

M. Urgamal (2018)

Species Catalogue of Rare and Threatened Vascular Plants of Mongolia



*Mongolian Academy of Sciences
Institute of General and Experimental Biology
Laboratory of the Flora and Plant Systematics*

SPECIES CATALOGUE OF RARE AND THREATENED VASCULAR PLANTS OF MONGOLIA

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In this catalogue, a total 1472 species (of these 59 subspecies) belonging to 456 genera of 96 families selected under certain criteria to rare and threatened vascular plants of Mongolia comprises it. These species contains are near threatened and vulnerable as they have been identified as being in need of conservation status attention in future.

For example, the list of catalogs includes 120 species are endemic to Mongolia, 532 species are sub-endemic, 178 species are relatives listed under the IUCN Global Red List assessed, 427 species are listed under the IUCN Regional Red List (Asia and European) and 148 species are assessed of Mongolian Red List, 134 species are included Mongolian Red Book, 128 species are very rare and 332 species are rare included in Mongolian Law on Natural Plants, 8 species are in CITES, 186 species are aquatic plants, 484 species are vulnerability to climate change, 418 species are alpine plants, 618 species are only distributed in one botanic-geographical region of Mongolia, 70 species are relict plants and 54 species being exacerbated by overuse it comprises. Currently, of these, 16 species are categorized as Critically Endangered (CR), 39 species as Endangered (EN) and 55 species as Vulnerable (VU) according to Mongolian Red List for IUCN. In each species included information such as scientific and synonyms names, global, regional and national distribution data, legal status, conservation groups and threatened statuses, IUCN habitat types and Mongolian Red Book and Red List. Here synthesizes based on information from more than 150 references and take into than more 64,500 sheets digitalized collections of Herbarium (UBA), Institute of General and Experimental Biology, MAS.

It is the first comprehensive and complete inventory of the Mongolia's threatened species to the vascular flora. The species conservation catalog are intended to highlight species of particular concern and to alert policy-makers, conservationists, government, relevant ministries and agencies, and planning authorities of actions that will help to ensure that all rare and threatened vascular plants of Mongolia maintain viable. In the future, for these rare and threatened vulnerable species, conservation action plans were also compose, defining the dominant threats and required conservation measures and evaluation in particular on Mongolian endemic, aquatic and alpine plants according to the IUCN Red List Criteria.

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МОНГОЛ ОРНЫ ГУУРСТ УРГАМЛЫН ХОВОР, ХОВОРДОЖ БУЙ ЭМЗЭГ ЗҮЙЛҮҮДИЙН ЛАВЛАХ

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Энэхүү каталогид тодорхой шалгууруудын дагуу сонгогдсон 96 овгийн 456 төрөлд хамаарах нийт 1472 зүйл (үүнээс 59 дэд зүйл) гуурст ургамал багтсан бөгөөд эдгээр нь нэн ховор, ховор, ховордож буй эмзэг зүйлүүд тул цаашид онцгой анхааралдаа аван тэдгээрийн ховордлын статусыг нэн түрүүн үнэлэх шаардлагатай гэж үзсэн.

Тухайлбал, зүйлийн жагсаалтад ДБХХ-ны Улаан дансны (IUCN Red List) аргачлалаар үнэлэгдсэн дэлхийн (Global) хэмжээнд 178 зүйл, бүс нутаг болон үндэсний хэмжээнд (Regional and National) 427 зүйл, Монгол улсын “Байгалийн ургамлын тухай хууль”-ийн хавсралтад орсон нэн ховор 128 зүйл, ховор 332 зүйл, Улаан ном (2013)-д багтсан 134 зүйл, CITES-ийн хавсралтад орсон 8 зүйл, унаган 120 зүйл, завсрын унаган 532 зүйл, усны 186 зүйл, уур амьсгалийн өөрчлөлтөд эмзэг 484 зүйл, өндөр уулын 418 зүйл, Монгол орны ургамал-газарзүйн зөвхөн ганц тойрогт тархдаг 618 зүйл, үлдвэр 70 зүйл, хэт ашиглалтын улмаас өртөгдөн хөнөөгдөж байгаа 54 зүйл тус тус хамрагдсан. Түүнчлэн одоогоор Монголын ургамлын Улаан дансанд нийт 148 зүйл үнэлгээ хийгдсэний 16 зүйл нь Устаж байгаа (CR), 39 зүйл нь Устаж болзошгүй (EN), 55 зүйл нь Эмзэг (VU) ангилалд багтаж байна. Ургамлын зүйл бүрт шинжлэх ухааны болон адилцаа нэрс, дэлхийн ба бүс нутгийн хийгээд Монгол орны тархалтын мэдээлэл, хамгааллын бүлэг, ховордлын зэрэглэл, ДБХХ-ны амьдрах орчны төрлүүд (IUCN Habitat Type), Биологийн төрөл зүйлийг хамгаалах олон улсын конвенциуд (Bern, CITES, Habitats Directive, Ramsar Convention) болон Монгол улсын холбогдох хуулиуд, Улаан ном (Red Book) ба Улаан дансны (IUCN Red List) үнэлгээ зэрэг холбогдох мэдээллүүдийг оруулав. Үүнд 150 гаруй бүтээл, эх сурвалжийн мэдээллийг шүүсний гадна ШУА-ийн Ерөнхий болон сорилын биологийн хүрээлэнгийн Ургамлын сан (Herbarium UBA) дахь гуурст ургамлын 64,500 гаруй биет цуглуулгын мэдээлэлд үндэслэсэн.

Тус лавлах нь Монгол орны гуурст ургамлын ховор, ховордож буй зүйлүүдийн анхны бүрэн хэмжээний бүртгэл бөгөөд үүнд онцгой анхаарал хандуулах зүйлүүдийг илрүүлсэнээр засгийн газар болон холбогдох яам, агентлаг зэрэг эрх бүхий байгууллагуудын бодлого боловсруулагчдад эдгээр зүйлүүдийг хууль эрхзүйн хувьд хамгаалах арга хэмжээг бий болгоход чиглэгдсэн ба цаашид хамгааллын төлөвлөгөөг боловсруулах, учрах аюул заналуудыг тодорхойлох үүднээс ДБХХ-ны Улаан Дансны (IUCN Red List Criteria) шалгуурын дагуу үнэлгээг ялангуяа унаган, үлдвэр, усны болон өндөр уулын зүйлүүдэд хийх нэн шаардлагатайг илэрхийлж буй.

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“Уур амьсгалын өөрчлөлт Монгол орны ургамлын аймагт нөлөөлөх нь” суурь судалгааны төслийн хүрээнд эрхлэн гаргав.

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SYMBOLS AND ABBREVIATIONS

AP	- Alpine Plants
APG	- Angiosperm Phylogeny Group
CI	- Annex of Convention on International Trade in Endangered Species
CR	- Critically Endangered
DD	- Data Deficient
E	- Endemic
EN	- Endangered
EW	- Extinct in the Wild
EX	- Extinct
IGEB	- Institute of General and Experimental Biology
IPNI	- International Plant Names Index
LC	- Least Concern
MAS	- Mongolian Academy of Sciences
NA	- Not Applicable
NT	- Near Threatened
OR	- Only region
R	- Rare
RB	- Red Book
RE	- Regionally Extinct
RL	- Relict
SE	- Sub-endemic
UBA	- Herbarium of the Institute of the General and Experimental Biology, Mongolian Academy of Sciences, Ulaanbaatar
Y+	- More than 5 specimens (sheets)
Y-	- Few than 5 specimens (sheets)
VR	- Very Rare
VU	- Vulnerable
WP	- Water Plants

INTRODUCTION

Mongolia is one of the largest landlocked countries in the world. It is located between the latitudes 41°35'N and 52°09'N, and longitudes 87°44'E and 119°56'E the north within the territory of the East Asia (by the UNESCO new classification).

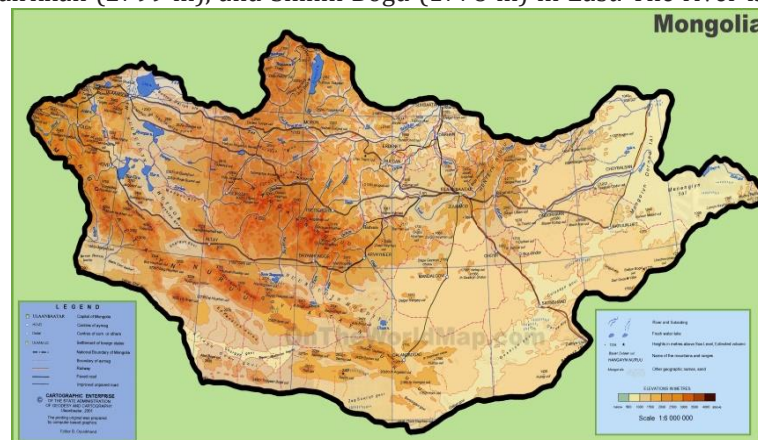


Located on the western part of the Great Lakes Depression, the Uvs nuur depression, which is registered in the World Heritage Site, is the lowest point in Dornod aimag - the Hoh Lake Depression (560 m).

Mongolia is one of the few countries, which possesses a great range of natural ecosystems within their borders. Mongolia is located at the junction of Siberian taiga and Central Asian prairie steppe and deserts, and therefore specific species of fauna and flora are included in the territory. Largely unknown to the rest of the world until recent years, Mongolia's unique combination of diverse landscapes, unspoiled habitat, and rare wild plant and animal species clear water and fresh air has started to attract international nature conservation organizations and has become the subject of growing international attention. Mongolia is divided into six basic natural zones, differing in climate, landscape, soil, flora and fauna. As the human and livestock populations increase and world climate changes, many groups of plants, including endemic and rare species are potentially in danger of extinction.

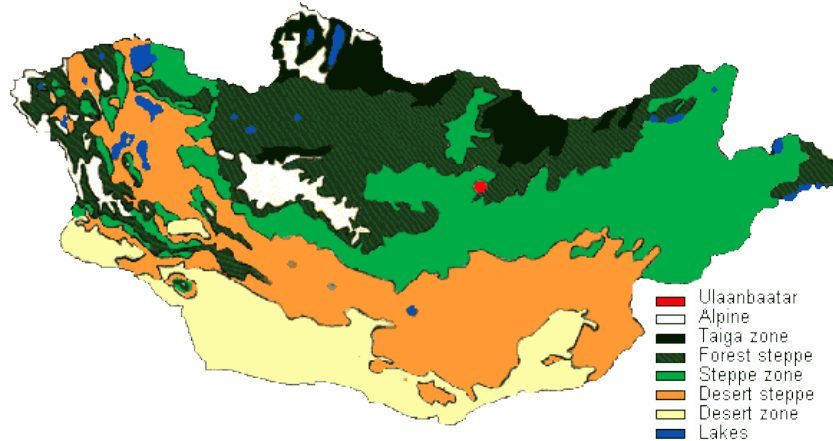
Mongolia is a landlocked country in East and Central Asia. It is bordered by Russia to the north and the People's Republic of China to the south, east and west. Although Mongolia does not share a border with Kazakhstan, its western-most point is only 38 kilometres (24 mi) from Kazakhstan's eastern tip. At 1,566,600 square kilometres (603,909 sq mi), Mongolia is the 19th largest and the most sparsely populated independent country in the world.

Mongolia is relatively elevated. Basically, the Mongolian plateau (900-1500 m above sea level) The Altai mountain range is 900 km long to the west of the country. The central parts of the country are Khangai and Khuvsgul mountainous regions (north to Sayan), and north of Khentii mountain range. The height of the east and southeast is high. The summit of the Mongol Altai mountain range is the Khuiten uul (4374 m), Khangai Otgontenger (4008 m), Soyn Munkh Saridag (3491 m) and Khentii Asralt Khairkhan (2799 m), and Shiliin Bogd (1778 m) in East. The river is relatively low by large rivers and streams. Located on the western part of the Great Lakes Depression, the Uvs



HIGH MOUNTAIN ZONE

Mongolia is a mountainous country. Though the high mountain zone, which includes the higher elevations of these ranges, makes up only about 4.48 percent (Ulziykhutag 1989) territory of Mongolia, average elevation of the country is quite high, at 5,184 feet (1,580 m.) above sea level. In the Far Western Altai, Khuiten Peak in the top parts of Tavan Bogda Mountains reaches 14,350 feet (4,374 m.), the highest point in the country. Altai, Khangai and Khentii mountain ranges and the Khuvsgul Mountains are higher than the height of forest zone. The High Mountain zone ranges from 2000 to 2900 m a.s.l. on average with several peaks extending above 2900 m a.s.l. The vegetative communities differ from the other zones, as the vegetation is adapted to grow in cold areas, both dry and wet. Forbs are uncommon, but grasses and sedges dominate and bryophytes are common. Typical species found in the High Mountain zone include *Kobresia bellardii*, *K. filifolia*, *Carex melanantha*, *Thalictrum alpinum*, *Ptilagrostis mongholica*, *Poa altaica*, *P. sibirica*, *Festuca rubra*, *Saxifraga hirculus*, and *S. sibirica*.



TAIGA (FOREST) ZONE

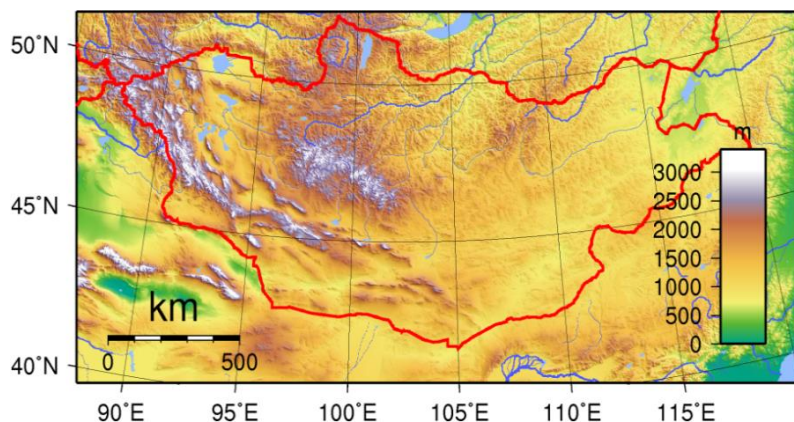
Taiga zone which covers 3.89 percent (Ulziykhutag 1989) of Mongolian territory occurs only in northern Mongolia, where it is found in the Khentii Mountains, in the mountainous terrain around Lake Khuvsgul, back part of Tarvagatai mountain range, first higher place near Orkhon river and some parts of Khan Khukhii mountain range. The taiga zone experiences more precipitation (12 to 16 inches annually) and lower temperatures than most of Mongolia, therefore plant growing period is comparatively short. Stepping considerably affects the edge of Taiga zone and steppe elements penetrated to sides and along wide trenches of shorter mountains.

FOREST STEPPE ZONE

The forest steppe zone covers about 23.28 percent (Ulziykhutag 1989) of the territory, and is one of the most heavily populated areas in Mongolia. The forest steppe zone occurs in the northern frontier of Central Asian prairie steppe and desert and southern frontier of Eastern Siberian forests Khentii, Khangai branch mountainous, the Mongolian Altai Mountains occurs in the eastern frontier, in the Orkhon and Selenge river basins, and in the Khyangan mountains. This zone is the real example of steppe and forests coexist in mountainous area and affect each other. Watershed of the world occurs in the zone and besides this, haphazard usage from the forests is dangerous for convicting the zone into mountainous steppe zone. Its pastures, wood, and water make it an important area for herders and their livestock.

STEPPE ZONE

The Steppe zone (25.86 %) is the driest of all the Mongolian ecological zones with the average annual precipitation ranging between 125–250 mm (Ulziykhutag 1989). Steppe covers nearly the entire far-eastern part of Mongolia, extending west in a narrowing band just south of the Khangai and Khan Khukhii Mountains all the way to the Depression of the Great Lakes. Mongolia's steppe lies in the eastern part of the vast plain that begins in Eastern Europe and reaches to the steppes of Manchuria. The steppe zone includes a distinctive group of flora and fauna. In the central and western areas of the country, the steppe provides many of the nation's most important grazing lands for domestic livestock. The steppe is vulnerable to impacts from overgrazing, agriculture, roads and other human activities.



DESERT STEPPE ZONE

Desert steppe occupies a large band, more than 20 percent of Mongolia's area, extending across the country between the steppe and desert zones. This zone includes (21.92% by Ulziykhutag 1989) the Depression of the Great Lakes, the Valley of the lakes, and most of the area between the Khangai and Altai mountain ranges, as well as the eastern Gobi area. The zone includes many low-lying areas, soils with salt pans, and small ponds. The climate is arid with frequent droughts and annual precipitation of 4-5 inches (100-125 mm.), and frequent strong winds and dust storms strongly influence the area vegetation. Still, many nomadic herders of Mongolia occupy this zone.

DESERT ZONE

The desert zone which covers 15.34 percent (Ulziykhutag 1989) of Mongolia. The Gobi is one of the great deserts in the world, occupying much of southern Mongolia and northeastern China and composing the northern part of Central Asian deserts. Starkly beautiful, the expanses of the fabled Gobi are rugged and inhospitable. Vegetation is sparse here, and the zone displays a remarkable variety, from rocky mountain massifs to the flat pavement-like areas of the super-arid desert, from poplar-fringed oases to vast out wash plains and areas of sand dunes. Climate is extreme. Precipitation may fall only once every two to three years and averages less than 4 inches (100 mm.) annually. Temperatures climb as high as 104° F (40° C) in summer, and fall as low as 104° F (-40° C) in winter. During the spring and fall, dangerously strong winds buffet the area with dust storms and wind-speeds up to 140 km/hour.

OVERVIEW PLANT DIVERSITY OF MONGOLIA

The first work on vascular flora and plant diversity of Mongolia was made by Russian scientist Grubov in 1982, since then the Mongolian vascular plants records have been included in Gubanov 1996, and the latter are Urgamal *et al.* in 2014, the "*Conspectus of the vascular plants of Mongolia*" was written.

The findings of current flora surveys in Mongolia can be found in the following scientific books, papers and literatures (Grubov 1955, 1982, 1989; Ulziykhutag 1989, 2003; Gubanov 1996; Ganbold 2010; Dariimaa 2014, 2015, 2017; Nyambayar 2009; Urgamal 2009; Oyuntsetseg & Urgamal 2014; Sanchir 2000; Tserenbaljid 2002, 2014; Urgamal & Oyuntsetseg 2017; Urgamal 2016, 2017a, 2017b, 2017c, Urgamal *et al.* 2013, 2014, 2016, 2017, 2018).

Most recently, in Mongolia, 33 new species of subspecies were recorded to the vascular plants of Mongolia (Urgamal 2016). Lastly, researcher V. Gundegmaa opened a new intersectional hybrid in the genus *Potentilla* from the Khangai Mountains of Northern Mongolia (Gundegmaa & Kechaykin 2018) and was renamed as Vanjiliin Gichgene (*Potentilla* × *vanzhili* V. Gundegmaa et Kechaykin, nothosp. nov.).

Today, plant diversity in Mongolia, has 7,350 native species and infraspecific taxa of plants belonging to 1,523 genera, 388 families, 116 orders 37 classes and 19 phyla (Urgamal *et al.* 2016). Of these, 3160 vascular plant species are known to exist in Mongolia, among which 49 species are Ferns, 22 species Gymnosperm and 3089 Angiosperm. Among Angiosperm, 2482 species are Dicotyledoneae and 607 species are Monocotyledoneae (Table 1).

Table 1. Statistics for the vascular plants of Mongolia (Urgamal *et al.* 2016, 2018)

Subkingdom	Division	Class	Order	Family	Genus	Species	Percent of total
1. Fern	1. Lycopodiophyta	2	2	2	4	7	0.22
	2. Pteridophyta	3	3	6	18	42	1.32
2. Gymnospermae	3. Pinophyta	1	1	2	5	13	0.41
	4. Gnetophyta	1	1	1	1	9	0.28
3. Angiospermae	5. Magnoliophyta	5	32	97	656	3089	97.77
total		*12	39	*108	684	3160	100.0

* according to APG IV (2016)

At a present, category for plant conservation of Mongolian vascular plant has 120 species of endemic plants, 523 species of sub-endemic, 133 species of very rare, 356 species of rare, 51 species of alien plants, 438 species of antropophilus plants, 186 species of aquatic (water) plants, 70 species of relict plants, 47 species of wilding crops, 135 species in Mongolian Red Book (2013), 148 species of Mongolian Red List for IUCN (2011), and 8 species of in II annex of CITES (Table 2).

Table 2. Statistics for conservation status species to the vascular flora of Mongolia

Groups of conservation status	Families	Genera	Species	Percent of total	Data sources
Endemic plants	19	49	120	3.79	Urgamal & Oyuntsetseg (2017)
Sub-endemic plants	43	174	523	16.55	in this catalog
Very rare plants	56	108	133	4.20	Law of Natural plants (1995)
Rare plants	64	211	356	11.26	Law of Natural plants (1995, 2004)
Alien (Invasive) plants	23	48	51	1.61	Urgamal (2017)
Antrophilus plants	49	212	438	13.86	Tserenbaljid (2002)
Aquatic (Water) plants	40	83	186*	5.88	*Urgamal & Dulmaa (in press)
Relict plants	23	36	70	2.21	Urgamal & Oyuntsetseg (2017)
Wilding crops	12	39	47	1.48	Urgamal <i>et al.</i> (2014)
Mongolian Red Book	49	103	135	4.27	Mongolian Red Book (2013)
in II annex of CITES	2	6	8	0.25	CITES (2008)
Mongolian Red List (IUCN)	53	116	148	4.68	Mongolian Red List for PLANTS
Extinct (EX)	-	-	-	-	(Nyambayar <i>et al.</i> 2011)
Extinct in the Wild (EW)	-	-	-	-	
Regionally Extinct (RE)	-	-	-	-	
Critically Endangered (CR)	10	14	16	0.51	
Endangered (EN)	22	35	39	1.24	
Vulnerable (VU)	27	50	55	1.74	
Near Threatened (NT)	15	21	23	0.72	
Least Concern (LC)	10	10	10	0.31	
Data Deficient (DD)	3	4	4	0.12	
Not Applicable (NA)	1	1	1	0.03	

MONGOLIAN RED LIST FOR PLANTS

Of the 148 assessed plant species of Mongolia, 74% were categorised as regionally threatened excluding Near Threatened. A further 11% were categorised as Critically Endangered (CR), 26% as Endangered (EN), 37% as Vulnerable (VU). Just 1% were categorised as Not Applicable (NA) as they did not meet the requirements for regional assessment. 3% of assessed species are categorized as Data Deficient (DD). A total of 110 species of plants are regionally threatened (Critically Endangered, Endangered or Vulnerable) in Mongolia. Of these, 16 species are categorized as Critically Endangered, 39 species as Endangered and 55 species as Vulnerable (Nyambayar *et al.* 2011).

Table 3. Critically Endangered (CR) taxa listed on the Mongolian Red List for IUCN (Nyambayar *et al.* 2011)

Scientific name	Scientific name	Scientific name	Scientific name
<i>Allium macrostemon</i>	<i>Calypso bulbosa</i>	<i>Mitella nuda</i>	<i>Platanthera bifolia</i>
<i>Allium obliquum</i>	<i>Dactylorhiza fuchsii</i>	<i>Neottia camtschatea</i>	<i>Rheum uninerve</i>
<i>Androsace longifolia</i>	<i>Elaeagnus moorcroftii</i>	<i>Neottianthe cucullata</i>	<i>Saussurea dorogostaiskii</i>
<i>Brachanthemum mongolorum</i>	<i>Lancea tibetica</i>	<i>Oxycoccus microcarpus</i>	<i>Viburnum mongolicum</i>
total: 16 species			

Table 4. Endangered (EN) taxa listed on the Mongolian Red List for IUCN (Nyambayar *et al.* 2011)

Scientific name	Scientific name	Scientific name	Scientific name
<i>Abies sibirica</i>	<i>Convallaria keiskei</i>	<i>Hyalea pulchella</i>	<i>Oxytropis mongolica</i>
<i>Aconitum kuznezoffii</i>	<i>Dictamnus albus</i>	<i>Incarvillea potaninii</i>	<i>Paeonia lactiflora</i>
<i>Adonis mongolica</i>	<i>Diphasiastrum alpinum</i>	<i>Juniperus pseudosabina</i>	<i>Pinus pumila</i>
<i>Ammopiptanthus mongolicus</i>	<i>Diphasiastrum complanatum</i>	<i>Juniperus sabina</i>	<i>Saussurea involucrata</i>
<i>Amygdalus mongolica</i>	<i>Drosera anglica</i>	<i>Lycopodium clavatum</i>	<i>Saxifraga hirculus</i>
<i>Arnica angustifolia</i> subsp. <i>iljinii</i>	<i>Drosera rotundifolia</i>	<i>Nuphar pumila</i>	<i>Sophora flavescens</i>
<i>Caragana tibetica</i>	<i>Dryopteris dilatata</i>	<i>Nymphaea candida</i>	<i>Spongiocarpella grubovii</i>
<i>Cardamine parviflora</i>	<i>Ferula feruloides</i>	<i>Nymphaea tetragona</i>	<i>Tanacetum sinuatum</i>
<i>Cistanche deserticola</i>	<i>Gentiana algida</i>	<i>Olgaea lomonosowii</i>	<i>Zygophyllum potaninii</i>
<i>Codonopsis clematidea</i>	<i>Glycyrrhiza squamulosa</i>	<i>Orchis militaris</i>	
total: 39 species			

Table 5. Vulnerable (VU) taxa listed on the Mongolian Red List for IUCN (Nyambayar *et al.* 2011)

Scientific name	Scientific name	Scientific name	Scientific name
<i>Acorus calamus</i>	<i>Cypripedium calceolus</i>	<i>Maianthemum dilatatum</i>	<i>Sambucus williamsii</i>
<i>Allium altaicum</i>	<i>Cypripedium macranthon</i>	<i>Oxytropis fragilifolia</i>	<i>Sanguisorba alpina</i>
<i>Anabasis aphylla</i>	<i>Ephedra equisetina</i>	<i>Paeonia anomala</i>	<i>Solidago dahurica</i>
<i>Anabasis eriopoda</i>	<i>Epipogium aphyllum</i>	<i>Paris verticillata</i>	<i>Sorbaria sorbifolia</i>
<i>Artemisia lithophila</i>	<i>Festuca komarovii</i>	<i>Pedicularis altaica</i>	<i>Swertia banzragczii</i>
<i>Artemisia tomentella</i>	<i>Gagea hiensis</i>	<i>Peganum harmala</i>	<i>Tofieldia coccinea</i>
<i>Astragalus dshinensis</i>	<i>Gueldenstaedtia monophylla</i>	<i>Polygonatum humile</i>	<i>Tugarinovia mongolica</i>
<i>Caragana brachypoda</i>	<i>Gymnocarpos przewalskii</i>	<i>Populus euphratica</i>	<i>Tulipa uniflora</i>
<i>Caragana gobica</i>	<i>Halimodendron halodendron</i>	<i>Rhamnus parvifolia</i>	<i>Vaccinium myrtillus</i>
<i>Carex parva</i>	<i>Hedysarum sangilense</i>	<i>Rhaponticum carthamoides</i>	<i>Valeriana saichanensis</i>
<i>Caryopteris mongolica</i>	<i>Iljinia regelii</i>	<i>Rhodiola rosea</i>	<i>Viburnum sargentii</i>
<i>Clematis glauca</i>	<i>Jurinea mongolica</i>	<i>Rhododendron adamsii</i>	<i>Vicia tsydenii</i>
<i>Comastoma pulmonaria</i>	<i>Kobresia robusta</i>	<i>Rhododendron aureum</i>	<i>Viola brachyceras</i>
<i>Corallorhiza trifida</i>	<i>Krylovia eremophila</i>	<i>Rosa kokanica</i>	
			total: 55 species

Table 6. Near Threatened (NT) taxa listed on the Mongolian Red List for IUCN (Nyambayar *et al.* 2011)

Scientific name	Scientific name	Scientific name	Scientific name
<i>Adonis sibirica</i>	<i>Gentiana macrophylla</i>	<i>Olgaea leucophylla</i>	<i>Rhododendron ledebourii</i>
<i>Artemisia xanthochroa</i>	<i>Hylotelephium pallescens</i>	<i>Oxytropis acanthacea</i>	<i>Rosa laxa</i>
<i>Brachanthemum gobicum</i>	<i>Larix dahurica</i>	<i>Phlomis oreophila</i>	<i>Typha minima</i>
<i>Carex selengensis</i>	<i>Lilium dahuricum</i>	<i>Potaninia mongolica</i>	<i>Zizania latifolia</i>
<i>Chesneya mongolica</i>	<i>Lilium martagon</i>	<i>Rhamnus ussuriensis</i>	
<i>Ephedra fedtschenkoae</i>	<i>Melica nutans</i>	<i>Rhododendron dauricum</i>	
			total: 22 species

Table 7. Least Concern (LC) taxa listed on the Mongolian Red List for IUCN (Nyambayar *et al.* 2011)

Scientific name	Scientific name	Scientific name	Scientific name
<i>Anticlea sibirica</i>	<i>Hedysarum fruticosum</i>	<i>Rhododendron lapponicum</i>	<i>Vincetoxicum sibiricum</i>
<i>Arnebia guttata</i>	<i>Limonium aureum</i>	<i>Sagittaria natans</i>	
<i>Asterothamnus centrali-asiaticus</i>	<i>Pedicularis abrotanifolia</i>	<i>Scheuchzeria palustris</i>	
total: 10 species			

Table 8. Data Deficient (DD) taxa listed on the Mongolian Red List for IUCN (Nyambayar *et al.* 2011)

Scientific name	Scientific name	Scientific name	Scientific name
<i>Anemarrhena asphodeloides</i>	<i>Aquilegia ganboldii</i>	<i>Physochlaina albiflora</i>	<i>Trollius sajanense</i>
total: 4 species			

Table 9. Not Applicable (NA) taxa listed on the Mongolian Red List for IUCN (Nyambayar *et al.* 2011)

Scientific name	Scientific name	Scientific name	Scientific name
<i>Botrychium lanceolatum</i>	<i>Helichrysum arenarium</i>		
total: 2 species			

Table 10. The number and proportion of vascular plant taxa in each Red List category is summarised in Mongolia (Nyambayar *et al.* 2011)

Category	No. of taxa	% of total
Critically Endangered (CR)	16	10.81
Endangered (EN)	39	26.35
Vulnerable (VU)	55	37.16
Near Threatened (NT)	22	7.43
Least Concern (LC)	10	6.75
Data Deficient (DD)	4	2.70
Not Applicable (NA)	2	1.35
total	148	100

CONCLUSION OF THE CATALOGUE

The catalog covers the following major research works and research articles on the findings of rare and endangered plants in Mongolia (Gal 1975; Grubov 1982, 1984; 1989; Ulziykhutag 1989, 2003, 2004; Dariimaa 2014, 2015, 2017; Ganbold 2000; Ligaa *et al.* 2008, 2009; Magsar 1995; Mongolian Red Book 2013; Munkhjargal *et al.* 2014; Nyambayar *et al.* 2011; Badamkhand 2014; Jamiyandorj *et al.* 2011; Urgamal 2009, 2016; 2017a, 2017b, 2017c; Urgamal *et al.* 2014, 2016, 2017; Urgamal & Oyuntsetseg 2017; Dulmaa & Urgamal 2017; Sanjid 2014; Shiirevdamba *et al.* 2013; Urgamal & Sanjid 2017; Gundegmaa & Munkh-Erdene 2018, Urgamal *et al.* 2018).

