list of alphabetically arranged epithets, as well as a linguistic analysis of adjective types by composition and the word-formative methods applied to them. Each adjective is represented with its dictionary forms, a short etymological note, and the binomial denomination(s) in which it participates. Either the common English name or a literal translation of the scientific Latin name is added after each plant name.

The article is based on the "Conspectus of the Bulgarian vascular flora", Sofia, 2012.

Keywords: Specific botanical epithets; Adjectives; Participles; Sensory perceptions; Word-formation

1 INTRODUCTION

The present article, based on the "Conspectus of the Bulgarian vascular flora" [1], discusses a relatively small group of specific botanical epithets meaning sensory perceptions. These epithets provide information about subjective qualities, such as the feel of touch, smell, or taste. The research contains epithets expressed by adjectives and participles that agree with the gender of the generic name.

The adjectives are ordered alphabetically and are given in their dictionary forms according to the rules of Latin morphology – durus, a, um; asper, era, erum; induratus, a, um (the adjectives of first and second declension as well as the past passive participles); laevis, e (the adjectives of third declension with two nominative forms), ferox, -ocis; glabrescens, -entis (the adjectives of third declension with one nominative form as well as the present active participle). The meaning of adjectives as botanical attributes is presented according to "The Names of Plants" [2], "Acta plantarum" [3], and "A Grammatical Dictionary of Botanical Latin" [4]. A note in brackets containing their word-formative elements accompanies the derivative and compound adjectives. The note of the participles indicates the verb they belong to. Several adjectives carrying additional semantic connotations are also included and interpreted.

Each adjective is followed by the binomial names containing it. The particular form of the adjective depends on the generic name's gender. The English common name or the literal translation of the scientific Latin denomination, when there is no common name, is also presented.

The taxonomic status of the binomial names (accepted name, synonym of a close species, or unclear name) is determined according to "Plants of the World Online" [5].

2 LIST OF EPITHETS

The epithets are divided into three groups according to their particular connotation of sensory perception.

2.1 Particular sensation of touch

Among the epithets in this subgroup, several could also be charged with additional shades of meaning, such as "presence or lack of an organ" (*echinatus* – having spines, therefore "prickly"; *epilosus* – hairless, thus "smooth"; *setifer* – bearing bristles, i.e., "rough, prickly"; *tomentosus* – covered with fine hairs, i.e., "fluffy", etc.), or "practical application" (*scabiosus* – wrinkled, rough or "used as a remedy against skin diseases"). In the present research, however, the meaning "sensation of touch" in contact with the particular plant species is assumed to be the leading one.

2.1.1 *Asper, era, erum* – rough [2], wrinkled, bristly [3].

- *Astragalus asper* (Accepted name; literally: Rough milkvetch)
- *Myosotis aspera* (synonym of *Myosotis sylvatica* subsp. *subarvensis*)
- *Sonchus asper* (Prickly sow-thistle, Rough milk thistle, Spiny-leaved sow thistle)

2.1.2 *Calvescens, -entis* [present active participle of *calvesco* – to become bald] – becoming bald, with no-persistent hair [2].

- *Centaurea calvescens* (synonym of *Centaurea reichenbachii*)

2.1.3 *Dumalis, e* [*dumus* – bush] – thorny, bushy [2], hirsute, bristly, prickly [3, 4].

- *Rosa dumalis* (Glaucous dog rose)

2.1.4 *Durus, a, um* – hard, tough [2, 3, 4].

- *Sclerochloa dura* (Common hardgrass, Fairground grass)

2.1.5 *Echinatus, a, um* [*Gr. echinos* – hedgehog] – prickly, spiny, equipped with thorns [2, 3].

- *Carex echinata* (Star sedge, Little prickly sedge)
- *Cynosurus echinatus* (Rough dig's-tail, Bristly dog-tail grass)
- *Glycyrrhiza echinata* (Chinese liquorice, Hedgehog liquorice)
- *Trifolium echinatum* (Prickly clover)

2.1.6 *Epilosus, a, um* [*e-* – without + *pilosus* – hairy] – hairless, smooth [2, 3].

- *Stipa epilosa* (synonym of *Stipa pulcherrima* – Golden feather grass)

2.1.7 *Farinosus, a, um* [*farina* – flour] – floury, floured (the surface of culms is mealy, powdery) [2, 3, 4].

- *Primula farinosa* (Bird's-eye primrose)

2.1.8 *Ferox, -ocis* [*ferus* – wild, untamed] – prickly, fierce (due to numerous spines or rigid bristles) [2, 3].

- *Dipsacus ferox* (Spiny teasel, Sardinian teasel)

2.1.9 *Glaber, bra, brum* – hairless, smooth, glabrous [2, 3, 4]

- *Alchemilla glabra* (Smooth lady's mantle)
- *Arabis glabra* (synonym of *Turritis glabra* – Tower mustard)
- *Cerinth glabra* (Smooth honeywort)
- *Chamaecytisus glaber* (synonym of *Chamaecytisus elongatus*; literally: Hairless broom)
- *Cruciata glabra* (Smooth crosswort)
- *Glycyrrhiza glabra* (Liquorice)

- *Herniaria glabra* (Smooth rupturewort)
- *Hypochaeris glabra* (Smooth cat's ear)
- *Pycnus glaber* (synonym of *Cyperus glaber*)
- *Ulmus glabra* (Wych elm, Scotch elm),

2.1.10 Glabratus, a, um [past passive participle of *glabro* – to denude of hair or bristles] – hairless, devoid of hair, smooth, glabrous [2, 3, 4].

