

FLORA OF THE FEHÉR-SZIRT AND ITS SURROUNDINGS NEAR KESZTÖLC, HUNGARY

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Floristic data collected by the author since 1990 on the Fehér-szirt and its surroundings near Kesztlőc, Pilis Mts, Hungary are presented. The list of taxa consists of 593 species.

Key words: floristics, check-list, Pilis Mts, Hungary

INTRODUCTION

Investigations on the flora and the vegetation of the Fehér-szirt and its surroundings near Kesztlőc have been carried out since 1990.

Areas close to the natural state got priority during our work, however, abandoned vineyards were investigated as well. Arable lands were omitted.

The flora of the Pilis Mts, especially its southern parts close to Budapest were studied by several notable botanists. The herbarium of Kitaibel already contains plants from the Pilis Mts (JÁVORKA 1926–1936). SADLER (1825, 1840) made detailed investigations in the region. KERNER (1857) gave an overview of the Pilis Mts, too. The studies of BORBÁS (1871, 1879) dealt with the parts of the mountains belonging to Pest county.

Floristic data on the northern part of the Pilis Mts were published by FEICHTINGER (1864, 1899). Despite other floristic studies he enumerated the exact localities of each occurring.

Authors publishing additional floristic records on the Pilis Mts are BOROS (1917, 1919, 1923, 1938, 1970), CSAPODY (1935, 1939), DOMOKOS (1939), FEKETE and JAKUCS (1957), GRUNDL (1863), HORÁNSZKY (1957), JÁVORKA (1904, 1915, 1940) and LENGYEL (1906, 1909). However, few studies have exact reference on Kesztlőc or its close surroundings. Floristic data on the swamp meadows in the vicinity of Kesztlőc and on the Hosszú-rét between Piliscsaba and Piliscsaba-Jászfalu were published by PENKSZA (1991). The most important floristic data on the Fehér-szirt (PENKSZA 1992a) and the phytosociological characterization of the swamp meadows found here were reported by PENKSZA (1992b).

The phytogeography of the Pilis Mts and its surroundings were described by BOROS (1953) and FEKETE (1988). BORHIDI (1956) studied the sandy vegeta-

tion of the Kisalföld. The "embayment" South of Esztergom was named as "the vicinity of Esztergom" by ZÓLYOMI (1958). SIMON (1962) published an overview on the natural vegetation of the Kisalföld. The monography of the swamp meadows by KOVÁCS (1962) contains information on the region, too. Works involving larger geographical units also contain some information to the studied area (SIMON *et al.* 1980, JAKUCS and FEKETE 1987). The vegetation of the Kétágú-hegy and the Csévi-szirtek were compared by SZERDAHELYI (1988, 1989). The vegetation map of Kétágú-hegy and its surroundings were completed by PENKSZA *et al.* (1994).

Taxonomic investigations on *Festuca* species of the area was carried out by CSÁNYI-KOVÁCS and HORÁNSZKY (1973).

The soil properties and their interrelation with the vegetation of the region were studied by KOVÁCSNÉ LÁNG (1966), LÁNG (1971), while microclimatic measurements were carried out by DRASKOVITS and KOVÁCS-LÁNG (1968).

MATERIALS AND METHODS

The studied area has a diverse habitat structure including a forest site East of the Fehér-szirt and a sandy area lying North and Northwest of the cliff (Fig. 1). Additionally there is a swamp meadow in the vicinity of the village Kesztlöc, which was also investigated.

The Fehér-szirt (424 m) is the lower, western part of the Kétágú-hegy. It was asymmetrically piled up, so the northeastern slope is almost parallel with the geological layers (BULLA 1962).

In the Kesztlöc region the lower, looser Oligocene sand and sandstone (covered by loess) sections are common. The Triassic limestone parts of the Kétágú-hegy were uplifted from this rock.

The foothill is covered by Pleistocene colluvial deposit.

Annual mean temperature of the Pilis Mts is 8.5–9.0 °C, but the western rocky slope of the Fehér-szirt shows significantly higher values (DRASKOVITS and KOVÁCS-LÁNG 1968).

Annual precipitation is 600–700 mm on the average and it has two maximum values: in late spring and November (BULLA 1962).

Soil formation is strongly influenced by the bed-rock. Consequently on the steep rocky limestone slopes Rendzina Leptosols and Lithic Leptosols have developed. On the loess-covered eastern slopes of the Fehér-szirt Haplic Cambisols have developed.

