

Red List of vascular plants of the Czech Republic – 2000

Červený seznam cévnatých rostlin České republiky (stav v roce 2000)

† Josef Holub & František Procházka¹

¹Eko-Agency KOPR, Pivovarská 61, CZ-385 01 Vimperk, Czech Republic, e-mail: frantisek.prochazka@kaleidoscope.cz

Holub J. & Procházka F. (2000): Red List of vascular plants of the Czech Republic – 2000. – Preslia, Praha, 72: 187–230.

After more than 20 years since the publication of the first version of the list of extinct, endemic and endangered taxa of vascular plants of the Czech Republic, a new version is presented to the botanical and nature conservation public. This version includes much new data on the flora of the Czech Republic which has been accumulated since 1979. A number of taxa are included which were not considered in the previous version (i. e. newly described species, and taxa known from other territories but only discovered in the Czech Republic in the last two decades). The threat classification of some taxa been has changed on the basis of much more detailed knowledge of their present distribution.

K e y w o r d s : Red list, vascular plants, threatened plants, Czech Republic

Introduction

The first version of the list of extinct and endangered taxa of the Czech flora was published more than twenty years ago (Holub et al. 1979). Even at the time of its publication, the authors knew that some facts would either change the status of some species included (e. g. *Isoetes lacustris* was erroneously included since the authors were not aware that its occurrence in the only locality had been confirmed after more than 50 years – see Tomšovic 1979) or add other taxa to the list (e. g. *Hypochaeris glabra*, *Androsace septentrionalis* were omitted by mistake).

Publication of the list, as well as of its modifications aimed at a broader public (Čeřovský et al. 1979, 1980, Procházka et al. 1983) stimulated interest among botanists and nature conservationists which lead to a rapid accumulation of numerous new records. This new information substantially changed the situation reflected in the work from 1979 which was based on the knowledge available in 1978. Also, work on several volumes of the Flora of the Czech Republic (Hejný & Slavík 1988, 1990, 1992, Slavík 1995), which has not been completed as yet, yielded further new records and contributed remarkably to a better knowledge of the current state.

Soon it became obvious that some taxa were included on the list by mistake because at the time of its publication, they were still growing in their known localities (e. g. *Astragalus arenarius*, *Eragrostis pilosa*, *Kochia prostrata*, *Ostericum palustre*, *Poa rhiphaea*, *Verbascum speciosum*). Other species disappeared from their historical locations but were found elsewhere later on so it was necessary – to the delight of botanists and nature conservationists – to move them to the category of “only” critically threatened species (e. g. *Adonis flammea*, *Lathyrus pisiformis*, *Nasturtium microphyllum*, *Phelipanche*

caesia, *Pilosella macrantha*, *Salix myrtilloides*, *Spergula pentandra*, *Wolffia arrhiza*). A more detailed research of taxonomically complicated groups such as *Epipactis helleborine* agg., *Minuartia verna* agg., *Rubus fruticosus* agg., *Taraxacum* sect. *Palustris* et sect. *Ruderalia* yielded recognition of a number of species which had not been previously reported from the territory of the Czech Republic (*Epipactis greuteri*, *Himantoglossum adriaticum*, *Minuartia caespitosa*, *Rubus* sp. div., *Taraxacum* sp. div., *Vandenboschia speciosa*), and some species were newly described from here (*Dactylorhiza bohemica* Businský, *Minuartia smejkalii* Dvořáková, *Rubus angustipaniculatus* Holub, *R. austromoravicus* Holub, *R. barrandienicus* Holub et Palek, *R. henrici-egonis* Holub, *R. bohemiicola* Holub, *R. brdensis* Holub, *R. centrobohemicus* Holub, *R. crispomarginatus* Holub, *R. josefianus* H. E. Weber, *R. perrobustus* Holub, *R. vratnensis* Holub, *Taraxacum bohemicum* Kirschner et Štěpánek, *T. dentatum* Kirschner et Štěpánek, *T. irrigatum* Kirschner et Štěpánek, *T. madidum* Kirschner et Štěpánek, *T. mendax* Kirschner et Štěpánek). For these new species, it was necessary to evaluate the degree of threat and include them in the new version of the list.

On the other hand, it appeared necessary to discard some taxa from the list because they were found to have been erroneously reported from the region (e. g. *Lonicera caerulea*). A different story is that of *Potamogeton polygonifolius* which had to be transferred from the category of unclear cases of extinct and missing taxa to the category of critically threatened, because it has recently been proved to be occurring in western Bohemia (surroundings of the town of Aš). There were more shifts to be made among particular categories, justified by new information. For example *Sparganium angustifolium*, *Herminium monorchis* or *Xeranthemum annuum* were moved from critically threatened to extinct taxa, *Utricularia bremii* and *Hippochaete ×meridionalis* from critically threatened to missing taxa, *Goodyera repens*, *Daphne cneorum* or *Illecebrum verticillatum* from strongly threatened to critically threatened, and the status of *Ajuga pyramidalis*, originally classified as merely threatened, had to be changed to critically threatened. Opposite trends are represented by lowering the degree of threat of some species. Hence e. g. *Iris humilis* subsp. *arenaria*, *Orobanche alsatica* or *O. reticulata* were moved from critically threatened to “merely” threatened taxa.

Publications focused, from various point of view, on endangered species in particular regions of the Czech Republic became another source of new information, often leading to re-classification of the originally reported degree of threat. The following regions deserve to be mentioned, i. e. northern Bohemia (Kubát 1986), eastern Bohemia (Faltys 1993), the region of Prachatice (Procházka 1990), Jeseníky Mts (Bureš et al. 1989), Bílé Karpaty Mts (Jongepierová & Grulich 1992) and the district of Zlín (Elsnerová 1995).

The new knowledge accumulated during the 1980s and the first half of 1990s as a result of a better insight into the state of the Czech flora and its level of danger was utilized for the second version of the Red List of Czech flora (Holub et al. 1995). This document was first thoroughly discussed at the workshop organized by the Czech Botanical Society specifically on this topic on 24–25 March 1995 (cf. Kubát 1996), and was provided to the Ministry of Environment not long afterwards. Although it has never been officially published, it has been circulating among the botanical and conservation community as unofficial copies and it is often referred to in scientific papers. This working version of the Red List differs from the first one, published in 1979, not only in the numerous changes in classification of some taxa into particular categories but also in that it contains neither the cate-

gory of uncertain cases of extinct taxa (A3) nor that of least endangered taxa (C4, i.e. rare taxa requiring further study).

A list of species representing these two omitted categories was made available later (Holub 1996), however, only in the form of a working document submitted for discussion to a broader botanical public. Compared to the first version (Holub et al. 1979), the newer list shows remarkably fewer taxa in C4 category. This is because in some taxa, originally ranked under this category, a higher degree of threat was found leading to their transfer to categories C1, C2 or C3. On the contrary, other taxa were excluded from C4 as it became clear that they are not endangered at all (e. g. *Circaea intermedia*, *Juncus squarrosus* and others).

The work on the unpublished, second version of the Red List was carried out from May 1994 to April 1995. In the course of the few years that have passed since then, a number of new data became available, making it necessary to compile a new version which is presented in the present paper. These new data were partly published, some in the fifth volume of the Flora of the Czech Republic (Slavík 1997), others in various studies on those groups of the Czech flora which had not been sufficiently known up to then (*Diphasiastrum* – Procházka 1997; *Euphrasia* – Dvořáková 1999b; *Hypericum* – Mártonfi et al. 1999; *Lemna* – Kaplan 2000; *Minuartia* – Dvořáková 1999a; *Orchidaceae* – Batoušek 1998, 1999, Batoušek & Kreutz 1999, Jatiová & Šmiták 1996; *Orobanche* – Holub & Zázvorka 1999; *Primula* – Kovanda 1997b; *Rubus* – Weber 2000; *Sorbus* – Kovanda 1996a, b, 1997a, 1998; *Stipa* – Danihelka et al. 2000; *Taraxacum* sect. *Palustria* – Kirschner & Štěpánek 1998, etc.). Also, there have been many new species discovered in the territory of the Czech Republic since 1995; some of them have been described from other regions of Europe as late as in the last few years [*Diphasiastrum oellgaardii* Stoor, Boudrie, Jérôme, Horn et Bennert, *Epipactis distans* C. Arvet-Touvet, *E. nordeniorum* Robatsch, *E. pontica* Taubenheim, *E. pseudopurpurata* Mered'a, *E. tallosii* A. Molnár et K. Robatsch, *Hypericum dubium* Leers, *Orobanche teucrii* Holandre, *Rubus amphimalacus* H. E. Weber, *R. caflischii* Focke, *R. sendtneri* Progel, *R. nessensis* subsp. *scissoides* H. E. Weber, *R. ortostachyoides* H. E. Weber, *R. wessbergii* A. Pedersen et Walsemann, *R. pseudidaeus* (Weihe) Lej., *Stipa eriocalis* Borbás, *Taraxacum fartoris* Kirschner et Štěpánek, *T. fascians* Kirschner et Štěpánek, *T. litigiosum* Kirschner et Štěpánek, *T. ranunculus* Kirschner et Štěpánek]. Numerous species and subspecies have even been described as new to science from the Czech Republic since 1995 (*Dactylorhiza traunsteineri* subsp. *carpatica* Batoušek et Kreutz, *Minuartia corcontica* Dvořáková, *Rubus josholubii* H. E. Weber, *Taraxacum ambrosium* Kirschner et Štěpánek, *T. indigenum* Kirschner et Štěpánek, *T. inundatum* Kirschner et Štěpánek, *T. paludem-ornans* Kirschner et Štěpánek, *T. portentosum* Kirschner et Štěpánek, *T. tragopogon* Kirschner et Štěpánek, *T. uvidum* Kirschner et Štěpánek), some were re-classified at the species [*Euphrasia corcontica* (Smejkal) Smejkal et Dvořáková] or subspecies [*Primula elatior* subsp. *corcontica* (Domin) Kovanda] level. The present list includes some taxa which were found in the Czech Republic so recently that the respective records have not been published as yet [*Cystopteris dickieana* R. Sim – K. Kubát, personal communication; *Dactylorhiza maculata* subsp. *ericetorum* (E. F. Linton) Averyanov – P. Batoušek, personal communication].

Of the species considered in 1995 as extinct or missing, some have been found in the Czech Republic since then, i. e. *Linaria arvensis* (southern Bohemia – Suda 1999), *Hypericum pulchrum* and *Luronium natans* (northern Bohemia – J. Hadinec & J. Suda, unpubl.), *Triglochin maritimum* (salt marsh at the Nesyt fishpond – P. Šmarda, J. Danihelka

et al., unpubl.), *Utricularia bremii* (southern Bohemia – M. Štech, unpubl.). On the other hand, it appeared necessary to exclude the only one historical record of *Himantoglossum hircinum* from the Czech flora because the plant on a herbarium specimen from northern Bohemia from 1874 (leg. Brandeis), surprisingly discovered quite recently by R. Hendrych in the Herbarium of National Museum Praha (PR) (cf. Hendrych 2000) is *H. adriaticum* (rev. F. Procházka, 17 February 2000) not *H. hircinum* (see Preslia 72: 562, 2000).

The necessity to update the list of extinct, missing and endangered taxa of the Czech flora, presented here to the botanical and nature-conservation community resulted from a large body of new data published recently in relevant, conservation oriented publications. Among the most important are the fifth volume of the Red Data Book of endangered plant and animal species of the Czech Republic, dealing with vascular plants (Čeřovský et al. 1999), the extensive Commented Red List of endangered flora of the southern part of Bohemia (Chán 1999), the new version of the Black List of the flora of Czech Republic (Holub et al. 1999, Holub 2000) and the Red List of brambles of the Czech Republic (Holub 1999).

Structure of the Red List

Concerning particular categories of endangerment, we follow the common classification used in previous versions (A1 to A3, C1 to C4) which has gradually converged with internationally used criteria (IUCN 1994, Holub 1996). However, in comparison to previous versions, we have changed the classification of taxa into particular categories in order to adapt our system to the international one. Unlike the Red List from 1979 (Holub, Procházka & Čeřovský 1979), the present one does not contain the B section (endemic and subendemic taxa). This is because nothing has changed with long known endemic/subendemic taxa while in those taxa described recently, the distribution status is only partially known (e.g. *Dactylorhiza bohemica*, *Euphrasia corcontica*, *Minuartia smejkalii*, *M. corcontica*, *Rubus bohemicola*). Although it can be assumed that many other newly described taxa belonging to taxonomically complicated genera such as *Dactylorhiza*, *Rubus*, *Taraxacum*, and *Sorbus* will have an endemic distribution, the present knowledge of their total distribution is too vague to be certain.

A. Extinct and missing taxa (IUCN: extinct = EX)¹

A1. Definitely extinct taxa (EX)

This category includes taxa which (i) have not been found within the territory of the Czech Republic for a very long time (25–50 years, but in some cases more than 100 years), (ii) were not found in their well known, but scarce localities despite habitat conditions in these localities remaining essentially unchanged in the last 50 years, (there was an effort to revise the occurrence of these species,) or taxa which (iii) have distinct and specialized ecological demands which have gone extinct in their usually scarce localities because of changed habitat conditions. In the latter case, the time criterion is not relevant.

¹ Currently valid IUCN categories (better suited to zoological than botanical needs) correspond only in part to the categories which are commonly used in the Czech Republic. The categories which were adopted for the purpose of the present paper are similar to those used in most neighbouring Central European countries. For the differences between IUCN categories and those used in the present paper, see the criteria described in the text.

A2. Missing (probably extinct) taxa (?EX)

The group of missing (= probably extinct) taxa contains plants which were not found in their well known localities for more than 20–30 years (or less if relevant) but a possibility of their re-appearance in these localities or of discovering new localities cannot be discounted. This particularly concerns species which can be easily overlooked, occur only ephemeraly or their occurrence is of such a kind that typically, some of their localities disappear and others can appear elsewhere. Taxa which have not been paid sufficient attention for some time are also often included here. In the future, it is probable that some representatives of this category will be moved to that of critically threatened or extinct, once reliable data on their current distribution have been accumulated.

A3. Uncertain cases of extinct or missing taxa (?EX?)

This very heterogeneous category includes cases qualified by the fact that there is no reliable evidence of their presence in our flora, it is not known whether they appeared accidentally or their presence is of a more long term character, or whether they are introduced or native. Further, taxa with uncertain taxonomic positions belong here as well as those which could have been misdetermined. A more detailed study of each particular case is needed to decide whether such a taxon belongs to category A1 (or possibly A2) or should be included among taxa under a different degree of threat. The A3 category certainly contains a number of species which never grew in the Czech Republic (since they were reported by mistake) or those that are of very low taxonomical value. Only research aimed on such a species can yield results needed for a decision to be made about its transfer to another category or definite removal from our flora (both in terms of historical and present state).

C. Taxa under a different degree of threat

C1. Critically threatened taxa (IUCN: critically endangered = CR)

Primarily, this category includes taxa which are both very rare and seriously threatened, represented by only one or few (usually up to 5) local populations, confined mostly to habitats endangered by human activities (such as fens, peat bogs, oligotrophic pastures, regularly managed semi-natural grasslands) but sometimes also by natural factors (rock falls, avalanches, successional changes, etc.). Populations of these species are mostly not abundant (in some cases, the population size has already dropped below the critical threshold), they are often fragmented, isolated, and formed by individuals which flower only occasionally, rarely bear viable seed or persist in localities only by vegetative means. Taxa whose occurrence exhibits such pattern are classified here even if the number of their localities exceeds 5 because in order to conserve their gene pool, a strict limit in the number of localities is of no use. The category further consists of taxa which were common or very common in the past but must now be considered rare due to a substantial decrease in number, size and density of local populations. Some of them have declined to only 10% (or even less) of their former occurrence and it can be assumed that this trend will continue. Many weeds of arable fields, flax-associated weeds, and species of emergent bottoms of water bodies are examples here. If relevant conservation measures are not immediately

implemented to protect taxa of this category (some do not grow in areas protected for nature conservation), it is highly probable that under the continuing influence of threatening factors many of them will disappear from our flora.

C2. Strongly threatened taxa (IUCN: endangered = EN)

Taxa with a proven and consistent trend of decline are classified in this category. Their retreat has been most marked in the last period and is accompanied by a clear decrease in number, size and density of populations within a large part of the country or over its whole territory. In some cases, taxa belonging to this category have already disappeared from some large-scale regions. A decrease to 50%, or even less, of the original status can happen. Unlike in the previous category (C1), however, such decline does not usually happen in all populations. Further, some rare species with only a few known localities (usually 5–20) belong here. The low number of localities is a threat in itself, especially if some of the localities are endangered, but the situation is not considered critical as yet. These taxa are not threatened by complete extinction from the Czech flora but if efficient conservation measures are not adopted, they might become critically endangered in the future.

C3. Threatened taxa (IUCN: vulnerable = VU)

The taxa included into this category have been declining less markedly than those in the previous group but their retreat is proven and appears to be permanent. Over the whole territory of the Czech Republic, or at least in part of it, local populations have decreased and can even disappear from localities where the species is less abundant. This leads to the species being less frequent than in the past (available figures suggest that the reduction varies between 20 to 50% of the original occurrence). Taxa belonging to this group are often confined to habitats which are decreasing in the contemporary landscape.

C4. Rare or scattered taxa, requiring further study and monitoring (IUCN: lower risk = LR + data deficient = DD)

This category contains rather rare taxa which cannot, at the moment, be placed in any of the groups given above. It can be assumed that they will be threatened in the near future because of numerous potential threats. For example, some relatively common species are attractive and thus endangered by being picked during flowering. Also, taxa belong here for which sufficient taxonomical, phytogeographical and ecological information is not available and hence the degree of threat cannot be more precisely decided.