- *Erigeron glabratus* (Variable fleabane)
- *Luzula glabrata* (Smooth woodrush)
- *Verbascum glabratum* (Accepted name; literally: Smooth mullein)

2.1.11 Glabrescens, -entis [present active participle of *glabresco* – to become smooth] – becoming smooth or glabrous [3, 4].

- *Thymus glabrescens* (Lovey anus thyme)

2.1.12 Glutinosus, a, um [*gluten* – glue] – sticky, viscous [2, 3, 4].

- *Alnus glutinosa* (Common alder, Black alder, European alder)
- *Odontites glutinosus* (synonym of *Macrosyringion glutinosum*)
- *Salvia glutinosa* (Glutinous sage, Sticky sage, Jupiter's distaff)
- *Saponaria glutinosa* (Accepted name; literally: Sticky soapwort)

2.1.13 Hirsutus, a, um [*hirtus* ↓] – hairy, hirsute, rough-haired (due to the presence of minute or sparse hairs), shaggy [2, 3, 4].

- *Althaea hirsuta* (synonym of *Malva setigera* – Rough marshmallow)
- *Alyssum hirsutum* (Accepted name)
- *Arabis hirsuta* (Hairy rock-cress)
- *Bassia hirsuta* (synonym of *Spirobassia hirsuta* – Hairy smotherweed)
- *Cardamine hirsuta* (Hairy bittercress)
- *Chaerophyllum hirsutum* (Hairy chervil)
- *Chamaecytisus hirsutus* (Hairy broom, Clustered broom)
- *Epilobium hirsutum* (Great willowherb, Hairy willowherb)
- *Glechoma hirsuta* (Accepted name)
- *Herniaria hirsuta* (Hairy rupturewort)
- *Hypericum hirsutum* (Hairy St John's-wort)
- *Lathyrus hirsutus* (Caley pea, Hairy vetchling, Austrian winter pea)
- *Linum hirsutum* (Downy flax)
- *Minuartia hirsuta* (Accepted name; literally: Hairy sandwort)
- *Pastinaca hirsuta* (Balkan parsnip)
- *Phleum hirsutum* (Hairy cat's tail)
- *Vicia hirsuta* (Hairy tare, Hairy vetch, Tiny vetch)

2.1.14 Hirtellus, a, um [diminutive of *hirtus* ↓] – somewhat hairy or shaggy, a bit hairy (due to the presence of short stiff hairs) [2, 3, 4].

- *Euphrasia hirtella* (Accepted name; literally: Hairy eyebright)

2.1.15 Hirtus, a, um – hairy, bristly, rather rough or coarse [2, 3, 4].

- *Carex hirta* (Hairy sedge, Hammer sedge)
- *Inula hirta* (synonym of *Pentanema hirtum*)
- *Rubus hirtus* (synonym of *Rubus glandulosus*)
- *Trifolium hirtum* (Rose clover)
- *Viola hirta* (Hairy violet)

2.1.16 Hispidulus, a, um [diminutive of *hispidus* ↓] – finely bristled, with short and hard hairs, beset with little bristles [2, 3, 4].

- *Scabiosa hispidula* (synonym of *Lomelosia hispidula*)

2.1.17 Hispidus, a, um – bristly, beset with rough and rigid hairs [2, 3, 4].

- *Elymus hispidus* (synonym of *Thinopyrum intermedium* subsp. *intermedium* – Intermediate wheatgrass)
- *Leontodon hispidus* (Bristly hawkbit, Rough hawkbit)
- *Opopanax hispidus* (Accepted name)

2.1.18 Holosericeus, a, um [Gr. *hólos* – entire + Gr. *serikós* – silky] – entirely silky to the touch (because the plant or spikelets are covered throughout in dense hairs) [3].

- *Convolvulus holosericeus* (Accepted name; literally: Silky bendweed).

2.1.19 Induratus, a, um [past passive participle of *induro* – harden] – indurated, hardened [2, 3, 4].

- *Centaurea indurata* (synonym of *Centaurea phrygia* subsp. *indurata*)

2.1.20 Laevigatus, a, um [past passive participle of *laevigo/ levigo* – to make smooth] – smooth, polished [2, 3].

- *Carex laevigata* (Smooth-stalked sedge)
- *Cephalaria laevigata* (Accepted name)
- *Digitalis laevigata* (Smooth foxglove, Grecian foxglove, Giraffe foxglove)
- *Hieracium laevigatum* (Smooth hawkweed)
- *Papaver laevigatum* (Accepted name; literally: Smooth poppy)

2.1.21 Laevipes, -edis [*laevis* ↓ + *pes* – foot, stem] – with smooth and hairless stalks, smooth-stemmed [3].

- *Cruciata laevipes* (Crosswort, Smooth bedstraw)