In the catalog, we have selected a total of 1,472 species (46% of total species) of rare and threatened species from the all vascular flora of Mongolia at the end of many criterias. These species are near threatened and vulnerable as they have been identified as being in need of conservation status attention. Although the selected plant groups are different in their scope, there are similarities in the threats that they are facing. Around the research in this catalog, 120 species are endemic to Mongolia, 532 species are sub-endemic, 148 species are included Mongolian Red List, 134 species are included Mongolian Red Book, 128 species are very rare and 332 species are rare included in Mongolian Law on Natural Plants, 8 species are in CITES, 186 species are aquatic plants, 484 species are vulnerability to climate change, 418 species are alpine plants and 618 species are distributed in only one local regions of Mongolia, 70 species are relict plants and 54 species are many useful plants it comprises. Moreover, some of the all species selected belong to more than one group: 178 species are relatives listed under the IUCN Global Red List assessed, 427 species are listed under the IUCN Regional Red List (Asia and European) and 148 species are assessed of Mongolian Red List (Table 11).

Table 11. The number of Mongolian vascular plant taxa assessed in IUCN Red List category is summarised in this catalog

IUCN Red List / categories	Total	EX	EW	RE	CR	EN	VU	NT	LC	DD	NA	NE
Global (IUCN 2017)	178	-	-	-	-	1	-	1	169	7	-	1294
Regional and National	427	12	-	-	50	74	124	66	79	11	11	1045
Asian countries	238	5	-	-	28	46	94	43	32	9	5	1234
European (2011, 2014)	189	7	-	-	32	28	30	23	47	2	6	1283
Mongolian (Nyambayar <i>et al.</i> 2011)	148	-	-	-	16	39	55	22	10	4	2	1324
total (double count)	753	12	0	0	66	114	179	89	258	22	13	719

Composition of the conservation groups of the vascular species of Mongolia has been increasing constantly over last 30 years and biggest number of 326 species of sub-endemic species, 119 species were new added registered to the Red Book of Mongolia, 39 species of aquatic plants, 10 species of endemics were new added and the number of very rare and rare species did not increase as this data has not been revised since the “Law on Natural Plants” was approved in 1995.

In this catalogue of rare and threatened species covers about 46.8% of Mongolia's total flora, we are at the starting point of understanding the threat status of Mongolian plants. With potentially at least 1,000 about species to be assessment, careful planning is needed to prioritise further groups of plants.

More than 30 percent of the total species is in only Central Asia's Gobi, South-Siberian forest taiga, Altai-Sayan high mountain ranges and spread in Mongol-Daguur-Manchurian steppes. The 8.2% are endemic to Mongolia. As well as habitat types, 26.9% of the total species are forest-taiga, forest-steppe, 31.7% are Gobi desert and 19.6% are high mountain and rocks, and 21.8% are wetlands.

The conservation this catalog are intended to highlight species of particular concern and to alert policy-makers, conservationists, and government and planning authorities of actions that will help to ensure that all rare and threatened vascular plants of Mongolia maintain viable species into the future. For these rare and threatened plants species, conservation action plans were also composed, defining the dominant threats and required conservation measures and evaluation in particular on Mongolian endemic, aquatic and alpine plant species according to Red Listing guidelines for IUCN in the future.

RECOMMENDATIONS

This publictaion is the first step towards a Mongolian Rare and Threatened Vascular Plants, providing information on the conservation status of 1,472 selected rare and threatened plant species. In order to improve the conservation status of Mongolian vascular plants and to halt the loss of diversity, a number of conservation measures are urgently needed. In particular:

- Integrate Mongolian vascular plant conservation actions, update and requirements into policy and legislation of Natural Plants.
- Use regional and national legislation, to improve the conservation status of threatened species.
- Improve policy measures to reduce the impact of habitat degradation, fragmentation and isolation, in particular related to future urban and tourism development, and to conserve rare and threatened plant life habitats in Mongolia.
- Improve the integration of natural plant diversity and plant conservation activities to ensure better knowledge and implementation. Expand the knowledge base on Mongolian rare and threatened vascular plant diversity.
- Conduct further research on rare and threatened Mongolian plant species and ensure the adequate management of their habitats to underpin conservation programmes and identify gaps in conservation actions and prioritise fieldwork and data collection for Data Deficient species to determine whether they are in need of conservation attention.
- Reassess rare and endangered plant species regularly and when new information becomes available according to IUCN Red List.
- Also endemic, aquatic plants, wetland and alpine species and to add and evaluate the these species as IUCN Regional and National Red List in this study.
- Establish a co-ordinated system of rare and threatened plant recording and monitoring in Mongolian country to improve future priority assessments and assess the impact of conservation measures and future environmental change.
- Undertake systematic gap analysis of all threatened and priority species to ensure adequate in situ and ex situ conservation of plant diversity and research on the to identify of plant species vulnerability to climate change.

■ It is very important to identify the threats of very rare, rare and threatened species to the vascular flora in Mongolia by international methodology and to make conservation status assessment surveys within professional organizations and researchers in national, local and national protected areas.

TECHNICAL NOTES

Species selection

The species selected in this catalog includes the articles contained in the following Mongolian laws, plant conservation status groups and international conventions, policy instruments, of which there are following major concern plant species:

- *The Global, Regional and National IUCN Red List of Threatened Species (Asian countries and European 2011, 2014)*
- *The Council Directive 92/43/EEC on the conservation of natural habitats and of wild fauna and flora (Habitats Directive)*
- *The Convention on the Conservation of European Wildlife and Natural Habitats (Bern Convention 1979)*
- *The Convention on International Trade in Endangered Species of Wild Fauna and Flora (Annex of CITES 2008)*
- *The Ramsar Convention on Wetlands (1975)*
- *The NatureServe Conservation Status (Global, National, Sub-National (G, N, S) ranks)*
- *The Endemic and Sub-Endemic species to Mongolia (by Urgamal & Oyuntsetseg 2017)*
- *The Very Rare and Rare species to Mongolia (by Mongolian Law on Natural Plants 1995; 2004)*
- *The Aquatic (Water) and Alpine Plant species (Dulmaa & Urgamal 2017; Gundegmaa & Munkh-Erdene 2018)*
- *The Species included in Mongolian Red Book (2013) and Mongolian Red List (2011)*
- *The Species are distributed in only one botanic-geographical region of Mongolia (Urgamal & Sanjid 2017)*
- *The Rare plant species to overused*
- *The Species of vulnerability to climate change (NatureServe Climate Change Vulnerability Index)*
- *The Relict species (Urgamal & Oyuntsetseg 2017)*

Database and Sources

The main data are based on the Herbarium (UBA) of Institute of General and Experimental Biology (IGEB) of Mongolian Academy of Sciences (MAS) includes a total of 126,000 specimens (3,900 sheets of mushrooms, 4,600 sheets of algae, 13,500 sheets of lichens, 21,300 sheets of bryophytes, and 82,600 sheets of vascular plants), were checked for new findings and the material was partly critically revised. This is a revision of the quantitative changes of Mongolia, which was based on mainly publications for Grubov (1982), Ulziykhutag (1989), Gubanov (1996), Urgamal *et al.* (2014, 2017) and “*Flora of Mongolia*, 1, 10, 17, 14a, 14b volumes (2015, 2009, 2009, 2014, 2017)”, also we present an updated list of the endemic taxa of vascular plants of Mongolia (Urgamal & Oyuntsetseg 2017). Electronic data from the Database of the Mongolian Flora (<http://www.eic.mn/flora/>) were frequently accessed during this.

Nomenclature and Taxonomy

Nomenclature and systematic placement of the vascular plant species are based on *Angiosperm Phylogeny Group* (APG IV, 2016), *Angiosperm Phylogeny Website* (APWeb version 13), *International Plant Name Index* (IPNI), *W3 Tropicos*, *World Checklist Selected Plants* (WCSP) and Stevens (2001 onwards) on the *Angiosperm Phylogeny Website*. (<http://www.mobot.org/APweb/>). Version 14, July 2017.

Species names in the *Species Catalogue of Rare and Threatened Vascular Plants of Mongolia* followed the International Plant Names Index (<http://www.ipni.org/index.html>), used by the global IUCN Red List. The International Plant Names Index (IPNI) is a database of the names and associated basic bibliographical details of seed plants, ferns and lycophytes. The data are freely available and are gradually being standardized and checked. The author citations for all plant taxa follow Brummitt and Powell (1992) and as updated on the IPNI web site.

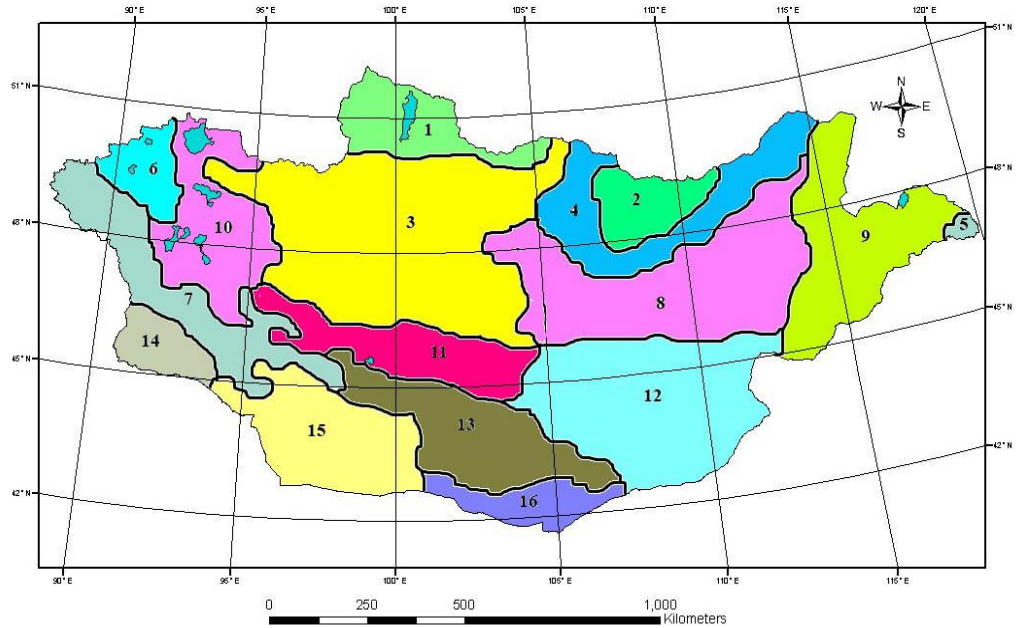
Regional and World distribution

The regional distribution of the species is within the 16 botanic-geographical regions of Mongolia (by Grubov 1982).

World Geographical Scheme for Recording Plant Distributions (WGSRPD)

The *World Geographical Scheme for Recording Plant Distributions* (WGSRPD) is a biogeographical system developed by the international Biodiversity Information Standards (TDWG) organization, formerly the *International Working Group on Taxonomic Databases* (Brummitt 2001. *World Geographical Scheme for Recording Plant Distributions*).

The WGSRPD standards, like other standards for data fields in botanical databases, were developed to promote "the wider and more effective dissemination of information about the world's heritage of biological organisms for the benefit of the world at large". The system provides clear definitions and codes for

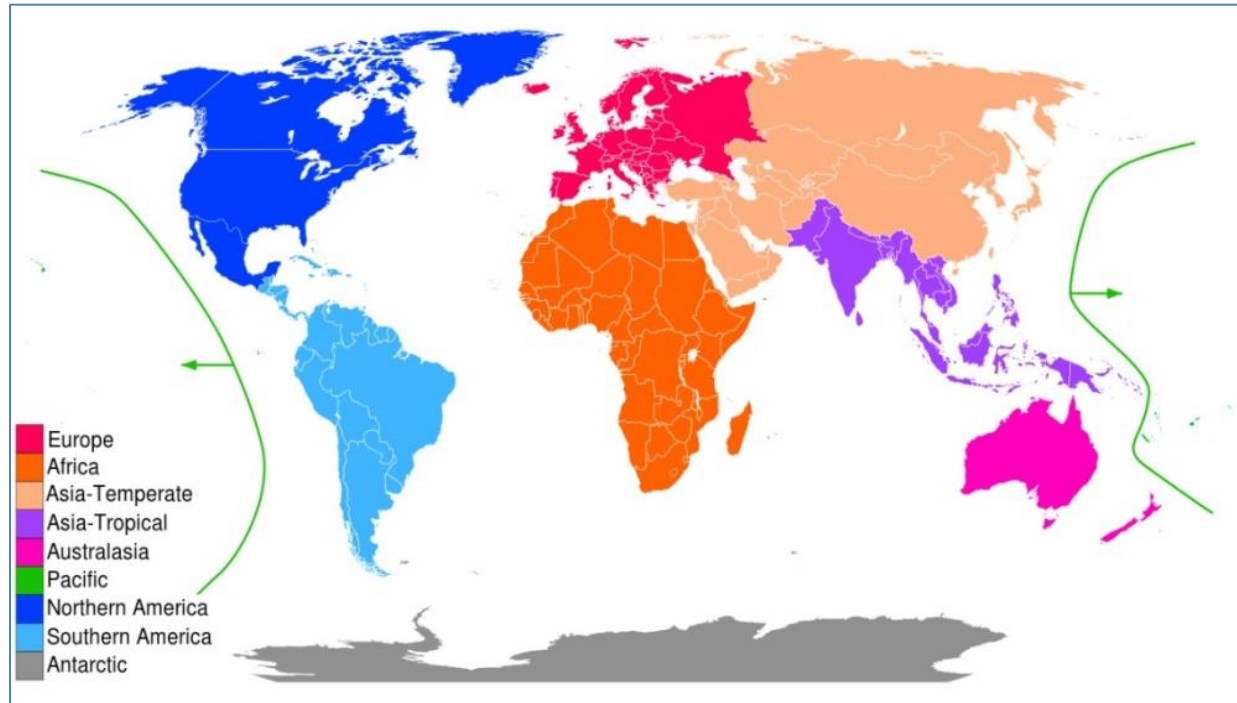


1. Khubsugul
2. Khentei
3. Khangai
4. Mongol Daurian
5. Great Khingan
6. Khobdo
7. Mongolian Altai
8. Middle Khalkha
9. East Mongolia
10. Depression of Great Lake
11. Valley of Lake
12. East Gobi
13. Gobi Altai
14. Dzungarian Gobi
15. Transaltai Gobi
16. Alashan Gobi

recording plant distributions at four scales or levels, from "botanical continents" down to parts of large countries. Current users of the system include the *International Union for Conservation of Nature* (IUCN), the *Germplasm Resources Information Network* (GRIN), and the *World Checklist of Selected Plant Families* (WCSP).

The Continental Scheme

1. EUROPE
2. AFRICA
3. ASIA-TEMPERATE
4. ASIA-TROPICAL
5. AUSTRALIA
6. PACIFIC
7. NORTHERN AMERICA
8. SOUTHERN AMERICA
9. ANTARCTIC



FORMAT OF SPECIES ACCOUNTS

Scientific Name:

We have adopted the nomenclature of the International Plant Names Index and Angiosperm Phylogeny Website, with some considerations. The scientific names of species are ordered according to “*Conspectus of the Vascular Plants of Mongolia* (Urgamal *et al.* 2014)” directly applied from the this book. All species are in alphabetical order.

Subspecies in Mongolia:

If there are two or more subspecies for the species, the subspecies occurring in Mongolia is given.

Synonyms:

Given if there is/are synonym(s) still in regular usage for the species.

Global Red List: (global risk of extinction)

The IUCN globally assessment for each species given in the data of “*IUCN 2017. Red List of Threatened Species. Version 2017-3.* <<http://www.iucnredlist.org>>.

Regional and National Red List: (regional and national risk of extinction)

We have adopted the European regional assessment for “*Bilz et al. 2011. European Red List of Vascular Plants.* Luxembourg: Publications” and National Red List database is a collection of national of Asian countries, sub-national and regional Red Lists from around the world. <<http://www.nationalredlist.org>>.

Category abbreviations: *EX* = Extinct, *EW* = Extinct World, *RE* = Regionally Extinct, *CR* = Critically Endangered, *EN* = Endangered, *VU* = Vulnerable, *NT* = Near Threatened, *LC* = Least Concern.

Mongolian Red List: (risk of extinction within Mongolia)

Red List status of taxa in Mongolia as given in the “*Mongolian Red List and Conservation Action Plans of PLANTS* (Nyambayar *et al.* 2011)”.

World Distribution:

Listed in alphabetical order based largely on Germplasm Resources Information Network (USDA, ARS, National Genetic Resources Program) and Flora of China and Siberia data and additional references given in relevant species accounts.

World Distribution Type:

We have used by *World Geographical Scheme for Recording Plant Distributions* (Brummitt 2001. WGSRPD) and most practical approach for the application of IUCN criteria.

Mongolian Distribution:

We have used the number format by botanic-geographical 16 regions in Mongolia (Grubov 1982) and also based on information from the Gubanov (1996) Urgamal *et al.* (2014) conspectus books and scientific literatures.

Habitat: The habitat of each species is detailed. This data contains based on following websites:

Biodiversity of Altai-Sayan ecoregion. <<http://www.bioaltai-sayan.ru/regnum/eng/index.htm>>

Electronic catalogue of the vascular plants of Asian Russia. Flora of Siberia. <<http://www-sbras.nsc.ru/>>

FloraGREIF. Virtual Flora of Mongolia. <<http://greif.unigreifswald.de/floragreif/>>

Flora of China. <http://www.efloras.org/flora_page.aspx?flora_id=2>

Национальный банк-депозитарий живых систем. <<https://plant.depo.msu.ru/#>>

Открытый атлас растений и лишайников России и сопредельных стран. <<http://www.plantarium.ru/>>

Habitat Type:

We have used the main habitats included in the Red List database, written in the shortened number format (*IUCN Habitats Classification Scheme. Version 3.1*).

Elevation:

We have used by followed publications (*Flora of China; Atlas of the Endemic Vascular Plants of Mongolia 2017; Endemic plants of the Altai mountain country 2008*).

Conservation group and notes:

The category for conservation status of taxa in Mongolia as given.

Status abbreviations: *E* = Endemic, *SE* = Sub-endemic, *R* = Rare, *VR* = Very Rare, *CI* = CITES, *RB* = Red Book, *RL* = Relict, *WP* = Water Plants, *OR* = Distributed in only One Region, *SCC* = Species of Vulnerability to Climate Change.

Specimens number (specimens status in Herbarium UBA):

- | | |
|----|-------------------------|
| No | - specimens absent |
| Y+ | - more than 5 specimens |
| Y- | - few than 5 specimens |

SPECIES CATALOGUE OF RARE AND THREATENED VASCULAR PLANTS OF MONGOLIA

No.	Scientific name of taxon	Conservation groups & notes	Mongolian distribution (by regions number)	World distribution (by WGSRPD)	Habitat types (by IUCN Habitats Classification)	Elevation (m)	IUCN Global Red List	IUCN Regional & National Red List (Asian & EU countries)	Mongolian Red List	Vulnerability to climate change	In Herbarium (UBA)
1	<i>Abies sibirica</i>	VR, RB, RL, AP	1,2	E Europe, China, Kyrgyzstan, Russia	Forest (1.1)	1900-2400	LC	VU (Estonia)	EN	✓	Y+
2	<i>Acanthophyllum pungens</i>	R	6,7,14	China, Kazakhstan	Rocky areas	<1300	NE	NE	NE		Y-
3	<i>Achillea acuminata</i>	R	2,4,5,9	China, Japan, Korea, Russia	Forest (1.4)	<2900	NE	NE	NE		No
4	<i>Achillea asiatica</i>	R	1-10,14	Europe, China, Kazakhstan, Russia	Forest (1.4)	<2600	NE	NE	NE		Y+
5	<i>Achillea ledebourii</i>	R, AP	3,7,8	China, Kazakhstan, Russia	Grassland (4.4), Wetlands (5.11)	2200-2500	NE	NE	NE	✓	No
6	<i>Achillea sergievskiana</i>	SE, AP, OR	7	Kazakhstan	Wetlands (5.11)	1800<	NE	NE	NE	✓	No
7	<i>Aconitum anthoroideum</i>	R, AP	3,7	China, Russia	Forest (1.4), Wetlands (5.11)	1400-2000	NE	NE	NE		Y-
8	<i>Aconitum biflorum</i>	SE, AP	3,7	Russia	Wetlands (5.11)	2000<	NE	NE	NE		Y-
9	<i>Aconitum birobidshanicum</i>	OR	9	China, Russia	Shrubland (3.4), Grassland (4.4)		NE	NE	NE		No

10	<i>Aconitum coreanum</i> (= <i>A. komarovii</i>)	R, RB, OR	5	China, Korea, Russia	Forest (1.4), Wetlands (5.4)	<900	LC	VU (R. Korea)	NE	✓	No
11	<i>Aconitum decipiens</i>	SE, AP	3,7	Russia	Wetlands (5.11)	2000<	NE	NE	NE		No
12	<i>Aconitum gubanovii</i>	E, AP	7,14	Endemic	Wetlands (5.11)	1800-2500	NE	NE	NE		No
13	<i>Aconitum kamelinii</i>	E, AP	3,13	Endemic	Rocky areas	1800-2800	NE	NE	NE		No
14	<i>Aconitum khanminthunii</i>	SE	6,7	Russia	Wetlands (5.2)		NE	NE	NE		No
15	<i>Aconitum kusnezoffii</i>	VR, RB, OU	5,9	China, Japan, Korea, Russia	Forest (1.4), Grassland (4.4), Wetlands (5.4)	1000-2400	NE	EN (Mongolia)	EN		Y-
16	<i>Aconitum macrorhynchum</i>	OR	4	China, Korea, Russia	Shrubland (3.4), Grassland (4.4)	<900	NE	NE	NE		No
17	<i>Aconitum nemorum</i>	AP, OR	7	China, M Asia	Shrubland (3.4), Wetlands (5.11)	2600-3000	NE	NE	NE		No
18	<i>Aconitum paskoi</i>	SE, R, AP	2,3	Russia	Wetlands (5.11)	2000<	NE	NE	NE		No
19	<i>Aconitum ranunculoides</i>	OR	4	China, Russia	Shrubland (3.4), Grassland (4.4)	1000-1500	NE	NE	NE		No
20	<i>Aconitum rubicundum</i>	AP, OR	1	Russia	Forest (1.4), Wetlands	1800<	NE	NE	NE		No

					(5.1; 5.4; 5.11)						
21	<i>Aconitum smirnovii</i>	R, OR	14		China, Russia	Grassland (4.4)	<1800	NE	NE	NE	Y-
22	<i>Aconitum turczaninowii</i>	R	2-5,9		Russia	Forest (1.4), Wetlands (5.4)		NE	NE	NE	Y-
23	<i>Acorus calamus</i>	VR, RB, WP, OU	1,3-5,8,9		Europe, Asia-Temperate, Asia-Tropical, N America	Wetlands (5.1; 5.4; 5.7)	<2800	LC	LC (R. Korea)	VU	✓ Y+
24	<i>Actaea dahurica</i> (= <i>Cimicifuga dahurica</i>)	R	2,5,9		Russia	Forest (1.4), Wetlands (5.4)		NE	NE	NE	Y-
25	<i>Actaea simplex</i> (= <i>Cimicifuga simplex</i>)	OR	5		China, Japan, Korea, Russia, Taiwan	Forest (1.4), Shrubland (3.4), Wetlands (5.4)	<3200	NE	NE	NE	Y-
26	<i>Adenophora changaica</i>	E, R, RB, AP, OR	3		Endemic	Forest (1.4)	1600-2200	NE	NE	NE	✓ No
27	<i>Adonis apennina</i> (= <i>A. sibirica</i>)	R	1-4,6,8		Europe, China, Russia	Forest (1.4), Grassland (4.4)	<1900	NE	NE	NT	Y+
28	<i>Adonis mongolica</i>	E, VR, RB, RL, OU	1-4,8		Endemic	Grassland (4.4)	1300-1800	NE	EN (Mongolia)	EN	✓ Y+
29	<i>Aeluropus littoralis</i> (= <i>Ae. micrantherus</i>)	SE	10,14,15		Europe, Kazakhstan, Russia	Wetlands (5.16; 5.17), Desert (8.2)		NE	NE	NE	Y+
30	<i>Agriophyllum squarrosum</i> (= <i>A. pungens</i>)	R	6-16		SE Europe, China, Kazakhstan, Russia	Desert (8.2), Coastline (10.2)		NE	NE	NE	Y+

31	<i>Agrostemma githago</i>	R, OR	4	Europe, Asia-Temperate, N America	Forest (1.4), Wetlands (5.1; 5.4)		NE	NE	NE	No
32	<i>Ajania achilleoides</i>	SE	3,6-8,10-13,15,16	China	Desert (8.2)	900-1300	NE	NE	NE	Y+
33	<i>Ajania grubovii</i>	E	7,14	Endemic	Rocky areas	1100-1300	NE	NE	NE	No
34	<i>Alchemilla changaica</i>	E, R, RB, AP, OR	3	Endemic	Forest (1.4)	1500-2000	NE	NE	NE	√ No
35	<i>Alchemilla circularis</i>	SE, AP, OR	7	Russia	Wetlands (5.11)	2000<	NE	NE	NE	√ No
36	<i>Alchemilla cyrtopleura</i>	R, AP	3,7	Kazakhstan, Russia	Wetlands (5.11)	1800<	NE	NE	NE	No
37	<i>Alchemilla gubanovii</i>	E, AP	2,3	Endemic	Forest (1.4)	1600-2000	NE	NE	NE	No
38	<i>Alchemilla hebescens</i>	R, AP	2,3	Russia	Forest (1.4), Wetlands (5.11)	1800<	NE	NE	NE	Y-
39	<i>Alchemilla krylovii</i>	SE, R, AP, OR	7	Kazakhstan, Russia	Forest (1.4), Wetlands (5.4; 5.11)	1800<	NE	NE	NE	√ No
40	<i>Alchemilla murbeckiana</i>	AP, OR	7	Europe, Caucasus, M Asia, Russia, N America	Forest (1.2; 1.4), Wetlands (5.1; 5.4; 5.11)	<2000	NE	NT (Estonia)	NE	No
41	<i>Alchemilla pavlovii</i>	E, R, RB, AP	2,3	Endemic	Forest (1.4)	1500-2200	NE	NE	NE	Y-
42	<i>Alisma gramineum</i>	WP	5,7,8,10,11,14	Europe, Africa, Asia-Temperate, Asia-Tropical, N America	Wetlands (5.1; 5.7; 5.16)		DD	NE	NE	√ Y-

43	<i>Alisma plantago-aquatica</i>	WP	1-5,8-10,14	Cosmopolitan	Wetlands (5.1; 5.4; 5.7; 5.11; 5.14)		LC	NE	NE	✓	Y-
44	<i>Allium altaicum</i>	SE, R, RL, AP, OU	1-3,6-8, 10,13,14	China, Kazakhstan, Russia	Rocky areas	1800<	NT	VU (Mongolia)	VU	✓	Y+
45	<i>Allium anisopodium</i>	R	2-13	China, Japan, Kazakhstan, Korea, Russia	Grassland (4.4), Rocky areas	<2200	NE	NE	NE		Y+
46	<i>Allium carolinianum</i>	AP, OR	14	China, M and SW Asia	Rocky areas	3000<	NE	NE	NE		No
47	<i>Allium condensatum</i>	R	5,9	China, Japan, Korea, Russia	Grassland (4.4), Wetlands (5.4)	<2000	NE	NE	NE		Y+
48	<i>Allium eduardii</i>	SE	2-4,6-16	China, Kazakhstan, Russia	Grassland (4.4), Rocky areas, Desert (8.2)		NE	NE	NE		Y-
49	<i>Allium galanthum</i>	R	7,14	China, Kazakhstan, Kyrgyzstan, Russia	Rocky areas, Desert (8.2)	800-1500	DD	NE	NE		Y-
50	<i>Allium ledebourianum</i>	SE, AP, OR	7	China, Kazakhstan, Russia	Grassland (4.4), Wetlands (5.1)	1800<	LC	NE	NE		Y-
51	<i>Allium lineare</i>	R	1-4,6-8, 10,13,14	SE Europe, China, Kazakhstan, Russia	Grassland (4.4; 4.5), Wetlands (5.1; 5.4)		NE	NE	NE		Y+
52	<i>Allium macrostemon</i>	VR	8,9	China, Japan, Korea, Russia	Grassland (4.4)	<1600	NE	NE	CR		Y-
53	<i>Allium maximowiczii</i>	R	2,4,5,9	China, Japan, N Korea, Russia	Grassland (4.4),	<1300	DD	NE	NE		Y-

					Wetlands (5.1; 5.4)					
54	<i>Allium monadelphum</i>	SE, AP	1-3,6,7	China, Russia	Grassland (4.4), Wetlands (5.1; 5.4)	1600<	NE	NE	NE	Y+
55	<i>Allium mongolicum</i>	SE, OU	3,4,6-16	China, Kazakhstan, Russia	Rocky areas, Desert (8.2)	800-2800	LC	NE	NE	Y+
56	<i>Allium obliquum</i>	VR, RB, RL, OR, OU	7	E Europe, China, Kazakhstan, Kyrgyzstan, Russia	Forest (1.4), Wetlands (5.1; 5.4)		NE	CR (Mongolia)	CR	√ Y-
57	<i>Allium pallasii</i>	OR	14	China, M Asia, Russia	Rocky areas, Desert (8.2)		NE	NE	NE	Y-
58	<i>Allium polyrhizum</i>	SE, OU	1-4,7-13, 15,16	China, Kazakhstan, Russia	Grassland (4.4; 4.5), Rocky areas, Desert (8.2)	1000-3700	NE	NE	NE	Y+
59	<i>Allium pumilum</i>	SE, AP	6,7,14	Russia	Rocky areas	1600<	NE	NE	NE	No
60	<i>Allium ramosum</i>	R	1-13	China, Japan, Kazakhstan, Russia	Grassland (4.4), Rocky areas	800-2100	LC	NE	NE	Y+
61	<i>Allium subtilissimum</i>	SE	3,14	China, Kazakhstan, Russia	Rocky areas	700-1500	NE	NE	NE	Y+
62	<i>Allium tythocephalum</i>	SE	4,6,7,13	Russia	Shrubland (3.4), Rocky areas		NE	NE	NE	No
63	<i>Allium ubsicola</i>	SE	6,10,14	Russia	Wetlands (5.2; 5.4)		NE	NE	NE	No
64	<i>Alyssum linifolium</i>	R	3,7	Europe, Africa, Asia-Temperate, Asia-Tropical, Australia	Grassland (4.4), Rocky areas, Desert (8.2)		NE	NE	NE	No