Remarks on the Red List

The nomenclature used in this paper follows the opinion of J. Holub whose taxonomical conception was that of a splitter. This means that some narrow genera (such as *Carex* excl. *Vigneae*, *Cornus* excl. *Swida*, *Filago* excl. *Logfia* or *Cerastium* excl. *Dichodon*) are accepted that would usually be treated at lower taxonomical levels (generally subgenus or section) by workers abroad. Similarly, some taxa treated here as species are more usually

accepted at the subspecific level (*Zannichellia palustris*, *Z. pedicellata* or *Potentilla thyrsiflora*, *P. hedrichii* etc.). The use of names other than those in common use (e. g. *Genistella sagittalis* instead of *Chamaespartium sagittale*, *Kengia serotina* instead of *Cleistogenes serotina*, *Kadenia dubia* instead of *Cnidium dubium*, *Spergularia media* instead of *S. maritima*, *Struthiopteris spicant* instead of *Blechnum spicant*, *Vandenboschia speciosa* instead of *Trichomanes speciosum*) is either a reflection of Holub's opinion or is an indication of doubt about the correctness of the more usually applied names, whether for taxonomic (e. g. *Mutellina purpurea*, *Tithymalus virgultosus*) or purely nomenclatural reasons. Many of these examples, along with those taxa followed by the abbreviations "tax." or "nom." in the list would make convenient and worthwhile subjects for future detailed studies.

The Agency of Nature and Landscape Protection of the Czech Republic is preparing for publication an extended version of the present list for the purpose of practical nature conservation. In that version, a broader generic concept which is common in Europe will be used, and national nomenclature (common names) as well as an alphabetical list of all taxa with references to both Czech (Regulation of the Ministry of Environment of the Czech Republic No. 395/1992) and international (Bern Convention, Washington Convention, Regulation of the European Community No. 92/43/EEC from 1992) legislation will be added.

The present list uses species as the basic systematic unit. Where required, subspecies are also given. If a species is listed which has more than one subspecies growing in the Czech Republic and none of these subspecies is specifically mentioned, then all its subspecies belong to given category into which the species is classified. Hybrids are included only when their populations are already completely independent of parental populations or when they represent rare hybrid combinations of woody plants described from the Czech Republic (e. g. the extremely rare pine *Pinus × celakovskiorum* which has been growing in its locus classicus on boulder scree near the Plešné jezero lake in the Šumava Mts for more than 100 years).

Names of some taxa are followed by abbreviations:

„ind.“ – only native occurrence considered

„ind.?” – unclear if the species is a native of the Czech Republic

„tax.“ – taxon is problematic from the taxonomic point of view

„s. l.“ – broad conception of the given taxon

„s. s.“ – narrow conception of the given taxon (microspecies or typical subspecies)

„agg.“ – a group of insufficiently known taxa (often microspecies)

„nom.“ – nomenclature of the taxon is problematic

List of extinct, missing and endangered taxa of vascular plants of the Czech Republic

A 1. Definitely extinct taxa

Alchemilla corcontica Plocek

Aldrovanda vesiculosa L.

Androsace maxima L.

Apera interrupta L.

Asperula arvensis L.

- Astragalus asper* Jacq. (ind.)
Betula humilis Schrank
Botrychium simplex E. Hitchc.
Camelina alyssum (Mill.) Thell.
Camelina macrocarpa Reichenb. [*C. alyssum* subsp. *integerrima* (Čelak.) Smejkal, *C. alyssum* subsp. *macrocarpa* (Wierzb.) Hiit., *C. sativa* subsp. *macrocarpa* (Wierzb.) Soó]
Ceratocephala orthoceras DC. [*C. testiculata* auct.]
Ciminalis acaulis (L.) Borkh. [*Gentiana acaulis* L.]
Clematis vide *Coriflora*
Conringia austriaca (Jacq.) Sweet
Coriflora integrifolia (L.) W. A. Weber [*Clematis integrifolia* L., *Viorna integrifolia* (L.) Spach]
Cuscuta epilinum Weihe
Cystopteris sudetica A. Braun et Milde
Dactylorhiza russowii (Klinge) Holub
Euphrasia corcontica (Smejkal) Smejkal et Dvořáková [*E. micrantha* Reichenb. var. *corcontica* Smejkal]
Galatella cana (Waldst. et Kit.) Nees [*Aster canus* Waldst. et Kit.]
Galium verrucosum Hudson
Gentianella campestris (L.) Börner subsp. *campestris*
Gentianella campestris (L.) Börner subsp. *suecica* (Froel.) Tzvelev
Gentianella germanica (Willd.) Börner subsp. *solstitialis* (Wettst.) Holub
Gentianella praecox (A. Kerner et J. Kerner) E. Mayer subsp. *praecox* [*G. gabretae* Skalický]
Geranium bohemicum L.
Geranium lucidum L.
Gladiolus felicitis Mirek
Gymnadenia odoratissima (L.) L. C. Richard
Helianthemum vide *Rhodax*
Heliotropium europaeum L.
Herminium monorchis (L.) R. Br.
Hieracium purkynei Čelak.
Iris spuria L.
Linnaea borealis L.
Linum perenne L.
Melampyrum barbatum Willd.
Moehringia muscosa L.
Moenchia erecta (L.) P. Gaertn., E. Meyer et Scherb.
Montia arvensis Wallr. [*M. fontana* subsp. *chondrosperma* (Fenzl) Walters, *M. fontana* subsp. *verna* Dostál]
Myagrum perfoliatum L.
Narthecium ossifragum (L.) Hudson
Oenanthe fistulosa L.
Oenanthe silaifolia M. Bieb.
Orchis coriophora L.
Pedicularis sceptrum-carolinum L.
Peucedanum arenarium Waldst. et Kit.
Pilularia globulifera L.
Plantago altissima L.
Potamogeton coloratus Hornem.
Potamogeton compressus L.
Primula farinosa L.
Rhodax rupifragum (Kerner) Holub [*Helianthemum rupifragum* Kerner]
Rosa arvensis Hudson
Salicornia prostrata Pallas
Schoenoplectus supinus (L.) Palla
Schoenoplectus triquetter (L.) Palla
Scirpus vide *Schoenoplectus*
Scleranthus verticillatus Tausch [*S. collinus* Opiz]
Senecio vide *Tephroseris*
Silene bupleuroides L. (ind.?)

Silene cretica L. subsp. *annulata* (Thore) Hayek (tax.)
Sparganium angustifolium Michx.
Spergula linicola Boreau
Suaeda prostrata Pallas [*S. pannonica* auct. fl. morav. non (L.) Dumort.]
Tephroses palustris (L.) Fourr.
Trinia ucrainica Šiškin [*T. kitaibelii* auct., *T. ramosissima* auct.]
Typha minima Hoppe
Typha shuttleworthii Koch et Sonder
Urtica kioviensis Rogow.
Veronica pumila All.
Viorna vide *Coriflora*
Woodsia alpina (Bolton) S. F. Gray
Xeranthemum annuum L. (ind.)

A2. Missing (probably extinct) taxa

Ajuga vide *Chamaepitys*
Alchemilla filicaulis Buser subsp. *vestita* (Buser) Bradshaw
Bassia vide *Kochia*
Camelina pilosa (DC.) Zinger [*C. sativa* subsp. *pilosa* auct., *C. sativa* subsp. *zingeri* (Mirek) Smejkal]
Camelina sativa (L.) Crantz
Caucalis platycarpus L. subsp. *muricata* (Čelak.) Holub
Chamaepitys chia (Schreber) Holub subsp. *glabra* (C. Presl) Dostál [*Ajuga pseudochia* Desj.-Šost.,
A. chamaepitys (L.) Schreber subsp. *ciliata* (Briq.) Smejkal]
Chenopodium botryodes Sm. [*Ch. crassifolium* Hornem., *Ch. chenopodioides* auct.]
Colobium taraxacoides (Vill.) Holub [*C. saxatile* (Lam.) Holub, *Leontodon nudicaulis* auct., *L. taraxacoides*
(Vill.) Mérat, *Thrinicia hirta* Roth, *T. saxatilis* (Lam.) Holub et Moravec]
Crypsis vide *Heleochoa*
Elatine hydropiper L. emend. Oeder subsp. *orthosperma* (Meinsh.) Hermann
Eleocharis uniglumis (Link) Schultes subsp. *sternerii* Strandh.
Epilobium lanceolatum Sebastini et Mauri (ind.)
Equisetum vide *Hippochaete*
Erigeron angulosus Gaud.
Euclidium syriacum (L.) R. Br.
Galium parisiense L.
Gentianella amarella (L.) Börner subsp. *lingulata* (C. Agardh) Holub
Geum aleppicum Jacq. (ind.)
Heleocharis vide *Eleocharis*
Heleochoa alopecuroides (Piller et Mitterp.) Roemer (ind.)
Hieracium grabowskianum Naegeli et Peter
Hieracium vide etiam *Pilosella*
Hippochaete meridionalis (Milde) Holub [*Equisetum meridionale* (Milde) Chiov.]
Imula salicina L. subsp. *aspera* (Lam.) Hayek
Kochia laniflora (S. G. Gmelin) Borbás (ind.) [*Bassia laniflora* (S. G. Gmelin) A. J. Scott]
Lactuca saligna L.
Leontodon vide *Colobium*
Lolium remotum Schrank
Lolium temulentum L.
Lycopodioides helveticum (L.) O. Kuntze [*Selaginella helvetica* (L.) Spring.]
Pilosella anchusoides (Arvet-Touvet) Soják [*Hieracium anchusoides* Arvet-Touvet]
Pilosella pseudocalodon (Peter) Soják [*Hieracium pseudocalodon* Peter]
Pilosella stenosoma (Naegeli et Peter) Soják [*Hieracium brachiatum* Bertol. ex DC. subsp. *stenosoma* Naegeli et
Peter, *H. suprafloccosum* (Naegeli et Peter) Zahn]
Pilosella tephrophyton (Oborny et Zahn) Soják [*Hieracium tephrophyton* Oborny et Zahn]
Pleconax conica (L.) Šourková [*Silene conica* L.]
Polycnemum heuffelii Láng

Potamogeton friesii Rupr.
Rubus barberi H. E. Weber
Rubus curvaciculatus Walsemann ex H. E. Weber [*R. dethardingii* auct.]
Rubus hercynicus G. Braun
Sagina apetala Ard.
Sagina micropetala Rauschert
Salix starkeana Willd.
Scandix pecten-veneris L.
Sceptridium multifidum (S. G. Gmelin) Tagawa [*Botrychium multifidum* (S. G. Gmelin) Rupr.]
Scorzonera vide *Podospermum*
Selaginella vide *Lycopodioides*
Senecio rupestris Waldst. et Kit.
Silene vide *Pleconax*
Spergula maxima Weihe s. s.
Taraxacum inundatum Kirschner et Štěpánek
Taraxacum limosum Soest (tax.)
Taraxacum olivaceum Soest
Taraxacum portentosum Kirschner et Štěpánek
Taraxacum trilobifolium Hudziok [*T. hemiparabolicum* Hudziok]
Thrinacia vide *Colobium*
Turgenia latifolia (L.) Hoffm. (ind.)
Vaccaria hispanica (Miller) Rauschert s. l. (ind.)
Veronica scardica Griseb.

A 3. Uncertain cases of extinct or missing taxa

Althaea vide *Dinacrusa*
Alyssum turkestanicum Regel et Schmalh. [*Alyssum desertorum* Stapf]
Anthemis montana L.
Artemisia alba Turra
Artemisia austriaca Jacq. (ind.)
Aster vide *Galatella*
Astragalus sulcatus L.
Betula tortuosa Ledeb.
Campanula rapunculus L.
Capsella heegeri Solms (tax.)
Carex brevicollis DC.
Carex vide etiam *Vigna*
Cerastium litigiosum Loisel.
Cerastium sylvaticum Waldst. et Kit.
Ceratocephala falcata (L.) Cramer
Ceratoides vide *Krascheninnikovia*
Chamaecytisus falcatus (Waldst. et Kit.) Holub [*Ch. hirsutus* subsp. *ciliatus* (Wahlenb.) Klásková, *Ch. triflorus* subsp. *ciliatus* (Wahlenb.) Holub, *Cytisus ciliatus* Wahlenb.]
Coronilla moravica Chrtková et Stavělová (tax.)
Crepis succisifolia All. subsp. *velenovskyi* Domin (tax.)
Cytisus vide *Chamaecytisus*
Dinacrusa hirsuta (L.) G. Krebs [*Althaea hirsuta* L.]
Epilobium hypericifolium Tausch (tax.)
Euphrasia frigida Pugsley
Euphrasia salisburgensis Hoppe
Eurotia vide *Krascheninnikovia*
Fritillaria meleagris L.
Galatella punctata (Waldst. et Kit.) Nees [*Aster punctatus* Waldst. et Kit.]
Galium aristatum L.
Galium lucidum All.

- Galium rubioides* L.
Genista tinctoria L. subsp. *elatior* (W. D. J. Koch) Nyman
Gentiana vide *Ciminalis*, *Gentianella*
Gentianella obtusifolia (F. W. Schmidt) Holub subsp. *norica* (A. Kerner et J. Kerner) Holub
Gentianella uliginosa (Willd.) Börner
Herniaria incana Lam. (ind.)
Hieracium chamaeadenium Oborny et Zahn (tax.)
Hieracium leptovicense Borbás s. l. (tax.)
Hieracium riphaeoides Bornm. et Zahn (tax.)
Hieracium vide etiam *Pilosella*
Hierochloë hirta (Schrank) Borbás
Hordeum secalinum Schreber
Hylotelephium argutum (Haw.) Holub [*H. telephium* subsp. *fabaria* (W. D. J. Koch) Ohba, *Sedum argutum* (Haw.) Sweet, *S. carpaticum* G. Reuss, *S. fabaria* subsp. *carpaticum* (G. Reuss) Dostál, *S. fabaria* W. D. J. Koch]
Hymenophyllum tunbridgense (L.) Sm.
Hyoscyamus bohemicus F. W. Schmidt (tax.)
Isatis praecox Tratt.
Krascheninnikovia ceratoides (L.) Gueldenst. [*Ceratoides latens* (J. F. Gmelin) Reveal et Holmgren, *Eurotia ceratoides* (L.) C. A. Meyer]
Lamium molucellifolium Fries
Leontodon incanus (L.) Schrank
Libanotis pyrenaica (L.) Bourgeau subsp. *intermedia* (Rupr.) Soó
Linum hirsutum L. subsp. *glabrescens* (Rochel) Soó (tax.)
Ludwigia palustris (L.) Elliott
Mibora minima (L.) Desv.
Minuartia glauca Dvořáková [*M. verna* (L.) Wahlenb. subsp. *collina* (Neilr.) Halliday]
Muscari botryoides (L.) Mill.
Muscari neglectum Ten. [*M. racemosum* auct.]
Myosotis alpestris F. W. Schmidt
Ononis foetens All. [*O. spinosa* subsp. *austriaca* (Beck) Gams, *O. spinosa* subsp. *foetens* (All.) Širj.]
Ophioglossum azoricum C. Presl
Ophrys sphegodes Miller
Osmunda regalis L.
Otites borysthena (Gruner) Klokov subsp. *parviflora* (Hornem.) Holub [*Silene borysthena* (Gruner) Walters subsp. *parviflora* (Hornem.) Šourková]
Petrorhagia saxifraga (L.) Link (ind.)
Peucedanum officinale L.
Pilosella calomastix (Peter) Soják [*Hieracium calomastix* Peter]
Podospermum laciniatum (L.) DC. [*Scorzonera laciniata* L.]
Polycnemum verrucosum Láng (tax.)
Polygonatum latifolium Desf.
Pseudolysimachion spurium (L.) Rauschert subsp. *spurium* [*Veronica spuria* L. subsp. *spuria*]
Quercus frainetto Ten. (ind.?)
Rhinanthus borbásii (Dörfler) Soó
Rhinanthus glacialis Personat
Rubus hypomalacus Focke
Saxifraga hirculus L.
Saxifraga moschata Wulfen (ind.?)
Sedum vide *Hylotelephium*
Schoenoplectus americanus (Pers.) Volkart
Seseli austriacum (Beck) Wölf.
Silene vide *Otites*
Spiranthes aestivalis (Poir.) L. C. Richard
Thalictrum baubini Crantz
Thlaspi alliaceum L. (ind.?)
Tragus racemosus (L.) All. (ind.)

Trifolium diffusum Ehrh.
Trifolium pannonicum Jacq.
Tunica vide *Petrorhagia*
Valeriana montana L.
Vigna brunescens (Pers.) Soják [*Carex brunescens* (Pers.) Poir.]
Vigna praecox (Schreber) Soják subsp. *velenovskyi* (Domin) Dostál (tax.) [*Carex praecox* subsp. *velenovskyi* (Domin) Jilek]
Viola epipsila Ledeb.
Viola uliginosa Besser
Xanthium ripicola Holub

C1. Critically threatened taxa

Achillea asplenifolia Vent.
Achroanthes vide *Malaxis*
Aconitum altissimum Miller subsp. *penninum* (Ser.) Holub [*A. vulparia* subsp. *penninum* (Ser.) Gáyér]
Adenophora liliifolia (L.) Ledeb. ex DC.
Adonis flammea Jacq.
Agropyron pectinatum (M. Bieb.) Beauv. (ind.)
Agrostemma githago L.
Agrostis alpina Scop.
Aira caryophyllea L.
Ajuga pyramidalis L.
Alchemilla baltica Sam. ex Juz.
Alchemilla fissa Günther et Schummel
Alectorolophus vide *Rhinanthus*
Alisma vide *Luronium*
Amygdalus nana L.
Anacamptis pyramidalis (L.) L. C. Richard
Anemonastrum narcissiflorum (L.) Holub [*Anemone narcissiflora* L.]
Anemone vide *Anemonastrum*
Angelica vide *Ostericum*
Androsace septentrionalis L.
Aphanes australis Rydb. [*Alchemilla microcarpa* Boiss. et Reuter]
Aposeris foetida (L.) Less.
Arabis nemorensis (Hoffm.) Koch
Arabis sudetica Tausch
Arenaria grandiflora L. [*Cernohorskya grandiflora* (L.) Á. Löve et D. Löve]
Arnoseris minima (L.) Schweigger et Koerte
Artemisia pancicii (Janka) Ronniger
Artemisia scoparia Waldst. et Kit.
Asplenium adiantum-nigrum L.
Asplenium adulterinum Milde
Asplenium trichomanes L. subsp. *pachyrhachis* (Christ) Lovis et Reichst. in Greuter
Asplenium vide etiam *Ceterach*, *Phyllitis*
Aster alpinus L.
Aster vide etiam *Tripolium*
Astragalus arenarius L.
Atriplex rosea L.
Batrachium baudotii (Godron) F. W. Schulz
Batrachium penicillatum Dumort.
Beckmannia eruciformis (L.) Host (ind.?)
Betula oycoviensis Besser
Betula × *seideliana* Missbach
Botrychium matricarifolium A. Br. ex Koch
Brassica elongata Ehrh. (ind.?)