2.1.22 Laevis, e (levis) – smooth, beardless, shiny [2, 3, 4].

- *Jasione laevis* (Shepherd's scabious)
- *Ulmus laevis* (European white elm, Fluttering elm, Spreading elm)

2.1.23 Lanatus, a, um [*lana* – wool] – woolly, densely pubescent [2, 3, 4].

- *Campanula lanata* (Woolly bellflower)
- *Carlina lanata* (Woolly carline thistle)
- *Carthamus lanatus* (Woolly distaff thistle, Downy safflower, Saffron thistle)
- *Digitalis lanata* (Woolly foxglove, Grecian foxglove)
- *Holcus lanatus* (Yorkshire fog, Meadow soft grass)
- *Scorzonera lanata* (synonym of *Gelasia lanata*)
- *Sideritis lanata* (Hairy ironwort)
- *Verbascum lanatum* (Accepted name; literally: Woolly mullein)

2.1.24 Laniflorus, a, um [*lana* – wool + *flos* – blossom] – having mossy flowers [3].

- *Kochia laniflora* (synonym of *Bassia laniflora*)

2.1.25 Lanuginosus, a, um [*lanugo* – the down of plants] – with a woolly covering, downy [2, 3, 4].

- *Ranunculus lanuginosus* (Woolly buttercup, Downy buttercup)

2.1.26 Lasiocarpus, a, um [Gr. *lásios* – hairy + Gr. *carpós* – fruit] – having woolly fruits [3].

- *Carex lasiocarpa* (Slender sedge, Woollyfruit sedge)
- *Draba lasiocarpa* (Woolly-fruited whitlow-grass)
- *Helianthemum lasiocarpum* (synonym of *Helianthemum ledifolium* subsp. *lasiocarpum*; literally: Woolly-fruited sunrose)
- *Valerianella lasiocarpa* (synonym of *Valeriana lanata*)

2.1.27 Lasiostachyus, a, um [Gr. *lásios* – hairy + Gr. *stáchys* – spike] – having woolly spikes [3].

- *Onobrychis lasiostachya* (synonym of *Onobrychis arenaria* subsp. *lasiostachya*; literally: Woolly-spiked sainfoin)

2.1.28 Leiocarpus, a, um [Gr. *leios* – smooth + Gr. *carpós* – fruit] – with smooth fruits [3].

- *Chamaecytisus leiocarpus* (Accepted name)

- *Glaucium leiocarpum* (Smooth-fruited horned poppy)

2.1.29 Lentus, a, um – pliable, flexible, tough [3].

- *Taraxacum lentum* (Accepted name; literally: Flexible dandelion; Balkan endemic)

2.1.30 Mitis, e – mild, bland, without spines [2, 3].

- *Persicaria mitis* (Tasteless water-pepper)

2.1.31 Mollicrinis, e [mollis – soft + crinis – hair] – with soft hairs, softly hairy.

- *Potentilla mollicrinis* (synonym of *Potentilla astracantha* subsp. *mollicrinis*; literally: Soft-haired cinquefoil)

2.1.32 Mollis, e – soft, mild, without spines [2, 3, 4].

- *Alchemilla mollis* (Garden lady's mantle, Lady's mantle)
- *Bromus mollis* (synonym of *Bromus hordeaceus* – Soft brome)
- *Crepis mollis* (Northern hawk's-beard)
- *Geranium molle* (Dove's-foot crane's-bill)
- *Geum molle* (Accepted name; literally: Soft avens)
- *Holcus mollis* (Creeping soft grass, Creeping velvet grass)
- *Jurinea mollis* (Accepted name)
- *Pulmonaria mollis* (Accepted name; literally: Soft lungwort)
- *Rosa mollis* (Soft downy rose)
- *Saxifraga mollis* (synonym of *Saxifraga sibirica* – Siberian saxifrage)
- *Scorzonera mollis* (synonym of *Pseudopodospermum molle*)

2.1.33 Muricatus, a, um [murex – a purple shell with many spiny tips] – rough with short superficial tubercles, prickly [2, 3, 4].

- *Carex muricata* (Rough sedge, Prickly sedge)
- *Ceratophyllum muricatum* (Prickly hornwort)
- *Ranunculus muricatus* (Rough-fruited buttercup, Spinyfruit buttercup)
- *Valerianella muricata* (synonym of *Valeriana muricata* – Oblique-fruited cornsalad)

2.1.34 Muscosus, a, um [muscus – moss] – mossy, moss-like, or found in places covered with moss [3].

- *Moehringia muscosa* (Accepted name; literally: Mossy sandwort)

2.1.35 Pilosissimus, a, um [superlative of pilosus ↓] – very pilose, most hairy [2, 3].

- *Hieracium pilosissimum* (synonym of *Hieracium olympicum* subsp. *olympicum*)

2.1.36 Pilosus, a, um [pilus – hair] – hairy, with organs covered in hairs [2, 3].

- *Carex pilosa* (Hairy sedge, Wimper sedge)
- *Dipsacus pilosus* (Small teasel)
- *Eragrostis pilosa* (Indian love-grass, Hairy love grass, Soft love-grass)
- *Genista pilosa* (Hairy greenweed, Silkyleaf broom, Silkyleaf woadwaxen)
- *Luzula pilosa* (Hairy wood-rush)
- *Oxytropis pilosa* (Hairy oxytrope)
- *Potentilla pilosa* (synonym of *Potentilla recta* subsp. *pilosa*; literally: Hairy cinquefoil)
- *Satureja pilosa* (Accepted name; literally: Hairy savory; Balkan endemic)

2.1.37 Pseuderopus, -odos – [Gr. pseudo- – false + Gr. érion – wool + Gr. pus, podós – little foot, stem] – with false woolly stem [3].