65	<i>Ammopiptanthus mongolicus</i>	SE, VR, RL	14-16	China, Kazakhstan, Kyrgyzstan	Desert (8.2), Coastline (10.2)		NE	EN (Mongolia)	EN		Y+
66	<i>Amygdalus mongolica</i>	SE, R, RB, RL	12,13,16	China	Desert (8.2), Coastline (10.2)	1000-2400	NE	EN (Mongolia)	EN		Y+
67	<i>Amygdalus pedunculata</i>	RL	2-4,6-13,16	China, Russia	Rocky areas, Desert (8.2)		DD	NE	NE		Y+
68	<i>Anabasis aphylla</i>	VR	7,14	China, M Asia	Desert (8.2)		NE	VU (Mongolia)	VU		Y+
69	<i>Anabasis elatior</i>	R, RB, OR	14	China, Russia	Rocky areas, Desert (8.2)		NE	NE	NE	✓	No
70	<i>Anabasis eriopoda</i>	VR, RB, OR	14	Afghanistan, China, Iran, M Asia	Desert (8.2)		NE	VU (Mongolia)	VU	✓	No
71	<i>Anabasis peilotii</i>	OR	14	China, Kyrgyzstan, Tajikistan, Uzbekistan	Rocky areas, Desert (8.2)		NE	NE	NE		No
72	<i>Anabasis salsa</i>	OR	14	Caucasus, China, Kazakhstan, Russia	Desert (8.2), Coastline (10.2)		NE	NE	NE		Y-
73	<i>Androsace longifolia</i>	SE, VR	5,9	China	Grassland (4.5)	1300-1500	NE	CR (Mongolia)	CR	✓	Y-
74	<i>Anemarrhena asphodeloides</i>	VR, RB	5,9	China, Korea	Grassland (4.4)		NE	DD (Mongolia)	DD	✓	Y-
75	<i>Anemone obtusiloba</i>	R, RB, AP, OR	3	Afghanistan, Bhutan, N India, Myanmar, Nepal, Pakistan	Rocky areas	2900-4000	NE	NE	NE	✓	Y-
76	<i>Angelica saxatilis</i>	OR	2	China, Korea, Russia	Forest (1.4), Rocky areas		NE	NE	NE		No
77	<i>Angelica tenuifolia</i>	WP	1-4, 6-10,13	China, Kazakhstan, Russia	Forest (1.4), Shrubland (3.4),		NE	NE	NE	✓	Y+

				Wetlands (5.4)						
78	<i>Anoplocaryum tenellum</i>	E, AP, OR	7	Endemic	Rocky areas	2500-3000	NE	NE	NE	No
79	<i>Anticlea sibirica</i> (= <i>Zigadenus sibiricus</i>)	VR, RB, RL, OR	1	China, Japan, Korea, Russia	Forest (1.4), Shrubland (3.4)		NE	CR (Japan and R. Korea)	LC	✓ Y-
80	<i>Apocynum pictum</i> (= <i>Poacynum pictum</i>)	R	14,15	China, Kazakhstan	Desert (8.2)		NE	NE	NE	Y-
81	<i>Apocynum venetum</i> (= <i>A. lancifolium</i>)	OR	14	SE Europe, Caucasus, M Asia, Russia	Wetlands (5.1; 5.2; 5.4; 5.11)		NE	CR (Cyprus)	NE	No
82	<i>Aquilegia amurensis</i>	OR	2	Korea, Russia	Rocky areas		NE	NE	NE	No
83	<i>Aquilegia borodinii</i>	SE, AP, OR	7	Russia	Rocky areas	2000<	NE	NE	NE	✓ No
84	<i>Aquilegia daingolica</i>	SE, AP, OR	7	Russia	Rocky areas		NE	NE	NE	✓ No
85	<i>Aquilegia ganboldii</i>	E, VR, RB, OR	5	Endemic	Grassland (4.4)	1200-1600	NE	DD (Mongolia)	DD	✓ No
86	<i>Aquilegia turczaninovii</i>	OR	2	Russia	Rocky areas		NE	NE	NE	No
87	<i>Arctostaphylos uva-ursi</i>	AP, OR	2	Europe, Asia- Temperate, N America	Forest (1.4), Rocky areas	1800<	NE	VU (Bulgaria)	NE	No
88	<i>Arenaria serpyllifolia subsp. leptoclados</i>	OR	7	Europe, Caucasus, China, W and M Asia, Russia	Grassland (4.4)		NE	NE	NE	No
89	<i>Armeria maritima subsp. sibirica</i> (= <i>A. sibirica</i>)	WP, AP	3,7	Europe, Russia, N America	Wetlands (5.11)	1800<	NE	NE	NE	✓ Y-
90	<i>Arnebia fimbriata</i>	SE	11-13,	China	Rocky areas,		NE	NE	NE	Y+

		15,16		Desert (8.2)						
91	<i>Arnebia guttata</i> (= <i>A. tibetana</i>)	VR	3,7,10-16	China, M and SW Asia, Russia	Grassland (4.4), Desert (8.2)	NE	LC (Mongolia)	LC		Y+
92	<i>Arnica angustifolia</i> subsp. <i>iljinii</i> (= <i>A. iljinii</i>)	VR, RB, AP, OR	7	Russia	Wetlands (5.11)	1800<	NE	EN (Mongolia)	EN	✓ No
93	<i>Artemisia amoena</i>	SE, OR	7	Russia	Rocky areas		NE	NE	NE	No
94	<i>Artemisia argyrophylla</i>	SE	1,3,6,7, 13,15	China, Kazakhstan, Russia	Grassland (4.4), Rocky areas		NE	NE	NE	Y+
95	<i>Artemisia blepharolepis</i>	SE	11-13,16	China	Rocky areas, Desert (8.2)		NE	NE	NE	Y-
96	<i>Artemisia brachyphylla</i>	OR	5	China, Korea	Shrubland (3.4), Wetlands (5.4; 5.11)		NE	NE	NE	No
97	<i>Artemisia caespitosa</i>	SE	3,4,6-16	China, Russia	Rocky areas, Desert (8.2)		NE	NE	NE	Y+
98	<i>Artemisia changaica</i>	SE	1,3,7,8, 10,11,13	Russia	Shrubland (3.4), Grassland (4.4), Wetlands (5.4; 5.11)		NE	NE	NE	Y+
99	<i>Artemisia dahurica</i>	SE, OR	4	Russia	Grassland (4.4)		NE	NE	NE	No
100	<i>Artemisia davazamczii</i>	SE	7,10, 13,15	China?	Desert (8.2)		NE	NE	NE	Y+
101	<i>Artemisia desertorum</i> subsp. <i>pseudojaponica</i>	E, OR	5	Endemic	Wetlands (5.4)	1000- 1600	NE	NE	NE	Y+

102	<i>Artemisia disjuncta</i>	SE	7,13	China	Rocky areas		NE	NE	NE	Y+
103	<i>Artemisia feddei</i> <i>subsp.</i> <i>arschantinica</i>	E, OR	16	Endemic	Desert (8.2)	1000-1300	NE	NE	NE	No
104	<i>Artemisia giraldii</i>	SE, OR	4	China	Shrubland (3.4), Grassland (4.4)	1000-2300	NE	NE	NE	No
105	<i>Artemisia globosa</i>	SE	6,7,8,10, 12-14	China	Desert (8.2), Coastline (10.2)		NE	NE	NE	Y-
106	<i>Artemisia gracilescens</i>	SE	7,14,15	Kazakhstan, Russia	Desert (8.2)		NE	NE	NE	No
107	<i>Artemisia implicata</i>	SE, OR	16	China	Desert (8.2)		NE	NE	NE	No
108	<i>Artemisia klementzae</i>	SE	3,4,7, 9-14	China	Grassland (4.4), Desert (8.2)		NE	NE	NE	Y+
109	<i>Artemisia lagocephala subsp.</i> <i>lithophila</i> (= <i>A. lithophila</i>)	VR, RB, OR	1	Russia	Wetlands (5.11)		NE	VU (Mongolia)	VU	✓ Y-
110	<i>Artemisia marschalliana</i>	OR	7	E Europe, China, Kazakhstan, Russia	Grassland (4.4), Rocky areas		NE	NE	NE	Y+
111	<i>Artemisia mongolorum subsp.</i> <i>gobica</i>	SE	3,4,6-16	Kazakhstan, Russia	Rocky areas, Desert (8.2)		NE	NE	NE	Y+
112	<i>Artemisia obtusiloba subsp.</i> <i>altaiensis</i> (= <i>A. altaiensis</i>)	SE	3,6,7	China, Kazakhstan, Russia	Rocky areas		NE	NE	NE	Y+
113	<i>Artemisia ordosica</i>	SE	7,9,10,	China	Rocky areas,		NE	NE	NE	Y+

			12-16		Desert (8.2), Coastline (10.2)					
114	<i>Artemisia palustris</i>	WP	1-13	China, Korea, Russia	Grassland (4.4), Wetlands (5.1; 5.4; 5.11)		NE	NE	NE	✓ Y+
115	<i>Artemisia pamirica</i> (= <i>A. dracunculus</i> <i>var. pamirica</i>)	SE, AP	3,6,7, 10-13	China, Kazakhstan, Kyrgyzstan, Russia	Rocky areas	3000- 3400	NE	NE	NE	Y+
116	<i>Artemisia rutifolia</i>	R	1-4,6-10, 12-15	China, M Asia, Russia	Rocky areas, Desert (8.2)		NE	NE	NE	Y+
117	<i>Artemisia rutifolia</i> <i>var. altaica</i>	SE, OR	7	China	Desert (8.2)		NE	NE	NE	No
118	<i>Artemisia saissanica</i> (= <i>A. mongolorum</i> <i>subsp. saissanica</i>)	SE	7,10,14	Kazakhstan	Rocky areas, Desert (8.2)		NE	NE	NE	Y-
119	<i>Artemisia santolinifolia</i>	R, OU	2,3, 6-15	China, M Asia, Russia	Rocky areas, Desert (8.2), Coastline (10.2)		NE	NE	NE	Y+
120	<i>Artemisia santolinifolia</i> <i>subsp. stepposa</i>	E	8,9	Endemic	Grassland (4.4)	1000- 1500	NE	NE	NE	Y-
121	<i>Artemisia selengensis</i>	SE	3-5,9	China, Korea, Russia	Shrubland (3.4), Grassland (4.4), Wetlands (5.1; 5.4)		NE	NE	NE	Y+

122	<i>Artemisia sphaerocephala</i>	SE	3,10-16	China	Rocky areas, Desert (8.2), Coastline (10.2)		NE	NE	NE	Y+
123	<i>Artemisia sublessingiana</i>	SE	7,8,13-15	China, Russia	Rocky areas, Desert (8.2)		NE	NE	NE	Y+
124	<i>Artemisia succulenta</i>	SE, OR	7	China, Kazakhstan, Russia	Desert (8.2)		NE	NE	NE	No
125	<i>Artemisia terrae-albae</i>	SE	7,14,15	China, Kazakhstan	Desert (8.2), Coastline (10.2)		NE	NE	NE	Y+
126	<i>Artemisia tomentella</i>	VR, RB	1,3,6, 10-12,14	China, M Asia, Russia	Desert (8.2)		NE	VU (Mongolia)	VU	Y+
127	<i>Artemisia transbaicalensis</i>	SE	1,3	Russia	Wetlands (5.4)		NE	NE	NE	No
128	<i>Artemisia vestita</i>	OR	13	China, SW Asia	Rocky areas		NE	NE	NE	No
129	<i>Artemisia vulgaris subsp. inundata</i>	E, AP	2,3	Endemic	Wetlands (5.4; 5.11)	1800-2300	NE	NE	NE	No
130	<i>Artemisia xanthochloa</i>	SE, VR	3-16	China	Grassland (4.4), Desert (8.2)		NE	NT (Mongolia)	NT	Y-
131	<i>Artemisia xerophytica</i>	SE	6-8, 10-16	China, Russia	Desert (8.2)		NE	NE	NE	Y+
132	<i>Artemisia xylorrhiza</i>	SE	3,4,7-13, 16	China	Grassland (4.4), Desert (8.2)		NE	NE	NE	Y+
133	<i>Arundinella hirta (=A. anomala)</i>	R	4,5,9	China, Japan, Russia, Taiwan	Grassland (4.4; 4.5; 4.6)		NE	NT (Taiwan)	NE	Y-
134	<i>Asparagus brachyphyllus</i>	OR	9	China, Kazakhstan, Korea, Russia, Tajikistan, Turkmenistan,	Grassland (4.4)		NE	NE	NE	Y-

Uzbekistan										
135	<i>Asparagus burjaticus</i>	SE, OR	4	Russia	Grassland (4.4)		NE	NE	NE	No
136	<i>Asparagus gobicus</i>	SE	7-16	China	Desert (8.2)		NE	NE	NE	Y+
137	<i>Asparagus neglectus</i>	OR	14	China, M and SW Asia, Russia	Wetlands (5.1; 5.2; 5.9)		NE	NE	NE	No
138	<i>Asparagus oligoclonos</i>	R, RB, OR	5	China, Japan, Korea, Russia	Grassland (4.4), Wetlands (5.4), Rocky areas		DD	EN (Japan)	NE	✓ No
139	<i>Asparagus schoberioides</i>	OR	5	China, Japan, Korea, Russia	Forest (1.4), Shrubland (3.4), Wetlands (5.1; 5.4)		LC	NE	NE	✓ Y-
140	<i>Asperula saxicola</i>	E	13,16	Endemic	Rocky areas	1500-2500	NE	NE	NE	Y-
141	<i>Aster maackii</i>	OR	5	China, Japan, Korea, Russia	Grassland (4.4), Wetlands (5.1; 5.4)		NE	VU (Japan)		✓ No
142	<i>Aster sanczirii</i>	E, R	5	Endemic	Grassland (4.4)	1200-1600	NE	NE	NE	✓ No
143	<i>Asterothamnus alyssoides</i>	SE	8,12	China	Desert (8.2)		NE	NE	NE	No
144	<i>Asterothamnus centralasiaticus</i>	SE, VR	7-9, 11-16	China	Desert (8.2)		NE	NE	LC	Y+
145	<i>Asterothamnus heteropappoides</i>	SE	6,7,10,14	Russia	Desert (8.2), Rocky areas		NE	NE	NE	Y-
146	<i>Asterothamnus molliusculus</i>	E, R, RB, OR	12	Endemic	Desert (8.2)	1000-1500	NE	NE	NE	✓ Y-

147	<i>Asterothamnus poliiifolius</i>	SE	3,6,7,10, 11,13-15	China, Russia	Grassland (4.5), Wetlands (5.1), Desert (8.2)		NE	NE	NE	Y-
148	<i>Astragalus aksaicus</i>	SE, AP, OR	7	Russia	Wetlands (5.11), Rocky areas	1600<	NE	NE	NE	No
149	<i>Astragalus alashanensis</i>	SE	13,15	China	Desert (8.2)		NE	NE	NE	No
150	<i>Astragalus alashanus</i>	SE, OR	13	China	Rocky areas		NE	NE	NE	No
151	<i>Astragalus albicans</i>	OR	14	China, Kazakhstan	Sandy areas, Coastline (10.2)		NE	NE	NE	No
152	<i>Astragalus altaicola</i>	R	6,7,14	China, Kazakhstan, Russia	Sandy areas, Coastline (10.2)		NE	NE	NE	Y-
153	<i>Astragalus arcuatus</i>	OR	14	China, Kazakhstan, Russia	Desert (8.2), Coastline (10.2)		NE	NE	NE	No
154	<i>Astragalus argutensis</i>	SE	4,6-8	Russia	Wetlands (5.2), Rocky areas		NE	NE	NE	No
155	<i>Astragalus baitagensis</i>	E, R, AP, OR	14	Endemic	Rocky areas	1600-2500	NE	NE	NE	✓ Y-
156	<i>Astragalus banzragczii</i>	E, AP, OR	14	Endemic	Rocky areas	1800-2500	NE	NE	NE	✓ No
157	<i>Astragalus beketowii</i>	AP, OR	6	China, Kyrgyzstan, Tajikistan	Rocky areas	2500-4300	NE	NE	NE	✓ No
158	<i>Astragalus brachybotrys</i>	SE	6,7,10-14	Russia	Rocky areas		NE	NE	NE	Y-

159	<i>Astragalus brevifolius</i>	SE	1-4,6-8, 10-13	China, Russia	Wetlands (5.2), Rocky areas		NE	NE	NE	Y+
160	<i>Astragalus burtschumensis</i>	SE	6,7,10	China, Kazakhstan	Wetlands (5.2), Sandy areas		NE	NE	NE	No
161	<i>Astragalus changaicus</i>	E, R, AP	3,7	Endemic	Rocky areas	1600- 2200	NE	NE	NE	Y-
162	<i>Astragalus chorinensis</i>	SE	2-4	Russia	Rocky areas		NE	NE	NE	Y-
163	<i>Astragalus chubsugulicus</i>	E, AP, OR	1	Endemic	Wetlands (5.1; 5.11)	2000- 2500	NE	NE	NE	✓ No
164	<i>Astragalus compressus</i>	OR	7	China, Kazakhstan, Russia	Grassland (4.4), Rocky areas		NE	NE	NE	No
165	<i>Astragalus consanguineus</i>	SE	10	China, Kazakhstan, Russia	Rocky areas		NE	NE	NE	No
166	<i>Astragalus contortuplicatus</i>	OR	14	SE Europe, Caucasus, M and SW Asia, Russia	Grassland (4.4), Wetlands (5.1; 5.2), Sandy areas		NE	EN (Hungary)	NE	No
167	<i>Astragalus danicus</i>	R, AP	1,4	Europe, Caucasus, China, Kazakhstan, Russia	Forest (1.4), Wetlands (5.11)	1600<	NE	EN (Hungary)	NE	Y-
168	<i>Astragalus depasperatus</i>	SE	3,6,7	Kazakhstan, Russia	Wetlands (5.2), Rocky areas		NE	NE	NE	Y-
169	<i>Astragalus dilutus</i>	SE	3,6,7,10, 12-14	China, Kazakhstan, Russia	Wetlands (5.1; 5.2), Sandy areas		NE	NE	NE	Y+
170	<i>Astragalus</i>	SE, R, RL,	7,14	China	Rocky areas	1600<	NE	VU (Mongolia)	VU	Y-

	<i>dshimensis</i>	AP								
171	<i>Astragalus ellipsoideus</i>	SE	3,6,7,10,12,14-16	China, Kazakhstan, Russia?	Wetlands (5.2), Rocky areas, Desert (8.2)		NE	NE	NE	Y-
172	<i>Astragalus follicularis</i>	OR	3	Kazakhstan, Russia	Grassland (4.4), Sandy areas		NE	NE	NE	No
173	<i>Astragalus galactites</i>	SE	1-5,8,9	China, Russia	Grassland (4.4), Rocky areas		NE	NE	NE	Y+
174	<i>Astragalus gobi-altaicus</i>	E, AP, OR	13	Endemic	Rocky areas	1500-2300	NE	NE	NE	✓ No
175	<i>Astragalus gobicus</i>	E	14,15	Endemic	Wetlands (5.9), Sandy areas	1500-2200	NE	NE	NE	Y-
176	<i>Astragalus granitovii</i>	E, R	7,14	Endemic	Rocky areas	1200-1800	NE	NE	NE	Y-
177	<i>Astragalus gregorii</i>	E, R, AP, OR	7	Endemic	Grassland (4.4), Wetlands (5.1; 5.11)	2000-3000	NE	NE	NE	✓ No
178	<i>Astragalus grubovii</i>	SE	7,10-16	China	Desert (8.2)		NE	NE	NE	Y+
179	<i>Astragalus grum-grshimailoi</i>	SE, OR	7	China, Russia?	Rocky areas		NE	NE	NE	No
180	<i>Astragalus gubanovii</i>	E	7,10	Endemic	Rocky areas, Desert (8.2)	1000-2000	NE	NE	NE	No
181	<i>Astragalus hamiensis</i>	SE, OR	14	China	Wetlands (5.9), Coastline (10.2)		NE	NE	NE	No
182	<i>Astragalus</i>	SE, OR	9	China	Grassland		NE	NE	NE	No

	<i>hsinbaticus</i>					(4.4), Sandy areas					
183	<i>Astragalus junatovii</i>	SE	12,13,15,16	China		Grassland (4.5), Desert (8.2)	NE	NE	NE		Y+
184	<i>Astragalus kasachstanicus</i>	OR	7	China, Kazakhstan		Rocky areas	NE	NE	NE		No
185	<i>Astragalus kenteicus</i>	E, AP, OR	2	Endemic		Shrubland (3.4), Rocky areas	1800-2500	NE	NE	NE	✓ No
186	<i>Astragalus klementzii</i>	E, AP, OR	3	Endemic		Shrubland (3.4), Rocky areas	1800-2400	NE	NE	NE	✓ No
187	<i>Astragalus koslovii</i>	E, AP, OR	13	Endemic		Rocky areas	1600-2300	LC	NE	NE	✓ No
188	<i>Astragalus kurtschumensis</i>	SE, R	7,10	China, Kazakhstan		Rocky areas		NE	NE	NE	No
189	<i>Astragalus lasiopetalus</i>	SE	7,14	China, Kazakhstan, Kyrgyzstan, Uzbekistan		Desert (8.2), Coastline (10.2)		NE	NE	NE	No
190	<i>Astragalus lasiophyllus</i>	OR	14	China, Kazakhstan, M Asia		Coastline (10.2)		NE	NE	NE	Y-
191	<i>Astragalus lepsensis</i>	SE, OR	7	China, Kazakhstan, Kyrgyzstan		Shrubland (3.3), Wetlands (5.11), Rocky areas		NE	NE	NE	No
192	<i>Astragalus luxurians</i>	SE, OR	7	Russia		Wetlands (5.2), Rocky areas		NE	NE	NE	Y-
193	<i>Astragalus macropterus</i>	OR	1	China, M and SW Asia, Russia		Grassland (4.4),		NE	NE	NE	No

					Wetlands (5.1; 5.4)				
194	<i>Astragalus majevskianus</i>	SE, OR	7	China, Kazakhstan, Russia?	Shrubland (3.4), Rocky areas	NE	NE	NE	No
195	<i>Astragalus mongolicus</i>	SE, R, OU	1-5, 7-11,13	China, Kazakhstan, Russia	Forest (1.4), Shrubland (3.4), Grassland (4.4), Wetlands (5.1; 5.2), Rocky areas	LC	NE	NE	Y+
196	<i>Astragalus monophyllus</i>	SE	6-16	China, Russia	Desert (8.2), Coastline (10.2)	NE	NE	NE	Y+
197	<i>Astragalus multicaulis</i>	SE	3,6,7,13	Kazakhstan, Russia	Rocky areas	LC	NE	NE	Y+
198	<i>Astragalus ochrias</i>	SE	12,14-16	China	Sandy areas, Desert (8.2)	NE	NE	NE	No
199	<i>Astragalus onobrychis</i>	OR	10	Europe, Caucasus, China, M Asia, Russia	Grassland (4.4), Desert (8.2), Coastline (10.2)	LC	LC (Switzerland)	NE	No
200	<i>Astragalus ortholobus</i>	SE, OR	7	Kazakhstan, Russia	Wetlands (5.2)	NE	NE	NE	No
201	<i>Astragalus pavlovii</i>	SE	13-16	China	Rocky areas, Desert (8.2)	NE	NE	NE	Y+
202	<i>Astragalus pterae</i>	SE	6,10	China, Kyrgyzstan, Tajikistan	Wetlands (5.11), Rocky areas	NE	NE	NE	No

203	<i>Astragalus physocarpus</i>	SE, R, OR	7	Kazakhstan, Russia	Grassland (4.4), Sandy areas		NE	NE	NE	No
204	<i>Astragalus politovii</i>	SE, AP, OR	7	Russia	Wetlands (5.11), Rocky areas	1800<	NE	NE	NE	✓ No
205	<i>Astragalus polozhiaie</i>	SE, R	6,7	Russia	Grassland (4.4), Rocky areas		NE	NE	NE	No
206	<i>Astragalus potaninii</i>	E, AP, OR	7	Endemic	Rocky areas	2000-3000	NE	NE	NE	✓ No
207	<i>Astragalus pseudoborodinii</i>	SE, OR	14	China	Rocky areas		NE	NE	NE	No
208	<i>Astragalus pseudobrachytropis</i> (=A. abramovii)	SE	6	Russia	Rocky areas		NE	NE	NE	No
209	<i>Astragalus pseudochorinensis</i>	E, AP	2,4	Endemic	Shrubland (3.4), Rocky areas	1500-2000	NE	NE	NE	No
210	<i>Astragalus pseudotesticulatus</i>	E, AP, OR	7	Endemic	Rocky areas	2000-3000	NE	NE	NE	✓ Y-
211	<i>Astragalus pseudovulpinus</i>	E, AP, OR	14	Endemic	Rocky areas	1800-2300	NE	NE	NE	✓ No
212	<i>Astragalus roseus</i>	SE	7,14	China, Kazakhstan, Russia	Desert (8.2), Coastline (10.2)		NE	NE	NE	Y-
213	<i>Astragalus rudolfii</i>	E	7,14	Endemic	Rocky areas	1000-1600	NE	NE	NE	Y-
214	<i>Astragalus sabuletorum</i>	SE	7,14,15	China, Kazakhstan, Russia	Sandy areas, Desert (8.2)		NE	NE	NE	Y-
215	<i>Astragalus saichanensis</i>	E, AP	7,13	Endemic	Rocky areas	1600-2200	NE	NE	NE	✓ No

216	<i>Astragalus sanczirii</i>	E	7,14	Endemic	Sandy areas	<1600	NE	NE	NE	No
217	<i>Astragalus saralensis</i>	OR	1	Russia	Forest (1.4), Wetlands (5.4; 5.11)		NE	NE	NE	No
218	<i>Astragalus scabrisetus</i>	R, OR	15	China, Kazakhstan, Uzbekistan	Desert (8.2)		NE	NE	NE	Y+
219	<i>Astragalus schanginianus</i>	AP, OR	7	China, Kazakhstan, Kyrgyzstan, Russia	Shrubland (3.4), Wetlands (5.4; 5.11)	1600<	NE	NE	NE	✓ No
220	<i>Astragalus schrenkianus</i>	AP, OR	7	China, Kazakhstan, M Asia?	Rocky areas	1600<	NE	NE	NE	✓ No
221	<i>Astragalus scleropodius</i>	SE, AP, OR	7	China, Kazakhstan	Rocky areas	1600<	NE	NE	NE	✓ No
222	<i>Astragalus sphaerocystis</i>	AP, OR	7	China, Kazakhstan, Kyrgyzstan	Rocky areas	1600<	NE	NE	NE	✓ No
223	<i>Astragalus stenoceras</i>	OR	10	China, Kazakhstan, Russia, Tajikistan	Grassland (4.4), Sandy areas		NE	NE	NE	Y-
224	<i>Astragalus tamiricus</i>	E, OR	3	Endemic	Wetlands (5.1), Rocky areas	1600- 2400	NE	NE	NE	No
225	<i>Astragalus tephrolobus</i>	SE, OR	7	Russia	Wetlands (5.2), Rocky areas		NE	NE	NE	No
226	<i>Astragalus tschujensis</i>	SE, AP, OR	7	Russia	Rocky areas	1600<	NE	NE	NE	✓ Y-
227	<i>Astragalus tulinovii</i>	SE, OR	7	China	Wetlands (5.1), Rocky areas		NE	NE	NE	No
228	<i>Astragalus ulziykhutagii</i>	E, OR	7	Endemic	Forest (1.4), Shrubland	1500- 2500	NE	NE	NE	No

	(=A. alexandri)				(3.4)					
229	<i>Astragalus urunguensis</i>	SE, OR	14	China	Wetlands (5.1), Sandy areas		NE	NE	NE	No
230	<i>Astragalus vallestris</i>	SE	3,7, 10-14	China	Sandy areas, Desert (8.2)		NE	NE	NE	Y-
231	<i>Astragalus variabilis</i>	SE	7,11-16	China	Sandy areas, Desert (8.2)		NE	NE	NE	Y+
232	<i>Astragalus viridiflavus</i>	E	1-4	Endemic	Shrubland (3.4), Rocky areas	1600-2600	NE	NE	NE	No
233	<i>Astragalus xanthotrichos</i>	SE, OR	7	China, Kazakhstan	Rocky areas		NE	NE	NE	No
234	<i>Astragalus yumenensis</i>	SE	14,15	China	Desert (8.2)		NE	NE	NE	No
235	<i>Astragalus zacharensis</i>	SE, OR	9	China	Shrubland (3.4), Grassland (4.4)		NE	NE	NE	No
236	<i>Astragalus zaissanensis</i>	SE, AP, OR	7	China, Kazakhstan, Russia	Rocky areas	1500<	NE	NE	NE	✓ No
237	<i>Atraphaxis bracteata</i>	SE	3,6,7, 9-16	China	Desert (8.2), Coastline (10.2)		NE	NE	NE	Y+
238	<i>Atraphaxis compacta</i>	SE, R	14,15	China, Kazakhstan, Kyrgyzstan, Russia	Desert (8.2), Coastline (10.2)		NE	NE	NE	Y-
239	<i>Atraphaxis spinosa</i>	R, OR	14	N Africa, China, Kazakhstan, Kyrgyzstan, Russia, Tajikistan, Turkmenistan,	Desert (8.2), Coastline (10.2)		NE	VU (Egypt)	NE	Y-