Climatic, various geomorphologic and soil characters of the region enhanced the formation of numerous vegetation types like marshlands, sand grass-

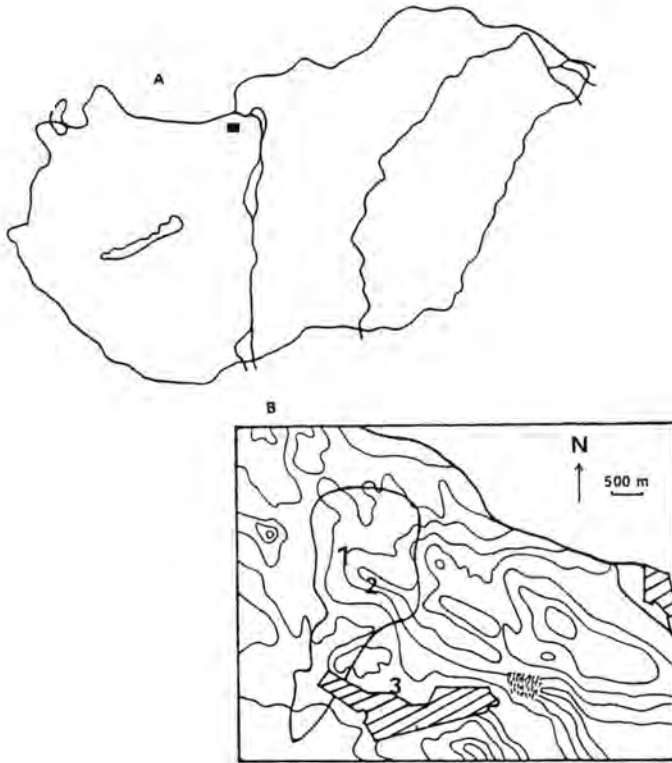


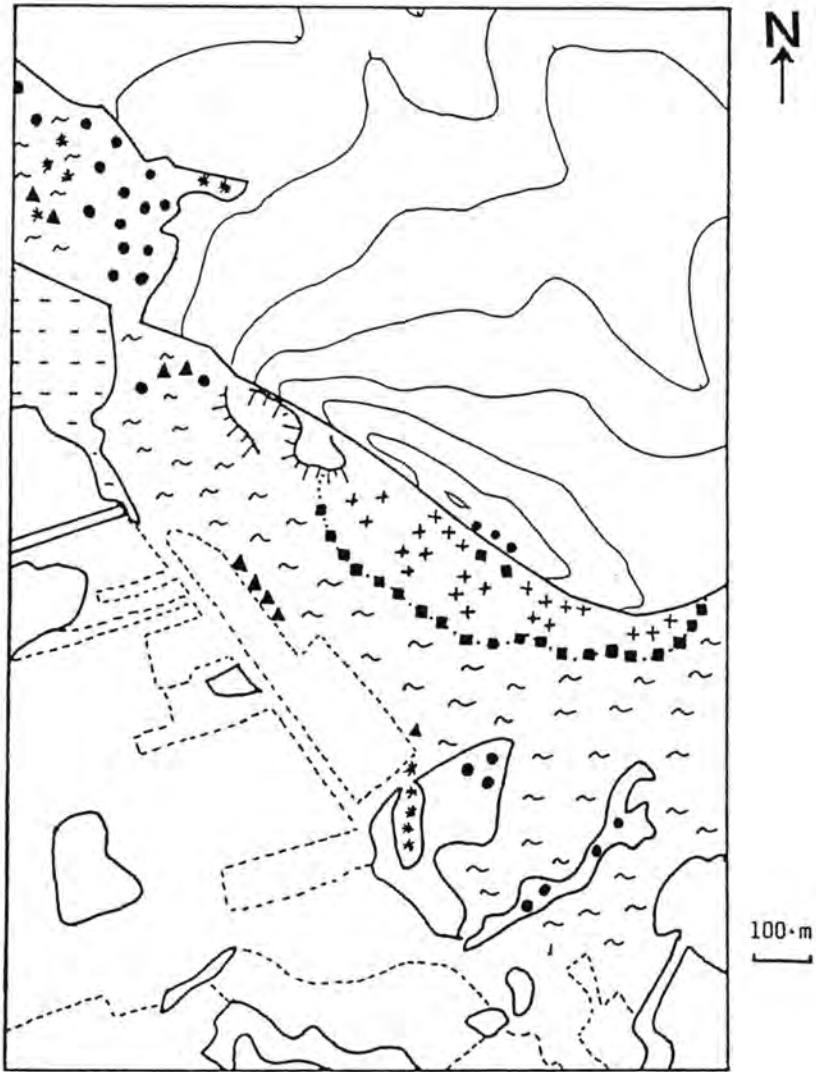
Fig. 1. A) Map of Hungary with the Fehér-szirt and its surroundings (filled rectangle). B) Map of the studied area. 1: The studied area, 2: the Fehér-szirt, 3: Kesztlőc (settlement)

lands, steppe meadows, shrub-forests, rocky grasslands, Turkey oak forests, oak-hornbeam woods and beech forests.

The list of species is based upon regular field work since 1990. For identification of the *Rosa* species FACSAR's monograph (1993) was used. Nomenclature principally follows SIMON's (1992) for the vascular plants and PRISZTER's (1980) for some author names, while ORBÁN and VAJDA (1983) was used for the moss names.