- *Hieracium pseuderopus* (synonym of *Hieracium klisurae* subsp. *pseuderopus*)

2.1.38 Pubescens, -entis [present active participle of pubesco – to grow hairy] – downy, short-haired [2, 3].

- *Avenula pubescens* (Downy oat-grass)
- *Orobancha pubescens* (Hairy broomrape)
- *Quercus pubescens* (Downy oak, Pubescent oak)

2.1.39 Pubiflorus, a, um [pubes – the hairs around the pubic area + flos – blossom] -- with downy flowers [3].

- *Astragalus pubiflorus* (synonym of *Astragalus exscapus* subsp. *pubiflorus*; literally: Downy-flower milkvetch)

2.1.40 Pubiger (pubigerus), era, erum [pubes ↑ + gero – carry] – provided with fluff, downy, pubescent [3].

- *Epimedium pubigerum* (Hairy barrenwort)

2.1.41 Rigidifolius, a, um [rigidus ↓ + folium – leaf] – having rigid leaves [3].

- *Galium rigidifolium* (Accepted name; literally: Rigid-leaved bedstraw)

2.1.42 Rigidulus, a, um [diminutive of rigidus ↓] – somewhat rigid, slightly stiff.[3].

- *Medicago rigidula* (Tifton medick, Tifton bur-clover)

2.1.43 Rigidus, a, um [rigeo – to be solidified, stiff] – rigid, stiff [3].

- *Arenaria rigida* (synonym of *Eremogone rigida*; literally: Rigid sandwort)
- *Desmazeria rigida* (synonym of *Catapodium rigidum* – Fern-grass)
- *Lolium rigidum* (Rigid ryegrass, Stiff darnel)
- *Onosma rigida* (Accepted name)
- *Seseli rigidum* (Accepted name)
- *Sesleria rigida* (Accepted name)
- *Velezia rigida* (synonym of *Dianthus nudiflorus*; Stiff velezia)

2.1.44 Scaber, bra, brum [scabo – to scrape, scratch] – coarse, rough [2, 3].

- *Rubus scaber* (Accepted name; literally: Rough bramble)
- *Plantago scabra* (synonym of *Plantago arenaria* – Sand plantain)
- *Trifolium scabrum* (Rough clover)

2.1.45 Scabiosus, a, um [scabo ↑] – wrinkled, rough (or perhaps, in some cases, with presumed healing properties against skin diseases) [3].

- *Centaurea scabiosa* (Greater knapweed)

2.1.46 Setaceus, a, um [seta – bristle] – bristly, bristle-like, with stiff hairs [4].

- *Achillea setacea* (Bristly yarrow)
- *Isolepis setacea* (Bristle club-rush, Bristle-leaf bulrush)
- *Minuartia setacea* (Accepted name; literally: Bristly sandwort)
- *Pennisetum setaceum* (synonym of *Cenchrus setaceus* – Crimson fountaingrass)

2.1.47 Setifer, era, erum [seta ↑ + fero – carry] –bristle-bearing, bristly [2, 3, 4].

- *Hypericum setiferum* (synonym of *Hypericum rochelii*; extinct Bulgarian endemic)
- *Polystichum setiferum* (Soft shield-fern)
- *Trifolium setiferum* (Accepted name; literally: Bristly trefoil)

2.1.48 Setifolius, a, um [seta ↑ + folium – leaf] – with bristly-surfaced leaves [3].

- *Lathyrus setifolius* (Brown vetchling)

2.1.49 Setosus, a, um [seta ↑] – bristly [3], beset with scattered stiff hairs [3, 4].

- *Crepis setosa* (Bristly hawksbeard)

2.1.50 Setulosus, a, um [diminutive of setosus ↑] – with small bristles, shortly hairy, minutely setose [3, 4].

- *Asperula setulosa* (synonym of *Cynanchica setulosa*)

2.1.51 Spinosulus, a, um [spinosus ↓] – quite spiny, somewhat prickly.

- *Rubus spinosulus* (synonym of *Rubus subaculeatus*; literally: Prickly blackberry)

2.1.52 Spinosus, a, um [spina – thorn] – spiny, covered with spines [2, 3].

- *Acanthus spinosus* (Spiny bear's breeches)
- *Amaranthus spinosus* (Spiny amaranth, Spiny pigweed, Prickly amaranth)
- *Lepidium spinosum* (Prickly pepperwort, Spiny pepperwort)
- *Ononis spinosa* (Spiny restharrow)
- *Pallenis spinosa* (Spiny starwort, Spiny golden star)
- *Prunus spinosa* (Blackthorn, Sloe)
- *Xanthium spinosum* (Spiny cocklebur, Prickly burweed)