- Bromus arvensis* L.
Bromus racemosus L.
Bromus secalinus L.
Bromus squarrosus L.
Bulliardia vide *Tillaea*
Buphthalmum salicifolium L.
Bupleurum affine Sadler
Bupleurum longifolium L. subsp. *vapincense* (Vill.) Todor
Bupleurum rotundifolium L.
Bupleurum tenuissimum L.
Calamagrostis phragmitoides Hartman [*C. purpurea* (Trin.) Trin. subsp. *phragmitoides* (Hartman) Tzvelev]
Calamagrostis pseudophragmites (Haller fil.) Koeler
Calamagrostis stricta (Timm) Koeler
Calamagrostis varia (Schrader) Host
Calathiana verna (L.) Holub [*Gentiana verna* L.]
Callitriche hermaphroditica L.
Callitriche platycarpa Kütz. in Reichenb. (tax.)
Campanula cervicaria L.
Campanula gelida Kovanda [*C. bohémica* Hruby subsp. *gelida* (Kovanda) Kovanda]
Cardamine opizii J. Presl et C. Presl
Cardamine parviflora L.
Cardamine resedifolia L.
Cardaminopsis petraea (L.) Hiitonen in Hylander
Carex alba L.
Carex atrata L. s. s.
Carex buxbaumii Wahlenb. s. s.
Carex capillaris L.
Carex hordeistichos Vill.
Carex macroura Meinsh. (tax.) [*C. pediformis* subsp. *macroura* (Meinsh.) Podpěra]
Carex rupestris All.
Carex vaginata Tausch
Carex viridula Michx. subsp. *pseudoscandinavica* Holub ined.
Carex vide etiam *Vignea*
Carlina biebersteinii Bernh. ex Hornem.
Carlina caulescens Lam.
Catabrosa aquatica (L.) Beauv.
Caulinia minor (All.) Cosson et Germ. [*Najas minor* All.]
Centaurea vide *Cyanus*, *Jacea*
Centaurium littorale (D. Turner) Gilmour subsp. *compressum* (Hayne in Kunth) Kirschner [*C. l.* (D. Turner) Gilmour subsp. *uliginosum* (Waldst. et Kit.) Rothm. ex Melderis, *C. uliginosum* (Waldst. et Kit.) Laus]
Cerastium alsinifolium Tausch
Cerastium fontanum Baumg.
Cerastium tenoreanum Ser.
Ceratophyllum submersum L.
Cernohorskya vide *Arenaria*
Ceterach officinarum DC. in Lam. et DC.
Chamaecytisus albus (Hacq.) Rothm.
Chamaespartium vide *Genistella*
Chenopodium murale L.
Chimaphila umbellata (L.) Barton
Chrysanthemum vide *Leucanthemum*
Chrysaspis badia (Schreber) Greene (ind.?) [*Trifolium badium* Schreber]
Chrysaspis patens (Schreber) Holub (ind.) [*Trifolium patens* Schreber]
Cimicifuga europaea Šipč.
Cirsium brachycephalum Juratzka
Cladium mariscus (L.) Pohl
Cleistogenes vide *Kengia*

- Conioselinum tataricum* Hoffm.
Conringia orientalis (L.) Dumort.
Corrigiola litoralis L.
Cortusa matthioli L. subsp. *moravica* Soják (tax.)
Crassula vide *Tillaea*
Crataegus lindmanii Hrab.-Uhr.
Crepis mollis (Jacq.) Ascherson s. s.
Crepis pannonica (Jacq.) K. Koch
Crepis setosa Haller fil.
Crepis sibirica L.
Crocus albiflorus Kit. (ind.)
Crocus heuffelianus Herbert (tax.)
Crypsis aculeata (L.) Aiton
Crypsis vide etiam *Heleochloa*
Cryptogramma crispa (L.) R. Br. ex Hooker
Cuscuta approximata Bab.
Cuscuta vide etiam *Monogynella*
Cyanus mollis (Waldst. et Kit.) J. Presl et C. Presl [*Centaurea mollis* Waldst. et Kit.]
Cyperus vide *Dichostylis*, *Pycneus*
Cystopteris dickieana R. Sim (tax.)
Cytisus vide *Chamaecytisus*
Dactylorhiza bohemica Businský
Dactylorhiza comosa (Scop.) P. D. Sell in P. Sell et G. Murrell subsp. *turfosa* (Procházka) Holub [*D. majalis* subsp. *turfosa* Procházka]
Dactylorhiza fuchsii (Druce) Soó subsp. *sooana* (Borsos) Borsos (tax.)
Dactylorhiza incarnata (L.) Soó subsp. *serotina* (Hausskn.) Soó et Moresby Moore (tax.)
Dactylorhiza maculata (L.) Soó subsp. *ericetorum* (E. F. Linton) Averyanov (tax.)
Dactylorhiza maculata (L.) Soó subsp. *maculata*
Dactylorhiza maculata (L.) Soó subsp. *transsilvanica* (Schur) Soó
Dactylorhiza traunsteineri (Sauter) Soó subsp. *traunsteineri*
Dactylorhiza traunsteineri (Sauter) Soó subsp. *carpatica* Batoušek et Kreutz (tax.)
Danthonia alpina Vest
Daphne cneorum L.
Dianthus arenarius L. subsp. *bohemicus* (Novák) O. Schwarz
Dianthus carthusianorum L. subsp. *capillifrons* (Borbás) Neumayer
Dianthus carthusianorum L. subsp. *sudeticus* Kovanda
Dianthus superbus L. subsp. *superbus*
Dichostylis micheliana (L.) Nees [*Cyperus michelianus* (L.) Link]
Diphasiastrum oellgaardii Stoor, Boudrie, Jérôme, Horn et Bennert
Diphasiastrum tristachyum (Pursh) Holub
Diplachne vide *Kengia*
Draba nemorosa L.
Dracocephalum austriacum L.
Drosera anglica Hudson
Drosera intermedia Hayne
Drymocallis rupestris (L.) Soják [*Potentilla rupestris* L.]
Drymochloa drymeia (Mert. et Koch) Holub [*Festuca drymeia* Mert. et Koch in Röhlings]
Dryopteris cristata (L.) A. Gray
Echium russicum J. F. Gmelin
Elatine alsinastrum L.
Eleocharis quinqueflora (F. X. Hartmann) O. Schwarz
Epipactis distans C. Arvet-Touvet
Epipactis greuteri H. Baumann et Künkele
Epipactis leptochila (Godfery) Godfery subsp. *neglecta* Kümpel
Epipactis nordeniorum Robatsch
Epipactis microphylla (Ehrh.) Swartz
Epipactis pontica Taubenheim

- Epipactis pseudopurpurata* Mered'a
Epipactis tallosii A. Molnár et K. Robatsch (tax.)
Epipogium aphyllum Swartz
Equisetum vide *Hippochaete*
Eragrostis pilosa (L.) Beauv. (ind.)
Erica tetralix L. (ind.)
Eriophorum gracile Koch ex Roth
Eryngium planum L.
Erysimum repandum L.
Erythronium dens-canis L. (ind.)
Euphorbia vide *Tithymalus*
Euphrasia micrantha Reichenb.
Euphrasia picta Wimmer
Euphrasia slovacica (Yeo) Holub
Festuca amethystina L.
Festuca psammophila (Hackel ex Čelak.) Fritsch
Festuca trichophylla (Ducros ex Gaudin) K. Richter
Festuca vaginata Waldst. et Kit. ex Willd. subsp. *dominii* (Krajina) Soó
Festuca versicolor Tausch
Festuca vide etiam *Drymochloa*
Filago lutescens Jordan
Filago vulgaris Lam.
Filipendula stepposa Juz.
Gagea bohemica (Zauschner) Schultes et Schultes fil. subsp. *saxatilis* (Mert. et Koch) Pascher
Galium austriacum Jacq.
Galium sudeticum Tausch
Galium tricornutum Dandy
Genista vide *Genistella*
Genistella sagittalis (L.) Gams (ind?) [*Chamaespartium sagittale* (L.) Gibbs]
Gentiana punctata L.
Gentiana vide etiam *Calathiana*, *Gentianella*
Gentianella amarella (L.) Börner subsp. *amarella*
Gentianella campestris (L.) Börner subsp. *baltica* (Murb.) Á. Löve et D. Löve [*G. baltica* (Murb.) Börner]
Gentianella germanica (Willd.) Börner subsp. *germanica*
Gentianella lutescens (Velen.) Holub subsp. *carpatica* (Wettst.) Holub [*Gentiana polymorpha* Wettst. subsp. *carpatica* (Wettst.) Wettst.]
Gentianella lutescens (Velen.) Holub subsp. *lutescens* [*Gentiana praecox* sensu auct. non sensu A. Kerner et J. Kerner orig., *G. polymorpha* Wettst. subsp. *praecox* (A. Kerner et J. Kerner) Wettst.]
Gentianella obtusifolia (F. W. Schmidt) Holub subsp. *sturmiana* (A. Kerner et J. Kerner) Holub
Gentianella praecox (A. Kerner et J. Kerner in J. Kerner) E. Mayer subsp. *bohemica* (Skalický) Holub
 [*G. bohemica* Skalický]
Geranium divaricatum Ehrh.
Gladiolus palustris Gaudin
Glaucium corniculatum (L.) Rudolph (ind.)
Glaux maritima L.
Gnaphalium luteo-album L.
Gnaphalium vide etiam *Omalotheca*
Goodyera repens (L.) R. Br.
Groenlandia densa (L.) Fourr.
Gymnadenia densiflora (Wahlenb.) A. Dietr.
Gymnadenia conopsea (L.) R. Br. subsp. "montana" (tax.)
Gypsophila paniculata L.
Hackelia deflexa (Wahlenb.) Opiz [*Lappula deflexa* (Wahlenb.) Garcke]
Hammarbya paludosa (L.) Kuntze
Hedysarum hedysaroides (L.) Schinz et Thellung
Heleocharis vide *Eleocharis*
Heleocharis schoenoides (L.) Host ex Roemer

- Conioselinum tataricum* Hoffm.
Conringia orientalis (L.) Dumort.
Corrigiola litoralis L.
Cortusa matthioli L. subsp. *moravica* Soják (tax.)
Crassula vide *Tillaea*
Crataegus lindmanii Hrab.-Uhr.
Crepis mollis (Jacq.) Ascherson s. s.
Crepis pannonica (Jacq.) K. Koch
Crepis setosa Haller fil.
Crepis sibirica L.
Crocus albiflorus Kit. (ind.)
Crocus heuffelianus Herbert (tax.)
Crypsis aculeata (L.) Aiton
Crypsis vide etiam *Heleocholea*
Cryptogramma crispa (L.) R. Br. ex Hooker
Cuscuta approximata Bab.
Cuscuta vide etiam *Monogynella*
Cyanus mollis (Waldst. et Kit.) J. Presl et C. Presl [*Centaurea mollis* Waldst. et Kit.]
Cyperus vide *Dichostylis*, *Pycneus*
Cystopteris dickieana R. Sim (tax.)
Cytisus vide *Chamaecytisus*
Dactylorhiza bohemica Businský
Dactylorhiza comosa (Scop.) P. D. Sell in P. Sell et G. Murrell subsp. *turfosa* (Procházka) Holub [*D. majalis* subsp. *turfosa* Procházka]
Dactylorhiza fuchsii (Druce) Soó subsp. *sooana* (Borsos) Borsos (tax.)
Dactylorhiza incarnata (L.) Soó subsp. *serotina* (Hauskn.) Soó et Moresby Moore (tax.)
Dactylorhiza maculata (L.) Soó subsp. *ericetorum* (E. F. Linton) Averyanov (tax.)
Dactylorhiza maculata (L.) Soó subsp. *maculata*
Dactylorhiza maculata (L.) Soó subsp. *transsilvanica* (Schur) Soó
Dactylorhiza traunsteineri (Sauter) Soó subsp. *traunsteineri*
Dactylorhiza traunsteineri (Sauter) Soó subsp. *carpatica* Batoušek et Kreutz (tax.)
Danthonia alpina Vest
Daphne cneorum L.
Dianthus arenarius L. subsp. *bohemicus* (Novák) O. Schwarz
Dianthus carthusianorum L. subsp. *capillifrons* (Borbás) Neumayer
Dianthus carthusianorum L. subsp. *sudeticus* Kovanda
Dianthus superbus L. subsp. *superbus*
Dichostylis micheliana (L.) Nees [*Cyperus michelianus* (L.) Link]
Diphasiastrum oellgaardii Stoor, Boudrie, Jérôme, Horn et Bennet
Diphasiastrum tristachyum (Pursh) Holub
Diplachne vide *Kengia*
Draba nemorosa L.
Dracocephalum austriacum L.
Drosera anglica Hudson
Drosera intermedia Hayne
Drymocallis rupestris (L.) Soják [*Potentilla rupestris* L.]
Drymocholea drymeia (Mert. et Koch) Holub [*Festuca drymeia* Mert. et Koch in Röhlings]
Dryopteris cristata (L.) A. Gray
Echium russicum J. F. Gmelin
Elatine alsinastrum L.
Eleocharis quinqueflora (F. X. Hartmann) O. Schwarz
Epipactis distans C. Arvet-Touvet
Epipactis greuteri H. Baumann et Künkele
Epipactis leptochila (Godfery) Godfery subsp. *neglecta* Kümpel
Epipactis nordeniorum Robatsch
Epipactis microphylla (Ehrh.) Swartz
Epipactis pontica Taubenheim

- Epipactis pseudopurpurata* Mered'a
Epipactis tallosii A. Molnár et K. Robatsch (tax.)
Epipogium aphyllum Swartz
Equisetum vide *Hippochaete*
Eragrostis pilosa (L.) Beauv. (ind.)
Erica tetralix L. (ind.)
Eriophorum gracile Koch ex Roth
Eryngium planum L.
Erysimum repandum L.
Erythronium dens-canis L. (ind.)
Euphorbia vide *Tithymalus*
Euphrasia micrantha Reichenb.
Euphrasia picta Wimmer
Euphrasia slovacica (Yeo) Holub
Festuca amethystina L.
Festuca psammophila (Hackel ex Čelak.) Fritsch
Festuca trichophylla (Ducros ex Gaudin) K. Richter
Festuca vaginata Waldst. et Kit. ex Willd. subsp. *dominii* (Krajina) Soó
Festuca versicolor Tausch
Festuca vide etiam *Drymochloa*
Filago lutescens Jordan
Filago vulgaris Lam.
Filipendula stepposa Juz.
Gagea bohemica (Zauschner) Schultes et Schultes fil. subsp. *saxatilis* (Mert. et Koch) Pascher
Galium austriacum Jacq.
Galium sudeticum Tausch
Galium tricornutum Dandy
Genista vide *Genistella*
Genistella sagittalis (L.) Gams (ind?) [*Chamaespartium sagittale* (L.) Gibbs]
Gentiana punctata L.
Gentiana vide etiam *Calathiana*, *Gentianella*
Gentianella amarella (L.) Börner subsp. *amarella*
Gentianella campestris (L.) Börner subsp. *baltica* (Murb.) Á. Löve et D. Löve [*G. baltica* (Murb.) Börner]
Gentianella germanica (Willd.) Börner subsp. *germanica*
Gentianella lutescens (Velen.) Holub subsp. *carpatica* (Wettst.) Holub [*Gentiana polymorpha* Wettst. subsp. *carpatica* (Wettst.) Wettst.]
Gentianella lutescens (Velen.) Holub subsp. *lutescens* [*Gentiana praecox* sensu auct. non sensu A. Kerner et J. Kerner orig., *G. polymorpha* Wettst. subsp. *praecox* (A. Kerner et J. Kerner) Wettst.]
Gentianella obtusifolia (F. W. Schmidt) Holub subsp. *sturmiana* (A. Kerner et J. Kerner) Holub
Gentianella praecox (A. Kerner et J. Kerner in J. Kerner) E. Mayer subsp. *bohemica* (Skalický) Holub
 [*G. bohemica* Skalický]
Geranium divaricatum Ehrh.
Gladiolus palustris Gaudin
Glaucium corniculatum (L.) Rudolph (ind.)
Glaux maritima L.
Gnaphalium luteo-album L.
Gnaphalium vide etiam *Omalotheca*
Goodyera repens (L.) R. Br.
Groenlandia densa (L.) Fourr.
Gymnadenia densiflora (Wahlenb.) A. Dietr.
Gymnadenia conopsea (L.) R. Br. subsp. "montana" (tax.)
Gypsophila paniculata L.
Hackelia deflexa (Wahlenb.) Opiz [*Lappula deflexa* (Wahlenb.) Garcke]
Hammarbya paludosa (L.) Kuntze
Hedysarum hedysaroides (L.) Schinz et Thellung
Heleocharis vide *Eleocharis*
Heleochloa schoenoides (L.) Host ex Roemer

- Helianthemum grandiflorum* (Scop.) DC. s. s.
Herniaria hirsuta L.
Hesiodia vide *Sideritis*
Hibiscus trionum L.
Hieracium albinum Fries
Hieracium asperulum Freyn
Hieracium chlorocephalum Wimmer ex Uechtr.
Hieracium chrysostyloides (Zahn) Chrtek jun.
Hieracium corconticum Knaf fil. ex Čelak.
Hieracium engleri Uechtr.
Hieracium kablikianum Zlatník (tax.)
Hieracium inuloides Tausch
Hieracium luteistylum Zlatník (tax.)
Hieracium nigrostylum Zlatník
Hieracium nivimontis (Oborny et Zahn) Chrtek jun.
Hieracium pedunculare Tausch
Hieracium pseudalbinum G. Schneider
Hieracium rhiphaeum Uechtr.
Hieracium schustleri Zlatník
Hieracium silesiacum Krause
Hieracium subortum G. Schneider
Hieracium tortuosum Tausch (tax.)
Hieracium villosum Jacq.
Hieracium vide etiam *Pilosella*
Hierochloë odorata (L.) Beauv.
Hierochloë repens (Host) Simonkai
Himantoglossum adriaticum Baumann
Hippochaete variegata (Schleicher) Bruhin [*Equisetum variegatum* Schleicher]
Hippocrepis comosa L.
Hippuris vulgaris L.
Hypericum elegans Stephan ex Willd.
Hypericum pulchrum L.
Hypochaeris glabra L.
Illecebrum verticillatum L.
Iris aphylla L. subsp. *feberi* (Seidl in Opiz) Dostál (tax.)
Iris aphylla L. subsp. *novakii* Soó (tax.)
Isoëtes echinospora Durieu
Isoëtes lacustris L.
Jacea stenolepis (A. Kerner) Soják [*Centaurea stenolepis* A. Kerner]
Juncus atratus Krockner
Juncus capitatus Weigel
Juncus gerardii Loisel.
Juncus sphaerocarpus Nees
Juncus subnodulosus Schrank
Juncus tenageia L. fil.
Juniperus sibirica Burgsd.
Jurinea cyanoides (L.) Reichenb.
Kengia serotina (L.) Paker [*Cleistogenes serotina* (L.) Keng]
Klasea lycopifolia (Vill.) Á. Löve et D. Löve [*Serratula lycopifolia* (Vill.) A. Kerner]
Knautia vide *Trichera*
Kochia prostrata (L.) Schrader
Lappula heteracantha (Ledeb.) Gürke subsp. *heterocarpa* (Klokov et Artemčuk) Holub
Lappula vide etiam *Hackelia*
Laser trilobum (L.) Borkh.
Laserpitium archangelica Wulfen (ind.)
Lathyrus aphaca L.
Lathyrus heterophyllus L.