				Uzbekistan, SW Asia						
240	<i>Atriplex altaica</i>	SE, OR	7	China, Kazakhstan, Russia	Wetlands (5.2; 5.9)		NE	NE	NE	No
241	<i>Atriplex cana</i>	OR	14	SE Europe, Caucasus, China, Kazakhstan, Russia	Desert (8.2), Coastline (10.2)		NE	NE	NE	No
242	<i>Atriplex laevis</i>	WP, OR	3,4,8-11, 13-15	Europe, China, Kazakhstan, Russia, SW Asia	Wetlands (5.16), Desert (8.2), Coastline (10.2)		NE	NE	NE	✓ No
243	<i>Atriplex sibirica</i>	WP, OR	2-4,6-16	Europe, China, Kazakhstan, Russia	Wetlands (5.2), Desert (8.2), Coastline (10.2)		NE	NA (Estonia)	NE	✓ Y-
244	<i>Aulacospermum anomalum</i>	R, AP	6,7	China, Russia	Wetlands (5.11), Rocky areas	1800<	NE	NE	NE	Y-
245	<i>Batrachium divaricatum</i>	WP	1,4-9,11	Europe, China, Kazakhstan, Russia	Wetlands (5.1; 5.5; 5.7)		NE	NE	NE	✓ Y-
246	<i>Batrachium kauffmannii</i>	R, WP	2,7	Europe, Russia	Wetlands (5.1; 5.7, 5.11)		NE	NE	NE	✓ No
247	<i>Batrachium mongolicum</i>	SE, R, WP	3,6,7, 10,11	Russia	Wetlands (5.1; 5.4; 5.7)		NE	NE	NE	✓ Y-
248	<i>Batrachium trichophyllum</i>	WP	1-3, 7-11,14	Europe, China, Kazakhstan, N Pakistan, Russia	Wetlands (5.1; 5.4; 5.7, 5.11)		NE	NT (Czech)	NE	✓ Y-

249	<i>Berberis amurensis</i>	OR	5	China, Japan, Korea, Russia	Grassland (4.4), Rocky areas		NE	NE	NE		No
250	<i>Bergenia crassifolia</i>	R, OR, OU	2-4,7	N and M Europe, China, Korea, Russia	Forest (1.4), Rocky areas	1800<	NE	NT (Switzerland)	NE		Y+
251	<i>Bidens cernua</i>	WP	3,4,6,7, 9-11	Europe, China, M Asia, Japan, Russia, N America	Forest (1.4), Wetlands (5.4; 5.11)		LC	VU (Japan)	NE	✓	Y-
252	<i>Bidens parviflora</i>	WP	3,4,6, 8-10,13	China, Japan, Korea, Russia	Forest (1.4), Rocky areas		NE	NE	NE		No
253	<i>Bidens tripartita</i>	WP	1-4, 7-10,14	Europe, N Africa, Asia-Temperate, Asia-Tropical, Australia, N America	Forest (1.4), Wetlands (5.1; 5.4; 5.11), Rocky areas		LC	VU (Taiwan)	NE	✓	No
254	<i>Biebersteinia odora</i>	VR, AP	6,7	China, N India, Kazakhstan, Kyrgyzstan, N Pakistan, Russia, Tajikistan	Rocky areas	1600-4200	NE	NE	NE		Y-
255	<i>Blysmus compressus</i> subsp. <i>brevifolius</i> (= <i>Scirpus brevifolius</i>)	WP	2-5,7-9, 11,13,14	Europe, N Africa, Asia-Temperate,	Wetlands (5.1; 5.4; 5.9; 5.11; 5.13), Coastline (10.7)		LC	VU (United Kingdom)	NE	✓	Y-
256	<i>Blysmus rufus</i>	WP	1,3-15	Europe, Asia-Temperate, N America	Wetlands (5.1; 5.4; 5.7; 5.11), Coastline (10.7)		NE	NT (Finland)	NE	✓	Y+
257	<i>Bolboschoenus</i>	WP	14,16	Europe, Africa,	Wetlands		LC	LC (United	NE	✓	No

	<i>maritimus</i>			Asia-Temperate, Asia-Tropical, Pacific, N. America	(5.4; 5.7; 5.9, 5.11), Coastline (10.4-10.7)		Kingdom)			
258	<i>Bolboschoenus planiculmis</i>	WP	4,5, 8-12,15	Europe, Asia-Temperate, Asia-Tropical	Wetlands (5.4; 5.7; 5.9)	NE	EN (Taiwan)	NE	✓	Y+
259	<i>Bolboschoenus popovii</i>	WP	10-16	China, M Asia, Russia	Wetlands (5.4; 5.7; 5.9)	NE	NE	NE	✓	Y+
260	<i>Boschniakia rossica</i>	OR	2	China, Japan, Korea, Russia, N America	Forest (1.4), Wetlands (5.1; 5.4)	NE	NE	NE		No
261	<i>Botrychium lanceolatum</i>	VR, RB, OR	3	Europe, Asia-Temperate, N America	Forest (1.4), Wetlands (5.1; 5.4; 5.11)	NE	CR (Japan)	NA	✓	Y+
262	<i>Brachanthemum gobicum</i>	SE, VR	12,13,16	China	Rocky areas, Desert (8.2)	NE	NT (Mongolia)	NT		Y+
263	<i>Brachanthemum mongolicum</i>	SE, R, RB	12,14	China	Desert (8.2)	NE	NE	NE		Y+
264	<i>Brachanthemum mongolorum</i>	E, VR, RB, RL, OR	9	Endemic	Desert (8.2)	1200-1500	NE	CR (Mongolia)	CR	✓ No
265	<i>Braya glabella</i> (=B. <i>siliquosa</i>)	R, OR	1	Europe, Asia-Temperate, N America	Rocky areas	NE	VU (Norway)	NE		No
266	<i>Bromus scoparius</i>	OR	14	Europe, China, M and SW Asia, Russia	Wetlands (5.2; 5.9), Rocky areas	NE	DD (Croatia)	NE		No
267	<i>Bromus squarrosus</i>	OR	10	Europe, N Africa, Asia-Temperate, Asia-Tropical, N America	Wetlands (5.1; 5.2; 5.4; 5.9)	NE	LC (Switzerland)	NE		No

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268	<i>Bunias cochlearioides</i>	R, OR	1	China, Kazakhstan, Russia	Wetlands (5.4; 5.11)		NE	NE	NE	Y-
269	<i>Bunium setaceum</i>	R	6,7	Afghanistan, China, Kazakhstan, Kyrgyzstan, Tajikistan	Rocky areas		NE	NE	NE	No
270	<i>Bupleurum aureum</i>	AP, OR	7	China, M Asia, Russia	Forest (1.4), Wetlands (5.11)	1300-1900	NE	NE	NE	✓ Y-
271	<i>Bupleurum krylovianum</i>	SE, AP	3,7	China, Kazakhstan, Kyrgyzstan, Russia	Rocky areas	1200-2000	NE	NE	NE	Y-
272	<i>Bupleurum longiinvolucratum</i>	SE, OR	7	China	Wetlands (5.1)	1000	NE	NE	NE	No
273	<i>Bupleurum mongolicum</i>	SE, AP	7,13,14	China	Rocky areas	1600-2300	NE	NE	NE	No
274	<i>Butomus junceus</i>	R, WP	1,8-10,14	M Asia, Russia	Wetlands (5.4; 5.7; 5.11)		NE	NE	NE	✓ Y-
275	<i>Butomus umbellatus</i>	WP	1-5,8,9,14	Europe, China, M and SW Asia, Russia, N America	Wetlands (5.5; 5.7; 5.11)		LC	LC (United Kingdom)	NE	✓ Y+
276	<i>Calamagrostis angustifolia subsp. tenuis</i>	OR	4	Russia	Wetlands (5.1; 5.4)		NE	NE	NE	No
277	<i>Calamagrostis inexpansa</i> (= <i>C. neglecta subsp. inexpansa</i>)	R	2,4,5,9	Europe, Asia-Temperate, N America	Wetlands (5.1; 5.4; 5.5; 5.7; 5.11)		LC	NE	NE	Y-
278	<i>Calamagrostis korotkyi</i> (= <i>C. turczaninovii</i>)	R	2-5	China, Japan, Korea, Russia	Wetlands (5.1; 5.3; 5.4; 5.7)		NE	NE	NE	Y+
279	<i>Calamagrostis</i>	SE	3,4	M Asia, Russia	Forest (1.4),		NE	NE	NE	No

	<i>pavlovii</i>					Wetlands (5.1; 5.4)							
280	<i>Calamagrostis sajanensis</i>	SE	2-4,10		Russia	Forest (1.4), Wetlands (5.1; 5.4)		NE	NE	NE			No
281	<i>Calamagrostis salina</i>	SE	8-10,13		M Asia, Russia	Wetlands (5.4; 5.14; 5.16)		NE	NE	NE			Y-
282	<i>Callianthemum angustifolium</i>	AP, OR	7		China, Russia	Wetlands (5.11)	2200<	NE	NE	NE	✓		No
283	<i>Callianthemum sajanense</i>	SE, AP, OR	1,3,7		Russia	Wetlands (5.4; 5.10, 5.11)	2400<	NE	NE	NE	✓		Y-
284	<i>Calligonum ebinuricum</i>	SE, RL	14,15		China	Desert (8.2)	600<	NE	NE	NE			No
285	<i>Calligonum gobicum</i>	SE, R, RL	14-16		China	Desert (8.2)		NE	NE	NE			Y-
286	<i>Calligonum junceum</i>	SE, R, RL	14,15		China	Desert (8.2)		NE	NE	NE			Y-
287	<i>Calligonum litwinowii</i>	RL	14,15		China, M Asia	Desert (8.2)		NE	NE	NE			No
288	<i>Calligonum mongolicum</i> (=C. pumilum)	SE, RL	7,10-16		China	Rocky areas, Desert (8.2)	<1800	NE	NE	NE			Y+
289	<i>Callitriche hermaphroditica</i>	R, WP	1,3-5		Europe, N Africa, Asia-Temperate, N and S America	Wetlands (5.1; 5.5; 5.7; 5.10; 5.11)		LC	VU (Japan)	NE	✓		Y-
290	<i>Callitriche palustris</i>	WP	1-5,7, 9-11,14		Europe, Asia- Temperate, Asia- Tropical, N and S America	Wetlands (5.1; 5.4; 5.5; 5.7; 5.11)		LC	VU (United Kingdom)	NE	✓		Y-
291	<i>Caltha natans</i>	WP	1-5,8,		China, Russia, N	Wetlands		LC	NE	NE	✓		Y+

			10,11	America	(5.1; 5.2; 5.4; 5.11)						
292	<i>Caltha palustris</i>	WP	1-5,10,11	Europe, Asia-Temperate, N America	Wetlands (5.1; 5.2; 5.4; 5.11)	LC	LC (United Kingdom)	NE	✓	Y-	
293	<i>Caltha palustris</i> var. <i>membranacea</i> (= <i>C. membranacea</i>)	WP	1-5,9,10	China, Japan, Korea, Russia	Wetlands (5.2; 5.4)	LC	LC (R. Korea)	NE	✓	Y-	
294	<i>Calypso bulbosa</i>	VR, RB, CI	2,4	Europe, Japan, Russia, N America	Forest (1.4)	NE	VU (Japan)	CR	✓	No	
295	<i>Calystegia hederacea</i>	R, RB	12,13	Europe, N and E Africa, Asia-Temperate, Asia-Tropical	Wetlands (5.1; 5.4; 5.9)	NE	NE	NE		Y-	
296	<i>Calystegia subvolubilis</i>	R, RB	2,3	Russia	Forest (1.4), Shrubland (3.4); Wetlands (5.1; 5.4)	NE	NE	NE		Y-	
297	<i>Camelina microcarpa</i>	R	4,6,14	Europe, Asia-Temperate, Asia-Tropical	Rocky areas, Desert (8.2)	NE	VU (Switzerland)	NE		Y-	
298	<i>Campanula punctata</i>	OR	9	China, Japan, Korea, Russia	Forest (1.4)	NE	NE	NE		No	
299	<i>Campanula rotundifolia</i>	AP, OR	6	Europe, Asia-Temperate	Rocky areas	1800<	NE	NE	NE	✓	Y+
300	<i>Campanula stevenii</i> subsp. <i>altaica</i> (= <i>C. altaica</i>)	SE, OR	7	E Europe?, M Asia, Russia	Rocky areas	1100-2500	NE	NE	NE	✓	No
301	<i>Capsella orientalis</i>	OR	7	China, Russia	Rocky areas		NE	NE	NE		No
302	<i>Caragana brachypoda</i>	SE, VR	12,13,16	China	Desert (8.2)		NE	VU (Mongolia)	VU		Y+

303	<i>Caragana bungei</i>	SE	3,6,7,10, 11,13-15	Russia	Sandy areas, Desert (8.2)		NE	NE	NE	Y+
304	<i>Caragana davazamcii</i>	SE	9,11-13, 16	China	Desert (8.2)		NE	NE	NE	Y+
305	<i>Caragana gobica</i>	E, VR	7,12,13	Endemic	Desert (8.2)	1000- 1600	NE	VU (Mongolia)	VU	Y+
306	<i>Caragana gobica subsp. occidentalis</i>	E	7,14	Endemic	Desert (8.2)	1800- 2300	NE	NE	NE	Y-
307	<i>Caragana jubata</i>	RL	1-3,7,13	Bhutan, China, India, Nepal, Russia	Forest (1.4), Shrubland (3.4), Wetlands (5.4; 5.11), Rocky areas		NE	NE	NE	Y+
308	<i>Caragana korshinskii</i>	SE	9,11-13, 16	China	Desert (8.2)		NE	NE	NE	Y+
309	<i>Caragana microphylla</i>	SE	2-4,8,9	China, Russia	Grassland (4.5), Rocky areas		NE	NE	NE	Y+
310	<i>Caragana spinosa</i>	R	4,6-8,10, 11,14,16	China, Kazakhstan, Russia	Wetlands (5.9; 5.15), Rocky areas, Desert (8.2)		NE	NE	NE	Y+
311	<i>Caragana stenophylla</i>	SE	3-5,8, 9,12,13	China, Russia	Grassland (4.5), Desert (8.2)		NE	NE	NE	Y+
312	<i>Caragana tibetica</i>	VR, RL	12,13,16	China	Desert (8.2)		NE	EN (Mongolia)	EN	Y+
313	<i>Cardamine impatiens</i>	OR	6	Europe, Asia- Temperate, Asia- Tropical, N America	Wetlands (5.1; 5.4)		NE	DD (Taiwan)	NE	Y-
314	<i>Cardamine</i>	R, RB, OR	5	China, Japan,	Wetlands		NE	NE	NE	✓ No

	<i>leucantha</i>			Korea, Russia	(5.1; 5.4)					
315	<i>Cardamine macrophylla</i>	R, AP	1,2,6,7	Europe, Asia-Temperate, Asia-Tropical	Forest (1.4), Shrubland (3.4), Wetlands (5.4; 5.11)	1500-4200	NE	NE	NE	Y-
316	<i>Cardamine parviflora</i>	VR	2,3	Europe, Africa, Asia-Temperate, Asia-Tropical, N America	Forest (1.4), Wetlands (5.1; 5.4; 5.11)		NE	EN (Mongolia)	EN	Y-
317	<i>Cardamine prorepens</i>	WP, OR	5	China, Korea, Russia	Wetlands (5.1; 5.4; 5.11)		NE	NE	NE	✓ Y-
318	<i>Cardamine trifida</i>	R, OR	5	China, Japan, Kazakhstan, Korea, Russia	Forest (1.4), Shrubland (3.4), Wetlands (5.4; 5.11)		NE	EN (Japan)	NE	✓ No
319	<i>Carduus nutans</i>	R	1,7	Europe, Africa, Asia-Temperate, Asia-Tropical	Grasslands (4.4), Rocky areas		NE	LC (United Kingdom)	NE	Y-
320	<i>Carex alba</i>	R, RB	1,2	ME Europe, Asia-Temperate	Forest (1.4), Wetlands (5.1; 5.4; 5.11), Rocky areas	1600<	NE	LC (Switzerland)	NE	Y-
321	<i>Carex appendiculata</i>	WP	2,4,5, 8-10	NE China, Korea, Russia	Forest (1.4), Wetlands (5.4; 5.11)		NE	NE	NE	✓ Y+
322	<i>Carex bohémica</i>	WP, OR	4	Europe, China, Japan, Korea, Russia	Wetlands (5.1; 5.4; 5.7)		NE	EN (Japan)	NE	✓ Y+

323	<i>Carex cespitosa</i>	WP	1-10,15	Europe, Asia-Temperate	Forest (1.4), Wetlands (5.1; 5.4; 5.11)		LC	NT (Norway)	NE	✓	Y+
324	<i>Carex chordorrhiza</i>	WP, OR	2	Europe, Asia-Temperate, N America	Shrubland (3.4), Wetlands (5.1; 5.4; 5.7; 5.10; 5.11)		LC	EN (R. Korea)	NE	✓	No
325	<i>Carex diandra</i>	WP	2,5,9,10	N Europe, Asia-Temperate, Asia-Tropical, New Zealand, Pacific, N America	Forest (1.4), Wetlands (5.1; 5.4; 5.10; 5.11)		LC	VU (Japan)	NE	✓	No
326	<i>Carex diluta</i>	WP, OR	10	China, M Asia, Russia	Wetlands (5.1; 5.4)		LC	NE	NE	✓	No
327	<i>Carex ericetorum</i>	OR	4	Europe, Kazakhstan, Russia	Forest (1.4), Wetlands (5.1; 5.4)		NE	VU (United Kingdom)	NE		No
328	<i>Carex heterolepis</i>	OR	5	China, Japan, Korea, Russia	Wetlands (5.1; 5.4)		NE	NE	NE		No
329	<i>Carex lanceolata</i>	OR	2	China, Japan, Korea, Russia	Forest (1.4)		NE	NE	NE		Y-
330	<i>Carex lasiocarpa</i>	WP, OR	2	Europe, China, Korea, Russia, N America	Forest (1.4), Wetlands (5.1; 5.4; 5.10; 5.11)		LC	VU (United Kingdom)	NE	✓	Y-
331	<i>Carex leporina</i> (=C. ovalis)	R, AP	2,3,7	N Europe, China, Russia	Wetlands (5.1; 5.4; 5.7; 5.11)	1400<	NE	LC (United Kingdom)	NE		No
332	<i>Carex limosa</i>	WP	2	Europe, China, Japan, Korea,	Forest (1.4), Wetlands		LC	EN (United Kingdom)	NE	✓	Y-

				Russia, N America	(5.1; 5.4; 5.7; 5.10; 5.11)						
333	<i>Carex orbicularis</i> <i>subsp. altaica</i>	SE, AP, OR	3	Russia	Wetlands (5.1; 5.4; 5.11)		LC	NE	NE	✓	Y-
334	<i>Carex pallida</i>	AP, OR	2	China, Japan, Korea, Russia	Forest (1.4), Shrubland (3.4), Wetlands (5.1; 5.4; 5.11)		NE	NE	NE	✓	Y-
335	<i>Carex parva</i>	R, RB, AP, OR	3	Afghanistan, Bhutan, China, India, Nepal	Forest (1.4; 1.6), Wetlands (5.1; 5.4)	2300- 4400	NE	VU (Mongolia)	VU	✓	Y+
336	<i>Carex raddei</i>	AP, OR	2	China, Korea, Russia	Forest (1.4), Wetlands (5.1; 5.4; 5.11)		NE	NE	NE	✓	Y-
337	<i>Carex</i> <i>rhynchophysa</i>	WP	2-5,9,10	Europe, China, Japan, Korea, Russia	Wetlands (5.1; 5.4; 5.7)		NE	NT (Norway)	NE	✓	Y+
338	<i>Carex rostrata</i>	WP	1-5, 8-10	Europe, Asia- Temperate, N America	Forest (1.4), Wetlands (5.1; 5.4)		LC	VU (Japan)	NE	✓	No
339	<i>Carex selengensis</i> (= <i>C. delicata</i> <i>subsp.</i> <i>selengensis</i>)	R	2-5,9,10	China, Russia	Forest (1.4), Wetlands (5.1; 5.3)		NE	NT (Mongolia)	NT	✓	Y-
340	<i>Carex vesicata</i>	WP	1-6,8, 9,14	China, Japan, Russia	Wetlands (5.1; 5.4; 5.7; 5.11)		NE	NE	NE	✓	Y+
341	<i>Carex williamsii</i>	AP, OR	2	Europe, Asia-	Wetlands	2000<	NE	NE	NE	✓	Y-

				Temperate, N America	(5.4; 5.10; 5.11)								
342	<i>Caroxylon gemmascens</i> (= <i>Salsola gemmascens</i>)	SE, OR	10	China	Desert (8.2)	NE	NE	NE				No	
343	<i>Caryopteris mongholica</i>	SE	2-4,7-9, 11-13,15,16	China, Russia	Grassland (4.4), Desert (8.2)	NE	VU (Mongolia)	VU				Y+	
344	<i>Cassiope ericoides</i>	OR	4	Russia	Wetlands (5.11); Rocky areas	NE	NE	NE				No	
345	<i>Catabrosa aquatica</i>	WP	2-4, 8-10,13	Europe, Asia-Temperate, Asia-Tropical, N America	Wetlands (5.1; 5.4)	LC	VU (Sweden)	NE	✓			Y+	
346	<i>Cenolophium denudatum</i>	R	3,7,10,14	Europe, China, Kazakhstan, SW Asia, Russia	Forest (1.4), Shrubland (3.4), Wetlands (5.1; 5.4)	NE	NE	NE				Y-	
347	<i>Centaurea adpressa</i>	R, OR	6	Europe, Kazakhstan, Russia	Shrubland (3.4), Wetlands (5.4)	NE	NE	NE				No	
348	<i>Centaureum pulchellum</i>	R	10,11,15	Europe, N Africa, Asia-Temperate, Asia-Tropical	Wetlands (5.1; 5.2; 5.4)	LC	VU (Norway)	NE				No	
349	<i>Cerastium holosteoides</i>	OR	2	Cosmopolitan	Shrubland (3.4), Wetlands (5.1; 5.4;	NE	LC (Taiwan)	NE				No	

350	<i>Cerastium maximum</i>	OR	13	China, Russia, N America	5.11) Grassland (4.4), Rocky areas	NE	NE	NE	No
351	<i>Ceratocephala testiculata</i>	OR	7	Europe, Caucasus, China, M Asia, Russia, N America	Sandy areas, Desert (8.2)	NE	DD (Croatia)	NE	No
352	<i>Ceratophyllum demersum</i>	WP	1,4,8-10,14	Cosmopolitan	Wetlands (5.1; 5.2; 5.4; 5.7; 5.11)	LC	DD (Taiwan)	NE	✓ Y+
353	<i>Chamaerhodos grandiflora</i>	OR	5	Russia	Grassland (4.4)	NE	NE	NE	Y-
354	<i>Chelidonium majus</i>	R, OU	2-5,7,9	Europe, Asia-Temperate, N America	Forest (1.4), Grassland (4.4), Rocky areas	NE	LC (United Kingdom)	NE	Y+
355	<i>Chenopodium acuminatum</i>	WP	3-14,16	China, M Asia, Japan, Korea, Russia, Taiwan, Vietnam	Grassland (4.4), Rocky areas	NE	NA (Taiwan)	NE	✓ Y+
356	<i>Chenopodium chenopodioides</i> (=Ch. botryodes)	R	7,10,14	Europe, N Africa, Asia-Temperate, Asia-Tropcal, N America	Desert (8.2)	NE	LC (United Kingdom)	NE	Y-
357	<i>Chenopodium foliosum</i>	WP	3,4,6,7,12-15	Europe, China, M Asia, Russia	Rocky areas, Desert (8.2)	NE	VU (France)	NE	✓ Y+
358	<i>Chenopodium frutescens</i>	SE	6,7,10	Russia	Wetlands (5.2), Rocky areas, Desert (8.2)	NE	NE	NE	Y+
359	<i>Chenopodium glaucum</i>	WP	2-6,8-16	Europe, Asia-Temperate, Asia-	Wetlands (5.4), Rocky	NE	NE	NE	✓ Y+

				Tropical, N America	areas, Desert (8.2)									
360	<i>Chenopodium gubanovii</i>	SE	10,14	China	Desert (8.2)		NE	NE	NE				No	
361	<i>Chenopodium iljinii</i>	R	7,10	China, Kazakhstan, Russia	Grassland (4.4), Rocky areas, Desert (8.2)		NE	NE	NE				No	
362	<i>Chesneya grubovii</i>	E, OR	15	Endemic	Desert (8.2)	1000-1500	NE	NE	NE				No	
363	<i>Chesneya mongolica</i>	SE, VR, RB	10-13, 15,16	China	Wetlands (5.1), Desert (8.2)		NE	NT (Mongolia)	NT				Y+	
364	<i>Chorispora bungeana</i>	R, RB	6,7,13,14	Afghanistan, India, , Kazakhstan, Kyrgyzstan, Pakistan, Russia, Tajikistan, Uzbekistan	Grassland (4.4), Desert (8.2)		NE	NE	NE				Y+	
365	<i>Chrysanthemum chalchingolicum (=Dendranthema chalchingolicum)</i>	E, R, RB	5,9	Endemic	Grassland (4.4), Wetlands (5.4)	1200-1600	NE	NE	NE				No	
366	<i>Chrysanthemum trilobatum</i>	SE	12,13	China	Desert (8.2)		NE	NE	NE				No	
367	<i>Chrysosplenium nudicaule</i>	SE, R, AP, OR	6	China, Nepal, Russia	Rocky areas	2500<	NE	NE	NE	✓			Y+	
368	<i>Cicer songaricum</i>	OR	7	China, M Asia, Russia	Shrubland (3.4), Rocky areas		NE	NE	NE				No	
369	<i>Cichorium intybus</i>	R, OR	6	Europe, N Africa, Asia-Temperate,	Wetlands (5.1; 5.4),		NE	LC (United Kingdom)	NE				No	

				Asia-Tropical	Rocky areas					
370	<i>Cicuta virosa</i>	WP	1-15	N and M Europe, Asia-Temperate, N America	Wetlands (5.1; 5.4; 5.5; 5.7; 5.10; 5.11)	LC	VU (R. Korea)	NE	✓	Y+
371	<i>Cirsium glabrifolium</i>	OR	7	China, M and SW Asia	Wetlands (5.1; 5.2; 5.4)	NE	NE	NE		Y+
372	<i>Cirsium helenioides</i>	OR	2	Europe, China, Kazakhstan, Russia	Forest (1.4), Grassland (4.4), Wetlands (5.1; 5.4)	NE	LC (Switzerland)	NE		Y-
373	<i>Cirsium pendulum</i>	R	2,4,5,9	China, Japan, Korea, Russia	Forest (1.4), Grassland (4.4), Wetlands (5.4)	NE	NE	NE		No
374	<i>Cirsium polyacanthum</i>	AP, OR	7	China?, M Asia	Grassland (4.4), Wetlands (5.4; 5.11)	NE	NE	NE	✓	No
375	<i>Cistanche deserticola</i>	VR, RB, CI, OU	7,10-16	China	Desert (8.2)	NE	EN (Mongolia)	EN	✓	Y-
376	<i>Cistanche feddeana</i>	R	13,16	China	Desert (8.2)	NE	NE	NE		Y-
377	<i>Cistanche lanzhouensis</i>	SE, OR	12	China	Desert (8.2)	NE	NE	NE		No
378	<i>Cistanche ningxiaensis</i>	R, RB, OR	12	China	Desert (8.2)	NE	NE	NE		No
379	<i>Clematis aethusifolia</i>	R, RB, OR	9	China, Russia	Shrubland (3.4), Grassland (4.4)	NE	NE	NE	✓	Y-

380	<i>Clematis alpina</i> <i>subsp. ochotensis</i> (= <i>Atragene</i> <i>ochotensis</i>)	R, OR	4	China, Japan, Russia	Forest (1.4), Shrubland (3.4)		NE	NE	NE	No
381	<i>Clematis glauca</i>	VR	3,7,10, 14,15	China, Kazakhstan, Russia	Shrubland (3.4), Wetlands (5.1; 5.4), Rocky areas		NE	VU (Mongolia)	VU	Y-
382	<i>Clematis</i> <i>macropetala</i>	OR	9	China, Russia	Forest (1.4), Shrubland (3.4)		NE	NE	NE	No
383	<i>Clematis orientalis</i>	OR	15	China, M and SW Asia, Russia	Wetlands (5.1; 5.2; 5.9)		NE	NE	NE	Y+
384	<i>Cleome gobica</i>	E, R, OR	15	Endemic	Desert (8.2)	1000- 1500	NE	NE	NE	No
385	<i>Climacoptera</i> <i>affinis</i>	OR	14	SE Europe, China, M Asia, Russia	Desert (8.2)		NE	NE	NE	No
386	<i>Climacoptera</i> <i>subcrassa</i>	SE, R, OR	14	China?	Desert (8.2)		NE	NE	NE	No
387	<i>Codonopsis</i> <i>clematidea</i>	VR, RB, OR	7	China, M Asia, SW Asia	Grassland (4.4)		NE	EN (Mongolia)	EN	Y+
388	<i>Coluria geoides</i>	SE	3,6	Kazakhstan, Russia	Grassland (4.4), Rocky areas		NE	NE	NE	Y+
389	<i>Comarum palustre</i>	WP	1-4,6	Europe, Asia- Temperate, N America	Wetlands (5.1; 5.4; 5.11)		LC	NT (United Kingdom)	NE	✓ Y+
390	<i>Comastoma</i> <i>pulmonarium</i>	VR, AP, OR	1-3,6	China, Japan, Russia	Wetlands (5.1; 5.4; 5.11)	3000- 4800	NE	EN (Japan)	VU	Y-
391	<i>Convallaria keiskei</i>	VR, RB	2,5	China, Japan,	Forest (1.4),		NE	EN (Mongolia)	EN	Y+

C				Korea, Myanmar, Russia	Shrubland (3.4)					
392	<i>Corallorhiza trifida</i>	VR, CI	1,2,4	Europe, Asia-Temperate, Asia-Tropical, N America	Forest (1.4)	NE	VU (Mongolia)	VU		Y+
393	<i>Corispermum mongolicum</i>	SE	3,4,7-16	China, Russia	Desert (8.2), Coastline (10.2)	NE	NE	NE		Y+
394	<i>Corispermum patelliforme</i>	SE	10,13,16	China	Desert (8.2), Coastline (10.2)	NE	NE	NE		Y-
395	<i>Corispermum tylocarpum</i>	OR	12	China	Desert (8.2), Coastline (10.2)	NE	NE	NE		Y-
396	<i>Cornus alba</i> (=Swida alba)	R	1-5,9	Europe, China, Korea, Russia	Forest (1.4)	NE	NE	NE		Y+
397	<i>Cortusa brotheri</i>	R, RB, AP, OR	7	China?, M Asia, Russia	Rocky areas	1800<	NE	NE	NE	✓ Y-
398	<i>Corydalis grubovii</i>	E	6,7	Endemic	Rocky areas	1800-3000	NE	NE	NE	✓ No
399	<i>Corydalis sajanensis</i>	AP, OR	1	Russia	Forest (1.4)	1500-2500	NE	NE	NE	✓ No
400	<i>Cotoneaster mongolicus</i>	SE	2-5,7-9, 12,13	China, Russia	Forest (1.4), Shrubland (3.4), Rocky areas		NE	NE	NE	Y+
401	<i>Cotoneaster neopopovii</i>	OR	4	Russia	Forest (1.4), Shrubland (3.4)		NE	NE	NE	Y+
402	<i>Cousinia affinis</i>	R, RB, OR	14	China, Kazakhstan	Rocky areas		NE	NE	NE	No
403	<i>Craniospermum</i>	SE	3,7,13,14	Russia	Wetlands		NE	NE	NE	Y-