2.1.53 Squarrosus, a, um – with scales or scale-like overlapping leaves or bracts, scurfy, scabby; rough [2, 3, 4].

- *Bromus squarrosus* (Rough brome, Corn brome)
- *Lappula squarrosa* (European stickseed, Bristly sheepbur, Bluebur)
- *Trifolium squarrosum* (Squarrose clover)

2.1.54 Stereophyllus, a, um [Gr. stereós – firm, rigid + Gr. phýllon – leaf] – stiff-leaved [3].

- *Centaurea stereophylla* (Accepted name; literally: Stiff-leaved knapweed)

2.1.55 Strigosus, a, um [striga – furrow, strip] – bristly, with rough, acute or stiff hairs in one direction [3].

- *Alyssum strigosum* (Hairy alyssum)
- *Carex strigosa* (Thin-spiked wood sedge)
- *Cyperus strigosus* (Straw-coloured flatsedge, False nutsedge)

2.1.56 Strigosus, a, um [strigula – small comb] – bristly, with small stiff hairs like the teeth of a comb [3].

- *Ranunculus strigosus* (Accepted name; literally: Bristly buttercup)

2.1.57 Suberosus, a, um [suber – cork] – corky, cork-like (due to the bark of suberous consistency or the presence of corky crests) [3].

- *Asperula suberosa* (synonym of *Cynanchica suberosa* - Woodruff)
- *Astragalus suberosus* (Accepted name; literally: Corky milkvetch)

2.1.58 Subudus, a, um [sub- - slightly + udus – wet, damp] – slightly humid.

- *Taraxacum subudum* (Accepted name; literally: Humid or marsh dandelion)

2.1.59 Subvillosus, a, um [sub- slightly + villus – hair] – somewhat hairy, sparsely covered with soft hairs [3].

- *Scorpiurus subvillosus* (synonym of *Scorpiurus muricatus* – Prickly scorpion's-tail, Caterpillar plant)

2.1.60 Tenellus, a, um [diminutive of tener – tender, soft] – somewhat delicate, rather slender or soft [3, 4].

- *Asperula tenella* (synonym of *Cynanchica tenella*)
- *Chorispora tenella* (Purple mustard, Blue mustard, Musk mustard, Crossflower)
- *Micropyrum tenellum* (synonym of *Festuca lactenali* – Gravel fescue)

2.1.61 Tomentosus, a, um [tomentum – fluff] – covered with fine, matted hairs, woolly, downy [3].

- *Arctium tomentosum* (Woolly burdock, Downy burdock)
- *Carex tomentosa* ()
- *Rosa tomentosa* (Harsh downy rose)
- *Salvia tomentosa* (Balsamic sage)
- *Tilia tomentosa* (Silver linden, Silver lime)

2.1.62 Urens, -entis [present active participle of uro – to burn] – acrid, burning, stinging (a reference mainly to the presence of stinging hairs that cause burning and skin irritation) [2, 3, 4].

- *Urtica urens* (Annual nettle, Dwarf nettle)

2.1.63 **Velutinus, a, um** [*velutum – velvet*] – velvety, densely covered with fine, short, soft hairs [3, 4].

- *Minuartia velutina* (synonym of *Minuartia glomerata* subsp. *velutina*; literally: Velvety sandwort; Balkan endemic)
- *Petrorrhagia velutina* (synonym of *Petrorrhagia dubia* subsp. *dubia* - Hairy pink)
- *Ranunculus velutinus* (Velvet buttercup)

2.1.64 **Villosus, a, um** [*villus – fur, hair*] – covered with long straight hairs, shaggy [2, 3, 4].

- *Androsace villosa* (Shaggy rock jasmine)
- *Calamagrostis villosa* (Hairy reed grass)
- *Dasyphyrum villosum* (Mosquito-grass)
- *Euphorbia villosa* (synonym of *Euphorbia illirica* – Hairy spurge)
- *Gagea villosa* (Hairy star of Bethlehem)
- *Hieracium villosum* (Shaggy hawkweed)
- *Ranunculus villosus* (Accepted name; literally: Shaggy buttercup).
- *Rosa villosa* (Apple rose)
- *Vicia villosa* (Hairy vetch, Fodder vetch, Winter vetch)

2.1.65 **Viscidulus, a, um** [diminutive of *viscidus – sticky*] – a bit sticky, somewhat viscid [3, 4].

- *Crepis viscidula* (Accepted name; literally: Sticky hawksbeard)

2.1.66 **Viscosus, a, um** [*viscum – birdlime: a sticky substance produced by mistletoe*] – sticky, viscous [3, 4].