FORMER FLORISTIC RECORDS

KERNER (1857) published detailed species lists of areas from the Pilis Mts to the Vértes Mts, but he rarely mentioned exact localities. Three notes refer to area studied in this paper: Kétágú-hegy as one of the localities of *Spiraea oblon-*



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Fig. 2. Distribution of the *Festuca* species. 1: *F. pallens*, 2: *F. valesiaca*, 3: *F. rupicola*, 4: *F. pseudovina*, 5: *F. vaginata*, 6: *F. wagneri*

gifolia W. et K., Kesztlőc in connection with the range of oak forests and Csaba (by its recent name Piliscsaba) in the enumeration of plant species of sandy habitats.

FEICHTINGER (1864) enumerated 61 species according to their localities near Kesztlőc (Kétágú-hegy, foot of Kétágú-hegy, sand dunes, Fehérkő). The species number is 115 in the flora of Esztergom county (FEICHTINGER 1899). Most of these species are characteristic of forests, shrub-forests or rocky grasslands. However, *Hypericum tetrapterum* Fr., *Triglochin maritimum* L. and *Gentiana austriaca* A. et J. Kern. indicate wetlands.

Five species are published by JÁVORKA (1904) from the Kesztlőc region: *Alisma graminifolium* Ehrh., *Anemone nigricans* (Störk.) Fritsch., *Linum nudifolium* Wierzb., *Laserpitium Pruthenium* L., *Pharbitis purpurea* Aschers.

CSAPODY (1935, 1939) reported two species from the vicinity of Esztergom (*Adonis flammea* Jacq., *Arenaria graminifolia* Schrad.).

BOROS (1946) visited the Kétágú-hegy three times and the Fehér-szirt twice. He mostly reported bryophytes: *Eurhynchium striatum* (Hedw.) Schimp., *Grimmia anodon* B. S. G., *Grimmia pulvinata* (Hedw.) Sm. var. *africana* (Hedw.) Hook., *Grimmia tergestina* Tomm. var. *tergestinoides* (Culm.) Amann, *Mannia fragrans* (Balbis) Frey et Clark and *Tortula intermedia* (Brid.) De Not. The occurring vascular plants were the following: *Herniaria incana* Lam., *Lactuca perennis* L., *Sempervivum schlechani* Schott and *Stipa pulcherrima* C. Koch.

New data were not recorded in BOROS (1953).

Alkanna tinctoria (L.) Tausch. can be found in one of the relevés made by BORHIDI (1956).

Detailed species list (155 taxa) on the marshlands is published by PENKSZA (1991). Some floristic data on the Fehér cliff are provided by PENKSZA (1992a).

BOROS (1925, 1953) as well as BORHIDI (1956) reports on the occurrence of *Thymus serpyllum* L.

RESULTS AND DISCUSSION

Since 1990, 590 species have been recorded (see the check-list), of which 74 species were also found by FEICHTINGER (1899).

The present list contains one unique species: *Tragopogon floccosus* W. et K.

Protected species of the area are the following: *Adonis vernalis* L., *Cephalanthera damasonium* (Mill.) Druce, *Dactylorhiza incarnata* (L.) Soó, *Epipactis helleborine* Crantz, *Epipactis palustris* (L.) Crantz, *Festuca pallens* Host, *Fumana procumbens* (Dun.) Gren. et Godr., *Helleborus purpurascens* W. et K., *Iris graminea* L., *Iris humilis* Georgi, *Iris pumila* L., *Iris variegata* L., *Jovibarba hirta* (Jusl.) Opiz, *Lilium martagon* L., *Neottia nidus-avis* (L.) Rich., *Orchis mili-*

taris L., *Orchis purpurea* Huds., *Orchis ustulata* L., *Oxytropis pilosa* (L.) DC., *Phlomis tuberosa* L., *Polygala major* Jacq., *Pulsatilla nigricans* Störck, *Sedum hillebrandtii* Fenzl, *Stipa eriocaulis* Borb., *Stipa joannis* Celak, *Stipa pulcherrima* C. Koch.

Special attention is due to *Epipactis palustris* (L.) Crantz, because this record is the second one for the Pilis region.

Further new data to this region are: three specimens of *Rosa hungarica* Kern. on the talus slope of the Fehér-szirt, *Malcolmia africana* (L.) R. Br. spreading upwards along cart-tracks, *Sempervivum marmoreum* Griseb. occurring in high quantities in the rock grassland of the western slope of the Fehér-szirt and *Ornithogalum degenianum* Polgár occurring frequently on cultivated and abandoned vineyards.

Among *Cotoneaster* species *C. niger* (Thunbg.) Fr. is found here. By autumn its fruits turn black or deep lilac. FEICHTINGER (1899) reported *Cotoneaster vulgaris* Lindl., which was later considered as a synonym of *Cotoneaster integerrima* Medik. by SOÓ (1966). Considering the colouration of the ripened berries (black or deep lilac), this species can surely be identified as *C. niger* (Thunbg.) Fr. (DOMOKOS 1938, 1944).