	<i>canescens</i>					(5.2), Sandy areas							
404	<i>Craniospermum mongolicum</i>	SE	7,11-14		Russia	Rocky areas, Desert (8.2)		NE	NE	NE		Y+	
405	<i>Craniospermum subfloccosum</i>	SE, AP, OR	7		China, Kazakhstan, Russia	Rocky areas	1800<	NE	NE	NE	✓	No	
406	<i>Craniospermum subvillosum</i>	SE, OR	14		China, Russia	Coastline (10.2)		NE	NE	NE		No	
407	<i>Crassula aquatica</i> (= <i>Tillaea aquatica</i>)	R, WP	2,4,6,10		Europe, Asia-Temperate, N America	Wetlands (5.1; 5.4; 5.11)		NE	VU (R. Korea), NT (Japan)	NE	✓	Y-	
408	<i>Crataegus maximoviczii</i>	OR	5		Russia	Shrubland (3.4), Wetlands (5.1; 5.4)		NE	NE	NE		No	
409	<i>Crataegus sanguinea</i>	R, OU	2-5,9		Europe, China, Russia	Forest (1.4), Shrubland (3.4), Wetlands (5.1; 5.4)		NE	NA (Estonia)	NE		Y-	
410	<i>Crepis czuensis</i>	SE, R, RB, AP	6,7		Russia	Rocky areas	1800<	NE	NE	NE		Y-	
411	<i>Crucihimalaya rupicola</i> (= <i>Arabis rupicola</i>)	E, AP	6,13		Endemic	Rocky areas	1800-2200	NE	NE	NE		No	
412	<i>Crypsis schoenoides</i>	R	3,10,14		Europe, Asia-Temperate, Asia-Tropical	Grassland (4.4), Wetlands (5.2; 5.4)		LC	NT (Croatia)	NE		Y-	
413	<i>Cryptogramma stelleri</i>	OR	1		Europe, Asia-Temperate, Asia-Tropical, N	Forest (1.2; 1.4)		NE	NT (Japan, Taiwan)	NE	✓	No	

				America					
414	<i>Cuscuta australis</i>	OR	9	Cosmopolitan	Forest (1.4), Shrubland (3.4)	NE	CR (Japan)	NE	Y-
415	<i>Cynanchum bungei</i>	OR	9	China, Korea	Wetlands (5.4)	NE	NE	NE	No
416	<i>Cynanchum gobicum</i> (= <i>Vincetoxicum lanceolatum</i>)	SE, R	12-16	China	Rocky areas, Desert (8.2)	NE	NE	NE	Y-
417	<i>Cynanchum mongolicum</i>	SE, OR	16	China	Rocky areas	NE	NE	NE	No
418	<i>Cynanchum thesioides</i> (= <i>Vincetoxicum sibiricum</i>)	R	2-16	China, Kazakhstan, Korea, Russia	Rocky areas	NE	LC (Mongolia)	LC	Y+
419	<i>Cynomorium songaricum</i>	R, RB, OU	10-16	China, M Asia, SW Asia	Desert (8.2), Coastline (10.2)	NE	NE	NE	✓ Y+
420	<i>Cypripedium calceolus</i>	VR, RB	1,2,4	Europe, China, Japan, Korea, Russia, N America	Forest (1.4), Wetlands (5.1; 5.4; 5.11)	LC	DD (Japan)	VU	Y+
421	<i>Cypripedium guttatum</i>	CI	1-5	Europe, Bhutan, China, Japan, Korea, Russia, N America	Forest (1.4; 1.6), Wetlands (5.1; 5.4; 5.11)	LC	CR (Japan, R. Korea)	NE	Y+
422	<i>Cypripedium macranthos</i>	VR, RB, CI	1,2,4,5	Europe, China, Japan, Korea, Russia, Taiwan	Forest (1.4; 1.6), Wetlands (5.1; 5.4)	LC	EN (R. Korea)	VU	Y+

423	<i>Cypripedium ventricosum</i>	CI, AP, OR	2	Russia	Forest (1.4), Wetlands (5.11)	1800<	NE	NE	NE	√	No
424	<i>Cystopteris sudetica</i>	OR	2	Europe, Caucasus, China, Japan, Korea, Russia	Forest (1.4)		NE	EN (Norway)	NE		No
425	<i>Dactylorhiza fuchsii</i> (=D. meyeri)	VR, RB	2,4	Europe, Caucasus, China, Russia	Forest (1.4)		NE	CR (Mongolia)	CR		No
426	<i>Dactylorhiza incarnata</i> subsp. <i>cruenta</i> (=D. <i>cruenta</i>)	RB	3	Europe, Caucasus, China, Russia	Forest (1.4), Grassland (4.4)		NE	NE	NE		No
427	<i>Dactylorhiza incarnata</i>	R, RB	3,5	Europe, China, Russia	Forest (1.4), Grassland (4.4)		NE	NT (United Kingdom)	NE		No
428	<i>Delphinium altaicum</i>	AP	6,7,13,14	China, Russia?	Forest (1.4), Wetlands (5.1; 5.4; 5.11)		NE	NE	NE		No
429	<i>Delphinium barlykense</i>	SE, AP	1,6,7	Kazakhstan, Russia	Grassland (4.4), Wetlands (5.4)		NE	NE	NE		No
430	<i>Delphinium changaicum</i>	E, AP	3,13	Endemic	Grassland (4.4), Rocky areas	1900-2400	NE	NE	NE		No
431	<i>Delphinium dictyocarpum</i>	OR	7	Russia	Shrubland (3.4), Wetlands (5.4)		NE	NE	NE		No
432	<i>Delphinium gubanovii</i>	E, OR	7	Endemic	Rocky areas	1800-2300	NE	NE	NE		No

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433	<i>Delphinium iliense</i>	OR	14	China, M Asia, Russia	Wetlands (5.1; 5.2; 5.4)		NE	NE	NE	Y-
434	<i>Delphinium inconspicatum</i>	SE, AP	3,6,7,14	China, Kazakhstan, Russia	Shrubland (3.4), Wetlands (5.11)	2000<	NE	NE	NE	Y+
435	<i>Delphinium malyshevii</i>	SE, AP, OR	1	Russia	Wetlands (5.11)	2200<	NE	NE	NE	✓ No
436	<i>Delphinium mirabile</i>	SE, AP	6,7	Russia	Shrubland (3.4), Wetlands (5.11)	2400<	NE	NE	NE	No
437	<i>Delphinium sajanense</i>	SE, AP, OR	1	Russia	Wetlands (5.1; 5.11), Rocky areas	1800<	NE	NE	NE	No
438	<i>Delphinium ukokense</i>	SE, AP	6,7	Kazakhstan, Russia	Wetlands (5.11)	2400<	NE	NE	NE	✓ Y-
439	<i>Dendranthema mongolicum</i>	SE	1,2,3	Russia	Rocky areas		NE	NE	NE	Y+
440	<i>Dendranthema naktongense</i>	OR	9	China, Korea, Russia	Grassland (4.4)		NE	NE	NE	No
441	<i>Dendroarabis fruticulosa</i> (= <i>Arabis fruticulosa</i>)	SE	6,7	China, Kazakhstan, Kyrgyzstan, Pakistan, Russia, Tajikistan	Rocky areas		NE	NE	NE	Y-
442	<i>Dianthus hoeltzeri</i>	RB, AP, OR	7	China, Kazakhstan	Wetlands (5.11)	1500- 3300	NE	NE	NE	✓ No
443	<i>Dianthus ramosissimus</i>	OR	10	Europe, Caucasus, China, Kazakhstan, Russia	Rocky areas		NE	NE	NE	Y-
444	<i>Dianthus soongoricus</i>	R, RB	7,14	China, Kazakhstan	Rocky areas		NE	NE	NE	No

445	<i>Diarthron altaicum</i>	SE, OR	7	China, M Asia, Russia	Rocky areas, Desert (8.2)	NE	NE	NE	No
446	<i>Diarthron linifolium</i>	R	2-5	China, Japan, Korea, Russia	Grassland (4.4), Rocky areas	NE	VU (R. Korea)	NE	Y-
447	<i>Dichostylis micheliana</i> (= <i>Cyperus michelianus</i>)	WP, OR	4	Europe, Africa, Asia-Temperate, Asia-Tropical, Australia	Wetlands (5.1; 5.4; 5.7)	LC	NE	NE	✓ No
448	<i>Dictamnus albus</i> (= <i>D. dasycarpus</i>)	VR	5,9	China, Korea, Russia	Shrubland (3.4), Grassland (4.4), Wetlands (5.1)	NE	EN (Mongolia)	EN	Y+
449	<i>Diphasiastrum alpinum</i>	VR	1,2	Europe, Asia-Temperate, N America	Forest (1.4), Shrubland (3.4), Wetlands (5.1; 5.11)	NE	EN (Japan)	EN	✓ Y-
450	<i>Diphasiastrum complanatum</i>	OR	1	Europe, Asia-Temperate, N America	Forest (1.4), Shrubland (3.4), Wetlands (5.4)	NE	EN (Finland, R. Korea)	EN	✓ Y-
451	<i>Dontostemon crassifolius</i>	SE	7,10-16	China, Russia	Rocky areas, Desert (8.2)	NE	NE	NE	Y+
452	<i>Dontostemon dentatus</i>	OR	5	China, Japan, Korea, Russia	Rocky areas	NE	CR (Japan)	NE	No
453	<i>Dontostemon elegans</i>	SE	6,7,10-16	China, Russia	Rocky areas, Desert (8.2)	NE	NE	NE	Y+
454	<i>Dontostemon</i>	SE	1-5,8,9,13	China, Russia	Grassland	NE	NE	NE	Y+

D

	<i>micranthus</i>					(4.4), Rocky areas					
D	455	<i>Dontostemon perennis</i>	SE	3,5-8, 10-13,15	China, Russia	Grassland (4.4), Rocky areas, Desert (8.2)	NE	NE	NE		Y+
	456	<i>Dontostemon senilis</i>	SE	6-8, 10-16	China	Rocky areas, Desert (8.2)	NE	NE	NE		Y+
	457	<i>Dontostemon senilis subsp. gubanovii</i>	SE	6,7,10	China	Rocky areas, Desert (8.2)	NE	NE	NE		No
	458	<i>Doronicum altaicum</i>	SE, AP, OR	1	China, Kazakhstan, Russia	Rocky areas	2300-2500	NE	NE	NE	✓ Y-
	459	<i>Draba altaica</i>	SE, R, AP	6,7,13	China, M and SW Asia, Russia	Rocky areas	2000-5600	NE	Rare & Threatened (India)	NE	Y-
	460	<i>Draba czuensis</i>	SE	3,6,7,10	Russia	Wetlands (5.2), Rocky areas		NE	NE	NE	No
	461	<i>Draba mongolica</i>	SE, AP	1,3,6,7	China, Russia	Rocky areas	1700-4000	NE	NE	NE	✓ Y-
	462	<i>Draba pygmaea</i>	SE, AP	1,3,6	Russia	Rocky areas	1800<	NE	NE	NE	Y+
	463	<i>Draba sibirica</i>	R, AP	3,7	Europe, China, Kazakhstan, Kyrgyzstan, Russia	Rocky areas	2000-2900	NE	NA (Estonia)	NE	Y-
	464	<i>Draba stenocarpa</i>	AP, OR	7	China, M and SW Asia	Rocky areas	2500-5000	NE	NE	NE	No
	465	<i>Draba subamplexicaulis</i>	SE, OR	1-3, 6,7,13	China, Kazakhstan, Kyrgyzstan, Russia, Uzbekistan	Rocky areas	2300-4600	NE	NE	NE	Y-
	466	<i>Dracocephalum argunense</i>	OR	5	China, Korea, Russia	Grassland (4.4)		NE	NE	NE	No

467	<i>Dracocephalum fragile</i>	SE, AP	1,3,6,7	Russia	Shrubland (3.4), Rocky areas		NE	NE	NE	Y+
468	<i>Dracocephalum fruticosum</i>	SE	3,4,6-8, 10-13,16	China, Russia	Rocky areas, Desert (8.2)		NE	NE	NE	Y+
469	<i>Dracocephalum heterophyllum</i>	AP, OR	3	China, Russia	Wetlands (5.11), Rocky areas	1100-5000	NE	NE	NE	✓ Y-
470	<i>Dracocephalum junatovii</i>	SE	4,9	Russia	Rocky areas		NE	NE	NE	No
471	<i>Dracocephalum nodulosum</i>	SE, AP, OR	14	China	Rocky areas	<3300	NE	NE	NE	✓ No
472	<i>Dracocephalum olchonense</i>	OR	4	Russia	Grassland (4.4)		NE	NE	NE	No
473	<i>Dracocephalum origanoides subsp. bungeanum</i>	SE, AP	1,6,7,13	China, Russia	Wetlands (5.11), Rocky areas	1700-2500	NE	NE	NE	Y+
474	<i>Dracocephalum paulsenii</i>	AP, OR	14	China, M and SW Asia, Russia	Wetlands (5.11), Rocky areas	3500-4200	NE	NE	NE	✓ No
475	<i>Dracocephalum pinnatum</i>	OR	6	Russia	Grassland (4.4), Sandy areas		NE	NE	NE	No
476	<i>Drosera anglica</i>	VR, RB	2	Europe, Asia-Temperate, N America	Wetlands (5.4; 5.11)	2000<	NE	VU (Japan)	EN	✓ No
477	<i>Drosera rotundifolia</i>	VR, RB	2	N and M Europe, Asia-Temperate, N America	Forest (1.2), Wetlands (5.4; 5.11)	2000<	LC	LC (R. Korea)	EN	✓ No
478	<i>Dryas grandis</i>	R, AP, OR	1	Russia	Shrubland (3.4), Wetlands	<2400	NE	NE	NE	✓ No

					(5.4)							
D	479	<i>Dryas incisa</i>	R, AP, OR	1	Europe, Russia, N America	Forest (1.1; 1.2; 1.4), Wetlands (5.4; 5.11)	2000<	NE	NE	NE	✓	No
E	480	<i>Dryas sumneviciii</i>	R, AP, OR	1	Russia	Forest (1.2)	2000<	NE	NE	NE	✓	No
	481	<i>Dryopteris dilatata</i>	VR, RB	2,5	Europe, Russia, N America	Forest (1.4), Wetlands (5.4)		NE	EN (Mongolia)	EN		Y-
	482	<i>Echinops nanus</i>	R	7,14	China, Kazakhstan, Russia, Uzbekistan	Desert (8.2)		NE	NE	NE		Y+
	483	<i>Elachanthemum intricatum</i> (= <i>Artemisia intricata</i>)	SE	3,4,7, 9-15	China, Russia?	Desert (8.2)		NE	NE	NE		Y+
	484	<i>Elaeagnus angustifolia</i> (= <i>E. moorcroftii</i>)	VR, RB, RL	15,16	China, M Asia, SW Asia, Russia	Desert (8.2)		NE	CR (Mongolia)	CR		Y+
	485	<i>Eleocharis acicularis</i>	WP	2-4,6-9, 11,14	Cosmopolitan	Wetlands (5.1; 5.4; 5.7; 5.10; 5.11)		LC	VU (Japan)	NE	✓	Y+
	486	<i>Eleocharis acicularis</i> subsp. <i>yokoscensis</i>	WP	2-5,8,9,14	China, Japan, Korea, M Asia, SW Asia, Russia	Wetlands (5.1; 5.4; 5.11)		NE	NE	NE	✓	Y-
	487	<i>Eleocharis klingeii</i>	WP, OR	3	Europe, Caucasus, China, M and W Asia, Russia	Wetlands (5.1; 5.4)		NE	NE	NE	✓	No
	488	<i>Eleocharis mamillata</i>	WP, OR	10	Europe, Russia	Wetlands (5.1; 5.4; 5.7; 5.11)		NE	NE	NE	✓	Y-
	489	<i>Eleocharis palustris</i>	WP	1-16	Cosmopolitan	Wetlands (5.1; 5.4; 5.7;		LC	NE	NE	✓	Y+

						5.10; 5.11)					
490	<i>Eleocharis quinqueflora</i> (= <i>E. meridionalis</i>)	WP	2-4,7,8, 10,11,15		Cosmopolitan	Wetlands (5.1; 5.4; 5.7; 5.10; 5.11)	LC	NE	NE	✓	Y+
491	<i>Eleocharis uniglumis</i>	WP	1,4,5,8,9, 10,12-15		Cosmopolitan	Wetlands (5.4; 5.10; 5.11)	LC	NE	NE	✓	Y+
492	<i>Elymus dahuricus</i> (= <i>E. exselsus</i>)	R	1-10,13		China, Russia	Grassland (4.4), Wetlands (5.1; 5.4), Rocky areas	NE	NE	NE		Y+
493	<i>Elymus fedtschenkoi</i>	R, RB, OR	7		China, M Asia, Russia	Wetlands (5.1; 5.4; 5.11)	NE	NE	NE	✓	Y+
494	<i>Elymus karakabinicus</i>	SE, OR	7		China, Kazakhstan, Russia	Grassland (4.4)	NE	NE	NE		No
495	<i>Elymus kronokensis</i>	OR	4		China, Russia	Wetlands (5.1; 5.7; 5.11)	NE	NE	NE		No
496	<i>Elymus praecaespitosus</i>	R	1-4,7		Russia	Wetlands (5.4; 5.11)	NE	NE	NE		Y-
497	<i>Elymus schrenkianus</i> (= <i>E. pamiricus</i>)	R	3,4,7,13		China, M Asia, SW Asia, Russia	Wetlands (5.1), Rocky areas	NE	NE	NE		Y+
498	<i>Ephedra equisetina</i>	VR, RB, RL	3,6-9, 12-16		China, M Asia, SW Asia, Russia	Rocky areas	NE	VU (Mongolia)	VU		Y+
499	<i>Ephedra fedtschenkoae</i>	VR	2-4,7		China, Kazakhstan, Tajikistan, Russia	Rocky areas, Desert (8.2)	LC	NT (Mongolia)	NT	✓	No
500	<i>Ephedra glauca</i>	RL	12,14,15		China	Rocky areas, Desert (8.2)	LC	NE	NE	✓	Y+
501	<i>Ephedra</i>	RL	7,14,15		China, M Asia, SW	Shrubland	LC	NE	NE	✓	Y+

	<i>intermedia</i>			Asia, Russia	(3.4), Rocky areas, Desert (8.2)							
E	502	<i>Ephedra lomatolepis</i>	RL	12,14,15	China, Kazakhstan, Russia	Desert (8.2)		LC	NE	NE	✓	No
	503	<i>Ephedra przewalskii</i>	RL	6,7,11-16	China, Kazakhstan, Kyrgyzstan, Pakistan, Tajikistan, Uzbekistan	Desert (8.2), Coastline (10.2)		LC	NE	NE		Y+
	504	<i>Ephedra sinica</i>	R, OU	2-5, 7-15	China, Russia	Grassland (4.5), Desert (8.2)		LC	NE	NE		Y+
	505	<i>Epilobium alpinum</i>	AP, OR	7	Europe, Asia-Temperate, N America	Wetlands (5.1; 5.4; 5.11)	1800<	NE	NE	NE	✓	No
	506	<i>Epilobium ciliatum</i>	AP, OR	2	Cosmopolitan	Wetlands (5.1; 5.4; 5.11), Rocky areas	1200-2100	LC	VU (Switzerland)	NE	✓	No
	507	<i>Epilobium davuricum</i>	R	2-4,11	Europe, Russia	Forest (1.4), Shrubland (3.4), Wetlands (5.1; 5.4)		NE	NE	NE		Y-
	508	<i>Epilobium hirsutum</i>	R, AP	3,6	Europe, Africa, Asia-Temperate, Asia-Tropical, N America	Forest (1.2; 1.4), Shrubland (3.4), Wetlands (5.1; 5.4; 5.11), Rocky	1500-3500	LC	VU (Japan, R. Korea)	NE		No

					areas							
509	<i>Epilobium palustre</i>	WP	1-10, 13-15	Europe, Africa, Asia-Temperate, Asia-Tropical, N America	Forest (1.2; 1.4), Shrubland (3.4), Wetlands (5.1; 5.4)		LC	VU (Netherlands)	NE	✓	Y+	E
510	<i>Epipactis helleborine</i>	OR	6	Europe, Caucasus, China, Russia, N America	Forest (1.2; 1.4), Shrubland (3.4)		LC	EX (Cyprus)	NE		No	
511	<i>Epipactis palustris</i>	WP, OR	7	Europe, China, Russia	Forest (1.2; 1.4), Shrubland (3.4), Wetlands (5.4)		LC	EN (Norway)	NE	✓	No	
512	<i>Epipogium aphyllum</i>	VR, AP	1-4	Europe, China, SE Asia, Russia	Forest (1.4), Wetlands (5.1; 5.4; 5.11)	1200- 3600	NE	EN (Japan), CR (Taiwan)	VU		Y-	
513	<i>Equisetum arvense</i>	WP	1-10,14	Europe, Asia- Temperate, Asia- Tropical, N America	Forest (1.2; 1.4), Shrubland (3.4), Wetlands (5.1; 5.4; 5.11)	<3700	LC	LC (United Kingdom)	NE	✓	Y+	
514	<i>Equisetum fluviatile</i>	WP	1-10,14	Europe, Asia- Temperate, Asia- Tropical, N America	Forest (1.2; 1.4), Wetlands (5.1; 5.4; 5.8;	<3000	LC	LC (United Kingdom)	NE	✓	Y+	

					5.10; 5.11)							
E	515	<i>Equisetum palustre</i>	WP	1-10,14	Europe, Asia-Temperate, Asia-Tropical, N America	Forest (1.2; 1.4), Shrubland (3.4), Wetlands (5.1; 5.4; 5.11)	<4000	LC	LC (United Kingdom)	NE	✓	Y+
	516	<i>Equisetum pratense</i>	WP	1-7,9,10	Europe, Asia-Temperate, N America	Forest (1.2; 1.4), Shrubland (3.4), Wetlands (5.1; 5.4; 5.11)	<2800	NE	VU (Japan)	NE		Y+
	517	<i>Equisetum ramosissimum</i>	R	14	Europe, Africa, Asia-Temperate, Asia-Tropical, Pacific, N America	Forest (1.4; 1.6), Wetlands (5.1; 5.4)	<3600	NE	LC (Taiwan)	NE		Y-
	518	<i>Equisetum variegatum</i>	R, AP	1,4	Europe, Asia-Temperate, Asia-Tropical, N America	Forest (1.1; 1.2; 1.4; 1.6), Shrubland (3.4), Wetlands (5.1; 5.4; 5.11)	1500-3700	NE	CR (Japan)	NE		Y-
	519	<i>Eragrostis cilianensis</i>	R, OR	10	China, M and S Asia	Rocky areas, Desert (8.2)		NE	DD (Sri-Lanka)	NE		Y+
	520	<i>Eremogone androsacea</i>	SE, R, AP, OR	13	China?	Rocky areas	1800<	NE	NE	NE	✓	No
	521	<i>Eremogone juncea</i> (=Arenaria juncea)	R	4,5,9	China, Korea, Russia	Shrubland (3.4),		NE	NE	NE		Y+

					Grassland (4.4)							
522	<i>Eremogone mongholica</i>	SE, AP, OR	7	Russia	Shrubland (3.4), Rocky areas	1800<	NE	NE	NE	✓	No	
523	<i>Eremopyrum distans</i>	R, OR	14	Europe, China, M and SW Asia, Russia	Desert (8.2), Coastline (10.2)		NE	NE	NE		No	
524	<i>Erigeron altaicus</i>	SE	7,14	China, Kazakhstan, Russia	Grassland (4.4)		NE	NE	NE		Y-	
525	<i>Erigeron baicalensis</i>	SE, OR	1	Russia	Forest (1.4), Wetlands (5.4; 5.11)		NE	NE	NE	✓	No	
526	<i>Erigeron elongatus</i>	SE, AP	1-4, 6,7,13	Europe, Asia-Temperate, N America	Forest (1.1; 1.2; 1.4), Wetlands (5.1; 5.4; 5.11)	1800<	NE	NE	NE		No	
527	<i>Erigeron heterochaeta</i>	AP, OR	3	China?, Kazakhstan, Kyrgyzstan	Wetlands (5.11), Rocky areas		NE	NE	NE	✓	No	
528	<i>Erigeron krylovii</i>	SE, AP	3,7	China, Kazakhstan, Russia	Forest (1.4), Grassland (4.4), Wetlands (5.4; 5.11)	1700-2800	NE	NE	NE		No	
529	<i>Eriophorum angustifolium</i> (= <i>E. polystachyon</i>)	WP	1-7, 9-11	Europe, Asia-Temperate, N America	Forest (1.2; 1.4), Wetlands (5.1; 5.4; 5.11)		LC	VU (United Kingdom)	NE	✓	Y-	
530	<i>Eriophorum</i>	AP, OR	1	Russia, N America	Wetlands	1800<	LC	NE	NE		No	

E

	<i>callitrix</i>				(5.10; 5.11)							
E	531	<i>Eriophorum vaginatum</i>	WP, OR	3	Europe, Caucasus, China, M and SW Asia, Russia	Forest (1.2; 1.4), Wetlands (5.1; 5.4; 5.7; 5.10; 5.11)		LC	CR (Hungary)	NE	✓	Y-
	532	<i>Eritrichium alpinum</i>	AP, OR	6?	Russia	Grassland (4.4), Wetlands (5.4; 5.11)	1800<	NE	NE	NE		No
	533	<i>Eritrichium kamelinii</i>	SE, OR	7	Russia	Rocky areas		NE	NE	NE		No
	534	<i>Eritrichium pauciflorum</i>	SE	1-8,13	China, Kazakhstan, Russia	Rocky areas		NE	NE	NE		Y+
	535	<i>Eritrichium pectinatum</i>	OR	3	Russia	Shrubland (3.4), Rocky areas		NE	NE	NE		No
	536	<i>Eritrichium sajanense</i>	SE	1	Russia	Rocky areas	2000<	NE	NE	NE		No
	537	<i>Eryngium planum</i>	R, RB, OR	4	Europe, China, M and SW Asia, Russia	Rocky areas		NE	CR (Croatia)	NE		No
	538	<i>Erysimum ledebourii</i>	SE, OR	7	Kazakhstan, Russia	Grassland (4.4), Rocky areas		NE	NE	NE		No
	539	<i>Erysimum mongolicum</i>	SE	7,14	China	Rocky areas		NE	NE	NE		No
	540	<i>Erysimum quadrangulum</i>	SE, OR	7	Kazakhstan	Wetlands (5.2); Sandy areas		NE	NE	NE		No
	541	<i>Erythronium sibiricum</i>	OR	7	China, Kazakhstan, Russia	Wetlands (5.1; 5.4)		NE	NE	NE		No

542	<i>Euphorbia alpina</i>	SE, R, RB, AP, OR	7	China, Kazakhstan, Russia	Grassland (4.4), Wetlands (5.11); Rocky areas	1800<	NE	NE	NE	✓	No
543	<i>Euphorbia caesia</i>	AP, OR	7	E Europe, China, Kazakhstan, Russia	Grassland (4.4), Wetlands (5.1; 5.4; 5.11)	1800<	NE	NE	NE		No
544	<i>Euphorbia kozlovii</i>	SE	8,10,12, 13,16	China, Russia	Desert (8.2)		NE	NE	NE		Y+
545	<i>Euphorbia macrorrhiza</i>	SE	6,7	China, Kazakhstan, Russia	Grassland (4.4), Rocky areas		NE	NE	NE		No
546	<i>Euphorbia mongolica</i>	SE	3,6,7, 10-13	China, Russia	Rocky areas		NE	NE	NE		Y+
547	<i>Euphorbia pachyrrhiza</i>	OR	7	China, Kazakhstan, Kyrgyzstan, Tajikistan	Grassland (4.4)		NE	NE	NE		No
548	<i>Euphorbia pilosa</i>	AP, OR	7	China, Kazakhstan, Kyrgyzstan, Russia, Tajikistan	Forest (1.4), Grassland (4.4), Wetlands (5.1; 5.4; 5.11)	2000<	NE	NE	NE	✓	No
549	<i>Euphorbia potaninii</i>	SE	3,6,7, 10,13	China, Russia	Rocky areas		NE	NE	NE		Y+
550	<i>Euphorbia soongarica</i>	OR	7	E Europe, China, M Asia, Russia	Grassland (4.4), Wetlands (5.4)		NE	NE	NE		No

E

	551	<i>Euphrasia altaica</i>	AP, OR	7	Kazakhstan, Russia	Grassland (4.4), Wetlands (5.4, 5.11)		NE	NE	NE	✓	No
E	552	<i>Euphrasia schischkinii</i>	SE	7	China, Kazakhstan, Russia	Grassland (4.4), Wetlands (5.2)		NE	NE	NE		No
F	553	<i>Euphrasia syreitschikovii</i>	SE	1-3, 5-8	China, Russia	Grassland (4.4), Wetlands (5.1; 5.4)		NE	NE	NE		Y-
	554	<i>Eutrema altaicum</i> (= <i>Taphrospermum</i> <i>altaicum</i>)	SE	1,6,7	China, Kazakhstan, Kyrgyzstan, Russia, Tajikistan	Wetlands (5.1; 5.4; 5.11)	2000- 4000	NE	NE	NE		No
	555	<i>Eutrema edwardsii</i>	SE	1-3, 6,7,13	Europe, Asia- Temperate, N America	Shrubland (3.4), Wetlands (5.4; 5.11)	2000<	LC	NE	NE		Y+
	556	<i>Eutrema heterophyllum</i>	AP, OR	7	China, M and SW Asia	Wetlands (5.1; 5.4; 5.11)	2000<	NE	NE	NE	✓	No
	557	<i>Fallopia dumetorum</i>	OR	5	Europe, Caucasus, China, M and SW Asia, Russia, N America	Wetlands (5.1; 5.4; 5.7)		NE	VU (United Kingdom)	NE		No
	558	<i>Ferula bungeana</i>	SE	5,8-16	China	Desert (8.2), Coastline (10.2)		NE	NE	NE		Y+
	559	<i>Ferula feruloides</i>	VR, RB, OR, OU	7	China, Kazakhstan, Kyrgyzstan, Russia, Uzbekistan	Rocky areas, Desert (8.2)		NE	EN (Mongolia)	EN		Y-