- Lathyrus hirsutus* L.
Lathyrus nissolia L. (ind.)
Lathyrus palustris L.
Lathyrus pannonicus (Jacq.) Garecke s. s.
Lathyrus pisiformis L.
Leucanthemum adustum (Koch) Gremlí subsp. *adustum* (tax.)
Leucojum aestivum L.
Ligularia sibirica (L.) Cass.
Limodorum abortivum (L.) Swartz
Linaria arvensis (L.) Desf.
Lindernia procumbens (Krocker) Philcox
Linum hirsutum L. subsp. *hirsutum*
Liparis loeselii (L.) L. C. Richard
Listera cordata (L.) R. Br.
Littorella uniflora (L.) Ascherson
Loncomelos pyrenaicus (L.) Hrouda subsp. *sphaerocarpus* (Kerner) Holub [*Ornithogalum pyrenaicum* L. subsp. *sphaerocarpus* (Kerner) Hegi]
Luronium natans (L.) Rafin. [*Alisma natans* L.]
Luzula spicata (L.) DC. in Lam. et DC. subsp. *spicata*
Lycopodium vide *Diphasiastrum*
Malaxis monophyllos (L.) Swartz
Marrubium peregrinum L.
Marrubium vulgare L.
Melandrium viscosum (L.) Čelak. [*Silene viscosa* (L.) Pers.]
Mentha vide *Pulegium*
Mercurialis ovata Sternberg et Hoppe
Minuartia caespitosa (Willd.) Degen [*M. verna* subsp. *hercynica* (Willk.) O. Schwarz]
Minuartia corcontica Dvořáková [*M. gerardii* auct. fl. corcont. non (Willd.) Hayek]
Minuartia smejkalii Dvořáková [*M. verna* (L.) Hiern. subsp. *montana* (Fenzl) Hayek sensu auct. fl. bohém. p. p.]
Minuartia viscosa (Schreber) Schinz et Thell.
Misopates orontium (L.) Rafin.
Moneses uniflora (L.) A. Gray
Monogynella lupuliformis (Krocker) Hadač et Chrtěk [*Cuscuta lupuliformis* Krocker]
Montia fontana L.
Myosotis stenophylla Knaf [*M. podperae* Domin]
Myricaria germanica (L.) Desv. (ind.)
Najas vide *Caulinia*
Nasturtium microphyllum (Boenn.) Reichenb. (ind.?)
Nigella arvensis L.
Notholaena marantae (L.) Desv.
Nuphar pumila (Timm) DC.
Nymphaea alba L.
Nymphaea candida J. Presl in Bercht. et J. Presl
Nymphoides peltata (S. F. Gmelin) O. Kuntze
Omalotheca supina (L.) DC. [*Gnaphalium supinum* L.]
Onosma arenaria Waldst. et Kit.
Ophrys apifera Hudson
Ophrys fuciflora (F. W. Schmidt) Moench subsp. *holubyana* (Andrasovszky) Jáv. [*O. holosericea* (Burm. f.) Greuter subsp. *holubyana* (Andrasovszky) Dostál]
Ophrys insectifera L.
Orchis mascula (L.) L. subsp. *mascula*
Orchis palustris Jacq.
Orchis tridentata Scop.
Orchis ustulata L. subsp. *aestivalis* (Kümpel) Kümpel et Mrkvicka
Orchis ustulata L. subsp. *ustulata*
Oreosedum villosum (L.) Grulich [*Sedum villosum* L.]
Ornithogalum vide *Loncomelos*

- Orobanche artemisiae-campestris* Vaucher ex Gaudin [*O. loricata* Reichenb.]
Orobanche coerulescens Stephan ex Willd.
Orobanche picridis F. W. Schultz
Orobanche teucrii Holandre
Orobanche vide etiam *Phelipanche*
Ostericum palustre (Besser) Besser [*Angelica palustris* (Besser) Hoffm.]
Padus avium Miller subsp. *petraea* (Tausch) Pawł. ex Holub [*Prunus padus* L. subsp. *petraea* (Tausch) Domin]
Papaver lecoqii Lamotte
Pedicularis exaltata Besser
Pedicularis sudetica Willd. subsp. *sudetica*
Peucedanum carvifolia Vill.
Phelipanche arenaria (Borkh.) Pomel [*Orobanche arenaria* Borkh.]
Phelipanche bohémica (Čelak.) Holub et Zázvorka [*Orobanche bohémica* Čelak.]
Phelipanche caesia (Reichenb.) Soják [*Orobanche caesia* Reichenb.]
Phelipanche purpurea (Jacq.) Soják [*Orobanche purpurea* Jacq.]
Phyllitis scolopendrium (L.) Newman
Phyteuma orbiculare L. subsp. *montanum* R. Schulz
Pilosella blyttiana (Fries) F. W. Schultz et C. H. Schultz [*Hieracium blyttianum* Fries]
Pilosella kalksburgensis (Wiesb.) Soják [*Hieracium kalksburgense* Wiesb., *H. canum* Naegeli et Peter]
Pilosella rubra (Peter) Soják [*Hieracium rubrum* Peter]
Pilosella rubripilosella (G. Schneider) Soják [*Hieracium rubripilosella* G. Schneider]
Pinguicula vulgaris L. subsp. *bohémica* (Krajina) Domin [*P. bohémica* Krajina]
Pinus × *celakovskiorum* Ascherson et Graebner
Plantago atrata Hoppe subsp. *sudetica* (Pilger) Holub
Plantago maritima L. subsp. *salsa* Soják (tax.)
Poa alpina L.
Poa crassipes Domin ex Šourek (tax.)
Poa riphaea (Ascherson et Graebner) Fritsch
Polycnemum arvense L.
Polycnemum majus A. Br.
Polygala amara L. subsp. *brachyptera* (Chodat) Hayek
Polygala serpyllifolia Hose
Potamogeton polygonifolius Pourret
Potamogeton praelongus Wulfen
Potamogeton × *angustifolius* J. Presl
Potamogeton vide etiam *Groenlandia*
Potentilla crantzii (Crantz) Beck ex Fritsch subsp. *serpentina* (Borbás) Neumayer (tax.)
Potentilla patula Waldst. et Kit.
Potentilla sterilis (L.) Garcke
Potentilla vide etiam *Drymocallis*
Primula elatior (L.) Hill subsp. *corcontica* (Domin) Kovanda (tax.)
Primula minima L.
Prunus vide *Amygdalus*, *Padus*
Pseudolysimachion spurium (L.) Rauschert subsp. *foliosum* (Waldst. et Kit.) Holub [*Veronica paniculata* L. subsp. *foliosa* (Waldst. et Kit.) Skalický]
Puccinellia limosa (Schur) Holmberg
Pulegium vulgare Miller [*Mentha pulegium* L.]
Pulicaria dysenterica (L.) Bernh.
Pulicaria vulgaris Gaertner
Pulsatilla patens (L.) Miller
Pulsatilla vernalis (L.) Miller
Pycreus flavescens (L.) Beauv. ex Reichenb. [*Cyperus flavescens* L.]
Pyrola chlorantha (Custer) Swartz
Pyrola media Swartz
Quercus virgiliana (Ten.) Ten. (tax.)
Radiola linoides Roth
Ranunculus sardous Crantz s. l.

- Ranunculus* vide etiam *Batrachium*
Reseda phyteuma L.
Rhinanthus serotinus (Schönh.) Oborny subsp. *vernalis* (Zinger) Hylander
Rhodiola rosea L.
Rhynchospora fusca (L.) Aiton fil.
Ribes petraeum Wulfen
Rubus ambrosius Trávníček ined.
Rubus amphimalacus H. E. Weber
Rubus caflischii Focke
Rubus chaerophylloides Spribille
Rubus chamaemorus L.
Rubus geminatus H. E. Weber
Rubus lividus G. Braun
Rubus lusaticus Rostock
Rubus pyramidalis Kaltenb.
Rubus scaber Weihe
Rubus vestitus Weihe
Rumex palustris Sm. (ind.)
Rumex stenophyllus Ledeb. (ind.)
Sagina nodosa (L.) Fenzl
Sagina subulata (Swartz) C. Presl
Salix appendiculata Vill.
Salix bicolor Willd.
Salix daphneola Tausch (tax.)
Salix herbacea L.
Salix myrsinifolia Salisb.
Salix myrtilloides L.
Salix repens L. s. s.
Salvia aethiopsis L.
Salvia austriaca Jacq. (ind.)
Samolus valerandi L.
Saxifraga oppositifolia L.
Saxifraga rosacea Moench subsp. *steinmannii* (Tausch) Holub [*S. decipiens* Ehrh. subsp. *steinmannii* (Tausch) Br.-Bl. in Hegi]
Scabiosa lucida Vill. subsp. *calcicola* Blonski (tax.)
Scheuchzeria palustris L.
Schoenus ferrugineus L.
Schoenus nigricans L.
Scorzonera parviflora Jacq.
Scrophularia vernalis L.
Sedum vide *Oreosedum*, *Rhodiola*
Senecio doria L.
Senecio erucifolius L.
Senecio paludosus L.
Senecio vide etiam *Tephroseris*
Serratula vide *Klasea*
Sideritis montana L.
Silene gallica L.
Silene rupestris L. (ind.?)
Sorbus alnifrons Kovanda
Sorbus gemella Kovanda
Sorbus graeca (Spach) Schauer
Sorbus hardeggensis Kovanda
Sorbus querneae Kovanda
Sorbus rhodanthera Kovanda
Sorbus sudetica (Tausch) Fritsch
Spergula pentandra L.

Trifolium retusum L.
Trifolium striatum L.
Trifolium vide etiam *Chrysoaspis*
Triglochin maritimum L.
Trigonella monspeliaca L.
Trinia glauca (L.) Dumort.
Trifolium pannonicum (Jacq.) Dobroř. [*Aster pannonicus* Jacq.]
Typha laxmannii L.
Utricularia bremii Heer in Koeliker (tax.)
Utricularia intermedia Hayne
Utricularia ochroleuca R. Hartman
Utricularia vulgaris L.
Valerianella carinata Loisel.
Vandenboschia speciosa (Willd.) Kunkel [*Trichomanes speciosum* Willd.]
Veratrum nigrum L.
Verbascum speciosum Schrader
Veronica bellidioides L.
Veronica opaca Fries
Veronica vide etiam *Pseudolysimachion*
Vicia oreophila Žertová (tax.)
Vignea chordorrhiza (Ehrh. in L. fil.) Reichenb. in Mössler [*Carex chordorrhiza* Ehrh. in L. fil.]
Vignea dioica (L.) Reichenb. in Mössler [*Carex dioica* L.]
Vignea reichenbachii (Bonnet) Soják [*Carex reichenbachii* Bonnet, *C. pseudobrivoidea* Clav.]
Vignea stenophylla (Wahlenb.) Reichenb. in Mössler [*Carex stenophylla* Wahlenb.]
Viola alba Besser
Viola elatior Fries
Viola kitaibeliana Schultes in Roemer et Schultes
Viola saxatilis F. W. Schmidt subsp. *curtisii* (Forst.) Kirschner et Skalický
Vitis sylvestris C. C. Gmelin
Vulpia bromoides (L.) S. F. Gray
Wolffia arrhiza (L.) Horkel ex Wimmer

C2. Strongly threatened taxa

Achillea tanacetifolia All. [*A. "bohemica"*] (tax.)
Aconitum firmum Reichenb. subsp. *moravicum* Skalický
Adonathe vide *Chrysocyathus*
Adonis aestivalis L.
Adonis vide etiam *Chrysocyathus*
Agrostis rupestris All.
Aira praecox L.
Ajuga vide *Chamaepitys*
Alcea biennis Winterl
Alchemilla flabellata Buser
Alchemilla obtusa Buser subsp. *trapezialis* Plocek
Alchemilla reniformis Buser
Alchemilla ursina Fröhner
Alectorolophus vide *Rhinanthus*
Alisma gramineum Lej.
Allium angulosum L.
Allium carinatum L.
Allium rotundum L.
Allium sphaerocephalon L.
Allium strictum Schrader
Allium victoralis L.
Alnus vide *Duschekia*

- Alsine pallida* Dumort. [*Stellaria palida* (Dumort.) Pire]
Althaea officinalis L. (ind.)
Andromeda polifolia L.
Androsace elongata L.
Antennaria dioica (L.) Gaertn.
Anthriscus caucalis Bieb.
Arabis auriculata Lam.
Arabis pauciflora (Grimm) Garcke
Arabis turrita L.
Arctostaphylos uva-ursi (L.) Sprengel
Aremonia agrimonoides (L.) DC.
Armeria vulgaris Willd. subsp. *serpentini* (Gauckler) Holub
Asperula vide *Galium*
Asplenium cuneifolium Viv.
Astragalus exscapus L.
Avenula planiculmis (Schrader) W. Sauer et Chmelitschek
Baeothryon vide *Trichophorum*
Bartsia alpina L.
Batrachium rionii (Lagger) Nyman
Betula nana L.
Betula obscura A. Kotula
Bifora radians Bieb.
Blysmus compressus (L.) Panzer ex Link
Botrychium lunaria (L.) Swartz
Bromus commutatus Schrader
Bupleurum longifolium L. subsp. *longifolium*
Campanula barbata L.
Campanula bohemica Hruby
Campanula bononiensis L.
Campanula tatrae Borbás subsp. *sudetica* (Hruby) Kovanda
Cardamine dentata Schultes
Carex aterrima Hoppe
Carex distans L.
Carex fritschii Waisb.
Carex hostiana DC.
Carex lasiocarpa Ehrh.
Carex lepidocarpa Tausch
Carex limosa L.
Carex melanostachya Bieb. ex Willd.
Carex ornithopoda Willd.
Carex paupercula Michaux
Carex pulicaris L. [*Vignea pulicaris* (L.) Reichenb.]
Carex secalina Willd. ex Wahlenb.
Carex viridula Michx. subsp. *serotina* (Mérat) Malýšev [*C. serotina* Mérat, *C. oederi* auct.]
Carex strigosa Hudson
Carex vide etiam *Vignea*
Caucalis platycarpus L. subsp. *platycarpus*
Centaurea vide *Cyanus*
Centaurium pulchellum (Swartz) Druce
Centunculus minimus L.
Cephalanthera rubra (L.) L. C. Richard
Cerastium vide *Dichodon*
Cerasus fruticosa (Pallas) Woronow [*Prunus fruticosa* Pallas]
Chaiturus marrubiastrum (L.) Reichenb. [*Leonurus marrubiastrum* L.]
Chamaepitys chia (Schreber) Holub subsp. *trifida* (Dumort.) Kmeťová [*Ajuga chamaepitys* (L.) Schreber]
Chenopodium urbicum L.
Chenopodium vulvaria L.