The distribution of *Festuca* species on the area is shown in a vegetation profile by CSÁNYI-KOVÁCS (1972) and CSÁNYI-KOVÁCS and HORÁNSZKY (1973). Recent distribution of the *Festuca* species can be seen on Figure 2. The following remarks are necessary to their distribution:

- *Festuca rupicola* Heuff. (not mentioned by the authors above), always occurs in rather mesophytic habitats like in the eastern slope rock grassland of the Fehér-szirt, in the open woodlands between the Fehér-szirt and Tábla-hegy and in the herbaceous layer of black locust forests.
- Sometimes *Festuca pallens* Host is replaced by *Festuca valesiaca* Schleich. in the rock grasslands on the western slopes of the Fehér-szirt.

Festuca rupicola Heuff. does not occur in steppe slopes and sandy steppe meadows, though it would be expected even from the names of the associations, but *Festuca valesiaca* Schleich. and *Festuca pseudovina* Hack. ex Wiesb. can be found in great quantity.

The species list of the swamp meadows (PENKSZA 1991) is further extended owing to three newly discovered areas. Rare, protected and character species of the swamp meadows are the following: *Carex hostiana* DC., *Dactylo-rhiza incarnata* (L.) Soó, *Eleocharis quinqueflora* (F. X. Hartmann) O. Schwarz, *Epipactis palustris* (L.) Crantz, *Eriophorum latifolium* Hoppe, *Juncus subnodulosus* Schrank, *Molinia hungarica* Milkovits, *Orchis militaris* L.

Some individuals of *Thymus serpyllum* L. were found in the sandy area W of Kesztölc. This thyme species does not spread across the saddle between Fehér-

szirt and Tábla-hegy. This way it shows the easternmost occurrence of the species.

In the eastern part of the area (at Babos-hegy) *Festuca pseudodalmatica* Krajina, *Helleborus purpurascens* W. et K., *Trifolium rubens* L. and *Vicia tenuifolia* Roth can be found on andesite bed-rock.

LIST OF VASCULAR SPECIES

- Acer campestre* L.
Acer platanoides L. (FEICHTINGER 1899)
Acer pseudo-platanus L. (FEICHTINGER 1899)
Achillea asplenifolia Vent.
Achillea collina L.
Achillea distans W. et K. ex Willd.
 (FEICHTINGER 1899)
Achillea ochroleuca Ehrh.
Achillea pannonica Scheele
Acinos arvensis (Lam.) Dandy
Aconitum vulparia Rchb.
Actaea spicata L.
Adonis vernalis L.
Adoxa moschatellina L.
Aegopodium podagraria L.
Agrimonia eupatoria L.
Agropyron caninum (L.) P. B.
Agropyron intermedium (Host) P. B.
Agropyron repens (L.) P. B.
Agrostis stolonifera L.
Ajuga chamaepitys (L.) Schreb.
Ajuga genevensis L.
Ajuga reptans L.
Alisma plantago-aquatica L.
Alliaria petiolata (M. B.) Cavara et Grande
Allium flavum L.
Allium montanum F. W. Schmidt
Allium sativum L.
Allium sphaerocephalon L.
Allium vineale L.
Alopecurus pratensis L.
Althaea officinalis L.
Alyssum alyssoides (L.) Nath.
Alyssum tortuosum W. et K.
Ambrosia elatior L.
Anchusa officinalis L.
Anemone ranunculoides L.
Anemone sylvestris L.
Angelica sylvestris L.
Anthemis ruthenica M. B. (FEICHTINGER 1899)
Anthemis tinctoria L.
Anthericum ramosum L.
Anthoxanthum odoratum L.
Anthriscus sylvestris (L.) Hoffm.
Anthyllis macrocephala Wender.
Anthyllis vulneraria L.
Apera spica-venti (L.) P. B.
Arabis hirsuta (L.) Scop.
Arabis recta Vill.
Arabis turrata L. (FEICHTINGER 1899)
Arenaria serpyllifolia L.
Arrhenatherum elatius (L.) Presl.
Artemisia campestris L.
Artemisia pontica L.
Artemisia vulgaris L.
Arum orientale M. B.
Asarum europaeum L.
Asparagus officinalis L.
Asperula cynanchica L.
Asperula odorata L.
Asplenium ruta-muraria L.
Asplenium trichomanes L.
Aster amellus L. (FEICHTINGER 1899)
Aster lanceolatus Willd.
Aster linosyris (L.) Bernh.
Astragalus austriacus Jacq.
Astragalus cicer L.
Astragalus glycyphyllos L.
Astragalus onobrychis L.
Atropa bella-donna L.
Ballota nigra L.
Barbarea vulgaris R. Br.
Berberis vulgaris L.
Berteroa incana (L.) DC.
Betonica officinalis L.
Bilderdykia convolvulus (L.) Dum.