560	<i>Ferula mongolica</i>	SE	3,7,10, 14,15	China	Shrubland (3.4); Grassland (4.4), Rocky areas		NE	NE	NE	Y+
561	<i>Ferulopsis hystrix</i>	SE	2-4,6-11, 13,15	China?, Russia	Rocky areas		NE	NE	NE	Y+
562	<i>Festuca dahurica</i>	SE	2,4,5,9	China, Russia	Grassland (4.4), Rocky areas		NE	NE	NE	Y+
563	<i>Festuca extremiorientalis</i>	OR	2	China, Korea, Russia	Forest (1.4), Shrubland (3.4), Grassland (4.4)		NE	NE	NE	No
564	<i>Festuca hubsugulica</i>	SE, AP, OR	1	Russia	Rocky areas	2000<	NE	NE	NE	No
565	<i>Festuca komarovii</i>	SE, R	1,2	Russia	Rocky areas		NE	VU (Mongolia)	VU	No
566	<i>Festuca kurtschumica</i>	AP, OR	7	China, Kazakhstan, Russia	Wetlands (5.11)	2700<	NE	NE	NE	Y-
567	<i>Festuca litvinovii</i>	R, RB, OR	9	China, Russia	Grassland (4.4)		NE	NE	NE	Y+
568	<i>Festuca ovina subsp. sphagnicola</i>	SE	3,7	Russia	Grassland (4.4), Rocky areas		NE	NE	NE	Y+
569	<i>Festuca pseudosulcata</i>	OR	4	China, Russia	Grassland (4.4)		NE	NE	NE	Y+
570	<i>Festuca tristis</i>	SE	3,6,7	China, Kazakhstan, Russia	Grassland (4.4), Rocky areas		NE	NE	NE	No
571	<i>Festuca tschujensis</i>	SE	3,6,7,10	Kazakhstan, Russia	Grassland (4.4), Rocky		NE	NE	NE	Y+

					areas						
	572	<i>Festuca venusta</i>	SE, R	1-4	Russia	Grassland (4.4), Rocky areas		NE	NE	NE	Y-
F	573	<i>Flueggea suffruticosa</i> (= <i>Securinega suffruticosa</i>)	R	5,9	China, Japan, Korea, Russia, Taiwan	Forest (1.4), Grassland (4.4)		NE	LC (Taiwan)	NE	No
G	574	<i>Fragaria viridis</i>	OR	2	Europe, Caucasus, China, M Asia, Russia	Forest (1.4), Grassland (4.4), Wetlands (5.4)		NE	VU (Finland)	NE	Y-
	575	<i>Frankenia pulverulenta</i>	R, OR	10	Europe, Africa, Asia-Temperate, Asia-Tropical, N America	Wetlands (5.2; 5.4?), Coastline (10.2)		NE	CR (Bulgaria)	NE	No
	576	<i>Frankenia tuvunica</i> (= <i>F. bucharica</i> subsp. <i>tuvunica</i>)	SE, OR	10	Russia	Wetlands (5.2; 5.15; 5.16)		NE	NE	NE	No
	577	<i>Fritillaria dagana</i>	SE, AP	1,2	Russia	Wetlands (5.4; 5.11)		NE	NE	NE	No
	578	<i>Fumaria officinalis</i>	AP, OR	7	E Europe, Asia-Temperate	Wetlands (5.1; 5.4; 5.11)		NE	VU (Hungary)	NE	✓ Y-
	579	<i>Gagea brevistolonifera</i>	AP, OR	7	China?, M Asia	Wetlands (5.4; 5.11)		NE	NE	NE	✓ No
	580	<i>Gagea filiformis</i>	AP, OR	7	Afghanistan, China, Iran, Kazakhstan, Pakistan, Russia	Grassland (4.4), Wetlands (5.1; 5.4; 5.11)	<2300	NE	NE	NE	✓ No

581	<i>Gagea granulosa</i>	AP, OR	7	Europe, China, Kazakhstan, Russia	Forest (1.4), Grassland (4.4), Wetlands (5.1; 5.4; 5.11)	1300-2000	NE	NE	NE	✓	No
582	<i>Gagea hiensis</i>	VR, RB	1,2	China, Russia, Korea	Wetlands (5.1; 5.4)		NE	VU (Mongolia)	VU	✓	No
583	<i>Gagea kuraiensis</i>	SE, AP, OR	7	Russia	Wetlands (5.4; 5.11)		NE	NE	NE	✓	No
584	<i>Galatella altaica</i>	SE	7,14	China, Kazakhstan, Russia	Grassland (4.4), Rocky areas		NE	NE	NE		No
585	<i>Galatella angustissima</i>	OR	1	Europe, Caucasus, China, Kazakhstan, Russia	Grassland (4.4), Rocky areas		NE	NE	NE		No
586	<i>Galatella hauptii</i>	SE, OR	7	China, Kazakhstan, Russia	Grassland (4.4), Rocky areas		NE	NE	NE		No
587	<i>Galatella macrosciadia</i>	R	1,7,14	China, Kazakhstan, Russia, Uzbekistan	Forest (1.4), Grassland (4.4)		NE	NE	NE		Y-
588	<i>Galitzkya macrocarpa</i>	E, R, AP	13,15	Endemic	Rocky areas	1800-2600	NE	NE	NE		Y+
589	<i>Galitzkya potaninii</i>	SE	7,14,15	China	Rocky areas	800-1700	NE	NE	NE		Y-
590	<i>Galium amblyophyllum</i>	OR	14	China?, M Asia, Russia	Grassland (4.4), Wetlands (5.2; 5.4)		NE	NE	NE		No
591	<i>Galium davuricum</i>	OR	2	China, Japan, Russia	Forest (1.4)		NE	NE	NE		No

592	<i>Galium humifusum</i>	R	3,7,13	E Europe, Asia-Temperate, Asia-Tropical	Forest (1.4), Grassland (4.4)		NE	EX (Israel), EN (Cyprus)	NE		No
593	<i>Galium verum subsp. wirtgenii</i>	AP, OR	7	Europe, Russia	Shrubland (3.4), Grassland (4.4), Wetlands (5.1; 5.4; 5.11)		NE	NT (Switzerland)	NE	✓	No
594	<i>Gentiana algida</i>	AP, OU	1-3,6,7,13	E Europe, Asia-Temperate, N America	Grassland (4.4), Wetlands (5.11)	1200-4200	NE	EN (Mongolia)	EN	✓	Y+
595	<i>Gentiana aquatica</i>	WP	1-3,6-8	China, Japan, Kazakhstan, Russia, Tajikistan	Grassland (4.4), Wetlands (5.1; 5.4; 5.11)		NE	CR (Japan)	NE	✓	Y+
596	<i>Gentiana aquatica</i> var. <i>pseudoaquatica</i> (= <i>G. pseudoaquatica</i>)	WP	1-9,13	China, Korea, Russia	Grassland (4.4), Wetlands (5.1; 5.4; 5.11)		NE	NE	NE	✓	Y+
597	<i>Gentiana macrophylla</i>	VR	1-7,9,13,14	Russia	Forest (1.4), Shrubland (3.4), Wetlands (5.1; 5.4; 5.11)		NE	NT (Mongolia)	NT		Y+
598	<i>Gentiana riparia</i>	R	7,14	China, M and SW Asia, Russia	Grassland (4.4),		NE	NE	NE		No

					Wetlands (5.1)						
599	<i>Gentianella atrata</i>	AP, OR	5	China, M Asia, Russia	Wetlands (5.1; 5.4; 5.11)		NE	NE	NE	✓	No
600	<i>Gentianella aurea</i>	SE	7	Europe, Russia, N America	Wetlands (5.1; 5.4; 5.10; 5.11)		NE	EN (Sweden)	NE	✓	No
601	<i>Gentianopsis barbata</i>	R	1-11, 13,14	China, Japan, Kazakhstan, Kyrgyzstan, Russia	Forest (1.4), Wetlands (5.1; 5.4; 5.11)	700-4700	NE	NE	NE		Y+
602	<i>Geranium krylovii</i>	AP, OR	2	Europe, China, M Asia, Russia	Forest (1.4), Shrubland (3.4), Grassland (4.4), Wetlands (5.1; 5.11)		NE	NE	NE	✓	No
603	<i>Geranium transbaicalicum</i> (= <i>G. pratense</i> subsp. <i>transbaicalicum</i>)	SE	2-6,9	China, Russia	Grassland (4.4), Wetlands (5.1; 5.11)		NE	NE	NE		Y+
604	<i>Geum rivale</i>	AP, OR	7	N Europe, Asia-Temperate, N America	Wetlands (5.1; 5.4; 5.10; 5.11)	1200-2300	LC	CR (Hungary)	NE	✓	No
605	<i>Glaucium elegans</i>	OR	14	China, M and SW Asia, Russia	Wetlands (5.2); Desert (8.2)	700-900	NE	NE	NE		No
606	<i>Glyceria arundinacea</i>	WP	1-10,14	Europe, China, Kazakhstan,	Forest (1.4), Wetlands		LC	NT (Hungary)	NE	✓	Y+

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	(= <i>G. triflora</i>)			Korea, Russia	(5.1; 5.3; 5.4; 5.7)				
607	<i>Glycyrrhiza alaschanica</i>	SE	12,15,16	China	Coastline (10.2)	NE	NE	NE	No
608	<i>Glycyrrhiza gobica</i>	SE	12,13, 15,16	China	Desert (8.2), Coastline (10.2)	NE	NE	NE	No
609	<i>Glycyrrhiza inflata</i>	SE	7,15,16	China, M Asia	Desert (8.2), Coastline (10.2)	NE	NE	NE	No
610	<i>Glycyrrhiza pallidiflora</i>	OR	9	China, Korea, Russia	Wetlands (5.1; 5.4)	NE	NE	NE	Y-
611	<i>Glycyrrhiza soongorica</i>	SE	2-4,8,9, 12,15,16	Afghanistan, China, Kyrgyzstan	Wetlands (5.1; 5.4; 5.9), Coastline (10.2)	NE	NE	NE	No
612	<i>Glycyrrhiza squamulosa</i>	VR	12,14	China	Wetlands (5.1; 5.4; 5.9)	NE	EN (Mongolia)	EN	No
613	<i>Glycyrrhiza uralensis</i>	R, OU	2-5,8-16	China, M Asia, Russia	Grassland (4.4), Wetlands (5.1; 5.4; 5.9), Desert (8.2), Coastline (10.2)	NE	NE	NE	Y+
614	<i>Gnaphalium baicalense</i>	SE	2-4,9, 10,14	China?, Russia	Wetlands (5.1; 5.4; 5.11)	NE	NE	NE	Y-
615	<i>Goldbachia ikonnikovii</i>	R	6-8,10, 11,13,14	China	Rocky areas, Desert (8.2)	NE	NE	NE	Y-
616	<i>Goldbachia laevigata</i>	R	6,7,10, 11,14	China, M Asia, SW Asia	Rocky areas, Desert (8.2)	NE	NE	NE	Y-

617	<i>Goldbachia pendula</i>	SE	7,14	China, Kazakhstan, Kyrgyzstan, Russia, Tajikistan, Turkmenistan	Rocky areas, Desert (8.2)	NE	NE	NE	No	
618	<i>Goniolimon callicomum</i>	R, RB	7,14	China, Kazakhstan, Russia	Rocky areas, Desert (8.2)	NE	NE	NE	No	
619	<i>Goniolimon eximium</i>	OR	7	China, M Asia	Grassland (4.4), Rocky areas	NE	NE	NE	Y-	
620	<i>Goodyera repens</i>	AP	1-4,6	Europe, Asia-Temperate, Asia-Tropical, N America	Forest (1.4)	NE	VU (R. Korea)	NE	Y+	
621	<i>Gueldenstaedtia monophylla</i>	VR	6,7,10,12,13,16	China, Russia	Rocky areas	NE	VU (Mongolia)	VU	Y+	
622	<i>Gueldenstaedtia stenophylla</i>	OR	5	China	Rocky areas	NE	NE	NE	No	
623	<i>Gymnadenia conopsea</i>	R, CI	1-5	Europe, Caucasus, China, Japan, Korea, Russia	Forest (1.2; 1.4), Shrubland (3.4), Grassland (4.4), Wetlands (5.1; 5.4; 5.11)	<4700	DD	VU (R. Korea)	NE	Y+
624	<i>Gymnocarpus przewalskii</i>	SE, VR	12,14,16	China	Desert (8.2)	NE	VU (Mongolia)	VU	Y-	
625	<i>Gypsophila altissima</i>	OR	7	SE Europe, Caucasus, China, Russia	Grassland (4.4), Wetlands (5.1; 5.4)	NE	NE	NE	No	

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626	<i>Gypsophila cephalotes</i>	R	6,7	China, M Asia, Russia	Grassland (4.5), Desert (8.2)	NE	NE	NE	Y-
627	<i>Gypsophila desertorum</i>	SE	1-4, 6-13,16	China, Russia	Forest (1.4), Grassland (4.4), Rocky areas	NE	NE	NE	Y+
628	<i>Gypsophila perfoliata</i>	OR	10	SE Europe, Caucasus, China, M and SW Asia, Russia	Grassland (4.4), Wetlands (5.2), Sandy areas	NE	CR (Bulgaria)	NE	No
629	<i>Gypsophila sericea</i>	OR	7	China, Kazakhstan, Russia	Forest (1.4), Wetlands (5.1; 5.4; 5.11), Rocky areas	NE	NE	NE	No
630	<i>Halerpestes salsuginosa</i>	WP	1-4,6-15	China, Kazakhstan, Russia	Wetlands (5.1; 5.4; 5.7; 5.11)	NE	NE	NE	✓ Y+
631	<i>Halerpestes sarmentosa</i>	WP	3,4,6-16	China, Japan, Kazakhstan, N Korea, N Pakistan, Russia	Wetlands (5.1; 5.4; 5.7)	NE	NE	NE	✓ Y+
632	<i>Halimodendron halodendron</i>	VR, RL	7,10, 14,15	China, M Asia, SW Asia, Russia	Shrubland (3.4), Rocky areas, Desert (8.2)	NE	VU (Mongolia)	VU	Y+
633	<i>Halocnemum strobilaceum</i>	R, OR	14	SE Europe, N Africa, Asia-Temperate, Asia-Tropical	Desert (8.2), Coastline (10.2)	NE	CR (Spain)	NE	Y-

634	<i>Hansenia mongholicum</i>	SE	1,2	Russia	Forest (1.4)		NE	NE	NE	✓	Y-
635	<i>Haplophyllum dauricum</i>	RL, OU	2-6,8,9,11-13,16	China, Russia	Grassland (4.4), Rocky areas, Desert (8.2)		NE	NE	NE		Y+
636	<i>Hedysarum austrosibiricum</i>	SE, AP	3,6,7	China, Kazakhstan, Russia	Wetlands (5.11), Rocky areas	2000<	NE	NE	NE		No
637	<i>Hedysarum chalchorum</i>	E, AP	3,4,8	Endemic	Grassland (4.4), Rocky areas	1800-2600	NE	NE	NE		No
638	<i>Hedysarum consanguineum</i>	SE, AP, OR	7	Kazakhstan, Russia	Wetlands (5.4; 5.11)	2000<	NE	NE	NE		Y-
639	<i>Hedysarum dahuricum</i>	SE, R	1,3-10,13	China, Russia	Grassland (4.4), Rocky areas		NE	NE	NE		Y-
640	<i>Hedysarum fruiticosum</i>	Red List	3-5,8-13,16	China, Russia	Grassland (4.4), Wetlands (5.1; 5.4), Coastline (10.2)		LC	LC (Mongolia)	LC		Y+
641	<i>Hedysarum gmelinii</i>	SE	1-4,6,7,9,10,13	Europe, China, M Asia, Russia	Shrubland (3.4), Grassland (4.4), Rocky areas		NE	NE	NE		Y+
642	<i>Hedysarum iliense</i>	OR	7	China, Kazakhstan	Rocky areas		NE	NE	NE		No
643	<i>Hedysarum kamelinii</i>	E, AP	7	Endemic	Rocky areas	2000-3000	NE	NE	NE		No
644	<i>Hedysarum krylovii</i>	OR	7	China, Kazakhstan	Shrubland		NE	NE	NE		No

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					(3.4), Rocky areas						
645	<i>Hedysarum sajanicum</i>	SE, AP, OR	1		Russia	Wetlands (5.4; 5.11), Rocky areas	2000<	NE	NE	NE	✓ No
646	<i>Hedysarum sangilense</i>	VR, AP	1,3		China, Russia	Wetlands (5.1; 5.4; 5.11), Rocky areas	1600<	NE	VU (Mongolia)	VU	Y-
647	<i>Hedysarum theinum</i>	SE, AP, OR	7		Kazakhstan, Russia	Wetlands (5.10; 5.11)	1800<	NE	NE	NE	✓ No
648	<i>Helichrysum arenarium</i>	VR, RB, OR	7		E Europe, Caucasus, China, Russia	Rocky areas		NE	NA (Mongolia)	NA	Y-
649	<i>Helictotrichon mongolicum</i>	SE	1-3,6, 7,13		China, Kazakhstan, Russia	Forest (1.4), Grassland (4.4), Rocky areas		NE	NE	NE	Y+
650	<i>Herniaria caucasica</i>	AP, OR	7		China, M and SW Asia, Russia	Rocky areas	1400-2000	NE	NE	NE	✓ No
651	<i>Herniaria glabra</i>	R, RB, OR	7		E Europe, Afghanistan, Russia, Uzbekistan	Rocky areas		NE	LC (United Kingdom)	NE	Y-
652	<i>Hieracium czadanense</i> (=H. mongolicum)	SE, AP	1		Russia	Wetlands (5.4; 5.11)		NE	NE	NE	No
653	<i>Hieracium dublitzkii</i>	OR	7		China?, Kazakhstan	Grassland (4.4), Rocky areas		NE	NE	NE	No
654	<i>Hieracium sershukense</i>	SE	7		Russia	Rocky areas	1800<	NE	NE	NE	✓ No
655	<i>Hippolytia trifida</i>	SE	3,6-9,		China	Rocky areas,		NE	NE	NE	Y+

	(= <i>Ajania trifida</i>)		11-13,16		Desert (8.2)					
656	<i>Hippophae rhamnoides</i> subsp. <i>mongolica</i> (=H. <i>rhamnoides</i>)	RL	3,4,6,7, 10,11,13	China, Russia	Rocky areas		NE	NE	NE	Y+
657	<i>Hippophae rhamnoides</i> subsp. <i>turkestanica</i>	RL, OR	14	China, M Asia, SW Asia	Rocky areas, Desert (8.2), Coastline (10.2)		NE	NE	NE	No
658	<i>Hippuris vulgaris</i>	WP	1-11, 13,14	Cosmopolitan	Wetlands (5.1; 5.3; 5.4; 5.7; 5.10; 5.11)		LC	LC (United Kingdom)	NE	✓ Y+
659	<i>Hololeion maximowiczii</i>	OR	9	China, Japan, Korea, Russia	Forest (1.4), Grassland (4.4), Wetlands (5.1; 5.4)		NE	NT (Japan, R. Korea)	NE	No
660	<i>Hordeum aegiceras</i>	OR	7	China, M and SW Asia, Russia	Grassland (4.4)		NE	NE	NE	No
661	<i>Hordeum bogdanii</i>	R	3,7,9,10, 14-16	China, M and SW Asia, Russia	Grassland (4.4), Desert (8.2), Coastline (10.2)		LC	NE	NE	Y-
662	<i>Huperzia selago</i>	AP	1,2	Europe, Asia-Temperate, Pacific, N America	Forest (1.2; 1.4), Wetlands (5.4; 5.11)	1900-2300	LC	VU (R. Korea)	NE	✓ Y-
663	<i>Hyalea pulchella</i>	VR	7,14	China, M and SW Asia, Russia	Desert (8.2), Coastline (10.2)		NE	EN (Mongolia)	EN	No

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664	<i>Hylotelephium pallescens</i> (= <i>Sedum pallescens</i>)	VR	2,4	China, Japan, Korea, Russia	Forest (1.4), Grassland (4.4), Wetlands (5.1; 5.3)		NE	VU (Japan)	NT		Y+
665	<i>Hypocoum leptocarpum</i>	OR	3	Afghanistan, Bhutan, China, India, Nepal, Tajikistan	Grassland (4.4), Wetlands (5.1; 5.4)		NE	NE	NE		No
666	<i>Hypericum ascyron</i> subsp. <i>gebleri</i> (= <i>H. gebleri</i>)	R, RB, AP, OR	2	China, Korea, Russia, Taiwan	Forest (1.4), Wetlands (5.1; 5.4; 5.11)		NE	LC (Taiwan)	NE	✓	Y+
667	<i>Hypericum perforatum</i>	R, AP	3,6	Cosmopolitan	Forest (1.4), Shrubland (3.4), Wetlands (5.1; 5.4; 5.11)	<2800	NE	LC (United Kingdom)	NE		Y-
668	<i>Hypochaeris maculata</i> (= <i>Achyrophorus maculatus</i>)	R	4,8	Europe, China, Russia	Forest (1.4), Shrubland (3.4), Wetlands (5.1; 5.4; 5.11)		NE	NT (United Kingdom)	NE		No
669	<i>Hyssopus ambiguus</i>	AP, OR	7	China?, Kazakhstan, Russia	Rocky areas	1800<	NE	NE	NE	✓	No
670	<i>Iljinia regelii</i>	VR, RL	14-16	China, Kazakhstan	Desert (8.2)		NE	VU (Mongolia)	VU		Y+
671	<i>Impatiens parviflora</i>	OR	7	Europe, China, M and SW Asia, Russia	Forest (1.4), Rocky areas		NE	LC (Switzerland)	NE		No

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672	<i>Incarvillea potaninii</i>	SE, VR, RL	13,15,16	China	Rocky areas, Desert (8.2)	NE	EN (Mongolia)	EN	Y-
673	<i>Inula japonica</i>	OR	2	China, Japan, Korea, Russia	Grassland (4.4), Wetlands (5.1; 5.4)	NE	NE	NE	No
674	<i>Iris bungei</i>	SE	3,5,8,9, 11-13,16	China	Grassland (4.4), Rocky areas, Desert (8.2)	NE	NE	NE	Y+
675	<i>Iris dichotoma</i>		2-5,8,9	China, Korea, Russia	Grassland (4.4)	NE	EN (R. Korea)	NE	Y+
676	<i>Iris glaucescens</i>	R, OR	6	China, Kazakhstan, Russia	Rocky areas	NE	NE	NE	No
677	<i>Iris halophila</i>	R	6,14	Europe, China, M and SW Asia, Russia	Grassland (4.4; 4.5), Wetlands (5.4)	NE	NE	NE	Y-
678	<i>Iris humilis</i>	R	1-5,8, 9,12,13	Europe, China, Japan, Russia	Forest (1.4), Grassland (4.4), Rocky areas	NE	NT (Hungary)	NE	Y-
679	<i>Iris ivanovae</i>	SE	2,3	China, Russia	Forest (1.4), Grassland (4.4)	NE	NE	NE	No
680	<i>Iris kamelinii</i>	SE	1,7	Russia	Grassland (4.4)	NE	NE	NE	No
681	<i>Iris ludwigii</i>	SE, OR	7	Kazakhstan, Russia	Shrubland (4.4), Rocky areas	NE	NE	NE	No
682	<i>Iris oxypetala</i>	RB	12,16	China	Desert (8.2)	NE	NE	NE	No
683	<i>Iris potaninii</i>	SE, R, OU	1-4,	China, Russia	Grassland	NE	NE	NE	Y+

			6-13		(4.4), Rocky areas					
684	<i>Iris psammocola</i>	OR	10	China	Desert (8.2)	NE	NE	NE		No
685	<i>Iris pseudothoroldii</i>	SE	4	Russia	Grassland (4.4)	NE	NE	NE		No
686	<i>Iris ruthenica subsp. brevituba</i>		1,2	China, Kazakhstan, Korea, Russia	Forest (1.4), Rocky areas	NE	VU (R. Korea)	NE		No
687	<i>Isatis oblongata</i>	SE	1,3,4, 6-9,13	China, Russia	Grassland (4.4), Coastline (10.2)	NE	NE	NE		Y+
688	<i>Isatis tinctoria</i>	R, OR	14	Europe, Asia-Temperate, Asia-Tropical	Desert (8.2), Coastline (10.2)	DD	CR (Japan)	NE		No
689	<i>Juncellus pannonicus</i>	R, WP	10,11,16	Europe, Asia-Temperate	Wetlands (5.2; 5.7; 5.9; 5.17), Coastline (10.2)	NE	NE	NE	✓	Y-
690	<i>Juncus arcticus subsp. grubovii (= J. grubovii)</i>	E, WP	1-3	Endemic	Wetlands (5.1; 5.4)	1600-2400	NE	NE	NE	✓ No
691	<i>Juncus articulatus</i>	R, WP	4,9,14	Europe, Africa, Asia-Temperate, Asia-Tropical, N America	Wetlands (5.1; 5.4; 5.7)	NE	VU (Finland)	NE	✓	Y-
692	<i>Juncus bufonius</i>	WP	1-16	Cosmopolitan	Wetlands (5.1; 5.4; 5.7; 5.9; 5.11)	LC	LC (United Kingdom)	NE	✓	Y-
693	<i>Juncus bufonius subsp. ambiguus</i>	WP	3,4,6,7, 9-11,13-15	S Europe, Russia?, N America	Wetlands (5.1; 5.7; 5.9)	NE	LC (United Kingdom)	NE	✓	Y-
694	<i>Juncus bufonius</i>	WP	10,14	Europe, China?, M	Wetlands	NE	NE	NE	✓	Y-

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	<i>subsp. nastanthus</i>			Asia, Russia	(5.1; 5.2; 5.4)						
695	<i>Juncus bufonius subsp. turkestanicus</i> (= <i>J. turkestanicus</i>)	WP	3,4,5,7, 9,10,14	China?, M. Asia, Russia?	Wetlands (5.1; 5.2; 5.4)		NE	NE	NE	✓	No
696	<i>Juncus compressus</i>	WP	1,3-5, 8-10,13,14	Europe, China?, M and W Asia, Russia	Wetlands (5.1; 5.2; 5.7; 5.9)		LC	LC (Switzerland)	NE	✓	Y+
697	<i>Juncus filiformis</i>	WP, OR	7	Europe, China, Japan, Russia, N America	Wetlands (5.1; 5.4; 5.10; 5.11)	<2500	LC	CR (Japan)	NE	✓	No
698	<i>Juncus gerardii</i>	WP	2-4,6-10, 13-15	N Europe, Asia-Temperate, N America	Wetlands (5.1; 5.2; 5.7; 5.9)		NE	LC (United Kingdom)	NE	✓	Y+
699	<i>Juncus salsuginosus</i>	WP	1-4,6-8, 10-13,15	China, M Asia, Russia	Wetlands (5.2; 5.7; 5.9)		NE	NE	NE	✓	Y+
700	<i>Juncus virens</i>	WP, OR	4	Russia	Wetlands (5.4)		NE	NE	NE		No
701	<i>Juniperus pseudosabina</i>	R, AP, OU	1-4,7,8,13	China, M and SW Asia, Russia	Forest (1.4), Rocky areas	2000-4000	LC	EN (Mongolia)	EN		Y+
702	<i>Juniperus sabina</i>	VR, AP, OU	2-4,6-8, 10,11,13,14	Europe, China, Kazakhstan, Russia, SW Asia	Shrubland (3.4), Rocky areas	1000-3300	LC	EN (Bulgaria)	EN		Y+
703	<i>Juniperus sabina var. davurica</i> (= <i>J. davurica</i>)	VR, OR	2	Korea?, Russia	Shrubland (3.4), Rocky areas		NE	NE	NE		Y-
704	<i>Jurinea chaetocarpa</i>	R, RB	7,14	China, Kazakhstan	Desert (8.2), Coastline (10.2)		NE	NE	NE		Y-
705	<i>Jurinea mongolica</i>	SE, VR	10-14	China	Desert (8.2), Coastline (10.2)		NE	VU (Mongolia)	VU		Y+

706	<i>Kalidium caspicum</i>	R	10,14	SE Europe, China, M and SW Asia	Desert (8.2)		NE	NE	NE	No
707	<i>Kaschgaria komarovii</i>	SE	7,14,15	China, Kazakhstan	Desert (8.2)		NE	NE	NE	Y+
708	<i>Knorringia sibirica</i>	WP	1-16	China, M and SW Asia, Russia	Forest (1.4), Grassland (4.4), Wetlands (5.1; 5.4), Coastline (10.2)		NE	NE	NE	✓ Y-
709	<i>Knorringia sibirica subsp. ubsunurica</i>	SE, WP, OR	10	Russia	Coastline (10.2)		NE	NE	NE	✓ No
K 710	<i>Kobresia robusta</i>	R, RB, RL, AP, OR	3	China	Wetlands (5.1; 5.11)	2900- 5200	NE	VU (Mongolia)	VU	✓ Y+
711	<i>Kobresia smirnovii</i>	SE, AP	3,6,7	China, M Asia, Russia	Wetlands (5.11); Rocky areas	2200<	NE	NE	NE	Y+
712	<i>Kochia krylovii</i>	SE	6,7,10-16	China, Russia	Desert (8.2), Coastline (10.2)		NE	NE	NE	Y-
713	<i>Kochia melanoptera</i>	SE	3,6,7, 10-16	China, Kazakhstan, Russia	Wetlands (5.15; 5.17), Desert (8.2), Coastline (10.2)		NE	NE	NE	Y+
714	<i>Koeleria glauca</i>	OR	4	Europe, China, M Asia, Russia	Forest (1.4), Grassland (4.4), Wetlands (5.1; 5.4)		NE	CR (Croatia)	NE	Y+
715	<i>Koeleria thonii</i>	OR	5	Russia	Wetlands		NE	NE	NE	No

					(5.1), Sandy areas						
716	<i>Koenigia islandica</i>	WP	1-3,6,7,10,13	Europe, Asia-Temperate, N America	Forest (1.1; 1.2; 1.4); Wetlands (5.1; 5.4; 5.10; 5.11)		LC	NT (Norway)	NE	✓	Y+
717	<i>Lagochilus ilicifolius</i>	SE	3,7,8,10-16	China, Russia	Grassland (4.5); Desert (8.2)		NE	NE	NE		Y+
718	<i>Lagopsis darwiniana</i>	E, AP, OR	7	Endemic	Wetlands (5.2; 5.11), Rocky areas	1600-2700	NE	NE	NE	✓	No
719	<i>Lagopsis flava</i>	AP, OR	7	China, Kazakhstan, Kyrgyzstan	Wetlands (5.11), Rocky areas	2100-2400	NE	NE	NE	✓	No
720	<i>Lagopsis marrubiastrum</i>	SE	3,6,7,13,14	Russia	Shrubland (3.4); Rocky areas		NE	NE	NE		Y-
721	<i>Lancea tibetica</i>	VR, RB, RL, AP, OR	3	China, SW Asia	Wetlands (5.4; 5.11)	2000-4500	NE	CR (Mongolia)	CR	✓	Y+
722	<i>Lappula heterocantha</i>	OR	7	Europe, Caucasus, Kazakhstan, Russia	Forest (1.4), Grassland (4.4), Rocky areas		NE	NE	NE		No
723	<i>Lappula lipskyi</i>	OR	7	China, Kazakhstan	Grassland (4.4), Rocky areas		NE	NE	NE		No
724	<i>Lappula macrantha</i>	SE	7,14	China	Rocky areas		NE	NE	NE		No
725	<i>Lappula microcarpa</i>	SE	7,10	China, M and SW Asia, Russia	Desert (8.2), Rocky areas		NE	NE	NE		No