- Chenopodium* vide etiam *Teloxys*
Chrysanthemum vide *Leucanthemum*
Chrysocyathus vernalis (L.) Holub [*Adonis vernalis* L., *Adonanthe vernalis* (L.) Spach]
Cicuta virosa L.
Cnidium vide *Kadenia*
Coeloglossum viride (L.) Hartman
Coleanthus subtilis (Tratt.) Seidl in Roemer et Schultes
Corallorhiza trifida Châtel.
Cornus vide *Swida*
Coronilla vaginalis Lam.
Coronopus squamatus (Forssk.) Ascherson
Crambe tataria Sebeók
Crepis praemorsa (L.) Tausch
Cruciata pedemontana (Bellardi) Ehrend.
Cyanus montanus (L.) Hill (ind.) [*Centaurea montana* L.]
Cynoglossum hungaricum Simonkai
Cypripedium calceolus L.
Dactylorhiza incarnata (L.) Soó subsp. *incarnata*
Dactylorhiza fuchsii (Druce) Soó subsp. *sudetica* (Reichenb. f.) Verm.
Dactylorhiza sambucina (L.) Soó
Dasystephana pneumonanthe (L.) Soják [*Gentiana pneumonanthe* L., *Pneumonanthe vulgaris* F. W. Schmidt]
Deilosma vide *Hesperis*
Delphinium elatum L.
Dianthus gratianopolitanus Vill.
Dianthus lumnitzeri Wiesb. [*D. hungaricus* Pers. subsp. *lumnitzeri* (Wiesb.) Holub]
Dianthus moravicus Kovanda [*D. gratianopolitanus* Vill. subsp. *moravicus* (Kovanda) Holub]
Dianthus seguieri Vill. subsp. *glaber* Čelak. [*D. sylvaticus* Hoppe]
Dianthus superbus L. subsp. *alpestris* Čelak.
Dianthus superbus L. subsp. *sylvestris* Čelak. (tax.)
Dichodon viscidum (Bieb.) Holub [*Cerastium dubium* (Bast.) Guépin]
Diphasiastrum issleri (Rouy) Holub
Diphasiastrum zeilleri (Rouy) Holub
Dipsacus laciniatus L.
Draba muralis L.
Duschekia alnobetula (Ehrh.) Pouzar (ind.) [*Alnus viridis* (Chaix.) DC.]
Elatine hexandra (Lappierre) DC.
Elatine triandra Schkuhr
Eleocharis uniglumis (Link) Schultes subsp. *uniglumis*
Empetrum hermaphroditum (Lange) Hagerup
Epilobium anagallidifolium Lam.
Epilobium nutans F. W. Schmidt
Epipactis albensis Nováková et Rydlo
Epipactis muelleri Godfery
Epipactis palustris (L.) Crantz
Equisetum vide *Hippochaete*
Eriophorella vide *Trichophorum*
Eriophorum latifolium Hoppe
Euphrasia coerulea Hoppe et Fürnrohr
Euphrasia curta (Fries) Wettst. subsp. *glabrescens* (Wettst.) Smejkal
Euphrasia kernerii Wettst. (tax.)
Euphrasia rostkoviana Hayne subsp. *monticola* Silverside [*E. rostkoviana* subsp. *montana* (Jord.) Wettst.]
Euphrasia tatarica Wettst.
Euphorbia vide *Tithymalus*
Fumana procumbens (Dunal.) Gren. et Godron
Gagea bohemica (Zauschner) Schultes et Schultes fil. subsp. *bohemica*
Gagea pusilla (F. W. Schmidt) Schultes et Schultes fil.
Gagea transversalis Steven (tax.)

- Gagea villosa* (Bieb.) Duby
Galium exoletum Klokov
Galium vide etiam *Cruciata*
Gentiana pannonica Scop.
Gentiana vide etiam *Dasystephana*, *Gentianella*, *Tretorrhiza*
Geranium molle L.
Geum vide *Oreogeum*
Gladiolus imbricatus L.
Globularia punctata Lapeyr.
Gratiola officinalis L.
Guepinia vide *Teesdalia*
Gypsophila fastigiata L.
Heleocharis vide *Eleocharis*
Helianthemum vide *Rhodax*
Helichrysum arenarium (L.) Moench
Helictotrichon desertorum (Less.) Něvskij subsp. *basalticum* (Podp.) Holub
Helictotrichon vide etiam *Avenula*
Hesperis sylvestris Crantz
Hesperis tristis L.
Hieracium apiculatum Tausch
Hieracium fritzei F. W. Schultz
Hieracium glandulosodentatum Uechtr.
Hieracium krajinae Zlatník (tax.)
Hieracium melanocephalum Tausch
Hieracium moravicum Fries (tax.)
Hieracium nigrescens Willd.
Hieracium rohlenae Zlatník
Hieracium schneiderianum Zlatník
Hieracium tubulosum (Tausch) Tausch
Hieracium uechtritizianum G. Schneider
Hieracium wimmeri Uechtr.
Hieracium vide etiam *Pilosella*
Hippochaete ×moorei (Newman) H. P. Fuchs [*Equisetum ×moorei* Newman]
Holoschoenus vide *Scirpoides*
Hydrocharis morsus-ranae L.
Hypericum dubium Leers [*H. maculatum* Crantz subsp. *obtusiusculum* (Tourlet) Hayek]
Inula germanica L.
Iris aphylla L. subsp. *bohemica* (F. W. Schmidt) Dostál (tax.)
Iris graminea L.
Iris humilis Georgi subsp. *arenaria* (Waldst. et Kit.) Á. Löve et D. Löve
Iris pumila L.
Iris variegata L.
Juncus trifidus L.
Jurinea mollis (L.) Reichenb.
Kadenia dubia (Schkuhr) Lavrova et Tichomirov [*Cnidium dubium* (Schkuhr) Thell.]
Kickxia elatine (L.) Dumort. subsp. *elatine*
Kickxia spuria (L.) Dumort.
Koeleria glauca (Schrader) DC.
Lathyrus lacteus (Bieb.) Vissjul. [*L. pannonicus* subsp. *collinus* (Ortmann) Soó]
Leonurus vide *Chaiturus*
Leopoldia tenuiflora (Tausch) Heldr. [*Muscari tenuiflorum* Tausch]
Leucanthemum adustum (Koch) Gremlí subsp. *margaritae* (Gáyer in Jáv.) Holub
Leucorchis vide *Pseudorchis*
Lilium bulbiferum L.
Linum flavum L.
Lithospermum officinale L.
Loncomelos brevistylus (Wolfner) Dostál [*Ornithogalum brevistylum* Wolfner]

- Lotus borbasii* Ujhelyi
Luzula luzulina (Vill.) Raciborski
Lycopodiella inundata (L.) Holub
Lycopodium vide *Diphasiastrum*, *Lycopodiella*
Lycopus exaltatus L. fil.
Lygia vide *Thymelaea*
Lysimachia punctata L. (ind.)
Lythrum hyssopifolia L.
Lythrum virgatum L.
Malus sylvestris Miller (ind.)
Medicago prostrata Jacq.
Melilotus dentata (Waldst. et Kit.) Pers.
Minuartia fastigiata (Sm.) Reichenb.
Monotropa hypophegea Wallr.
Montia hallii (A. Gray) Greene
Muscari racemosum (L.) Lam. et DC. (nom.)
Muscari vide etiam *Leopoldia*
Myriophyllum alterniflorum DC. in Lam.
Najas marina L.
Nasturtium × *sterile* (Airy Shaw) Oefelein
Nepeta pannonica L.
Odontites verna (Bellardi) Dumort.
Onobrychis arenaria (Kit.) DC.
Ononis arvensis L.
Ophioglossum vulgatum L.
Orchis militaris L.
Orchis morio L.
Orchis pallens L.
Orchis purpurea Hudson
Oreogeuum montanum (L.) Golubkova [*Geum montanum* L., *Parageum montanum* (L.) Hara]
Orlaya grandiflora (L.) Hoffm.
Ornithogalum vide *Loncomelos*
Orobanche alsatica Kirschleger
Orobanche flava Mart. ex F. W. Schultz
Orobanche reticulata Wallr.
Oxycoccus microcarpus Turcz. ex Rupr.
Papaver maculatum Schur subsp. *austromoravicum* (Kubát) Kubát ined.
Parageum vide *Oreogeuum*
Parietaria officinalis L. (ind.)
Parnassia palustris L.
Pedicularis palustris L.
Phlomis vide *Phlomooides*
Phlomooides tuberosa (L.) Moench [*Phlomis tuberosa* L.]
Phyteuma orbiculare L. subsp. *orbiculare*
Pilosella bifurca (M. Bieb.) F. W. Schultz et C. H. Schultz [*Hieracium bifurcum* M. Bieb.]
Pilosella euchaetia (Naegeli et Peter) Soják [*Hieracium euchaetium* Naegeli et Peter]
Pilosella fallax (Willd.) Arvet-Touvet [*Hieracium fallax* Willd.]
Pilosella heterodoxa (Tausch) Soják [*Hieracium heterodoxum* Tausch]
Pilosella koernickeana (Naegeli et Peter) Soják [*Hieracium koernickeanum* (Naegeli et Peter) Zahn]
Pilosella macrantha (Ten.) F. W. Schultz et C. H. Schultz [*Hieracium macranthum* Ten.]
Pilosella paragoga (Naegeli et Peter) Soják [*Hieracium paragogum* Naegeli et Peter]
Pilosella stoloniflora (Waldst. et Kit.) F. W. Schultz et C. H. Schultz [*Hieracium stoloniflorum* Waldst. et Kit.]
Pilosella sulphurea (Döll) F. W. Schultz et C. H. Schultz [*Hieracium sulphureum* Döll]
Pinguicula vulgaris L. subsp. *vulgaris*
Plantago vide *Psyllium*
Pleurospermum austriacum (L.) Hoffm.
Pneumonanthe vide *Dasystephana*

- Poa badensis* Haenke ex Willd.
Poa laxa Haenke
Podospermum canum C. A. Meyer [*Scorzonera cana* (C. A. Meyer) O. Hoffm.]
Polygala amarella Crantz subsp. *amarella*
Polygala amarella Crantz subsp. *austriaca* (Crantz) Janchen
Polypodium interjectum Shivas
Polystichum braunii (Spenner) Fée
Polystichum lonchitis (L.) Roth
Populus nigra L. (ind.)
Potamogeton alpinus Balbis
Potamogeton acutifolius Link in Roemer et Schultes
Potamogeton perfoliatus L.
Potamogeton gramineus L.
Potamogeton nodosus Poirlet
Potamogeton trichoides Cham. et Schlechtendal
Potentilla lindackeri Tausch (tax.)
Potentilla micrantha Ramond ex DC. in Lam. et DC.
Potentilla thuringiaca Bernh. ex Link
Prunus vide *Cerasus*
Pseudorchis albida (L.) Á. Löve et D. Löve [*Leucorchis albida* (L.) A. Meyer]
Psyllium scabrum (Moench) Holub [*Plantago arenaria* Waldst. et Kit.]
Pulmonaria angustifolia L.
Pulsatilla grandis Wenderoth
Pulsatilla pratensis (L.) Miller subsp. *bohemica* Skalický
Pyrola rotundifolia L.
Pyrus nivalis Jacq. (ind.)
Quercus cerris L. (ind.)
Ranunculus illyricus L.
Ranunculus lingua L.
Ranunculus vide etiam *Batrachium*
Rhinanthus pulcher Sprengel
Rhodax canus (L.) Fuss [*Helianthemum canum* (L.) Baumg.]
Rhynchospora alba (L.) Vahl
Rosa majalis J. Herrmann
Rosa micrantha Borrer ex Sm. in Sowerby
Rosa pimpinellifolia L.
Rosa sherardii H. Davies
Rubus bertramii G. Braun
Rubus camptostachys G. Braun
Rubus divaricatus P. J. Mueller
Rubus evestigatus Trávníček ined. [*R. "parawimmerianus"*]
Rubus hadracanthos G. Braun
Rubus macrophyllus Weihe et Nees
Rubus micans Godron
Rubus nemoralis P. J. Mueller
Rubus orthostachyoides H. E. Weber
Rubus posnaniensis Sribille
Rubus semmonicus H. E. Weber ined. [*R. heweberi* Holub ined., *R. fasciculatifomis* auct.]
Rubus sendtneri Progel
Rubus senticosus Weihe
Rubus thelybatos Cafilisch
Rubus wahlbergii Arrhenius
Rubus wessbergii A. Pedersen et Walsemann
Salix elaeagnos Scop.
Salix hastata L.
Salix lapponum L.
Salvinia natans (L.) All. (ind.)

- Saxifraga rosacea* Moench subsp. *sponhemica* (C. C. Gmelin) D. A. Webb
Scabiosa columbaria L.
Scabiosa lucida Vill. subsp. *lucida*
Schoenoplectus tabernaemontani (C. C. Gmelin) Palla
Scilla drunensis (Speta) Speta
Scilla kladnii Schur
Scirpoides holoschoenus (L.) Soják
Scirpus radicans Schkuhr
Scirpus vide etiam *Schoenoplectus*, *Scirpoides*, *Trichophorum*
Sclerochloa dura (L.) Beauv.
Scorzonera hispanica L.
Scorzonera purpurea L.
Scorzonera vide etiam *Podospermum*
Scutellaria hastifolia L.
Selaginella selaginoides (L.) Link
Senecio fluviatilis Wallr.
Senecio subalpinus Koch
Senecio umbrosus Waldst. et Kit.
Senecio vide etiam *Tephroseris*
Seseli pallasii Besser [*S. varium* Trevir.]
Sesleria caerulea (L.) Ard. [*S. uliginosa* Opiz ex Berchtold in Scidl]
Silene nemoralis Waldst. et Kit.
Sisymbrium orientale L.
Sium latifolium L.
Sonchus palustris L.
Sorbus austriaca (Beck) Prain et al.
Sorbus bohemica Kovanda
Sorbus eximia Kovanda
Sparganium minimum Wallr.
Spergularia echinosperma (Čelak.) Ascherson et Graebner
Stachys annua (L.) L.
Stellaria vide *Alsine*
Stipa dasyphylla (Lindem.) Trautv.
Stipa tirsia Steven
Stratiotes aloides L.
Swertia perennis L.
Swida australis (C. A. Meyer) Pojarkova in Grossgejm [*Cornus australis* C. A. Meyer]
Symphytum bohemicum F. W. Schmidt
Taraxacum bohemicum Kirschner et Štěpánek
Taraxacum hamatum Raunk.
Taraxacum lacistophyllum (Dahlst.) Raunk.
Taraxacum paucilobum Hudziok
Taraxacum rubicundum (Dahlst.) Dahlst.
Taraxacum serotinum (Waldst. et Kit.) Poiret
Taraxacum vindobonense Soest
Teesdalia nudicaulis (L.) R. Br. [*Guepinia nudicaulis* (L.) Bast.]
Teloxys botrys (L.) W. A. Weber [*Chenopodium botrys* L.]
Tephroseris integrifolia (L.) Holub
Teucrium montanum L.
Teucrium scordium L.
Teucrium scorodonia L. (ind.)
Thalictrum flavum L. s. s.
Thalictrum foetidum L.
Thesium bavarum Schrank
Thesium pyrenaicum Pourret
Thymelaea passerina (L.) Cosson et Germ.
Thymus alpestris Tausch ex A. Kerner

- Tithymalus angulatus* (Jacq.) Rafin. [*Euphorbia angulata* Jacq.]
Tithymalus lucidus (Waldst. et Kit.) Klotzsch et Garcke [*Euphorbia lucida* Waldst. et Kit.]
Tithymalus palustris (L.) Hill [*Euphorbia palustris* L.]
Tithymalus seguierianus (Necker) Prochanov subsp. *seguierianus* [*Euphorbia seguieriana* Necker subsp. *seguieriana*]
Tithymalus villosus (Willd.) Pacher [*Euphorbia villosa* Willd.]
Traunsteinera globosa (L.) Reichenb.
Tretorrhiza cruciata (L.) Delarbre [*Gentiana cruciata* L.]
Triglochin palustre L.
Trichophorum alpinum (L.) Pers.
Utricularia minor L.
Vaccinium vide *Oxycoccus*
Valeriana simplicifolia (Reichenb.) Kabath
Valeriana tripteris L.
Valerianella rimosa Bast.
Ventenata dubia (Leers) Cosson
Veratrum album L. subsp. *album*
Verbascum lychnitis L. subsp. *moenchii* (C. F. Schultz) Holub et Mladý (nom.)
Veronica agrestis L.
Veronica anagalloides Guss.
Veronica dentata F. W. Schmidt
Veronica triloba (Opiz) Kerner
Vicia pannonica Crantz s. s. (ind.)
Vicia striata Bieb.
Vignea appropinquata (Schumacher) Soják [*Carex appropinquata* Schumacher]
Vignea davalliana (Sm.) Reichenb. in Mössler [*Carex davalliana* Sm.]
Vignea diandra (Schrank) Soják [*Carex diandra* Schrank]
Vignea divulsa (Stokes in With.) Reichenb. [*Carex divulsa* Stokes in With.]
Viola ambigua Waldst. et Kit.
Viola lutea Hudson subsp. *sudetica* (Willd.) W. Becker
Viola pumila Chaix in Vill.
Viola stagnina Kit.
Woodsia ilvensis (L.) R. Br.

C3. Threatened taxa

- Achillea nobilis* L.
Achillea pannonica Scheele
Achillea setacea Waldst. et Kit.
Achyrophorus vide *Trommsdorfia*
Aconitum anthora L.
Aconitum callibotryon Reichenb.
Aconitum variegatum L.
Aegonychon purpurocaeruleum (L.) Holub [*Lithospermum purpurocaeruleum* L.]
Agrimonia procera Wallr.
Alchemilla obtusa Buser subsp. *obtusa*
Alchemilla plicata Buser
Alchemilla straminea Buser
Alchemilla suavis Plocek
Alectorolophus vide *Rhinanthus*
Allium flavum L.
Allium schoenoprasum L. subsp. *alpinum* (DC.) Čelak.
Alsine neglecta (Weihe in Bluff et Fingerh.) Á. Löve et D. Löve [*Stellaria neglecta* Weihe in Bluff et Fingerh.]
Alyssum montanum L. subsp. *gmelini* (Jordan et Fourr.) E. Schmid
Anagallis foemina Miller
Anemone sylvestris L.