- Bilderdykia dumetorum* (L.) Dum.
Botriochloa ischaemum (L.) Keng
Brachypodium pinnatum (L.) P. B.
Brachypodium sylvaticum (Huds.) R. et Sch.
Briza media L.
Bromus benekeii (Lange) Trimen
Bromus erectus Huds. (FEICHTINGER 1899)
Bromus inermis Leyss.
Bromus mollis L.
Bromus squarrosus L.
Bromus sterilis L.
Bromus tectorum L.
Bupleurum falcatum L.
Bupleurum praealtum Nath.
Calamagrostis epigeios (L.) Roth
Caltha palustris L.
Calystegia sepium (L.) R. Br.
Camelina microcarpa Andrz.
Campanula bononiensis L.
Campanula glomerata L.
Campanula persicifolia L.
Campanula rapunculoides L.
Campanula rotundifolia L.
Campanula sibirica L.
Campanula trachelium L.
Cardaminopsis arenosa (L.) Hay.
Carduus acanthoides L.
Carduus collinus W. et K. (FEICHTINGER 1899)
Carduus nutans L.
Carex acutiformis Ehrh.
Carex caryophyllea Latour.
Carex elata All.
Carex flacca Schreb.
Carex hirta L.
Carex hostiana DC.
Carex humilis Leyss.
Carex liparicarpos Gaud.
Carex michelii Host
Carex panicea L.
Carex pilosa Scop.
Carex riparia Curt.
Carex vulpina L.
Carlina vulgaris L. subsp. *intermedia*
 (Schur) Hay.
Carpinus betulus L.
Caucalis platycarpos L.
Centaurea micranthos S. G. Gmel.
Centaurea pannonica (Heuff.) Simk.
Centaurea sadleriana Janka
Centaurea scabiosa L.
Centaurea spinulosa Rochel
Centaurea triumfettii All. (FEICHTINGER 1899)
Centaureum minus Mönch
Centaureum pulchellum (Sw.) Druce
Cephalanthera damasonium (Mill.) Druce
Cerastium semidecandrum L.
Cerastium vulgatum L.
Cerasus avium (L.) Mönch
Cerasus fruticosa Pall.
Cerasus mahaleb (L.) Mill.
Cerintho minor L.
Chaenorrhinum minus (L.) Lange
Chaerophyllum temulum L.
 (FEICHTINGER 1899)
Chelidonium majus L.
Chenopodium album L.
Chondrilla juncea L.
Chrysanthemum corymbosum L.
Chrysopogon gryllus (Torn. ex L.) Trin.
Cichorium intybus L.
Cirsium arvense (L.) Scop.
Cirsium canum (L.) All.
Cirsium eriophorum (L.) Scop.
Cleistogenes serotina (L.) Keng
 (FEICHTINGER 1899)
Clematis recta L.
Clematis vitalba L.
Clinopodium vulgare L.
Colutea arborescens L.
Convallaria majalis L.
Convolvulus arvensis L.
Corispermum nitidum Kit.
Cornus mas L.
Cornus sanguinea L.
Coronilla varia L.
Corydalis cava (L.) Schw. et Körte
Corydalis solida (L.) Clairv.
Corylus avellana L.
Cotoneaster niger (Thunbg.) Fr.
Crataegus monogyna Jacq.
Crataegus laevigata (Poir.) DC.
Crepis rhoeadifolia M. B.
Crepis tectorum L.
Crupina vulgaris Pers.
Cuscuta epithymum (L.) Nath.
Cynoglossum hungaricum Simk.
Cynoglossum officinale L.
Cyperus fuscus L.