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726	<i>Lappula occultata</i>	OR	14	China, M Asia	Rocky areas	NE	NE	NE	No
727	<i>Lappula tenuis</i>	SE	14,15	Europe?, China, Kazakhstan, Kyrgyzstan, Russia, Tajikistan, Turkmenistan, Uzbekistan	Desert (8.2)	NE	NE	NE	No
728	<i>Lappula tuvinica</i>	SE, OR	6	Kazakhstan, Russia	Grassland (4.4), Wetlands (5.4)	NE	NE	NE	No
729	<i>Larix czekanowskii</i>	OR	4	Russia	Forest (1.4)	NE	NE	NE	✓ Y+
730	<i>Larix gmelinii</i> (= <i>L. dahurica</i>)	RB	2,4	Russia	Forest (1.4)	LC	NT (Mongolia)	NT	✓ Y-
731	<i>Lathyrus ledebourii</i>	SE, OR	7	China, Russia?	Wetlands (5.1)	NE	NE	NE	No
732	<i>Lathyrus palustris</i> <i>subsp. pilosus</i>	WP	1-5, 8-10,14	Europe, China, Japan, Korea, Russia, N America	Wetlands (5.1; 5.4; 5.11)	LC	NT (Norway)	NE	✓ Y-
733	<i>Lathyrus quinquenervius</i>	R	3-5	China, Japan, Korea, Russia	Wetlands (5.1; 5.4)	NE	NE	NE	Y+
734	<i>Ledum palustre</i>	WP, OU	1-4	N and M Europe, Asia-Temperate, N America	Forest (1.2; 1.4), Shrubland (3.4), Wetlands (5.4; 5.11)	NE	LC (Central Asia)	NE	✓ Y+
735	<i>Ledum palustre</i> <i>var. decumbens</i> (= <i>L. decumbens</i>)	WP	1,4	Europe, Asia-Temperate, N America	Forest (1.2; 1.4), Shrubland (3.4), Wetlands	NE	NE	NE	✓ Y-

					(5.4; 5.11)						
736	<i>Lemna minor</i>	WP	1,3,4, 7-11,13	Cosmopolitan	Wetlands (5.1; 5.4; 5.5; 5.7; 5.11)		LC	LC (United Kingdom)	NE	✓	Y-
737	<i>Lemna trisulca</i>	WP	1-5,8-11	Cosmopolitan	Wetlands (5.1; 5.4; 5.7; 5.10; 5.11)		LC	EX (Israel), CR (Taiwan), VU (Japan)	NE	✓	Y+
738	<i>Lemna turionifera</i>	WP	9,11	Europe, Asia- Temperate, Asia- Tropical, N America	Wetlands (5.1; 5.4; 5.7; 5.11)		LC	LC (United Kingdom)	NE	✓	No
739	<i>Leonurus mongolicus</i>	SE	2-4,6-9	Russia	Forest (1.4), Wetlands (5.1; 5.4)		NE	NE	NE		Y-
740	<i>Leonurus pseudopanzerioides</i> (= <i>L. panzerioides</i>)	SE, R	7,14	China	Wetlands (5.1; 5.4)	1100- 1800	NE	NE	NE		Y+
741	<i>Leonurus turkestanicus</i>	OR	7	China, Kazakhstan, Kyrgyzstan, Tajikistan, Turkmenistan	Wetlands (5.1; 5.4)	1000- 2000	NE	NE	NE		No
742	<i>Lepidium apetalum</i>	OR	7	China, M and SW Asia, Japan, Korea	Rocky areas		NE	NE	NE		Y+
743	<i>Lepidium lacerum</i>	SE	7,14	China, Kazakhstan	Rocky areas		NE	NE	NE		No
744	<i>Lepisorus clathratus</i>	AP, OR	13	Bhutan, China, India, Japan, Nepal, Taiwan	Rocky areas	2000- 4300	NE	EN (Japan)	NE		No
745	<i>Lespedeza bicolor</i>	OR	5	China, Japan, Korea, Russia	Forest (1.4), Shrubland (3.4)		NE	NE	NE		No
746	<i>Leymus ordensis</i>	OR	15	Russia	Wetlands (5.1; 5.2; 5.4;		NE	NE	NE		No

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						5.9)					
747	<i>Libanotis grubovii</i> (= <i>Seseli grubovii</i>)	SE	7,13-15		China	Rocky areas, Desert (8.2)		NE	NE	NE	Y+
748	<i>Ligularia glauca</i>	SE, AP, OR	7		Russia	Forest (1.4), Shrubland (3.4), Wetlands (5.11)	1800<	NE	NE	NE	✓ No
749	<i>Ligularia mongolica</i>	SE	5,9		China, Korea, Russia	Forest (1.4), Shrubland (3.4), Wetlands (5.1; 5.4)	<1500	NE	NE	NE	No
750	<i>Ligularia przewalskii</i>	SE	9,12		China?, Kazakhstan	Shrubland (3.4), Grassland (4.4)		NE	NE	NE	No
751	<i>Ligularia songarica</i>	R, RB, OR	14		China, Kazakhstan, Kyrgyzstan	Wetlands (5.1; 5.11)	500- 1100	NE	NE	NE	No
752	<i>Ligularia thomsonii</i>	AP, OR	14		China, M and SW Asia	Shrubland (3.4), Wetlands (5.1; 5.4; 5.11)	1500- 3800	NE	NE	NE	✓ No
753	<i>Lilium concolor</i> <i>var. pulchellum</i> (= <i>L. buschianum</i>)	SE, R	5		China, Japan, Korea, Russia	Forest (1.4), Shrubland (3.4), Wetlands (5.1; 5.4)		NE	EN (Japan)	NE	Y+
754	<i>Lilium martagon</i>	VR, OU	1-7		Europe, China, Japan, Korea, Russia	Forest (1.4)		NE	LC (Hungary)	NT	Y+

755	<i>Lilium pensylvanicum</i> (= <i>L. dahuricum</i>)	VR	2,4,5	China, Korea, Russia	Shrubland (3.4), Wetlands (5.4)		NE	EN (R. Korea)	NT	Y+
756	<i>Lilium pumilum</i> (= <i>L. potaninii</i>)	R, RB, OU	1-5,8, 9,12	China, Korea, Russia	Forest (1.4), Shrubland (3.4), Grassland (4.4)	<2600	NE	NE	NE	Y+
757	<i>Limonium aureum</i> (= <i>L. erythrorrhizum</i>)	VR	3-13, 15,16	China, Russia	Desert (8.2), Coastline (10.2)		NE	LC (Mongolia)	LC	Y+
758	<i>Limonium congestum</i>	SE, AP	6,7,10	China, Russia	Desert (8.2), Coastline (10.2)	2300-2700	NE	NE	NE	No
759	<i>Limonium gobicum</i>	E, R, OR	12	Endemic	Rocky areas	1000-1600	NE	NE	NE	No
760	<i>Limonium grubovii</i>	E, R, RB, OR	9	Endemic	Grassland (4.4)	1500-1800	NE	NE	NE	✓ No
761	<i>Limonium klementzii</i>	E	7,10,15	Endemic	Rocky areas	1200-2000	NE	NE	NE	Y-
762	<i>Limonium myrianthum</i>	OR	14	China, Kazakhstan, Kyrgyzstan	Grassland (4.4), Wetlands (5.2; 5.4)		NE	NE	NE	Y-
763	<i>Limonium tenellum</i>	SE	4,8,9,11-13, 15,16	China, Russia	Grassland (4.4), Rocky areas, Desert (8.2)		NE	NE	NE	Y+
764	<i>Limosella aquatica</i>	WP	1-4,6,7, 9-11,13,14	Europe, Asia-Temperate, N America	Wetlands (5.1; 5.4; 5.7; 5.11)		LC	VU (Japan), EN (R. Korea)	NE	✓ Y-

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765	<i>Linaria altaica</i>	SE, AP	3,6,7,10,14	China?, Kazakhstan, Russia	Shrubland (3.4), Rocky areas	1000- 2200	NE	NE	NE	Y-
766	<i>Linaria hepatica</i>	SE, R	6,7,11, 13,14	China	Rocky areas		NE	NE	NE	Y-
767	<i>Linaria incompleta</i>	OR	7	Europe, Caucasus, China, Kazakhstan, Russia	Grassland (4.4), Rocky areas		NE	NE	NE	No
768	<i>Linum pallescens</i>	R	2-5,7-10, 13,14	China, Kazakhstan, Kyrgyzstan, Russia, Tajikistan	Grassland (4.4), Wetlands (5.4)		NE	NE	NE	✓ Y-
769	<i>Linum violascens</i>	SE, OR	7	Kazakhstan, Russia	Shrubland (3.4), Grassland (4.4)		NE	NE	NE	No
770	<i>Lithosciadium kamelinii</i>	SE, OR	7	China	Rocky areas		NE	NE	NE	Y-
771	<i>Litwinowia tenuissima</i>	OR	14	China, M and SW Asia, Russia	Grassland (4.4), Wetlands (5.1; 5.2)		NE	NE	NE	No
772	<i>Lonicera caerulea</i>	AP, OR	6	Europe, Asia- Temperate, N America	Forest (1.4), Shrubland (3.4), Wetlands (5.1; 5.4; 5.10; 5.11)	2600- 3500	LC	EN (Finland)	NE	✓ No
773	<i>Lonicera caerulea subsp. altaica (=L. altaica)</i>	R, AP	1-4,6,7, 13,14	China, Japan, Korea, Russia	Forest (1.4), Shrubland (3.4), Wetlands		LC	NE	NE	Y-

					(5.1; 5.4; 5.11)						
774	<i>Lonicera chrysantha</i>	OR	5	Europe, China, Japan, Korea, Russia	Forest (1.4), Shrubland (3.4), Wetlands (5.1; 5.4; 5.11)		NE	VU (Japan)	NE		Y+
775	<i>Lonicera tatarica</i>	OR	4	Europe, Caucasus, China, Kyrgyzstan?, Russia	Forest (1.4), Shrubland (3.4), Wetlands (5.1; 5.4; 5.11)		NE	NE	NE		Y-
776	<i>Lophanthus krylovii</i>	SE, R, AP, OR	7	China, Kazakhstan, Russia	Wetlands (5.2), Rocky areas	2000-2500	NE	NT (Switzerland)	NE	✓	Y+
777	<i>Luzula changaica</i>	E, AP, OR	3	Endemic	Wetlands (5.4; 5.11)	1500-2500	NE	NE	NE	✓	No
778	<i>Luzula multiflora</i>	AP, OR	3	Europe, Asia-Temperate, Asia-Tropical, Pacific, N America	Forest (1.4), Wetlands (5.1; 5.4-5.11)	2200-3600	NE	NT (Taiwan)	NE	✓	Y-
779	<i>Luzula multiflora subsp. frigida</i>	AP, OR	7	Europe, China, Russia	Grassland (4.4), Wetlands (5.1; 5.4; 5.11); Rocky areas	1900-3000	NE	NE	NE	✓	No
780	<i>Luzula nivalis</i>	AP, OR	1	Europe, Asia-Temperate, N America	Forest (1.4), Wetlands (5.1; 5.4;	1500-2500	NE	NT (Norway)	NE	✓	No

					5.10; 5.11)						
781	<i>Luzula pilosa</i>	AP, OR	2	Europe, Asia-Temperate, N America	Forest (1.4), Wetlands (5.1; 5.4; 5.11)	1700-2200	NE	LC (United Kingdom)	NE	✓	No
782	<i>Luzula spicata subsp. mongolica</i>	SE, AP	1-3,6, 7,13	Russia	Forest (1.4), Grassland (4.4), Wetlands (5.1; 5.4; 5.11)		LC	LC (Switzerland)	NE	✓	Y-
783	<i>Lychnis fulgens</i>	OR	5	China, Japan, Korea, Russia	Wetlands (5.1; 5.4; 5.11)		NE	NE	NE	✓	No
784	<i>Lycium potaninii</i>	SE, R, RL, OR	16	China, SW Asia	Desert (8.2)		NE	NE	NE		Y-
785	<i>Lycium ruthenicum</i>	RL, OU	10,11, 13-16	Europe, China, M and SW Asia, Russia	Desert (8.2)		NE	NE	NE		Y+
786	<i>Lycium truncatum</i>	SE, R, RB, RL	10,12,15,16	China	Desert (8.2)		NE	NE	NE		Y-
787	<i>Lycopodium annotinum</i>	AP	1,2	Europe, Asia-Temperate, Asia-Tropical, N America	Forest (1.2; 1.4)		NE	VU (R. Korea)	NE	✓	Y-
788	<i>Lycopodium clavatum</i>	VR	2	Europe, Asia-Temperate, N and S America	Forest (1.2; 1.4)		NE	LC (Taiwan)	EN	✓	Y-
789	<i>Lycopus lucidus</i>	OR	9	China, Japan, Russia, Taiwan	Shrubland (3.4), Wetlands (5.1; 5.4;		NE	EN (Taiwan)	NE		No

					5.11)						
790	<i>Lysimachia maritima</i> (= <i>Glaux maritima</i>)	WP	1-16	Europe, Asia-Temperate, N America	Forest (1.4), Wetlands (5.1; 5.4; 5.7; 5.11)		LC	VU (R. Korea)	NE	✓	Y-
791	<i>Maianthemum dilatatum</i>	VR	3-5,9	China?, Japan, Korea, Russia, N America	Forest (1.4), Wetlands (5.4; 5.11)	1600<	NE	VU (Mongolia)	VU		No
792	<i>Maianthemum intermedium</i>	OR	5	Russia	Forest (1.4), Wetlands (5.4; 5.11)		NE	NE	NE		No
793	<i>Maianthemum trifolium</i>	OR	2	China, N Korea, Russia, N America	Forest (1.2; 1.4), Wetlands (5.1; 5.4)	700-1200	NE	NE	NE		No
794	<i>Malaxis monophyllos</i>	AP	1-5	China, Japan, Korea, Russia, N America	Forest (1.2; 1.4), Grassland (4.4), Wetlands (5.1; 5.4; 5.10; 5.11)	800-4100	NE	VU (R. Korea)	NE		No
795	<i>Malcolmia africana</i> (= <i>Strigosella africana</i>)	R	10,11	Europe, N Africa, Asia-Temperate, Asia-Tropical	Desert (8.2), Coastline (10.2)		NE	NA (Estonia)	NE		No
796	<i>Malus baccata</i>	R	2-5,8,9	Europe, Asia-Temperate	Forest (1.4), Shrubland (3.4), Wetlands (5.1)		LC	NT (India)	NE		Y+
797	<i>Matricaria recutita</i>	R, OR	2	Europe, Asia-Temperate, N	Forest (1.4), Grassland		NE	LC (Switzerland)	NE		Y-

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				America?	(4.4)						
798	<i>Mazus stachydifolius</i>	OR	5	China, Korea, Russia	Forest (1.4), Grassland (4.4)		NE	NE	NE	✓	No
799	<i>Megacarpaea megalocarpa</i>	R, RB	14	China, Kazakhstan, Kyrgyzstan, Russia, Uzbekistan	Desert (8.2)		NE	NE	NE		No
800	<i>Melica nutans</i>	R	1,2,4	Europe, Asia-Temperate, Asia-Tropical?	Forest (1.4), Shrubland (3.4)	1500-2300	NE	LC (United Kingdom)	NT		Y-
801	<i>Melica transsilvanica</i>	OR	7	Europe, China, M and SW Asia, Russia	Grassland (4.4), Wetlands (5.4), Rocky areas	800-2000	NE	VU (Switzerland)	NE		No
802	<i>Melilotus albus</i>	R	4,8,14,15	Europe, Asia-Temperate, Asia-Tropical?	Forest (1.4), Grassland (4.4)		NE	LC (Switzerland)	NE		No
803	<i>Melilotus wolgicus</i>	R	9,12	Europe, China, M Asia, Russia, N America	Forest (1.4), Grassland (4.4)		NE	NA (Estonia)	NE		No
804	<i>Mentha aquatica</i>	WP, OR	4	Europe, Africa, Asia-Temperate, Asia-Tropical, S America	Wetlands (5.1; 5.2; 5.4; 5.7, 5.11)		LC	LC (United Kingdom)	NE	✓	No
805	<i>Mentha canadensis</i>	OR	2	Europe, Asia-Temperate, Asia-Tropical, N America	Shrubland (3.4), Wetlands (5.1; 5.4; 5.7)		NE	NT (Taiwan)	NE		No
806	<i>Menyanthes trifoliata</i>	WP	1,2,4	Europe, N Africa, Asia-Temperate, Asia-Tropical, N	Wetlands (5.1; 5.4; 5.7)		LC	VU (R. Korea)	NE	✓	Y+

			America							
807	<i>Merremia sibirica</i>	OR	3	China, Russia	Shrubland (3.4), Wetlands (5.1; 5.4)		NE	NE	NE	Y-
808	<i>Mertensia pallasi</i>	SE, OR	7	China?, Kazakhstan, Russia	Rocky areas		NE	NE	NE	No
809	<i>Mertensia stylosa</i>	SE	1-3	Russia	Forest (1.4)		NE	NE	NE	Y-
810	<i>Mertensia tarbagataica</i>	SE, AP, OR	7	China, Kazakhstan	Wetlands (5.11), Rocky areas	2500- 2800	NE	NE	NE	✓ No
811	<i>Microstigma brachycarpum</i> (= <i>M. junatovii</i>)	SE, R	6,7,15,16	China	Rocky areas, Desert (8.2)		NE	NE	NE	Y-
812	<i>Microula tibetica</i> var. <i>pratensis</i>	R, AP, OR	3	China	Wetlands (5.1), Rocky areas	3500<	NE	NE	NE	✓ No
813	<i>Middendorfia borysthenica</i>	OR	10	Europe, Russia	Wetlands (5.1; 5.2; 5.4)		NE	NE	NE	Y-
814	<i>Minuartia arctica</i>	R, AP	1-4,6,7	China, Kazakhstan, Japan, Russia, N America	Rocky areas	2200- 2400	NE	CR (Japan)	NE	Y+
815	<i>Minuartia regeliana</i>	R, OR	3	China, M and SW Asia, Russia	Rocky areas	600- 1000	NE	NE	NE	Y-
816	<i>Minuartia stricta</i>	R, AP	1-3	Europe, Asia- Temperate, N America	Wetlands (5.1; 5.11), Rocky areas	1800<	NE	EX (Switzerland)	NE	Y-
817	<i>Mitella nuda</i>	VR, RB	1,2,4	China, Japan, Korea, Russia, N America	Forest (1.1; 1.2; 1.4), Wetlands (5.1; 5.4)	700- 1100	NE	VU (Japan), EN (R. Korea)	CR	Y+

818	<i>Moehringia umbrosa</i>	R, AP	1,2,6,7	China, Kazakhstan, Russia	Grassland (4.4), Rocky areas	1800-2700	NE	NE	NE	Y-
819	<i>Moneses uniflora</i>	R, AP	1,2,4,7	Europe, Asia-Temperate, N America	Forest (1.2; 1.4), Wetlands (5.1; 5.4; 5.11)	1800<	NE	CR (Japan), LC (Taiwan)	NE	Y-
820	<i>Myosotis austrosibirica</i>	SE, AP	7,13	Kazakhstan, Russia	Rocky areas	1800<	NE	NE	NE	No
821	<i>Myosotis scorpioides</i>	OR	2	Europe, Caucasus, M Asia, Russia, N America	Forest (1.4), Grassland (4.4), Wetlands (5.1; 5.4)		NE	LC (Switzerland)	NE	No
822	<i>Myosotis stricta</i>	OR	7	Europe, Caucasus, M Asia, Russia	Grassland (4.4), Wetlands (5.1; 5.4)		NE	VU (Andorra)	NE	No
823	<i>Myricaria longifolia</i>	R	2-4,6,7,11	China, Russia	Forest (1.4), Shrubland (3.4), Grassland (4.4)		NE	NE	NE	Y+
824	<i>Myriophyllum spicatum</i>	WP	1-11,14	N Europe, Asia-Temperate	Wetlands (5.1; 5.5; 5.7; 5.10; 5.11)		LC	LC (Taiwan)	NE	✓ Y+
825	<i>Myriophyllum verticillatum</i>	WP	1-10,14	Europe, Africa, Asia-Temperate, N America	Wetlands (5.1; 5.5; 5.7; 5.10; 5.11)		LC	NT (Norway)	NE	✓ Y+
826	<i>Najas marina (=N. major)</i>	WP	10,11	Cosmopolitan	Wetlands (5.1; 5.4; 5.5; 5.11)		LC	NT (Taiwan)	NE	✓ Y-

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					5.7, 5.9; 5.10; 5.12)					
827	<i>Nanophyton erinaceum</i>	SE	10,14	China, M Asia, Russia	Desert (8.2), Coastline (10.2)		NE	NE	NE	Y-
828	<i>Nanophyton grubovii</i>	SE, OR	10	Russia	Rocky areas		NE	NE	NE	No
829	<i>Nanophyton mongolicum</i>	SE	7,14	China	Rocky areas		NE	NE	NE	Y-
830	<i>Nardus stricta</i>	AP, OR	3	Europe, Caucasus, M Asia, Russia, N America	Forest (1.4), Wetlands (5.1; 5.4; 5.11)	1600<	NE	NT (Finland)	NE	No
831	<i>Neotorularia brevipes</i>	SE	7,14	China, M and SW Asia	Desert (8.2)		NE	NE	NE	No
832	<i>Neotorularia grubovii</i> (= <i>Torularia grubovii</i>)	E, R, RB, AP, OR	1	Endemic	Wetlands (5.1; 5.11)	1800- 2800	NE	NE	NE	✓ No
833	<i>Neotorularia mongolica</i>	E, AP, OR	1	Endemic	Wetlands (5.1; 5.11)	2000- 2800	NE	NE	NE	✓ No
834	<i>Neottia camtschatea</i>	VR	1-3,7	China, Kazakhstan, Russia	Forest (1.4)		NE	CR (Mongolia)	CR	No
835	<i>Neottia puberula</i> (= <i>Listera savatieri</i>)	OR	5	China, Japan, Korea, Russia	Forest (1.4)	1400- 2600	NE	NE	NE	No
836	<i>Neottianthe cucullata</i>	VR, CI, AP	1-4	E Europe, Asia- Temperate	Forest (1.4), Wetlands (5.1; 5.4; 5.11)	<4500	NE	VU (R. Korea)	CR	Y+
837	<i>Nepeta densiflora</i>	SE, R, OR	7	China, Kazakhstan, Russia	Wetlands (5.2), Rocky areas		NE	NE	NE	Y-

838	<i>Nepeta nuda</i>	R, RB, AP, OR	6	Europe, Caucasus, China, M Asia, Russia	Forest (1.4), Grassland (4.4), Wetlands (5.4; 5.11)	1600- 1900	NE	EN (Switzerland)	NE	✓	No
839	<i>Nepeta pungens</i>	OR	14	China, M and SW Asia, Russia	Rocky areas		NE	NE	NE		No
840	<i>Nitraria sphaerocarpa</i>	SE	13,15,16	China, Kazakhstan	Desert (8.2), Coastline (10.2)		NE	NE	NE		Y+
841	<i>Noccaea ferganensis</i>	OR	7	China?, M Asia	Shrubland (3.4), Grassland (4.4)		NE	NE	NE		No
842	<i>Nonea rossica</i>	OR	3	SE Europe, Caucasus, M Asia, Russia	Grassland (4.4), Wetlands (5.1; 5.4)		NE	NE	NE		No
843	<i>Nuphar pumila</i>	VR, RB, RL, WP	1,3,10,11	N Europe, Asia- Temperate	Wetlands (5.5; 5.6; 5.7; 5.10)		LC	VU (R. Korea and Japan)	EN	✓	Y-
844	<i>Nymphaea candida</i>	VR, RL, WP	3,10,11	Europe, Asia- Temperate, Asia- Tropical	Wetlands (5.5; 5.6; 5.7)		NE	NT (Estonia)	EN	✓	Y+
845	<i>Nymphaea tetragona</i>	R, RB, RL, WP	1,3,10,11	Europe, Asia- Temperate, Asia- Tropical, N America	Wetlands (5.5; 5.6; 5.7; 5.10; 5.11)		LC	VU (Japan), CR (R. Korea), DD (Taiwan)	EN	✓	Y-
846	<i>Nymphoides peltata</i>	WP	1,4,8-10, 14	Europe, Asia- Temperate, Asia- Tropical	Wetlands (5.1; 5.3; 5.4; 5.7; 5.10)		LC	NT (Japan)	NE	✓	Y+
847	<i>Oenanthe aquatica</i>	WP, OR	10	Europe, Asia-	Wetlands		LC	CR (Norway),	NE	✓	No

				Temperate	(5.1; 5.3; 5.6; 5.7; 5.10)		LC (United Kingdom)				
848	<i>Oenanthe javanica</i>	R, WP, OR	10	Cosmopolitan	Wetlands (5.1; 5.3; 5.6; 5.7; 5.10; 5.11)	800-2300	LC	LC (Taiwan)	NE	✓	No
849	<i>Olgaea leucophylla</i>	SE, VR	8,9,11-13	China	Desert (8.2)		NE	NT (Mongolia)	NT		Y+
850	<i>Olgaea lomonosowii</i>	R, RB, OR	9	China	Wetlands (5.1), Sandy areas	800-2300	NE	EN (Mongolia)	EN	✓	Y+
851	<i>Olimarabidopsis pumila</i>	OR	14	China, M and SW Asia, Russia	Wetlands (5.2; 5.4)		NE	NE	NE		No
852	<i>Onoclea sensibilis</i>	OR	2	Europe, Asia-Temperate, N America	Forest (1.2; 1.4)		LC	NE	NE	✓	No
853	<i>Onosma setosa</i>	SE, OR	7	China, Kazakhstan, Russia	Rocky areas		NE	NE	NE		No
854	<i>Onosma setosa subsp. transrhymense</i>	R	3,7,10	China, M Asia, Russia	Grassland (4.4), Rocky areas		NE	NE	NE		No
855	<i>Orchis militaris</i>	VR	2-4,7	Europe, China, SW Asia, Russia	Grassland (4.4), Wetlands (5.1; 5.4)		NE	EN (Finland)	EN		No
856	<i>Oreoloma violaceum</i>	SE	6,7,14	China	Grassland (4.4)		NE	NE	NE		Y+
857	<i>Orobanche pycnostachya</i>	OR	5	China, Korea, Russia	Grassland (4.4), Rocky areas		NE	NE	NE		No
858	<i>Oxalis acetosella</i>	R	1,2	Europe, Asia-Temperate, N America	Forest (1.2; 1.4)		NE	NE	NE		Y-

859	<i>Oxytropis acanthacea</i>	SE, VR, AP	6,7	Russia	Rocky areas	1800<	NE	NT (Mongolia)	NT	Y+
860	<i>Oxytropis aciphylla</i>	R	3,6,7, 10-16	China, Russia	Rocky areas, Desert (8.2)		NE	NE	NE	Y+
861	<i>Oxytropis alpestris</i>	SE, AP, OR	7	Russia	Wetlands (5.11)	2600<	NE	NE	NE	✓ No
862	<i>Oxytropis alpicola</i>	SE, AP, OR	2	Russia	Shrubland (3.4), Rocky areas	1800<	NE	NE	NE	✓ Y-
863	<i>Oxytropis alpina</i>	SE, AP	1-3,6,7,13	China, M Asia, Russia	Shrubland (3.4), Wetlands (5.1; 5.4; 5.11), Rocky areas	2500<	NE	NE	NE	Y+
864	<i>Oxytropis altaica</i>	SE, AP	6,7	Kazakhstan, Russia	Wetlands (5.1; 5.11), Sandy areas	1800<	NE	NE	NE	Y-
865	<i>Oxytropis bicolor</i>	OR	9	China	Grassland (4.4)		NE	NE	NE	No
866	<i>Oxytropis brachycarpa</i>	AP, OR	7	China?, Kazakhstan, Kyrgyzstan, Tajikistan	Wetlands (5.1), Rocky areas	1600<	NE	NE	NE	✓ Y-
867	<i>Oxytropis bungei</i>	E	3,6-8, 10-14	Endemic	Shrubland (3.4), Rocky areas	1000-2500	NE	NE	NE	Y+
868	<i>Oxytropis caespitosa</i>	SE	1-5,8	Russia	Grassland (4.4), Wetlands (5.1; 5.4), Sandy areas		NE	NE	NE	Y+

869	<i>Oxytropis campanulata</i>	SE	1,3	Russia	Forest (1.4), Wetlands (5.4)		NE	NE	NE	No
870	<i>Oxytropis chionophylla</i>	SE, AP	3,6,7,13	Russia	Wetlands (5.1; 5.11), Rocky areas	1600<	NE	NE	NE	Y+
871	<i>Oxytropis diantha</i>	E, R, AP	1,3	Endemic	Shrubland (3.4), Wetlands (5.1; 5.11)	1600-2400	NE	NE	NE	Y-
872	<i>Oxytropis dubia</i>	OR	2	Russia	Grassland (4.4), Sandy areas		NE	NE	NE	No
873	<i>Oxytropis eriocarpa</i> (= <i>O. komei</i>)	SE, AP	6,7	China, Kazakhstan, Russia	Shrubland (3.4), Rocky areas	2600<	NE	NE	NE	Y+
874	<i>Oxytropis falcata</i>	R, AP	6,7	China	Grassland (4.4), Rocky areas	2700-5200	LC	NE	NE	No
875	<i>Oxytropis filiformis</i>	SE	1-5, 7-11,13	China, Russia	Shrubland (3.4), Rocky areas		NE	NE	NE	Y+
876	<i>Oxytropis fragilifolia</i>	E, VR, RB, AP	7,13	Endemic	Rocky areas	2000-3000	NE	VU (Mongolia)	VU	✓ Y-
877	<i>Oxytropis geblerii</i>	SE, AP	1,3,6, 7,13	Russia	Shrubland (3.4), Rocky areas	1800<	NE	NE	NE	Y-
878	<i>Oxytropis glandulosa</i>	SE	1,3	Russia	Wetlands (5.4), Sandy areas		NE	NE	NE	Y+
879	<i>Oxytropis gorbunovii</i>	R, AP	3,6,7	China?, M Asia, Russia	Wetlands (5.1; 5.4),	1600<	NE	NE	NE	No