- Anthemis cotula* L.
Anthemis ruthenica Bieb.
Anthemis vide etiam *Cota*
Anthericum liliago L.
Aphanes arvensis L.
Aquilegia vulgaris L.
Arabis sagittata (Bertol.) DC. in Lam. et DC.
Arnica montana L.
Artemisia pontica L.
Arum maculatum L.
Asperula tinctoria L.
Asplenium viride Hudson
Aster amellus L. s. l.
Aster vide etiam *Crinitina*
Astragalus austriacus Jacq.
Astragalus danicus Retz.
Astragalus onobrychis L.
Baeothryon vide *Trichophorum*
Batrachium fluitans (Lam.) Wimmer
Batrachium trichophyllum (Chaix in Vill. emend. Freyn) van den Bosch
Biscutella laevigata agg.
Bolboschoenus maritimus (L.) Palla subsp. *cymosus* (Reichenb.) Soják (tax.)
Bolboschoenus maritimus (L.) Palla subsp. *maritimus* (tax.)
Bromopsis ramosa (Hudson) Holub s. s.
Bromus vide *Bromopsis*
Buglossoides vide *Aegonychon*
Butomus umbellatus L.
Calla palustris L.
Calycocorsus vide *Willemetia*
Campanula gentilis Kovanda
Campanula glomerata L. subsp. *farinosa* (Rochel) Kirschleger
Campanula latifolia L. (ind.)
Campanula sibirica L.
Cardamine matthioli Moretti
Cardamine trifolia L.
Carex bigelowii Torrey ex Schweinitz subsp. *rigida* Schultze-Motel
Carex elata All.
Carex ericetorum Pollich
Carex hartmanii Cajander
Carex michelii Host
Carex pauciflora Lightf.
Carex rhizina Blytt ex Lindblom [*C. pediformis* subsp. *rhizina* (Blytt) Podpěra]
Carex supina Willd. ex Wahlenb.
Carex umbrosa Host
Carex vide etiam *Vignea*
Centaurea vide *Cyanus*
Cephalanthera damasonium (Miller) Druce
Cephalanthera longifolia (L.) Fritsch
Cerastium brachypetalum Pers.
Cerastium semidecandrum L.
Cerasus mahaleb (L.) Miller subsp. *simonkaii* (Pérez) Terpó [*Prunus mahaleb* L. subsp. *simonkaii* Pérez]
Chamaebuxus vide *Polygaloides*
Chamaecytisus austriacus (L.) Link
Chamaecytisus ×virescens (Kováts ex Neilr.) Dostál
Chrysaspis spadicea (L.) Greene [*Trifolium spadiceum* L.]
Cirsium eriophorum (L.) Scop.
Cirsium pannonicum (L. fil.) Link

- Clematis recta* L.
Corothamnus procumbens (Waldst. et Kit. ex Willd.) C. Presl [*Cytisus procumbens* (Waldst. et Kit. ex Willd.) Sprengel, *Genista procumbens* Waldst. et Kit. ex Willd.]
Corydalis pumila (Host) Reichenb.
Cota austriaca (Jacq.) C. H. Schultz
Crepis conyzifolia (Gouan) Kerner
Crepis rhoeadifolia Bieb.
Crepis succisifolia (All.) Tausch subsp. *succisifolia*
Crinitaria vide *Crinitina*
Crinitina linoxyris (L.) Soják [*Aster linoxyris* (L.) Bernh., *Crinitaria linoxyris* (L.) Less., *Linoxyris vulgaris* L.]
Cyanus triumfettii (All.) Á. Löve et D. Löve [*Centaurea triumfettii* All.]
Cyclamen purpurascens Miller
Cyperus fuscus L.
Cytisus vide *Corothamnus*
Dactylorhiza comosa (Scop.) P. D. Sell in P. Sell et G. Murrell subsp. *majalis* (Reichenb.) P. D. Sell [*D. majalis* Reichenb. subsp. *majalis*]
Dalanum vide *Galeopsis*
Dentaria glandulosa Waldst. et Kit.
Dianthus carthusianorum L. subsp. *latifolius* (Griseb. et Schenk) Hegi
Dianthus sabuletorum Heuff. subsp. *pontederacae* (Kerner) Holub (tax.)
Dictamnus albus L.
Diphasiastrum alpinum (L.) Holub
Diphasiastrum complanatum (L.) Holub
Dipsacus vide etiam *Virga*
Dorycnium germanicum (Gremli) Rikli
Dorycnium herbaceum Vill.
Draba vide *Erophila*
Drosera rotundifolia L.
Dryopteris pseudomas (Wollaston) Holub et Pouzar in Holub
Elatine hydropiper L. subsp. *hydropiper*
Eleocharis austriaca Hayek
Eleocharis ovata (Roth) Roemer et Schultes
Epilobium alsinifolium Vill.
Epilobium obscurum Schreb.
Epipactis atrorubens (Hoffm.) Besser
Epipactis viridiflora Hoffm. ex Krocker [*E. purpurata* Sm.]
Equisetum pratense Ehrh.
Equisetum ×litorale Kühlew ex Rupr.
Equisetum vide etiam *Hippochaete*
Erica herbacea L.
Erigeron podolicus Besser
Erophila spathulata Láng
Erysimum crepidifolium Reichenb.
Erysimum diffusum Ehrh.
Erysimum odoratum Ehrh.
Euphorbia vide *Tithymalus*
Euphrasia nemorosa (Pers.) Wallr.
Festuca pseudovina Hackel ex Wiesb.
Ficaria calthifolia Reichenb.
Filago vide *Logfia*
Fraxinus angustifolia Vahl subsp. *danubialis* Pouzar
Gagea minima (L.) Ker-Gawler
Galanthus nivalis L.
Galeopsis angustifolia (Ehrh.) Hoffm.
Galium valdepilosum H. Br. in Form.
Gentiana vide *Gentianopsis*
Gentianopsis ciliata (L.) Ma

- Glechoma hirsuta* Waldst. et Kit.
Glyceria nemoralis (Uechtr.) Uechtr. et Koernicke
Gymnadenia conopsea (L.) R. Br. subsp. *conopsea*
Heleocharis vide *Eleocharis*
Hieracium alpinum L.
Hieracium atratum agg. [*H. atratum* Fries incl. *H. kavinae* Zlatník, *H. polycephalum* Velen., *H. sternbergii* Zlatník, *H. sudetica* (Zahn) Zlatník, *H. velenovskyanum* Zlatník]
Hieracium bifidum Kit. ex Hornem.
Hieracium caesium (Fries) Fries
Hieracium decipiens Tausch
Hieracium nigratum Uechtr. [incl. *H. pseudeximium* (G. Schneider) Zlatník]
Hieracium prenanthoides Vill.
Hieracium stygium Uechtr.
Hieracium sudeticum Sternb.
Hieracium vide etiam *Pilosella*
Hierochloë australis (Schrader) Roemer et Schultes
Hippochaete hyemalis (L.) Bruhin [*Equisetum hyemale* L.]
Hippochaete ramosissima (Desf.) Börner [*Equisetum ramosissimum* Desf.]
Honorius nutans (L.) S. F. Gray (ind.?) [*Ornithogalum nutans* L.]
Hottonia palustris L.
Huperzia selago (L.) Bernh. ex Schrank et Mart.
Hydrocotyle vulgaris L.
Hylotelephium triphyllum (Haw.) Holub [*Sedum telephium* L.]
Hyoscyamus niger L.
Hypericum humifusum L.
Hypochaeris vide *Trommsdorffia*
Inula ensifolia L.
Inula hirta L.
Inula oculus-christi L.
Iris sibirica L.
Isolepis setacea (L.) R. Br.
Jovibarba globifera (L.) Parnell
Juncus acutiflorus Ehrh. ex Hoffm.
Juncus alpinoarticulatus Chaix in Vill.
Juncus ranarius Pers. et Song. [*J. ambiguus* auct. non Guss.]
Juniperus communis L. s. s.
Knautia vide *Trichera*
Lactuca perennis L.
Lactuca quercina L.
Lactuca vide etiam *Scariola*
Lappula squarrosa (Retz.) Dumort.
Laserpitium latifolium L.
Laserpitium prutenicum L.
Lathyrus latifolius L.
Lathyrus linifolius (Reichard) Bässler
Ledum palustre L.
Leersia oryzoides (L.) Swartz
Leopoldia comosa (L.) Parl. [*Muscari comosum* (L.) Miller]
Leucожum vernum L.
Ligusticum vide *Mutellina*
Limosella aquatica L.
Linaria genistifolia (L.) Miller
Linum tenuifolium L.
Lithospermum vide *Aegonychon*
Logfia arvensis (L.) Holub [*Filago arvensis* L.]
Logfia minima (Sm.) Dumort. [*Filago minima* (Sm.) Pers.]
Lonicera caprifolium L. (ind.?)

- Lotus glaber* Miller [*L. tenuifolius* (L.) Reichenb. nom. illeg., *L. tenuis* Waldst. et Kit. ex Willd.]
Luzula sudetica (Willd.) Schultes
Lycopodium annotinum L.
Lycopodium vide etiam *Huperzia*
Lysimachia vide *Naumburgia*
Malva pusilla Sm.
Matteuccia struthiopteris (L.) Tod. (ind.)
Medicago minima (L.) Bartal.
Melampyrum arvense L.
Melampyrum bohemicum Kerner (tax., nom.)
Melampyrum cristatum L.
Melica ciliata L.
Melica picta C. Koch
Melilotus altissima Thuill.
Melittis melissophyllum L. s. l.
Menyanthes trifoliata L.
Meum vide *Mutellina*
Minuartia setacea (Thuill.) Hayek
Monotropa hypopitys L.
Muscari vide *Leopoldia*
Mutellina purpurea (Poiret) Thell. [*Ligusticum mutellina* (L.) Crantz, *Meum mutellina* Gaertn.]
Myosurus minimus L.
Myriophyllum verticillatum L.
Nasturtium officinale R. Br.
Naumburgia thyrsiflora (L.) Reichenb.
Noccaea montana (L.) K. F. Meyer [*Thlaspi montanum* L.]
Odontites vide *Orphantha*
Ononis repens L.
Orchis mascula (L.) L. subsp. *signifera* (Vest) Soó
Ornithogalum umbellatum L.
Ornithogalum vide etiam *Honorius*
Orobanche alba Stephan ex Willd.
Orobanche caryophyllacea Sm.
Orobanche elatior Sutton
Orobanche lutea Baumg.
Orphantha lutea (L.) Kerner ex Wettst. [*Odontites luteus* (L.) Clairv.]
Otites cuneifolia Rafin. s. s. [*Silene otites* (L.) Wibel]
Oxycoccus hagerupii Á. Löve et D. Löve
Oxycoccus palustris Pers. s. s.
Oxytropis pilosa (L.) DC.
Papaver confine Jordan
Pedicularis sylvatica L.
Peucedanum alsaticum L.
Phyteuma nigrum F. W. Schmidt
Pilosella apatelina (Naegeli et Peter) Soják [*Hieracium apatelium* Naegeli et Peter]
Pilosella arvicola (Naegeli et Peter) Soják [*Hieracium arvicola* Naegeli et Peter]
Pilosella aurantiaca (L.) F. W. Schultz et C. H. Schultz (ind.) [*Hieracium aurantiacum* L.]
Pilosella auriculoides (A. F. Láng) F. W. Schultz [*Hieracium auriculoides* A. F. Láng, *H. pannonicum* Naegeli et Peter]
Pilosella calodon (Tausch ex Peter) Soják [*Hieracium calodon* Tausch ex Peter]
Pilosella echioides (Lumn.) F. W. Schultz et C. H. Schultz [*Hieracium echioides* Lumn.]
Pilosella fallacina (F. W. Schultz) C. H. Schultz [*Hieracium fallacinum* F. W. Schultz]
Pilosella iserana (Uechtr.) Soják [*Hieracium iseranum* (Uechtr.) Uechtr.]
Pilosella macrostolona (G. Schneider) Soják [*Hieracium macrostolonum* G. Schneider]
Pilosella piloselliflora (Naegeli et Peter) Soják [*Hieracium piloselliflorum* Naegeli et Peter]
Pilosella rothiana (Wallr.) F. W. Schultz et C. H. Schultz [*Hieracium rothianum* Wallr.]

- Pilosella sciadophora* (Naegeli et Peter) Soják [*P. corymbulifera* Arvet-Touvet, *Hieracium sciadophorum* Naegeli et Peter]
Pilosella tephroglauca (Naegeli et Peter) Soják [*Hieracium tephroglaucum* Naegeli et Peter]
Pinus rotundata Link
Pistolochia vide *Corydalis*
Platanthera bifolia (L.) L. C. Richard
Platanthera chlorantha (Custer) Reichenb.
Poa remota Forselles
Polemonium caeruleum L. (ind.)
Polygala major Jacq.
Polygala vide etiam *Polygaloides*
Polygaloides chamaebuxus (L.) O. Schwarz
Potamogeton lucens L.
Potamogeton obtusifolius Mert. et Koch
Potentilla collina Wibel (tax.)
Primula veris L. subsp. *canescens* (Opiz) Hayek
Prunella grandiflora (L.) Scholler
Prunella laciniata (L.) L.
Prunus vide *Cerasus*
Pseudolysimachion maritimum (L.) Á. Löve et D. Löve [*Veronica maritima* L.]
Pseudolysimachion orchideum (Crantz) T. Wraber [*Veronica orchidea* Crantz]
Pulmonaria mollissima Kerner (tax.)
Pulsatilla scherfelii (Ullepitsch) Skalický
Ranunculus aconitifolius L.
Ranunculus arvensis L.
Ranunculus cassubicus L. (tax.)
Ranunculus vide etiam *Batrachium*, *Ficaria*
Rapistrum perenne (L.) All.
Rhinanthus alectorolophus (Scop.) Pollich
Rosa gallica L.
Rosa jundzillii Besser
Rubus austroslovacus Trávníček ined.
Rubus canescens DC.
Rubus elatior Focke ex Grelli
Rubus epipsilos Focke
Rubus gliviciensis (Sudre) Spribille
Rubus graecensis Maurer
Rubus nemorosus Hayne et Willd.
Rubus nessensis W. Hall subsp. *scissoides* H. E. Weber
Rubus portae-moravicae Holub et Trávníček ined.
Rubus praecox Bertol. s. l.
Rubus radellus Spribille ex Zielinski ined.
Rubus rudis Weihe
Rubus saxatilis L.
Rubus siemianicensis Spribille
Rubus sprengelii Weihe
Rubus silvae-bohemicae Holub et Trávníček ined.
Rubus vratnensis Holub
Sagina saginoides (L.) Karsten
Salix daphnoides Vill.
Salix rosmarinifolia L.
Salsola australis R. Br.
Saxifraga bulbifera L.
Saxifraga paniculata Miller
Saxifraga tridactylites L.
Scabiosa canescens Waldst. et Kit.
Scariola viminea (L.) F. W. Schmidt [*Lactuca viminea* (L.) J. Presl et C. Presl]

- Scilla vindobonensis* Speta
Scirpus vide *Bolboschoenus*, *Isolepis*
Scleranthus polycarpus L.
Scorzonera austriaca Willd.
Scorzonera humilis L.
Scrophularia scopoli Hoppe in Pers.
Scrophularia umbrosa Dumort.
Sedum alpestre Vill.
Sedum vide etiam *Hylotelephium*
Sempervivum vide *Jovibarba*
Seseli annuum L.
Seseli hippomarathrum Jacq.
Silaum silaus (L.) Schinz et Thell.
Silene vide *Otites*
Soldanella montana Willd.
Sorbus carpatica (Beck) Borbás
Sorbus danubialis (Jáv.) Prodan
Spiraea salicifolia L. (ind.)
Stachys alpina L.
Staphylea pinnata L.
Stellaria longifolia Muhlenb. ex Willd.
Stellaria palustris Retz.
Stellaria vide etiam *Alsine*
Stipa joannis Čelak.
Stipa pulcherrima C. Koch
Taraxacum fascians Kirschner, Mikoláš et Štěpánek
Taraxacum franconicum Sahlin
Taraxacum gelertii Raunk.
Taraxacum hollandicum Soest
Taraxacum subalpinum Hudziok
Taxus baccata L.
Tetragonolobus maritimus (L.) Roth
Teucrium botrys L.
Thalictrum lucidum L.
Thalictrum minus L. s. l.
Thelypteris palustris Schott
Thesium alpinum L.
Thesium linophyllum L.
Thlaspi vide *Noccaea*
Thymus glabrescens Willd.
Tithymalus esula (L.) Scop. subsp. *riparius* (Schur) Chrtek et Křisa (tax.) [*Euphorbia esula* L. subsp. *riparia* Schur]
Tithymalus falcatus (L.) Klotzsch et Garcke [*Euphorbia falcata* L.]
Tithymalus polychromus (A. Kerner) Prochanov [*Euphorbia polychroma* A. Kerner]
Tithymalus strictus (L.) Klotzsch et Garcke [*Euphorbia stricta* L.]
Trichophorum cespitosum (L.) Hartman
Trifolium fragiferum L. s. l.
Trifolium ochroleucum Hudson
Trifolium rubens L.
Trifolium vide etiam *Chrysaspis*
Trollius altissimus Crantz [*T. europaeus* L. p. p]
Trommsdorffia maculata (L.) Bernh. [*Hypochaeris maculata* L.]
Trommsdorffia uniflora (Vill.) Soják [*Hypochaeris uniflora* Vill.]
Valerianella dentata (L.) Pollich subsp. *eriosperma* (Wallr.) Holub
Verbascum blattaria L.
Verbascum phoeniceum L.
Verbena officinalis L.