- Cystopteris fragilis* (L.) Bernh.
Cytisus austriacus L.
Cytisus nigricans L.
Dactylis glomerata L.
Dactylis polygama Horvátovszky
Dactylorhiza incarnata (L.) Soó
Daucus carota L.
Dentaria bulbifera L.
Deschampsia caespitosa (L.) P. B.
Dianthus pontederiae Kern.
Dianthus serotinus W. et K.
 (FEICHTINGER 1899)
Dictamnus albus L.
Diplotaxis tenuifolia (Jusl.) DC.
Dorycnium germanicum (Gremli) Rikli
Dryopteris filix-mas (L.) Schott
Echinops sphaerocephalus L.
Echium russicum Gmel.
Echium vulgare L.
Eleocharis palustris (L.) R. et Sch.
Eleocharis quinqueflora (F. X. Hartmann)
 O. Schwarz
Epilobium hirsutum L.
Epipactis helleborine Crantz
Epipactis palustris (L.) Crantz
Equisetum arvense L.
Equisetum palustre L.
Equisetum ramosissimum Desf.
 (FEICHTINGER 1899)
Equisetum telmateja Ehrh.
Erigeron acris L.
Eriophorum latifolium Hoppe
Eryngium campestre L.
Erysimum diffusum Ehrh.
Erysimum odoratum Ehrh.
Euonymus europaeus L.
Euonymus verrucosus Scop.
Eupatorium cannabinum L.
Euphorbia amygdaloides L.
Euphorbia cyparissias L.
Euphorbia polychroma Kern.
 (FEICHTINGER 1899)
Euphorbia seguierana Necker
Euphrasia rostkoviana Hayne
Euphrasia tatarica Fisch. ex Spreng.
Fagus sylvatica L.
Falcaria vulgaris Bern.
Festuca arundinacea Schreb.
Festuca gigantea (L.) Vill.
Festuca heterophylla Lam.
Festuca pallens Host
Festuca pratensis Huds.
Festuca pseudodalmatica Krajina
Festuca pseudovina Hack. ex Wiesb.
Festuca rupicola Heuff.
Festuca vaginata W. et K.
Festuca valesiaca Schleich.
Festuca wagneri Degen, Thaisz et Flatt
 emend. Soó
Ficaria verna Huds.
Filipendula ulmaria (L.) Maxim.
Filipendula vulgaris Mönch
Fragaria vesca L.
Fragaria viridis Duch.
Fraxinus excelsior L. (FEICHTINGER 1899)
Fraxinus ornus L. (FEICHTINGER 1899)
Fumana procumbens (Dun.) Gren. et
 Godr. (FEICHTINGER 1899)
Galanthus nivalis L.
Galium aparine L.
Galium glaucum L.
Galium mollugo L. (FEICHTINGER 1899)
Galium schultesii Vest
Galium uliginosum L.
Galium verum L.
Genista tinctoria L. subsp. *elatior*
 (Koch) Simk.
Geranium lucidum L.
Geranium robertianum L.
Geranium sanguineum L.
Geum urbanum L.
Glechoma hederacea L.
Glechoma hirsuta W. et K.
Globularia aphyllanthes Crantz
Glyceria fluitans (L.) R. Br.
Gypsophila paniculata L.
Hedera helix L.
Helianthemum nummularium (L.) Mill.
Helianthemum ovatum (Viv.) Dun.
Helichrysum arenarium (L.) Mönch
Helictotrichon pratense (L.) Bess.
Helleborus purpurascens W. et K.
 (FEICHTINGER 1899)
Heraclium sphondylium L.
Herniaria incana Lam. (FEICHTINGER 1899)
Hesperis tristis L. (FEICHTINGER 1899)
Hieracium auriculoides Läng
Hieracium bauhini Schult. ex Bess.
Hieracium echioides Lumnitzer
Hieracium pilosella L.

- Hieracium sabaudum* L.
Hieracium sylvaticum (L.) Grufbg.
Hieracium umbellatum L.
Holcus lanatus L.
Holosteum umbellatum L.
Hordelymus europaeus (L.) Harz
Hornungia petraea (L.) Rchb.
Hypericum hirsutum L.
Hypericum perforatum L.
Hypericum tetrapterum Fr.
 (FEICHTINGER 1899)
Hypochoeris maculata L.
Inula britannica L.
Inula conyza DC. (FEICHTINGER 1899)
Inula ensifolia L.
Inula hirta L.
Inula oculus-christi L. (FEICHTINGER 1899)
Iris graminea L. (FEICHTINGER 1899)
Iris humilis Georgi
Iris pseudacorus L.
Iris pumila L.
Iris variegata L.
Jovibarba hirta (Jusl.) Opiz
Juncus articulatus L.
Juncus inflexus L. (FEICHTINGER 1899)
Juncus subnodulosus Schrank
Jurinea mollis (L.) Rchb.
Knautia arvensis (L.) Coult.
Kochia laniflora (S. G. Gmel.) Borb.
Koeleria cristata (L.) Pers.
Koeleria glauca (Schkuhr) DC.
Koeleria majoriflora (Borb.) Borb.
Lactuca perennis L. (FEICHTINGER 1899)
Lactuca viminea (L.) J. et C. Presl
Lamium galeobdolon (L.) Nath.
Lamium maculatum L.
Lappula heteracantha (Ledeb.) Borb.
Lapsana communis L.
Laserpitium latifolium L.
Lathraea squamaria L.
Lathyrus latifolius L. (FEICHTINGER 1899)
Lathyrus niger (L.) Bernh.
Lathyrus palustris L.
Lathyrus pisiformis L.
Lathyrus tuberosus L.
Lathyrus vernus (L.) Bernh.
Lavatera thuringiaca L.
Legousia speculum-veneris (L.) Chaix
Leontodon autumnalis L.
Leontodon hispidus L.
Lepidium campestre (L.) R. Br.
Ligustrum vulgare L.
Lilium martagon L.
Linaria genistifolia (L.) Mill.
 (FEICHTINGER 1899)
Linaria vulgaris Mill.
Linum austriacum L.
Linum catharticum L.
Linum tenuifolium L.
Lithospermum arvense L.
Lithospermum purpureo-coeruleum L.
Lonicera xylosteum L.
Loranthus europaeus Jacq.
Lotus borbasii Ujhelyi
Lotus corniculatus L.
Lotus siliquosus L.
Luzula campestris (L.) Lam. et DC.
Lychnis coronaria (L.) Desr.
Lychnis flos-cuculi L.
Lycopus europaeus L.
Lysimachia nummularia L.
Lysimachia vulgaris L.
Lythrum salicaria L.
Malcolmia africana (L.) R. Br.
Medicago falcata L.
Medicago lupulina L.
Medicago minima (L.) Grufbg.
Melampyrum barbatum W. et K.
Melandrium album (Mill.) Garcke
Melandrium noctiflorum (L.) Fr.
 (FEICHTINGER 1899)
Melandrium viscosum (L.) Celak
 (FEICHTINGER 1899)
Melica ciliata L.
Melica nutans L.
Melica uniflora Retz.
Melilotus albus Desr.
Melilotus officinalis (L.) Pall.
Melittis carpatica Klok.
Mentha aquatica L.
Mercurialis perennis L.
Micropus erectus L. (FEICHTINGER 1899)
Milium effusum L. (FEICHTINGER 1899)
Minuartia fastigiata (Sm.) Rchb.
 (FEICHTINGER 1899)
Minuartia glomerata (M. B.) Degen
 (FEICHTINGER 1899)
Minuartia verna (L.) Hiern
Minuartia viscosa (Schreb.) Schinz et Thell.
 (FEICHTINGER 1899)