- *Dittrichia viscosa* (False yellowhead, Woody fleabane, Sticky fleabane)
- *Minuartia viscosa* (synonym of *Sabulina viscosa* – Sticky sandwort)
- *Senecio viscosus* (Sticky ragwort, Sticky groundsel)

2.2 Taste perception

A small group of specific epithets, including 3 primary, 3 derivative, and 4 compound adjectives, expresses different shades of tasting perceptions. Through the suffix *-ell-*, derivative adjectives are formed that highlight more precisely the differences in the main meaning: *amarus* bitter – *amarellus* somewhat bitter, *acetosus* acid – *acetosellus* somewhat acid. With the same purpose – to distinguish the minute shades in the meaning of the specific epithets of the common gender name *Astragalus* – the compound adjectives *glycyphyllus* with sweet leaves, and *glycyphylloides* similar to *glycyphyllus* are composed.

2.2.1 **Acer, acris, acre – a)** sharp-tasted, bitter [2, 3, 4]; **b)** pungent, sharp [3].

The epithet's polysemy allows for different interpretations across the various botanical species.

Note: In the classical period, this adjective had three nominative forms for each of the three genders, but later it became a two-ending adjective, with the masculine and feminine both spelled “acris” and the neuter “acre” [4].

- *Cardamine acris* (Accepted name; literally: Sharp bittercress)
- *Erigeron acer* / *Erigeron acris* (Bitter fleabane, Blue fleabane)
- *Ranunculus acris* (Meadow buttercup,)
- *Sedum acre* (Goldmoss stonecrop, Biting stonecrop, Mossy stonecrop)

2.2.2 **Acetosellus, a, um** [diminutive of *acetosus – vinegary*] – somewhat acid, slightly acid [3].

- *Oxalis acetosella* (Common wood sorrel)
- *Rumex acetosella* (Sheep's sorrel)

2.2.3 **Acetosus, a, um** [*acetum – vinegar*] – acid as vinegar, sour [2, 3].

- *Rumex acetosa* (Common sorrel, Garden sorrel)

2.2.4 **Amarellus, a, um** [diminutive of *amarus – bitter*] – somewhat bitter [2, 3].

- *Gentianella amarella* (Autumn gentian)
- *Polygala amarella* (Dwarf milkwort)

2.2.5 **Amarus, a, um** – bitter to the taste, harsh [2, 3, 4].

- *Cardamine amara* (Large bittercress)

2.2.6 **Dulcamarus, a, um** [*dulcis* – sweet + *amarus* – bitter] – sweet-bitter, with a bitterish and sweetish taste [3].

- *Solanum dulcamara* (Bittersweet nightshade, Woody nightshade, Blue bindweed)

Note: A probable mistake in the adjective's agreement – it should be *dulcamarum* because the generic name *Solanum* is neuter gender. The epithet refers to the woody stem bark, which, if tasted, is sweet at first but then becomes very bitter.

2.2.7 **Fatuus, a, um** – insipid, tasteless [2, 3, 5].

- *Avena fatua* (Spring wild oat)

2.2.8 **Glycacanthus, a, um** [*Gr. glycs* – sweet + *Gr. ácanthos* – thorny flower] – with sweet spines or thorns.

- *Jurinea glycacantha* (Accepted name)

2.2.9 **Glycyphylloides, -is** [*Gr. glycs* – sweet + *Gr. phyllon* – leaf + *-oides* – resemblance] – similar to glycyphyllus (with sweet leaves).

- *Astragalus glycyphylloides* (Accepted name)

2.2.10 **Glycyphyllus (os). a, um** / [*Gr. glycs* – sweet + *Gr. phyllon* – leaf] – having sweet-tasting leaves [3].

- *Astragalus glycyphyllos* (Wild liquorice, Liquorice milkvetch)

2.3 Sense of smell

The group of adjectives indicating olfactory perception includes 2 primary, 9 derivative (including one form of superlative degree – *odoratissimus*), and 3 compound adjectives. Some of these adjectives are used figuratively – *bituminosus*, *coriophorus*, *vulvarius*.

2.3.1 **Bituminosus, a, um** [*bitumen* – black, tar-like substance] – relating to bitumen, asphalt: due to the odor or resin produced by the plant [3].

- *Bituminaria bituminosa* (Arabian pea, Pitch trefoil)

2.3.2 **Coriophorus, a, um** [*Gr. coris* – bug, bedbug + *Gr. phoreo* – carry] – with a smell similar to that of bedbugs (literally: bearing bedbugs) [3].

- *Orchis coriophora* (synonym of *Anacamptis coriophora* – Bug orchid)

2.3.3 **Foetidus, a, um** [*foeteo* – exhale stench] – stinking, evil-smelling [3, 4].

- *Crepis foetida* (Stinking hawksbeard)
- *Thalictrum foetidum* (Stinking meadow-rue)

2.3.4 **Graveolens, -entis** [*gravis* – strong + *oleo* – to smell] – strong-scented, with an unpleasant smell due to its intensity [2, 3, 4].

- *Apium graveolens* (Wild celery, Smallage)
- *Dittrichia graveolens* (Stinking fleabane, Stinkwort)
- *Malabaila graveoleans* (synonym of *Pastinaca clausii*)
- *Ruta graveolens* (Common rue)

2.3.5 **Inodorus, a, um** [*in-* – without + *odor* – smell] – without smell, scentless [2, 3].