Veronica catenata Pennell
Veronica praecox All.
Veronica prostrata L.
Veronica vide etiam *Pseudolysimachion*
Vicia cassubica L.
Vicia lathyroides L.
Vicia pisiformis L.
Vigna curvata (Knaf) Soják [*Carex curvata* Knaf]
Viola rupestris F. W. Schmidt
Viola ruppii All. (nom., tax.)
Viola saxatilis F. W. Schmidt subsp. *polychroma* (Kerner) Kirschnert et Skalický (tax.)
Viola saxatilis F. W. Schmidt subsp. *saxatilis*
Virga pilosa (L.) Hill [*Dipsacus pilosus* L.]
Viscum laxum Boiss. et Reuter subsp. *abietis* (Wiesb.) O. Schwarz
Vulpia myuros (L.) C. C. Gmelin
Willemetia stipitata (Jacq.) Dalla Torre [*Calycocorsus stipitatus* (Jacq.) Rauschert]

C4. Rare or scattered taxa, requiring further study and monitoring

Achillea millefolium L. subsp. *sudetica* (Opiz) Oborny (tax.)
Abies alba Mill.
Aconitum altissimum Miller subsp. *altissimum* [*A. vulparia* Reichenb. sec. Gáyer subsp. *vulparia*]
Acosta biebersteinii (DC.) Dostál [*Centaurea biebersteinii* DC.]
Adenostyles alliariae (Gouan) Kerner
Aethusa cynapium L. subsp. *cynapioides* (Bieb.) Nyman
Agropyron vide *Elytrigia*
Agrostis vinealis Schreber
Alchemilla filicaulis Buser subsp. *filicaulis*
Alchemilla gruneica Plocek
Alchemilla walasii Pawł.
Allium senescens L. subsp. *montanum* (F. W. Schmidt) Holub
Alyssum montanum L. subsp. *montanum*
Alyssum vide etiam *Aurinia*
Anchusa officinalis L.
Angelica vide *Archangelica*
Anthemis vide *Cota*
Anthericum ramosum L.
Anthriscus longirostris Bertol. [*A. cerefolium* (L.) Hoffm. subsp. *trichosperma* (Schultes) Arcang.]
Anthyllis macrocephala Wender.
Archangelica officinalis Hoffm. (ind.?)
Arctium nemorosum Lej.
Armeria vulgaris Willd. subsp. *vulgaris*
Arum alpinum Schott et Kotschy (tax.)
Aruncus vulgaris Rafin.
Atriplex oblongifolia Waldst. et Kit.
Aurinia saxatilis (L.) Desv. [*Alyssum saxatile* L.]
Avena nuda L.
Avena strigosa Schreber
Avenula pratensis (L.) Dumort. subsp. *hirtifolia* (Podp.) Holub
Barbarea arcuata (Opiz) Reichenb.
Barbarea stricta Andr. in Besser
Batrachium circinatum (Sibth.) Spach
Batrachium peltatum (Schränk) J. Presl in Berchtold et J. Presl [*Batrachium rhipiphyllum* (Bast. ex Boreau) Dumort.]
Berberis vulgaris L.
Berula erecta (Hudson) Coville

- Betula carpatica* Willd.
Betula celtiberica Rothm. et Vasconcellos (tax.) [*B. petraea* Sýkora ined.]
Bismalva alcea (L.) Med.
Blechnum vide *Struthiopteris*
Bothriochloa ischaemum (L.) Keng
Bromus japonicus Thunb. ex Murray
Caltha palustris L. subsp. *cornuta* (Schott, Nyman et Kotschy) Hegi (tax.)
Caltha palustris L. subsp. *procumbens* (Beck) Neumayer
Campanula moravica (Spitzner) Kovanda
Cardamine hirsuta L. (ind.)
Cardamine pratensis L. subsp. *major* Tomšovic (tax.)
Carduus nutans L.
Carex buekii Wimmer
Carex cespitosa L.
Carex flava L.
Carex humilis Leysser
Carex juncella (Fries) Nyman (tax.)
Carex pendula Hudson
Carex pseudocyperus L.
Carex riparia Curtis
Carex vide etiam *Vignea*
Centaurea vide *Acosta*, *Cyanus*, *Jacea*
Centaureum erythraea Rafn
Cerastium lucorum Schur emend. Möschl
Cerastium pumilum Curtis
Cerinthe minor L.
Chamaecytisus ratisbonensis (Schäffer) Rothm.
Chamerion dodonaei (Vill.) Holub (ind.)
Chondrilla juncea L.
Chrysosplenium oppositifolium L.
Cicerbita alpina (L.) Wallr.
Circaea alpina L.
Cirsium acaule Scop.
Comarum palustre L.
Cornus mas L.
Cornus vide etiam *Swida*
Corydalis intermedia (L.) Link non (L.) Mérat [*C. fabacea* (Retz.) Pers.]
Corydalis solida (L.) Clairv.
Cota tinctoria (L.) J. Gay
Cotoneaster integerrima Med.
Cotoneaster matrensis Domokos (tax.) [*C. alaunicus* auct.]
Cotoneaster niger Fries subsp. *moravicus* Hrab.-Uhr. (tax.)
Cucubalus baccifer L.
Cyanus segetum Hill [*Centaurea cyanus* L.]
Cynodon dactylon (L.) Pers.
Dactylis slovenica Domin (tax.)
Dactylorhiza fuchsii subsp. *fuchsii* (Druce) Soó [*D. longibracteata* (F. W. Schmidt) Holub subsp. *longibracteata*]
Daphne mezereum L.
Dasystephana asclepiadea (L.) Borkh. [*Gentiana asclepiadea* L., *Pneumonanthe asclepiadea* (L.) F. W. Schmidt]
Dentaria enneaphyllos L.
Deschampsia cespitosa L. subsp. *austrobohemica* (Deyl) Conert (tax.)
Dianthus armeria L.
Dianthus sabuletorum Heuffel subsp. *serpentini* (Podp.) Holub (tax.)
Digitaria pectiniformis (Henrard) Tzvelev
Doronicum austriacum Jacq.
Dryopteris expansa (C. Presl) Fraser-Jenkins

- Eleocharis mamillata* H. Lindb. fil.
Elytrigia intermedia (Host) Něvskij s. l.
Empetrum nigrum L. s. s.
Epilobium palustre L.
Epilobium vide etiam *Chamerion*
Epipactis helleborine (L.) Crantz
Equisetum telmateia Ehrh.
Erigeron macrophyllus Herbich
Erysimum virgatum Roth
Euonymus verrucosa Scop.
Euphorbia vide *Tithymalus*
Gentiana vide *Dasystephana*
Festuca pallens Host
Festuca supina Schur
Festuca valesiaca Schleicher ex Gaud.
Fumaria officinalis L. subsp. *wirtgenii* (Koch) Arcang. (tax.)
Galium boreale L.
Galium glaucum L. subsp. *hirsutum* (Wallr.) Holub (tax.)
Galium spurium L.
Genista pilosa L.
Gentiana vide *Dasystephana*
Geranium sanguineum L.
Gnaphalium vide *Omalotheca*
Hacquetia epipactis (Scop.) DC.
Heleocharis vide *Eleocharis*
Helictotrichon vide *Avenula*
Hieracium erythropodum Uechtr. (tax.)
Hieracium glaucinum Jordan (tax.)
Hieracium maculatum Schrank
Hieracium onosmoides Fries
Hieracium saxifragum Fries
Hieracium schmidtii Tausch
Hieracium wiesbaurianum Uechtr.
Hieracium vide etiam *Pilosella*
Imperatoria ostruthium L. (ind.?)
Inula salicina L. subsp. *salicina*
Isopyrum thalictroides L.
Jacea oxylepis (Wimmer et Grab.) Soják [*Centaurea oxylepis* (Wimmer et Grab.) Hayek]
Jacea phrygia (L.) Soják [*Centaurea phrygia* L.]
Juncus minutulus (Alb. et Jah.) Prain
Knautia vide *Trichera*
Kohlruschia prolifera (L.) Kunth
Larix sudetica Domin (tax.)
Lavatera thuringiaca L.
Lemna gibba L.
Lemna trisulca L.
Lemna turionifera Landolt
Libanotis pyrenaica (L.) Bourgeau subsp. *bipinnata* (Čelak.) Holub
Lilium martagon L.
Listera ovata (L.) R. Br.
Loranthus europaeus Jacq.
Lunaria rediviva L.
Lycopsis arvensis L.
Lythrum salicaria L. subsp. *intermedium* (Ledeb.) Tacik (tax.)
Malva vide *Bismalva*
Melampyrum herbichii Wołoszczak (tax.)
Melandrium noctiflorum (L.) Fries [*Silene noctiflora* L.]

- Melica transsilvanica* Schur
Meum athamanticum Jacq.
Mulgedium vide *Cicerbita*
Myosotis caespitosa C. F. Schultz
Myosotis discolor Pers.
Myosotis sparsiflora Pohl
Neottia nidus-avis (L.) L. C. Richard
Nonea pulla (L.) DC. in Lam. et DC.
Oberna antelopum (Vest) Šourková (tax.) [*Silene vulgaris* (Moench) Garcke subsp. *antelopum* (Vest) Hayek]
Omalotheca norvegica (Gunn.) C. H. Schultz et F. W. Schultz [*Gnaphalium norvegicum* Gunn.]
Omphalodes scorpioides (Haenke) Schrank
Otites pseudotites (Besser ex Reichenb.) Klokov [*Silene pseudotites* Besser ex Reichenb.]
Papaver argemone L.
Papaver dubium L. s. s.
Pastinaca opaca Bernh.
Petasites kablikianus Tausch ex Berchtold
Petrorhagia vide *Kohlrauschia*
Peucedanum cervaria (L.) Lapeyr.
Peucedanum oreoselinum (L.) Moench
Peucedanum vide etiam *Imperatoria*
Phleum rhaeticum (Humphries) Rauschert
Picris paleacea Vest (tax.)
Pilosella cymosa (L.) F. W. Schultz et C. H. Schultz [*Hieracium cymosum* L.]
Pilosella glaucescens (Besser) Soják [*Hieracium glaucescens* Besser]
Pilosella glomerata (Froel.) Arvet-Touvet [*Hieracium glomeratum* Froel., *H. ambiguum* Ehrh., nom. nudum]
Pilosella schultesii (F. W. Schultz) F. W. Schultz et C. H. Schultz [*Hieracium schultesii* F. W. Schultz]
Pilosella ziziana (Tausch) F. W. Schultz et C. H. Schultz [*Hieracium zizianum* Tausch]
Pinus × *pseudopumilio* (Willk.) Beck
Plantago major L. subsp. *winteri* (Wirtgen) W. Ludwig (tax.)
Pneumonanthe vide *Dasystephana*
Poa bulbosa L. subsp. *pseudoconcinna* (Schur) Jirásek (tax.)
Polygala oxyptera Reichenb.
Polygonum calcatum Lindman
Polystichum aculeatum (L.) Roth
Potentilla alba L.
Potentilla arenaria Borkh.
Potentilla aurea L.
Potentilla hedrichii (Domin) Domin (tax.)
Potentilla pusilla Host (tax.)
Potentilla recta L. s. l.
Potentilla thyrsoflora Hülsen in Zimmeter ex A. Kerner (tax.)
Potentilla vide etiam *Comarum*
Poterium polygamum Waldst. et Kit.
Primula elatior (L.) Hill subsp. *tatrensis* (Domin) Soó
Primula veris L. subsp. *veris*
Prunus spinosa L. subsp. *cerasina* Hrab.-Uhr. (tax.)
Prunus spinosa L. subsp. *fechtneri* Domin (tax.)
Prunus spinosa L. subsp. *megalocarpa* Domin (tax.)
Prunus spinosa L. subsp. *moravica* Domin (tax.)
Prunus spinosa L. subsp. *ovoideo-globosa* Domin (tax.)
Pseudolysimachion spicatum (L.) Opiz [*Veronica spicata* L.]
Pyrus pyrastrer (L.) Burgsd.
Quercus dalechampii Ten.
Quercus polycarpa Schur
Quercus pubescens Willd.
Ranunculus platanifolius L.
Ranunculus vide etiam *Batrachium*

- Rosa andegavensis* Bast. (tax.)
Rosa blondeana Rip. ex Déségl. (tax.)
Rosa deseglisei Boreau (tax.)
Rosa intricata Gren. (tax.)
Rosa pomifera J. Hermann (tax.)
Rosa squarrosa (Rau) Boreau (tax.)
Rosa stephanocarpa Déségl. et Rip. (tax.)
Rubus acanthodes H. Hofmann
Rubus adalberti Holub et Trávníček ined.
Rubus bohemiicola Holub
Rubus brdensis Holub
Rubus elegantior Trávníček ined. [? *R. phyllostachys* P. J. Mueller]
Rubus gothicus E. H. L. Krause
Rubus indusiatus Focke
Rubus josholubii H. E. Weber
Rubus permollissimus Holub, Trávníček et Havlíček ined. [*R. chřibensis* Holub ined.]
Rubus praecociformis Trávníček ined.
Sanguisorba vide *Poterium*
Schoenoplectus lacustris (L.) Palla
Scirpus vide *Schoenoplectus*
Senecio erraticus Bertol.
Senecio vide *Tephroseris*
Serratula tinctoria L.
Seseli osseum Crantz
Seseli vide etiam *Libanotis*
Setaria verticilliformis Dumort.
Silene vide *Melandrium*, *Oberna*, *Otites*
Sorbus aria (L.) Crantz
Sorbus torminalis (L.) Crantz
Sparganium erectum L. emend. Reichenb. subsp. *oocarpum* (Čelak.) Domin (tax.)
Spergula morisonii Boreau
Stipa capillata L.
Streptopus amplexifolius (L.) DC. in Lam. et DC.
Struthiopteris spicant (L.) Weiss
Swida ×hungarica (Kárpáti) Soják [*Cornus ×hungarica* (Kárpáti) Soó]
Taraxacum aurosulum Linb. fil.
Taraxacum boeckmanii Borgvall
Taraxacum brachylepis Markl. ex Puolanne
Taraxacum cupidophyllum Dahlst.
Taraxacum corynodes Hagl.
Taraxacum crociflorum Dahlst.
Taraxacum cyanolepis Dahlst.
Taraxacum duplidentifrons Dahlst.
Taraxacum fusciflorum H. Oellgaard
Taraxacum haematicum Hagl. ex H. Oellgaard et H. Wittzell
Taraxacum intermedium Raunk. s. l.
Taraxacum lamprophyllum M. P. Christ.
Taraxacum lancidens Hagendyjk, Soest et Zevenbergen
Taraxacum lucidum Dahlst.
Taraxacum nordstedtii Dahlst.
Taraxacum pannucium Dahlst.
Taraxacum proximum (Dahlst.) Raunk.
Taraxacum pseudohamatum Dahlst.
Taraxacum psedoretroflexum M. P. Christ.
Taraxacum quadrans H. Oellgaard
Taraxacum ruptifolium H. Oellgaard
Taraxacum subhamatum M. P. Christ.

- Taraxacum tenebricans* (Dahlst.) Raunk.
Taraxacum tragopogon Kirschner et Štěpánek
Taraxacum undulatum Linb. fil. et Markl.
Tephrosia crista (Jacq.) Schur
Thymus marschallianus Willd. (tax.)
Thymus kosteleckyanus Opiz (tax.)
Thymus praecox Opiz
Thyselinum vide *Peucedanum*
Tithymalus amygdaloides (L.) Hill [*Euphorbia amygdaloides* L.]
Tithymalus virgultosus (Klokov) Holub [*Euphorbia virgultosa* Klokov]
Tragopogon minor Miller (tax.)
Trichera drymeia (Heuffel) Nyman [*Knautia drymeia* Heuffel]
Trichera maxima (Opiz in Berchtold et Opiz) Holub [*Knautia maxima* (Opiz) Ortmann, *K. dipsacifolia* Kreutzer]
Trifolium alpestre L.
Tunica vide *Kohlrauschia*
Ulmus laevis Pallas
Ulmus minor Miller emend. Reichenb.
Utricularia australis R. Br.
Valeriana dioica L.
Valeriana excelsa Poirét subsp. *procurrens* (Wallr.) Holub
Valeriana excelsa Poirét subsp. *transiens* (E. Walther) Holub (tax.)
Valeriana excelsa Poirét subsp. *sambucifolia* (Mikan fil.) Holub
Valeriana stolonifera Czern. subsp. *angustifolia* Soó
Valerianella dentata (L.) Pollich subsp. *dentata*
Veratrum album L. subsp. *lobelianum* (Bernh.) Reichenb.
Verbascum chaixii Vill. subsp. *austriacum* (Roemer et Schultes) Hayek
Veronica dillenii Crantz
Veronica montana L.
Veronica scutellata L.
Veronica teucrium L.
Veronica verna L.
Veronica vide etiam *Pseudolysimachion*
Viburnum lantana L. (ind.)
Vicia dumetorum L.
Vignea bohémica (Schreber) Soják [*Carex bohémica* Schreber]
Vignea chabertii (F. W. Schultz sub *Carex*) [*Carex chabertii* F. W. Schultz]
Vignea disticha (Hudson) Peter [*Carex disticha* Hudson]
Vignea otrubae (Podp.) Soják [*Carex otrubae* Podp.]
Vignea paniculata (L.) Reichenb. in Mössler [*Carex paniculata* L.]
Vignea polyphylla (Kar. et Kir. sub *Carex*) [*Carex polyphylla* Kar. et Kir.]
Viola biflora L.
Viola mirabilis L.
Viscum album L. s. s.
Viscum laxum Boiss. et Reuter subsp. *laxum*
Xanthium albinum (Widder) H. Scholz
Zannichellia palustris L.
Zannichellia pedicellata (Rosén et Wahlenb.) Fries (tax.)

Conclusion

There are about 2550 species and subspecies of native taxa and archaeophytes in the flora of the Czech Republic. This figure excludes alien species introduced to the country over the last few centuries (some of them only temporarily), planted species and also escapes

from cultivation. The number of species is only approximate as the critical revision of the Czech flora is not yet complete, and certain taxa present problems at the subspecific level.

The present list contains 1627 species and subspecies. When group A3 (formed by doubtful cases of extinct and missing taxa which are mostly not included in the above given total number of native or long naturalized taxa of the Czech Republic) is excluded, we are left with 1547 taxa, i. e. 60% of the Czech flora: A1 – 2.5% (= 69 taxa), A2 – 2.0% (= 49 taxa), C1 – 18.5% (= 473 taxa), C2 – 14% (= 352 taxa), C3 – 13% (= 326 taxa), C4 – 10% (= 278 taxa).

Even if we consider only those taxa in groups C1, C2, and C3 to be really endangered (excluding C4 in which the threat is low or in some cases only supposed), there are still at least 1151 seriously threatened species and subspecies in the Czech flora (45.5% of the total). By adding extinct and missing taxa, the number is increased to 1269 (about 50%).

The first version of the Red List (Holub, Procházka & Čerovský 1979) contained 1152 taxa (excluding the problematic group A3), whilst in the present edition, this number has risen to 1547. This represents an increase from 45% in 1979 to 60% in 2000 (out of a total of 2550 taxa). What is most disturbing, is that apart from group C4, (which covers the least endangered species), there has been a remarkable increase in numbers in all the most seriously threatened categories of taxa. Plants in category C1 have increased from 267 to 473, C2 from 240 to 352, and C3 from 239 to 326. The same holds true for the number of extinct taxa (37 to 69 in A1) and the number of missing taxa has increased from 39 to 49.

The finding that 4.5% of species and subspecies in the flora of Czech Republic are extinct or missing and that another 45.5% are seriously endangered is undoubtedly a sad reflection on the recent and continued exploitation of the environment by man in the Czech Republic. It also sends a serious message to the state nature conservation authorities and society as a whole.