- Moehringia trinervia* (L.) Clairv.
Molinia hungarica Milkovits
Muscari comosum (L.) Mill.
Muscari neglectum Guss. ex Ten.
Muscari tenuiflorum Tausch
Mycelis muralis (L.) Dum.
Myosotis arvensis (L.) Hill
Myosotis stricta Link
Neottia nidus-avis (L.) Rich.
Nepeta pannonica L.
Nonea pulla (L.) DC.
Odontites lutea (L.) Clairv.
Odontites rubra (Baumg.) Opiz
Oenothera biennis L.
Onobrychis arenaria (Kit.) Ser.
Ononis pusilla L.
Ononis spinosa L.
Orchis militaris L.
Orchis morio L.
Orchis purpurea Huds.
Orchis ustulata L.
Origanum vulgare L.
Orlaya grandiflora (L.) Hoffm.
Ornithogalum degenianum Polgár
Ornithogalum gussonei Ten.
Ornithogalum umbellatum L.
Orobanche alba Steph. (FEICHTINGER 1899)
Orobanche caryophyllacea Sm.
Oryzopsis virescens (Trin.) Beck
 (FEICHTINGER 1899)
Oxytropis pilosa (L.) DC.
Pastinaca sativa L.
Petrorhagia prolifera (L.) Ball et Heyw.
Peucedanum alsaticum L.
Peucedanum arenarium W. et K.
Phalaroides arundinacea (L.) Rauschert
Phleum phleoides (L.) Karst.
Phleum pratense L.
Phlomis tuberosa L.
Phragmites australis (Cav.) Trin.
Picris hieracioides L.
Pimpinella saxifraga L.
Plantago lanceolata L.
Plantago lanceolata L. subsp. *eriphora*
 (Hoffmans. et Link) Jáv.
Plantago major L.
Plantago media L.
Poa bulbosa L.
Poa compressa L.
Poa nemoralis L.
Poa palustris L.
Poa pratensis L.
Polygala amarella Crantz (FEICHTINGER 1899)
Polygala comosa Schkuhr
Polygala major Jacq.
Polygonatum latifolium (Jacq.) Desf.
Polygonatum multiflorum (L.) All.
Polygonatum odoratum (Mill.) Druce
Polygonum arenarium W. et K.
 (FEICHTINGER 1899)
Polypodium vulgare L.
Populus alba L.
Populus tremula L.
Potentilla anserina L.
Potentilla arenaria Borkh.
Potentilla erecta (L.) Räuschel
Potentilla neglecta Baumg.
Potentilla recta L.
Potentilla reptans L.
Primula veris Huds.
Prunella laciniata (L.) Nath.
Prunella vulgaris L.
Prunus spinosa L.
Pulicaria dysenterica (L.) Gartn.
Pulmonaria mollissima Kern.
Pulmonaria officinalis L.
Pulsatilla nigricans Störek
Pyrus pyraeaster (L.) Burgsd.
Quercus cerris L.
Quercus dalechampii Ten.
Quercus polycarpa Schur
Quercus pubescens Willd.
Ranunculus acris L.
Ranunculus polyanthemos L.
Ranunculus repens L.
Reseda lutea L.
Reseda phyteuma L.
Rhamnus catharticus L.
Ribes uva-crispa L.
Robinia pseudo-acacia L.
Rosa caesia Sm. in Sow.
Rosa canina L.
Rosa gallica L. (FEICHTINGER 1899)
Rosa hungarica Kern.
Rosa obtusifolia Desv.
Rosa rubiginosa L.
Rosa spinosissima L.
Rubus caesius L. (FEICHTINGER 1899)
Rumex acetosa L.
Rumex acetosella L.