- *Reseda inodora* (Scentless mignonette)

2.3.6 **Moschatus, a, um** [*Gr. moschos* – musk] – musk-scented, musky [3, 4].

- *Allium moschatum* (Accepted name; literally: Musk onion)
- *Fragaria moschata* (Musk strawberry, Hautbois strawberry)
- *Lamium moschatum* (Musk deadnettle)
- *Malva moschata* (Musk mallow)

2.3.7 Moschatellinus, a, um [diminutive of *moschatus*↑] – slightly musky [3].

- *Adoxa moschatellina* (Moschatel)

2.3.8 Odoratissimus, a, um (superlative of *odoratus*↓) – the most fragrant, emitting an intense scent [2, 3, 4].

- *Matthiola odoratissima* (Accepted name)

2.3.9 Odoratus, a, um [*odor* – scent, *smell*] – fragrant, sweet-scented [2, 3, 4].

- *Anthoxanthum odoratum* (Sweet vernal grass)
- *Erysimum odoratum* (Smelly wallflower, Fragrant wallflower)
- *Galium odoratum* (Sweet woodruff)
- *Polygonatum odoratum* (Angular Solomon's seal)
- *Viola odorata* (Wood violet, Sweet violet, English violet)

2.3.10 Odorus, a, um [*odor* ↑] – having odor, scented, fragrant, odorous [2, 3, 4].

- *Helleborus odorus* (Fragrant hellebore)

2.3.11 Suaveolens, -entis [*suavis* – sweet + *oleo* – to exhale odor] – fragrant, sweet-scented [3, 4].

- *Acinos suaveolens* (synonym of *Clinopodium suaveolens* – Sweet calamint)
- *Haplophyllum suaveolens* (Accepted name)
- *Heliotropium suaveolens* (Fragrant heliotrope)
- *Iris suaveolens* (Sweet-scented iris)
- *Mentha suaveolens* (Apple mint, Wolly mint, Round-leaved mint)
- *Myosotis suaveolens* (synonym of *Myosotis alpestris* subsp. *suaveolens*; literally: Fragrant forget-me-not)

2.3.12 Suavis, e – sweet, agreeable, pleasant, fragrant [3, 4].

- *Viola suavis* (Sweet violet)

2.3.13 Virosus, a, um [*virus* – poison; *stink*, *stench*] – smelly, fetid or poisonous [3, 4].

- *Cicuta virosa* (Northern water hemlock, Cowbane)
- *Hieracium virosum* (Accepted name; literally: Smelly or toxic hawkweed)

2.3.14 Vulvarius, a, um [*vulva* – a feminine sexual organ] – uterine; stinking (probably a reference to the bad smell emanating from the plant, similar to that of bacterial vaginosis) [3, 4].

- *Chenopodium vulvaria* (Stinking goosefoot)

Note: A probable mistake in the adjective's agreement – it should be *vulvarium* because the generic name *Chenopodium* is neuter gender!

3 TYPES OF EPITHETS

According to the morphological composition, the following types of epithets may be distinguished:

3.1 Primary adjectives – 15

acer; amarus; asper; durus; fatuus; glaber; hirtus; hispidus; laevis; lentus; mitis; mollis; odorus; scaber; suavis

The primary adjectives describe the plant as a whole. This is typical for attributes related to external plant features, such as coloration, size, or shape, as well as for those describing specific sensory perceptions associated with the particular plant. The simple epithets usually provide a general description, while the derivative and compound ones are focused on the details of the different morphological parts of the plant.

The most frequently used adjectives denoting a sensory perception are *mollis* soft (11 times), *glaber* smooth (10 times), and *hirtus* bristly (5 times).

The primary adjectives are also presented as word-formative elements in several derivative and compound epithets or participles:

amarus bitter → **amarellus** somewhat bitter; **dulcamarus** with a sweetish and bitterish taste

glaber smooth → **glabratus** hairless, glabrous; **glabrescens** becoming smooth

hirtus hairy, bristly → **hirtellus** somewhat hairy or shaggy; **hirsutus** rough-haired, shaggy

hispidus bristly → **hispidulus** finely-bristled

laevis smooth → **laevipes** smooth-stemmed

mollis soft → **mollicrinis** softly hairy

odorus scented, fragrant → **odoratus** fragrant; **inodorus** scentless

suavis sweet, pleasant → **graveolens** strong-smelling; **suaveolens** sweet-scented

3.2 Derivative adjectives – 47

acetosellus; acetosus; amarellus; bituminosus; dumalis; echinatus; epilosus; farinosus; ferox; foetidus; glutinosus; hirsutus; hirtellus; hispidulus; inodorus; lanatus; lanuginosus; moschatus; moschatellinus; muricatus; muscosus; odoratissimus; odoratus; pilosissimus; pilosus; rigidulus; rigidus; scabiosus; setaceus; setosus; setulosus; spinosulus; spinosus; squarrosus; strigosus; strigulosus; suberosus; subudus; subvillosus; tenellus; tomentosus; velutinus; villosus; virosus; viscidulus; viscosus; vulvarius

The adjectives formed with the suffix **-os-** are most numerous; the suffixes **-at-**, **-al-**, **-ace-**, **-id-**, **-in-**, **-ut-** are also used.