Acknowledgements

We are very grateful for the important contributions to the elaboration of critical genera included in the present list made by P. Bureš (*Eleocharis*), P. Havlíček (*Alchemilla*, *Rubus*), J. Chrtek Jun. (*Hieracium*, *Pilosella*), J. Kirschner and L. Kirschnerová (*Centaurium*, *Gentianella*), O. Šída (*Erigeron*), J. Štěpánek (*Taraxacum*), J. Štěpánková (*Galium*, *Myosotis*) and B. Trávníček (*Rubus*, *Taraxacum*), and to V. Grulich, L. Hrouda, Z. Kaplan, J. Hadinec, K. Kubát and M. Štech for providing us with information leading to changes in classification of species into particular categories. We thank P. Pyšek for translating the text into English, and John Bailey, Lois Child, and Chris Joyce for improving the English. J. Danihelka, A. KlauDISOVÁ, J. Rydlo, V. Řehořek and J. Zázvorka contributed valuable comments on the classification of species into particular groups.

Souhrn

Po více než 20 letech, které uplynuly od vydání první verze seznamu vyhynulých, endemických a ohrožených taxonů cévnatých rostlin flóry České republiky, je botanické a ochranářské veřejnosti předkládána další verze, která zahrnuje řadu nových poznatků o květeně České republiky, které byly nashromážděny od roku 1979.

Jsou v ní uvedeny četné taxony, které první verze neobsahovala. Jednak takové, které byly již dříve známy odjinud, avšak v České republice poprvé nalezené až během posledních dvou desetiletí (*Hypericum dubium*, *Orobancha teucrii*, *Stipa eriocaulis*, *Vandenboschia speciosa* (= *Trichomanes speciosum* atd.) nebo byly teprve nedávno popsány, a to buď ze zahraničí (*Diphasiastrum oellgaardii*, *Epipactis greuteri*, *Himantoglossum adriaticum* atd.) či dokonce od nás (různé druhy rodů *Minuartia*, *Rubus*, *Sorbus* a *Taraxacum* nebo *Dactylorhiza traunsteineri* subsp. *carpatica* atd.). Naopak musely být některé druhy obsažené v původním seznamu zcela vy-

nechány, protože bylo prokazatelně zjištěno, že na našem státním území nikdy nerostly (např. *Himantoglossum hircinum*).

V mnoha případech je změněno zařazení taxonů do jednotlivých kategorií, jež vyplynulo z mnohem detailnějšího poznání aktuálního rozšíření a míry konkrétního ohrožení. Nejzávažnějšími případy jsou ty, kdy druhy dříve považované v České republice již za vyhynulé anebo nezcvěstné byly znovu na našem území nalezeny (kupř. *Hypericum pulchrum*, *Linaria arvensis*, *Luronium natans* nebo *Potamogeton polygonifolius*, *Utricularia bremii*) či obrácená, smutnější varianta, kdy taxony dříve řazené do kategorie kriticky ohrožených, musely být již přefazeny mezi vyhynulé a nezcvěstné (*Gentianella germanica* subsp. *solstitialis*, *Herminium monorchis*, *Sceptridium multifidum* apod.).

Formální členění předloženého seznamu je v podstatě stejné jako v 1. verzi z roku 1979, chybí pouze oddíl B (endemity a subendemity). To proto, že u taxonů známých již před delší dobou zůstává stav stejný, kdežto u taxonů teprve nedávno nově popsaných je jen u části téměř jistý endemický charakter rozšíření (např. *Dactylorhiza bohemica*, *Euphrasia corcontica*, *Minuartia smejkalii*, *M. corcontica*, *Rubus bohemicola*). Lze sice předpokládat, že i mnohé další nově popsané taxony z kritických rodů (*Dactylorhiza*, *Rubus*, *Taraxacum*, *Sorbus*) budou také endemity či subendemity, dosud nedostatečně známé celkové rozšíření však ještě neumožňuje stanovit to s jistotou.

Ačkoliv obě další základní kategorie (A, C) i jejich další vnitřní členění zůstaly zachovány tak, jak byly použity v 1. verzi z roku 1979, částečně se změnila jejich náplň. To proto, aby mohly být ztotožněny s mezinárodními kategoriemi IUCN. V současnosti platné kategorie ohrožení IUCN (vyhovující spíše potřebám zoologickým než botanickým) odpovídají jen zčásti kategoriím dosud běžně používaným v České republice, které byly zvoleny pro účely této práce a které jsou vymezeny obdobně jako kategorie ohrožení používané ve většině sousedních středoevropských států. Rozdíly ve vymezení oproti náplni kategorií IUCN vyplývají z textů v anglické části práce, které jednotlivé zde použité kategorie podrobněji charakterizují.

A. Vyhynulé a nezcvěstné taxony (IUCN: extinct = EX)

A1. Vyhynulé taxony (EX)

A2. Nezcvěstné (pravděpodobně vyhynulé) taxony (?EX)

A3. Nejasné případy vyhynulých a nezcvěstných taxonů (?EX?)

C. Taxony v různém stupni ohrožené

C1. Kriticky ohrožené taxony (IUCN: critically endangered = CR)

C2. Silně ohrožené taxony (IUCN: endangered = EN)

C3. Ohrožené taxony (IUCN: vulnerable = VU)

C4. Vzácnější taxony vyžadující další pozornost (IUCN: lower risk = LR + data deficient = DD)

Seznam obsahuje jako základní systematickou jednotku druhy. Kde se to ukázalo vhodné, jsou uvedeny i poddruhy (subspecie). Pokud se v České republice vyskytuje více subspecií jednoho druhu, aniž by byly v seznamu zvláště (jmenovitě) uvedeny, vztahuje se zařazení druhu do určité kategorie i na všechny jeho subspecie, zastoupené v naší republice. Hybridi byli zařazeni jen ojediněle v těch případech, kdy jsou jejich porosty mnohdy již zcela nezávislé na rodičovských populacích, anebo výjimečně i vzácné hybridní kombinace fanerofytů, které byly z našeho území poprvé popsány (např. převzácná *Pinus × celakovskiorum* roste na klasickém nalezišti, kterým je kamenné moře u Plešného jezera na Šumavě, již déle než 100 let).

U některých taxonů jsou za jmény uvedeny zkratky, které jsou vysvětleny v následujícím přehledu:

„ind.“ – je brán v úvahu jen původní, přirozený výskyt (pokud existuje)

„ind.“ – není jasné, zda je taxon na území České republiky původní

„tax.“ – taxonomická problematika je nejasná

„s. l.“ – taxon uvažován v širším pojetí

„s. s.“ – taxon uvažován v užším pojetí (drobný druh, respektive typová subspecie)

„agg.“ – skupina nedostatečně prozkoumaných taxonů (nezřídka drobných druhů)

„nom.“ – pravděpodobný problém nomenklatorický

Nomenklatura (až na nemnohé výjimky) je ponechána tak, jak ji užíval J. Holub (užší vymezení rodů, hodnocení některých taxonů spíše subspecifické hodnoty na úrovni druhů atd.). Agentura ochrany přírody a krajiny České republiky však chystá vydání mnohem rozsáhlejší modifikace tohoto seznamu pro účely ochranné práce. V té bude použito širšího vymezení rodů, jak je v evropské botanice obvyklé, bude doplněno o národní nomenklaturu a abecední seznamy všech taxonů s odkazy na legislativní ochranu nejen naší (Vyhláška MŽP

č. 395/1992 Sb.), ale i mezinárodní (Bernská úmluva, Washingtonská úmluva, Směrnice Rady Evropských společenství č. 92/43/EEC z roku 1992).

Ona část flóry České republiky, kterou tvoří autochtonní taxony a archeofyty, čítá okolo 2550 druhů a subspecií. Do tohoto počtu nejsou zahrnuty ty cizí druhy, které k nám byly zavlečeny (mnohdy jen přechodně) teprve v nedávných letech, dále druhy zplaňující z kultur, rostliny pěstované apod. Uvedené číslo je jen velmi přibližné, protože jednak není dosud dokončeno kritické zpracování naší květeny a jednak jsou značné rozdíly v chápání některých taxonů, které někdy mohou být považovány za subspecie, jindy jsou však hodnoceny na nižší taxonomické úrovni (obvykle varieta).

V předloženém Červeném seznamu je uvedeno celkem 1627 druhů a subspecií. Po odečtení skupiny A3 (nejasné případy vyhynulých a nezávěsných taxonů, které povětšinou nejsou zahrnuty ani ve výše uvedeném celkovém počtu domácích anebo již dávno zdomácnělých taxonů České republiky), pak je to 1547 taxonů, tedy 60 % [A1 – 2,5 % (= 69 taxonů), A2 – 2 % (= 49 taxonů), C1 – 18,5 % (= 473 taxonů), C2 – 14 % (= 352 taxonů), C3 – 13 % (= 326 taxonů), C4 – 10 % (= 278 taxonů)].

I kdybychom za skutečně ohrožené považovali jen taxony skupin C1 až C3, s vyloučením skupiny C4, u níž je stupeň ohrožení už jen nízký anebo v některých případech snad i jen předpokládaný, pak je u nás skutečně v různém stupni ohroženo nejméně 1151 druhů a subspecií (45,5 % z celkového počtu), což spolu s vyhynulými a nezávěsnými taxony zvyšuje počet na 1269 (= 50 %).

První verze Červeného seznamu (Holub et al. 1979) zahrnovala (mimo problematickou skupinu A3) celkem 1152 taxonů, kdežto tato nová verze už 1547 druhů a subspecií (z celkového počtu 2550 uvažovaných ohrožených i neohrožených taxonů České republiky to bylo v roce 1979 asi 45%, dnes 60%). Znepokojující je především skutečnost, že s výjimkou nejméně ohrožené skupiny C4 výrazně stoupl počet taxonů ve všech skupinách s vyšším stupněm ohrožení (v C1 z 267 na 473, v C2 z 240 na 352 a v C3 z 239 na 326), stejně jako se zvýšil počet vyhynulých (A1 z 37 na 69) a nezávěsných (A2 z 39 na 49) taxonů.

Zjišťujeme-li, že 4,5 % druhů a subspecií z květeny České republiky patří do skupiny taxonů vyhynulých a nezávěsných a dalších 45,5 % v různém stupni vážně ohrožených, pak je to zajisté smutná bilance důsledků nedávné i současné exploatace přírodního prostředí člověkem v našem státě, ale také vážné memento pro státní ochranu přírody a celou společnost.

References

- Batoušek P. (1998): *Epipactis distans* C. Arvet-Touvet – nový druh kruštiku pro květenu ČR. – Rocznik, Brno, 27: 29–30.
- Batoušek P. (1999): *Epipactis nordeniorum* a *E. pseudopurpurata* – dva nové druhy květeny České republiky. – Sborn. Přírod. Klubu Uherské Hradiště, 4: 6–11.
- Batoušek P. & Kreutz C. A. J. (1999): *Dactylorhiza traunsteineri* (Sauter) Soó subsp. *carpatica* – eine neue *Dactylorhiza*-Unterart aus den Weißen Karpaten (Bílé Karpaty) in der Tschechischen Republik. – Journ. Eur. Orch., Göppingen, 31: 678–702.
- Bureš L., Burešová Z. & Novák V. (1989): Vzácné a ohrožené rostliny Jeseníků. 1. díl. – ČSOP, Bruntál. 239 pp.
- Čeřovský J., Feráková V., Holub J., Maglocký Š. & Procházka F. (eds.) (1999): Červená kniha ohrožených a vzácných druhů rostlin a živočichů ČR a SR. 5. Vyšší rostliny. – Příroda, Bratislava. 456 pp.
- Čeřovský J., Holub J. & Procházka F. (1979): Červený seznam flóry ČSR. – Památ. a Přir., Praha, 1979: 361–378.
- Čeřovský J., Holub J. & Procházka F. (1980): Ohrožená květena ČSR. – Živa, Praha, 28: 42–45.
- Danihelka J., Chytrý M., Grulich V. & Tichý L. (2000): *Stipa eriocalis* – přehlížený druh české flóry. – Preslia, Praha, 72: 399–410.
- Dvořáková M. (1999a): Zwei neue zur Sektion *Polymechana* gehörende *Minuartia*-Arten (*Caryophyllaceae*). – Preslia, Praha, 70 (1998): 335–338.
- Dvořáková M. (1999b): *Euphrasia corcontica*, eine endemische Art aus dem Gebirge Krkonoše (Riesengebirge, Westsudeteten). – Preslia, Praha, 71: 33–35.
- Elsnerová M. (1995): Vzácné a ohrožené druhy květeny okresu Zlín. – Muz. jihových. Moravy, Zlín. 116 pp.
- Faltys V. (1993): Přehled vyhynulých, nezávěsných a ohrožených taxonů cévnatých rostlin na území východních Čech. – Český Ústav Ochr. Přír., Pardubice. 24 pp.
- Hejny S. & Slavík B. (eds.) (1988–1992): Květena České socialistické republiky. Vol. 1 (1988), 2 (1990), 3 (1992). – Academia, Praha. 557, 540 et 542 pp.
- Hendrych R. (2000): K nálezu *Himantoglossum hircinum* v Čechách. – Preslia, Praha, 72: 529–535.
- Holub J. (1996a): Stupnice a kriteria ohrožení užívané v Červených seznamech. – Severočes. Přir., Litoměřice, Suppl. 9: 7–14.

- Holub J. (1996b): Dodatkové kategorie Červeného seznamu vyšších rostlin České republiky (A3 a C4). Severočes. Přír., Litoměřice, Suppl. 9 (1996): 29–34.
- Holub J. (1999): Předběžný Červený seznam ostružiníků České republiky. – Zpr. Čes. Bot. Společ., Praha, 34: 1–19.
- Holub J., Feráková V., Grulich V. & Procházka F. (1999): Černé seznamy vymizelých taxonů květen České republiky a Slovenské republiky. – In: Čefovský J. et al. (eds.), Červená kniha ohrožených a vzácných druhů rostlin a živočichů ČR a SR. 5. Vyšší rostliny, p. 411–415, Příroda, Bratislava.
- Holub J. (2000): Černá listina vymizelých taxonů květeny České republiky a Slovenské republiky. – Preslia, Praha, 72: 167–186.
- Holub J. et al. (1995): Červený seznam ohrožené květeny ČR (2. verze). – Ms., 28 pp. [Depon. in: AOPK ČR Praha et Knih. Čes. bot. společ. Praha].
- Holub J. & Zázvorka J. (1999): *Orobanche teucrii* Holandre. – In: Čefovský J. et al. (1999), Červená kniha ohrožených a vzácných druhů rostlin a živočichů ČR a SR. 5. Vyšší rostliny, p. 268, Příroda, Bratislava.
- Holub J., Procházka F. & Čefovský J. (1979): Seznam vyhynulých, endemických a ohrožených taxonů vyšších rostlin květeny ČSR (1. verze). – Preslia, Praha, 51: 213–237.
- Chán V. (ed.) (1999): Komentovaný červený seznam ohrožené květeny jižní části Čech. – Příroda, Praha, 16: 1–284.
- IUCN [Species Survival Commission] (1994): IUCN Red List Categories. – IUCN, Gland. 21 pp.
- Jatiová M. & Šmiták J. (1996): Rozšíření a ochrana orchidejí na Moravě a ve Slezsku. – AOPK, Brno. 545 pp.
- Jongepierová I. & Grulich V. (1992): Ohrozenie flóry. – In: Kuča P. et al. [eds.], Biele Karpaty – Bílé Karpaty, chráněná krajinná oblast, p. 119–141, ÚŠOP, Liptovský Mikuláš.
- Kaplan Z. (2000): *Lemna turionifera* – nový druh pro květenu České republiky. – Zpr. Čes. Bot. Společ., Praha, 35 (in press).
- Kirschner J. & Štěpánek J. (1998): A monograph of *Taraxacum* sect. *Palustria*. – BÚ AV ČR Průhonice. 281 pp.
- Kovanda M. (1996a): New taxa of *Sorbus* from Bohemia (Czech Republic). – Verh. Zool.-Bot. Ges. Österr., Wien, 133: 319–345.
- Kovanda M. (1996b): Observations on *Sorbus* in Southwest Moravia (Czech Republic) and adjacent Austria I. – Verh. Zool.-Bot. Ges. Österr., Wien, 133: 347–369.
- Kovanda M. (1997a): A remarkable range extension for *Sorbus austriaca*. – Čas. Morav. Zem. Muz., Vědy Přír., Brno, 81: 193–204.
- Kovanda M. (1997b): Observation on *Primula elatior* in the High Sudeten Mts. – Thaiszia, Košice, 7: 17–28.
- Kovanda M. (1998): Jeřáby (*Sorbus*) v Národním parku Poďýjí. – Příroda, Praha, 12: 99–108.
- Kubát K. (1986): Červená kniha vyšších rostlin Severočeského kraje. – Okres. Vlastiv. Muz. Litoměřice, Praha. 141 pp.
- Kubát K. (ed.) (1996): Červené seznamy ohrožené květeny České a Slovenské republiky. – Severočes. Přír., Litoměřice, Příl. 9: 1–126.
- Mártonfi P., Michálek J., Hadinec J., Mártonfiová L. & Rcpčák M. (1999): *Hypericum dubium* – a new species of the Czech Flora. – Preslia, Praha, 71: 337–348.
- Procházka F. (1990): Chráněné a ohrožené rostliny prachatického okresu. – Okresní Muzeum, Prachatice. 70 pp.
- Procházka F. (1997): *Diphasiastrum oellgaardii* – a new species in the flora of the Czech Republic. – Preslia, Praha, 69: 169–173.
- Procházka F., Čefovský J. & Holub J. (1983): Chráněné a ohrožené druhy květeny ČSR. – Ústřední dům pionýrů a mládeže, Praha. 103 pp.
- Slavík B. (ed.) (1995–1997): Květena České republiky. Vol. 4 (1995), 5 (1997). – Academia, Praha. 529 et 568 pp.
- Suda J. (1999): Výskyt *Linaria arvensis* na Blatensku. – Zpr. Čes. Bot. Společ., Praha, 34: 73–75.
- Tomšovic P. (1979): Šumavské šídlatky dřive a dnes. – Živa, Praha, 27: 122–123.
- Weber H. E. (2000): Zur Erforschung der Gattung *Rubus* L. (*Rosaceae*) in der Tschechischen Republik. – Preslia, Praha, 72: 231–239.

Received 10 March 2000

Accepted 23 June 2000