- Rumex obtusifolius* L.
Salix alba L.
Salix cinerea L.
Salvia nemorosa L.
Salvia pratensis L.
Salvia verticillata L.
Sambucus ebulus L.
Sambucus nigra L.
Sanguisorba minor Scop.
Sanguisorba officinalis L.
Saxifraga bulbifera L.
Saxifraga tridactylites L.
Scabiosa canescens W. et K.
Scabiosa ochroleuca L.
Scorzonera austriaca Willd.
 (FEICHTINGER 1899)
Scorzonera hispanica L.
Scorzonera purpurea L.
Scrophularia nodosa L.
Sedum acre L.
Sedum album L.
Sedum hillebrandtii Fenzl (FEICHTINGER 1899)
Sedum maximum (L.) Hoffm.
Sedum sexangulare L.
Sempervivum marmoreum Griseb.
Senecio jacobaea L.
Senecio vulgaris L.
Serratula tinctoria L.
Seseli annuum L.
Seseli osseum Crantz emend. Simk.
Sideritis montana L.
Silene conica L.
Silene nutans L.
Silene otites (L.) Wibel
Silene vulgaris (Mönch) Garcke
Sium erectum Huds.
Solidago canadensis L.
Solidago gigantea Ait.
Sorbus danubialis (Jáv.) Kárp.
Sorbus torminalis (L.) Crantz
Spiraea media Fr. Schm. (FEICHTINGER 1899)
Stachys annua (L.) L.
Stachys recta L.
Stachys sylvatica L.
Staphylea pinnata L.
Stellaria holostea L.
Stellaria media (L.) Cyr.
Stenactis annua (L.) Nees
Stipa capillata L.
Stipa eriocalis Borb.
Stipa joannis Celak
Stipa pulcherrima C. Koch
Succisa pratensis Mönch
Symphytum officinale L.
Symphytum tuberosum L.
Taraxacum laevigatum (Willd.) DC.
Taraxacum officinale Weber ex Wiggers
Taraxacum serotinum (W. et K.) Poirét
Teucrium chamaedrys L.
Teucrium montanum L.
Thalictrum minus L. (FEICHTINGER 1899)
Thesium arvense Horvátovszky
Thesium linophyllum L.
Thlaspi arvense L.
Thlaspi perfoliatum L.
Thymus glabrescens Willd.
Thymus marschallianus Willd.
Thymus pannonicus All.
Thymus serpyllum L.
Tilia cordata Mill.
Tilia platyphyllos Scop.
Tragopogon dubius Scop. (FEICHTINGER 1899)
Tragopogon floccosus W. et K.
 (FEICHTINGER 1899)
Tragopogon orientalis L.
Trifolium alpestre L.
Trifolium arvense L.
Trifolium campestre Schreb.
Trifolium hybridum L.
Trifolium montanum L.
Trifolium ochroleucum Huds.
Trifolium pratense L.
Trifolium repens L.
Trifolium rubens L.
Trigonella monspeliaca L.
Trinia glauca (L.) Dum.
Tussilago farfara L.
Typha latifolia L.
Ulmus glabra Huds.
Ulmus minor Mill.
Urtica dioica L.
Valeriana dioica L.
Valeriana officinalis L. subsp. *collina*
 (Wallr.) Nym.
Valerianella carinata Lois.
Valerianella dentata (L.) Poll.
Veratrum nigrum L. (FEICHTINGER 1899)

<i>Verbascum austriacum</i> Schott	<i>Vicia grandiflora</i> Scop.
<i>Verbascum lychnitis</i> L.	<i>Vicia lathyroides</i> L.
<i>Verbascum phlomoides</i> L.	<i>Vicia pannonica</i> Crantz
<i>Verbena officinalis</i> L.	<i>Vicia tenuifolia</i> Roth
<i>Veronica arvensis</i> L.	<i>Vicia villosa</i> Roth
<i>Veronica austriaca</i> L.	<i>Vinca herbacea</i> W. et K.
<i>Veronica chamaedrys</i> L.	<i>Vincetoxicum hirundinaria</i> Medik.
<i>Veronica dillenii</i> Crantz	<i>Viola alba</i> Bess.
<i>Veronica hederifolia</i> L.	<i>Viola ambigua</i> W. et K.
<i>Veronica polita</i> Fr.	<i>Viola hirta</i> L.
<i>Veronica prostrata</i> L.	<i>Viola kitaibeliana</i> R. et Sch.
<i>Veronica spicata</i> L.	<i>Viola mirabilis</i> L.
<i>Veronica teucrium</i> L.	<i>Viola odorata</i> L.
<i>Veronica triphyllos</i> L.	<i>Viola rupestris</i> F. W. Schmidt
<i>Veronica verna</i> L.	<i>Viola sylvestris</i> Lam.
<i>Viburnum lantana</i> L.	<i>Viola tricolor</i> L. subsp. <i>tricolor</i>
<i>Vicia angustifolia</i> Grufbg.	<i>Viscaria vulgaris</i> Bernh.
<i>Vicia cracca</i> L.	<i>Xeranthemum annuum</i> L.

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