In several cases, diminutive suffixes have also been used to emphasize different shades of meaning:

acetosus sour as vinegar – **acetosellus** somewhat acid

amarus bitter – **amarellus** somewhat bitter

hispidus bristly – **hispidulus** finely bristled

moschatus musk-scented – **moschatellinus** slightly musky

rigidus rigid – **rigidulus** somewhat rigid

setaceus, **setosus** bristly – **setulosus** having small bristles

spinosus spiny – **spinosulus** having small spines

strigosus with rough stiff hairs – **strigulosus** with small stiff hairs

viscosus sticky – **viscidulus** a bit sticky

Another way to specify the details in the plants' description is the use of degrees of comparison:

pilosus hairy – **pilosissimus** the most hairy

odoratus fragrant – **odoratissimus** the most fragrant

The prefixes used in this group of derivative adjectives are few:

e- (without) → **epilosus** hairless

in- (not, without) → **inodorus** without smell, scentless

sub- (weak, light) → **subudus** slightly humid, **subvillosus** sparsely haired

It is also interesting to note the metaphoric use of the adjective *ferox* - literally "fierce, wild, ferocious", as an animal's feature; related to a plant, the meaning is "prickly, fierce" due to many hard bristles and spines.

3.3 Compound adjectives – 21

coriophorus, dulcarnus, glycanthus, glycyphylloides, glycyphyllus, graveolens, holosericeus, laevipes, laniflorus, lasiocarpus, lasiostachyus, leiocarpus, mollicrinis, pseuderopus, pubiflorus, pubiger, rigidifolius, setifer, setifolius, stereophyllus, suaveolens

There is a balance in this group of adjectives regarding the origin of word-formative elements: 11 compound adjectives contain Latin-origin roots and 10 Greek ones.

The majority of the compound epithets describe individual plant organs – **laniflorus** – having woolly flowers, **leiocarpus** – with smooth fruits, **mollicrinis** – soft-haired, **stereophyllus** – hard-leaved, and others characterize the entire plant itself – **holosericeus** – entirely silky to the touch, **pubiger** – downy, pubescent, **setifer** – bearing bristles.

The epithet **coriophorus**, meaning literally "bearing bugs," is ambiguous. A possible interpretation of this epithet is the plant's smell or appearance, recalling these insects.

3.4 Participles – 7

Besides adjectives, participles are also used as specific epithets, especially past passive and present active participles. There are found 4 present active participles (**calvescens**, **glabrescens**, **pubescens**, **urens**) and 3 past passive ones (**glabratus**, **induratus**, **laevigatus**). While the present participle has only one nominative form, ending in -ns, and this form does not change regardless of the grammatical gender of the generic name, the past participle changes its form according to the generic name's gender – *Erigeron glabratus*, *Luzula glabrata*, *Verbascum glabratum*.

4 CONCLUSION

Specific botanical epithets denoting sensory perceptions enrich and deepen knowledge of different plant species. Unlike the far more numerous epithets describing objective features such as color, size, practical application, or place of origin or spread, these epithets reveal more abstract qualities such as sensation of touch, smell, or taste of the described botanical species. This peculiarity also determines the presence of a larger number of epithets used with a figurative meaning or suggesting different additional interpretations:

eg. **ferox** – literally "wild, untamed", as a botanical term means "prickly, spiny" due to the presence of many spines or bristles;

coriophorus – literally "carrying bedbugs", in the binomial botanical denomination is "smelling like a bedbug";

vulvarius – literally "uterine", as a botanical epithet, is "stinking, emanating unpleasant smell recalling bacterial vaginosis".

The polysemy of some suffixes in the structure of the derivative adjectives allows for a dual interpretation of the respective lexeme: ex., the suffix **-os-** in **bituminosus** indicates relation to bitumen, asphalt, hence the meanings "smelling like a resin", or "resembling asphalt"; in **muscosus** it refers to a resemblance to moss, hence "mossy", but, as well, to the place of spread of the particular botanical species; **farinosus** – "floury", or "powder-like"; **scabiosus** – wrinkled, rough, or used as a remedy against scabies.

The suffix **-at-** signifies the presence of an organ or likeness, so **echinatus** – "equipped with thorns", hence "spiny"; **muricatus** – "having short tubercles", so "pointed, prickly"; **lanatus** – "woolly, downy".

Regarding the structure of the epithets considered in the article, there are 15 primary, 47 derivative, 21 compound adjectives, 3 past passive participles, and 4 present active ones. Standard word-formative methods are applied – prefixes and suffixes in derivative adjectives, and combining Latin- and Greek-origin stems in the compound ones.

It should also be noted that the inclusion of superlative degree forms (**odoratissimus**, **pilosissimus**), along with the positive (**odoratus**, **pilosus**), is used to achieve greater precision and detail of specific botanical species.

In conclusion: specific epithets, denoting various manifestations of sensory perception, are a small but indispensable part of the comprehensive set of scientific botanical names in Latin. The information they carry enriches and refines our knowledge of the vast and constantly evolving world of living nature.

STATEMENTS ON COMPLIANCE WITH ETHICAL STANDARDS

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