										Sandy areas	
880	<i>Oxytropis gracillima</i>	SE	3,4,8-12		China, Korea?, Russia?	Grassland (4.4), Sandy areas		NE	NE	NE	No
881	<i>Oxytropis grandiflora</i>	SE	2,4,5,8,9		China, Russia	Grassland (4.4), Wetlands (5.1; 5.4)	800- 1700	NE	NE	NE	Y+
882	<i>Oxytropis hailarensis</i>	SE	5,9		China, Russia?	Grassland (4.4), Sandy areas		NE	NE	NE	No
883	<i>Oxytropis heterophylla</i>	SE	6,7,10, 13,14		China	Shrubland (3.4), Rocky areas		NE	NE	NE	Y+
884	<i>Oxytropis hirta</i>	OR	5		China	Grassland (4.4), Wetlands (5.1; 5.4)		NE	NE	NE	No
885	<i>Oxytropis intermedia</i>	SE, AP	3,6,7,10		Russia	Wetlands (5.1; 5.2), Rocky areas	1600<	NE	NE	NE	Y+
886	<i>Oxytropis junatovii</i>	E, AP, OR	13		Endemic	Rocky areas	1500- 2200	NE	NE	NE	✓ Y-
887	<i>Oxytropis jurtzevii</i>	SE, AP, OR	1		Russia	Shrubland (3.4), Wetlands (5.11)	2200<	NE	NE	NE	✓ No
888	<i>Oxytropis klementzii</i>	E	2-4,8		Endemic	Shrubland (3.4), Rocky areas	1500- 2300	NE	NE	NE	No
889	<i>Oxytropis komarovii</i>	SE, R	5,9		China, Russia	Grassland (4.4)		NE	NE	NE	Y-

890	<i>Oxytropis kossinskyi</i>	SE	3,4,8, 11,13	Russia	Grassland (4.4), Rocky areas		NE	NE	NE	Y+
891	<i>Oxytropis krylovii</i>	SE, R, AP, OR	7	China, Kazakhstan, Russia	Rocky areas	3000-4700	NE	NE	NE	✓ Y+
892	<i>Oxytropis kusnetzovii</i>	SE, AP	1,7	Russia	Wetlands (5.4; 5.11)	2200<	NE	NE	NE	No
893	<i>Oxytropis ladyginii</i>	SE, R, OR	7	China, Russia	Wetlands (5.1; 5.2)		NE	NE	NE	Y-
894	<i>Oxytropis lanata</i>	SE	1,3,4,8,9	China, Russia	Grassland (4.4), Sandy areas		LC	NE	NE	Y+
895	<i>Oxytropis lanuginosa</i>	SE	3,10	Russia	Grassland (4.4), Sandy areas		NE	NE	NE	Y-
896	<i>Oxytropis lasiopoda</i>	SE	3,4, 8,9,13	Russia	Grassland (4.4), Wetlands (5.2; 5.4; 5.15), Sandy areas		NE	NE	NE	Y+
897	<i>Oxytropis latibracteata</i>	SE, OR	3	China	Shrubland (3.4), Grassland (4.4)		NE	NE	NE	No
898	<i>Oxytropis lavrenkoi</i>	E, OR	12	Endemic	Rocky areas	1000-1600	NE	NE	NE	✓ No
899	<i>Oxytropis leptophylla</i>	SE	1,3-5, 8,9,12	China, Russia	Grassland (4.4), Sandy areas		NE	NE	NE	Y+
900	<i>Oxytropis leucotricha</i>	SE	1-3,8	Russia	Wetlands (5.1), Sandy		NE	NE	NE	No

					areas						
901	<i>Oxytropis macrosema</i>	SE	6,7		Russia	Shrubland (3.4), Rocky areas		NE	NE	NE	Y-
902	<i>Oxytropis martjanovii</i>	SE	3,6,7,10		Russia	Grassland (4.4), Wetlands (5.2), Sandy areas		NE	NE	NE	Y+
903	<i>Oxytropis micrantha</i>	E, AP	3,6,7,10,11		Endemic	Grassland (4.4), Sandy areas	1500-2500	NE	NE	NE	Y+
904	<i>Oxytropis mixotriche</i>	SE	2-4,8		Russia	Grassland (4.4), Sandy areas		NE	NE	NE	Y-
905	<i>Oxytropis mongolica</i>	SE, R	6,10		Russia	Coastline (10.2)		NE	EN (Mongolia)	EN	Y+
906	<i>Oxytropis monophylla</i>	SE	12,13		China	Coastline (10.2)		NE	NE	NE	Y-
907	<i>Oxytropis muricata</i>	SE	1,3,4,9,13		China, Russia	Shrubland (3.4), Rocky areas		NE	NE	NE	Y+
908	<i>Oxytropis nitens</i>	SE	1-4,8,9		Russia	Grassland (4.4), Rocky areas		NE	NE	NE	Y+
909	<i>Oxytropis ochrantha</i>	OR	9		China	Grassland (4.4), Wetlands (5.4)		NE	NE	NE	No
910	<i>Oxytropis oligantha</i>	SE, AP	3,6,7,13		Kazakhstan, Russia	Rocky areas	1600<	NE	NE	NE	Y+
911	<i>Oxytropis oxyphylla</i>	SE, AP	1-5,8,9,12		China, Russia	Grassland	500-	NE	NE	NE	Y+

					(4.4), Sandy areas	2700					
912	<i>Oxytropis pavlovii</i>	E	3,8,11-13	Endemic	Grassland (4.4), Sandy areas	1000-2000	NE	NE	NE	Y+	
913	<i>Oxytropis physocarpa</i>	SE, AP, OR	7	Russia	Rocky areas	2400<	NE	NE	NE	✓ No	
914	<i>Oxytropis potaninii</i>	E, AP, OR	7	Endemic	Rocky areas	1500-2500	NE	NE	NE	✓ Y-	
915	<i>Oxytropis prostrata</i>	SE	4,8,9	Russia	Coastline (10.2)		NE	NE	NE	No	
916	<i>Oxytropis pseudoglandulosa</i>	SE	1-4,8,9,12,13	China, Russia	Shrubland (3.4), Grassland (4.4), Sandy areas	<3000	NE	NE	NE	Y+	
917	<i>Oxytropis pumila</i>	SE	3,6-8,10,11,13	China, Russia	Grassland (4.4), Sandy areas		NE	NE	NE	Y+	
918	<i>Oxytropis racemosa</i> (= <i>O. psammocharis</i>)	SE	3,6,9,10,12	China, Korea	Grassland (4.4), Sandy areas		NE	NE	NE	Y-	
919	<i>Oxytropis reverdattoi</i>	SE	2-4	Russia	Grassland (4.4), Wetlands (5.4)		NE	NE	NE	Y+	
920	<i>Oxytropis rhizantha</i>	E, AP	6,7,10?	Endemic	Rocky areas	1800-2500	NE	NE	NE	✓ Y+	
921	<i>Oxytropis sacciformis</i>	SE, OR	12	China	Desert (8.2)		NE	NE	NE	No	
922	<i>Oxytropis sajanensis</i>	SE, AP	1,3	Russia	Wetlands (5.4; 5.11)	2200<	NE	NE	NE	Y+	

923	<i>Oxytropis saposchnikovii</i>	SE, R, AP, OR	7	China, Russia	Rocky areas	1600<	NE	NE	NE	✓	Y+
924	<i>Oxytropis selengensis</i>	SE	2-4,8,9	Russia	Grassland (4.4), Sandy areas		NE	NE	NE		Y+
925	<i>Oxytropis setosa</i>	SE	3,6	Russia	Rocky areas		NE	NE	NE		Y-
926	<i>Oxytropis songorica</i>	OR	7	Kazakhstan, Russia	Grassland (4.4), Wetlands (5.1; 5.4)		NE	NE	NE		No
927	<i>Oxytropis sordida</i>	AP, OR	1	N Europe, Russia	Wetlands (5.4; 5.11), Rocky areas	2000<	NE	NE	NE		Y-
928	<i>Oxytropis stenophylla</i>	SE	3,13	Russia	Rocky areas		NE	NE	NE		No
929	<i>Oxytropis stukovii</i>	SE	3,9	Russia	Coastline (10.2)		NE	NE	NE		No
930	<i>Oxytropis sulphurea</i>	SE, AP, OR	7	Kazakhstan, Russia	Wetlands (5.11), Rocky areas	2600<	NE	NE	NE	✓	No
931	<i>Oxytropis sutaica</i>	E, R, RB, AP	3,7	Endemic	Wetlands (5.11)	2500-3000	NE	NE	NE	✓	Y-
932	<i>Oxytropis tenuis</i>	E, R, AP	6,7	Endemic	Wetlands (5.4; 5.11)	1000-2000	NE	NE	NE		No
933	<i>Oxytropis teres</i>	SE, OR	7	Kazakhstan, Russia	Rocky areas		NE	NE	NE		No
934	<i>Oxytropis tschujae</i>	SE, AP	1,7	Russia	Rocky areas	2200<	NE	NE	NE		No
935	<i>Oxytropis turczaninovii</i>	SE	1,3,4	Russia	Grassland (4.4), Wetlands (5.4), Sandy areas		NE	NE	NE		No

936	<i>Oxytropis ulzichutagii</i>	E, AP, OR	7	Endemic	Wetlands (5.11), Rocky areas	2400-3100	NE	NE	NE	✓	No
937	<i>Oxytropis viridiflava</i>	SE	1-4,7-9, 11,13	Russia	Grassland (4.4), Rocky areas		NE	NE	NE		Y-
938	<i>Pachyneurum grandiflorum</i>	SE, AP	1,3, 6,7,13	China, Kazakhstan, Russia	Rocky areas	1600<	NE	NE	NE		Y+
939	<i>Pachypterygium multicaule</i>	SE, OR	14	China, M and SW Asia	Rocky areas, Desert (8.2)		NE	NE	NE		No
940	<i>Paeonia anomala</i>	R, AP, OU	1-4,6,7	Europe, China, Kazakhstan, Russia	Forest (1.4), Shrubland (3.4), Wetlands (5.1; 5.11)	1200-3900	NE	VU (Mongolia)	VU		Y+
941	<i>Paeonia lactiflora</i>	VR, RB, OU	2,4,5,9	China, Japan, Korea, Russia	Grassland (4.4), Wetlands (5.1; 5.4)		NE	DD (R. Korea)	EN		Y-
942	<i>Panzerina canescens</i>	SE, AP	6,7,10,13	China, Russia	Rocky areas	1600<	NE	NE	NE		Y+
943	<i>Papaver baitagense</i>	E, AP	6,7,14	Endemic	Grassland (4.4), Rocky areas	1800-2600	NE	NE	NE	✓	No
944	<i>Papaver pseudotenellum</i>	E, AP	7,10,13,14	Endemic	Grassland (4.4), Rocky areas	1500-2500	NE	NE	NE	✓	Y+
945	<i>Papaver rubro-aurantiacum subsp. chalchorum</i>	E, OR	8	Endemic	Rocky areas	1200-2000	NE	NE	NE	✓	No
946	<i>Papaver rubro-aurantiacum subsp.</i>	E, R, RB, AP, OR	3	Endemic	Shrubland (3.4),	1800-2600	NE	NE	NE	✓	Y-

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	<i>changaicum</i>					Grassland (4.4)						
947	<i>Papaver rubro-aurantiacum subsp. saichanense</i>	E, R, AP, OR	13	Endemic	Rocky areas	1500-2200	NE	NE	NE	✓	Y-	
948	<i>Papaver setosum</i>	OR	4	Russia	Wetlands (5.1; 5.4), Rocky areas		NE	NE	NE		Y-	
949	<i>Paraligusticum discolor</i>	AP, OR	7	China, M Asia, Russia	Wetlands (5.1; 5.4; 5.11)	2000<	NE	NE	NE	✓	Y-	
950	<i>Parasenecio hastatus (=Cacalia hastata)</i>	R, OU	1-5,9	China, Japan, Korea, Russia	Forest (1.4), Wetlands (5.1)		NE	CR (Japan)	NE		Y+	
951	<i>Paris verticillata (=P. hexaphylla)</i>	VR	2,4,5	China, Japan, Korea, Russia	Forest (1.4)		NE	VU (Mongolia)	VU		Y+	
952	<i>Parnassia palustris</i>	WP	1-11,14	Europe, Asia-Temperate, N America	Wetlands (5.1; 5.4; 5.11)		LC	LC (Taiwan)	NE	✓	Y+	
953	<i>Patrinia heterophylla</i>	OR	9	China	Wetlands (5.1; 5.4)		NE	NE	NE		No	
P 954	<i>Pedicularis abrotanifolia</i>	SE, VR, AP	1,3,6,7,13,14	China, Kazakhstan, Russia	Wetlands (5.1; 5.2; 5.11)	1600-2400	NE	LC (Mongolia)	LC		Y+	
955	<i>Pedicularis altaica</i>	SE, VR, AP	6,7,10,14	China, Kazakhstan, Russia	Grassland (4.4), Wetlands (5.1; 5.2; 5.11)	1600<	NE	VU (Mongolia)	VU		Y-	
956	<i>Pedicularis dasystachys</i>	R, RB, AP	6,7	Europe, China, M Asia, Russia	Wetlands (5.1; 5.4; 5.11)		NE	NE	NE		Y-	

957	<i>Pedicularis fetisowii</i>	OR	14	China	Rocky areas		NE	NE	NE	No
958	<i>Pedicularis fissa</i>	R, AP	2,7	Russia	Wetlands (5.4; 5.11)	2000<	NE	NE	NE	Y-
959	<i>Pedicularis flava</i>	SE	2-4,6-11, 13,15	China, Russia	Grassland (4.4), Wetlands (5.4), Rocky areas		NE	NE	NE	Y+
960	<i>Pedicularis lapponica</i>	AP, OR	1	N Europe, Russia, N America	Wetlands (5.1; 5.4; 5.10; 5.11)	2000<	NE	NE	NE	✓ Y-
961	<i>Pedicularis lasiostachys</i>	SE, AP	3,6,7	Russia	Wetlands (5.10; 5.11)	2100<	NE	NE	NE	Y+
962	<i>Pedicularis longiflora</i>	WP	1-3,7,11	China, M and SW Asia, Russia	Wetlands (5.1; 5.4; 5.11)		NE	NE	NE	✓ Y+
963	<i>Pedicularis moschata</i>	SE	6,7,10	Russia	Grassland (4.4), Rocky areas		NE	NE	NE	Y+
964	<i>Pedicularis palustris subsp. karoi (=P. karoi)</i>	WP	1-6, 8-10,14	China, Russia	Wetlands (5.1; 5.4; 5.11)		LC	NE	NE	✓ Y+
965	<i>Pedicularis physocalyx</i>	AP, OR	7	E Europe, Caucasus, China, M Asia, Russia	Grassland (4.4), Wetlands (5.4; 5.11)	1600<	NE	NE	NE	✓ No
966	<i>Pedicularis proboscidea</i>	R, RB, AP, OR	7	China, Kazakhstan, Russia	Wetlands (5.1; 5.4; 5.11)	1600<	NE	NE	NE	✓ Y-
967	<i>Pedicularis rhinanthoides</i>	AP, OR	7	China, India, Kazakhstan,	Wetlands (5.1; 5.4;	2300-5000	NE	NE	NE	✓ Y-

				Kyrgyzstan, Russia, Tajikistan	5.11)						
968	<i>Pedicularis violascens</i>	AP, OR	7	China, Kazakhstan, Kyrgyzstan	Wetlands (5.11), Rocky areas	4000-4300	NE	NE	NE	✓	No
969	<i>Pedicularis wlassowiana</i>	OR	2	Russia	Wetlands (5.4)		NE	NE	NE		No
970	<i>Peganum harmala</i>	VR, RL	7,10,13-15	SE Europe, N Africa, Asia-Temperate	Desert (8.2), Coastline (10.2)		NE	CR (Cyprus)	VU		Y+
971	<i>Peganum multisectum</i>	RL	14,15	China	Desert (8.2)		NE	NE	NE		Y-
972	<i>Peganum nigellastrum</i>	SE, RL	3,4, 8-13,16	China, Russia	Grassland (4.4), Rocky areas		NE	NE	NE		Y+
973	<i>Perovskia abrotanoides</i>	OR	6	China, M and SW Asia	Grassland (4.4), Sandy areas		NE	NE	NE		No
974	<i>Persicaria amphibia</i>	WP	1,3-12,14	Europe, N Africa, Asia-Temperate, Asia-Tropical, N America	Wetlands (5.1; 5.4; 5.7; 5.8; 5.10)		LC	VU (R. Korea), LC (United Kingdom)	NE	✓	Y+
975	<i>Persicaria hydropiper</i>	WP	2-4,6-8, 10,13,14	Europe, Asia-Temperate, Asia-Tropical, N America	Wetlands (5.1; 5.4; 5.10; 5.11)		LC	VU (Hungary)	NE	✓	Y+
976	<i>Persicaria lapathifolia</i> (=P. scabra)	WP	1-16	Cosmopolitan	Wetlands (5.1; 5.4; 5.10; 5.11)		LC	LC (United Kingdom)	NE	✓	Y+
977	<i>Persicaria minor</i>	WP	10,14	Europe, Asia-Temperate	Wetlands (5.1; 5.4; 5.7; 5.10)		NE	NT (Norway)	NE	✓	No

978	<i>Persicaria vivipara</i> (= <i>Polygonum viviparum</i>)	R, AP	1-4,6-8, 10,13,14	Europe, Asia- Temperate, Asia- Tropical, N America	Wetlands (5.1; 5.4; 5.10; 5.11)	1200- 5100	NE	NT (Germany)	NE	Y+
979	<i>Petrosimonia litwinowii</i>	OR	10	Europe, M Asia, Russia	Coastline (10.2)		NE	NE	NE	No
980	<i>Petrosimonia sibirica</i>	R	14	China, M Asia, Russia	Desert (8.2), Coastline (10.2)		NE	NE	NE	No
981	<i>Peucedanum falcaria</i>	SE	1,3,4,6- 8,10, 11,13-16	China, Kazakhstan, Russia	Desert (8.2), Coastline (10.2)		NE	NE	NE	Y+
982	<i>Peucedanum puberulum</i>	SE	2,3,6,8,13	Russia	Shrubland (3.4), Grassland (4.4)		NE	NE	NE	Y-
983	<i>Peucedanum terebinthaceum</i> (= <i>Kitagawia terebinthacea</i>)	R	2,4,5,9	China, Japan, Korea, Russia	Forest (1.4), Wetlands (5.1; 5.4)		NE	NE	NE	Y-
984	<i>Phalacrachena calva</i> (= <i>Centaurea calva</i>)	R, OR	10	China, M Asia, Russia	Rocky areas		NE	NE	NE	Y-
985	<i>Phleum alpinum</i>	R, AP, OR	7	N Europe, Asia- Temperate, Asia- Tropical, N and S America	Wetlands (5.1; 5.4; 5.10; 5.11)	1600<	LC	LC (Taiwan)	NE	✓ Y-
986	<i>Phlomis alpina</i>	AP, OR	7	China, Kazakhstan, Russia	Wetlands (5.11)	1800<	NE	NE	NE	✓ No
987	<i>Phlomis mongolica</i>	SE, R, RB	5,9	China	Forest (1.4), Grassland (4.4)	800- 2200	NE	NE	NE	Y+

988	<i>Phlomis oreophila</i>	VR, AP	7,10,14	China, Kazakhstan, Kyrgyzstan, Russia, Tajikistan	Rocky areas	2100- 3000	NE	NT (Mongolia)	NT		Y-
989	<i>Phlomis pratensis</i>	R, RB, AP, OR	6	China, Kazakhstan, Kyrgyzstan	Wetlands (5.4; 5.11)	1500- 3000	NE	NE	NE	✓	No
990	<i>Phlomis tuvina</i>	SE	6-8	Russia	Shrubland (3.4), Grassland (4.4)		NE	NE	NE		No
991	<i>Phragmites australis</i>	R, WP	1-16	Cosmopolitan	Wetlands (5.4; 5.9-5.11; 5.17)		LC	LC (Taiwan)	NE	✓	Y+
992	<i>Physochlaina albiflora</i>	E, VR, RL, AP	3,4	Endemic	Shrubland (3.4), Grassland (4.4), Wetlands (5.4)	1800- 2800	NE	NE	DD		Y-
993	<i>Physochlaina physaloides</i>	RL	1,3-9, 11-13	China, Kazakhstan, Russia	Rocky areas		NE	NE	NE		Y+
994	<i>Picea obovata</i>	AP	1-3,6,7	China, Kazakhstan, Russia	Forest (1.2; 1.4); Wetlands (5.1)	1200- 2800	LC	NE	NE		Y+
995	<i>Pilosella echioides</i> (= <i>Hieracium echioides</i>)	R	2,4	Europe, Caucasus, China, M Asia, Russia	Forest (1.4), Grassland (4.4)		NE	EN (Croatia)	NE		No
996	<i>Pinguicula alpina</i>	R, AP, OR	1	Europe, Asia- Temperate, Asia- Tropical, N America	Wetlands (5.1; 5.4; 5.10; 5.11)	1800- 4500	NE	EX (Hungary and United Kingdom)	NE	✓	Y+
997	<i>Pinguicula vulgaris</i>	R, RB, AP,	1	Europe, Asia-	Wetlands	1800<	EN	CR (Hungary	NE	✓	No

		OR		Temperate, Pacific, N America	(5.1; 5.4; 5.11)		and Italy)			
998	<i>Pinus pumila</i>	VR, RB, AP, OR	2	China, Japan, Korea, Russia	Forest (1.4)	1000- 2300	LC	VU (R. Korea)	EN	✓ Y-
999	<i>Pinus sibirica</i>	R, AP, OU	1-3,6,7	China, Kazakhstan, Russia	Forest (1.1; 1.2; 1.4)	800- 2400	LC	NE	NE	Y+
1000	<i>Piptatherum songaricum</i>	R	7,14	China, Kazakhstan, Russia	Rocky areas		NE	NE	NE	Y+
1001	<i>Plantago arachnoidea</i>	AP, OR	14	China, Kazakhstan	Wetlands (5.11), Rocky areas	700- 3500	NE	NE	NE	No
1002	<i>Plantago komarovii</i>	SE, R, AP	1,3,6,7,13	China, Kazakhstan, Russia	Wetlands (5.1; 5.4; 5.10; 5.11)	2000- 2500	NE	NE	NE	Y+
1003	<i>Plantago maritima subsp. ciliata (=P. salsa)</i>	WP, OU	1-6,8-11, 13,14	Europe, China, M and SW Asia, Russia	Wetlands (5.1; 5.3; 5.4)		LC	EN (Switzerland)	NE	✓ Y-
1004	<i>Plantago urvillei</i>	AP, OR	2	Europe, Caucasus, China, M and SW Asia, Russia	Forest (1.4), Grassland (4.4), Wetlands (5.1; 5.4; 5.11)	1800<	NE	NE	NE	No
1005	<i>Platanthera bifolia</i>	VR	1-4	Europe, N Africa, Asia-Temperate, Asia-Tropical	Forest (1.4)		NE	VU (United Kingdom)	CR	Y-
1006	<i>Platanthera fuscescens (=Tulotis fuscescens)</i>		2-5	China, Japan, Korea, Russia	Forest (1.4), Shrubland (3.4)		NE	VU (Japan)	NE	No
1007	<i>Platanthera obtusata subsp.</i>	R, RB, AP	1,3	Europe, Russia	Forest (1.4); Wetlands		NE	CR (Finland)	NE	Y-

	<i>oligantha</i> (= <i>Lysiella</i> <i>oligantha</i>)				(5.1; 5.4; 5.11)					
1008	<i>Platycodon grandiflorus</i>	OR	5	China, Japan, Korea, Russia	Forest (1.4); Wetlands (5.1; 5.4; 5.11)		NE	VU (Japan)	NE	No
1009	<i>Poa altaica</i>	SE, AP	1-3,6,7, 10,13	China, Kazakhstan, Russia	Rocky areas	1500<	NE	NE	NE	Y-
1010	<i>Poa ircutica</i>	SE, OR	4	Russia	Forest (1.4), Wetlands (5.1; 5.4)		NE	NE	NE	No
1011	<i>Poa kenteica</i>	SE, R, RB, AP	2,3	Russia	Forest (1.4)		NE	NE	NE	✓ Y+
1012	<i>Poa mongolica</i>	OR	5	China, N Korea, Russia	Forest (1.4), Wetlands (5.1; 5.4)		NE	NE	NE	No
1013	<i>Poa palustris</i>	WP	1-5, 7-9,13	Europe, Asia-Temperate, Asia-Tropical, N America	Shrubland (3.4); Grassland (4.4), Wetlands (5.1; 5.4)		LC	NT (Croatia)	NE	✓ Y+
1014	<i>Poa reverdattoi</i>	R	1,3,5-10, 13,14	China, Russia	Grassland (4.4), Rocky areas		NE	NE	NE	Y+
1015	<i>Poa smirnovii</i>	SE, AP	1,3,4,6,7	Russia	Shrubland (3.4), Wetlands (5.11)		NE	NE	NE	Y-
1016	<i>Poa supina</i>	R, AP	3,4,7	Europe, Asia-Temperate, Asia-	Shrubland (3.4),	1000-3100	NE	NT (Finland)	NE	No

					Tropical, N America	Wetlands (5.1; 5.4; 5.10; 5.11)					
1017	<i>Poa veresczaginii</i>	SE, AP, OR	7		China, Kazakhstan, Russia	Forest (1.4), Wetlands (5.4; 5.11)	2800-3600	NE	NE	NE	No
1018	<i>Polygonatum humile</i>	VR	4,5		China, Japan, Korea, Mongolia, Russia	Forest (1.4), Shrubland (3.4)		NE	VU (Mongolia)	VU	Y+
1019	<i>Polygonum alopecuroides</i> (= <i>Bistorta alopecuroides</i>)	R, AP	1-6,8		China, Korea, Russia	Forest (1.4), Wetlands (5.1; 5.4; 5.11)	900-2300	NE	NE	NE	Y+
1020	<i>Polygonum aviculare</i> (= <i>P. neglectum</i>)	WP	1-5, 7-14,16		Europe, Asia-Temperate, Asia-Tropical, N America	Wetlands (5.1; 5.2; 5.4; 5.10; 5.11), Rocky areas, Coastline (10.2)	<4200	NE	EN (Sweden)	NE	✓ Y-
1021	<i>Polygonum humifusum</i>	AP, OR	3		China, Russia, N America	Wetlands (5.1; 5.4; 5.11)		NE	NE	NE	✓ No
1022	<i>Polygonum volchovense</i>	OR	7		Russia	Wetlands (5.1; 5.4)		NE	NE	NE	No
1023	<i>Polyogon maritimus</i>	WP	11,15		Europe, N Africa, Asia-Temperate, Asia-Tropical, N America	Wetlands (5.2; 5.4; 5.9), Coastline (10.2)		NE	NT (Croatia)	NE	✓ Y+
1024	<i>Populus euphratica</i> (= <i>P. diversifolia</i>)	VR, RB, RL	12-16		N Africa, China, M and SW Asia	Wetlands (5.2; 5.9), Desert (8.2), Coastline		NE	EN (Egypt)	VU	✓ Y+

					(10.2)						
1025	<i>Populus simonii</i>	OR	9		China	Wetlands (5.1)	NE	NE	NE	✓	No
1026	<i>Potamogeton alpinus subsp. tenuifolius</i> (= <i>P. tenuifolius</i>)	WP	3,4,9, 10,12		Europe, Asia- Temperate, N America	Wetlands (5.5-5.7; 5.10)	LC	VU (Japan), EN (R. Korea)	NE	✓	Y-
1027	<i>Potamogeton berchtoldii</i>	WP	3,6,7,9		Europe, Asia- Temperate, Asia- Tropical, N America	Wetlands (5.1; 5.5-5.7)	LC	NT (Japan)	NE	✓	No
1028	<i>Potamogeton compressus</i>	WP	1,8,9, 10,14		Europe, Asia- Temperate, N America	Wetlands (5.1; 5.5-5.7; 5.10)	NE	EN (Norway and United Kingdom)	NE	✓	Y-
1029	<i>Potamogeton crispus</i>	WP	1,8,10		Cosmopolitan	Wetlands (5.1; 5.5-5.8; 5.10)	LC	LC (Taiwan)	NE	✓	No
1030	<i>Potamogeton friesii</i>	WP	5,8,9		Europe, Asia- Temperate, N America	Wetlands (5.1; 5.5-5.7)	LC	NT (Norway and Finland)	NE	✓	Y-
P 1031	<i>Potamogeton gramineus</i>	WP	1-10,14		Europe, Asia- Temperate, Asia- Tropical, N America	Wetlands (5.1; 5.5-5.7; 5.10)	LC	EN (Hungary)	NE	✓	Y-
1032	<i>Potamogeton lucens</i>	R, WP	1,8,10		Europe, N Africa, Asia-Temperate, Asia-Tropical, N America	Wetlands (5.1; 5.5-5.7; 5.10)	LC	EX (Israel), CR (Japan)	NE	✓	Y+
1033	<i>Potamogeton mandschuriensis</i>	SE, WP, OR	5		China, Russia?	Wetlands (5.1; 5.5; 5.6)	NE	NE	NE	✓	No
1034	<i>Potamogeton natans</i>	R, WP	1,10		Europe, Asia- Temperate, Asia-	Wetlands (5.5-5.7;	LC	VU (United Kingdom)	NE	✓	Y-

				Tropical, N America	5.10)					
1035	<i>Potamogeton obtusifolius</i>	R, WP	1,3,5	Europe, Asia-Temperate, Asia-Tropical, N America	Wetlands (5.5-5.7; 5.10)		LC	CR (Japan)	NE	✓ No
1036	<i>Potamogeton perfoliatus</i>	WP	1-12,14,16	Cosmopolitan	Wetlands (5.1; 5.5-5.7; 5.10)		LC	VU (R. Korea)	NE	✓ Y+
1037	<i>Potamogeton praelongus</i>	R, WP	1,3,4,8,9	Europe, Asia-Temperate, N America	Wetlands (5.5-5.7; 5.10)		LC	CR (Japan)	NE	✓ Y-
1038	<i>Potamogeton pusillus</i>	WP	1-6,8-11, 13,14	Europe, Africa, Asia-Temperate, Asia-Tropical, N America	Wetlands (5.1; 5.5-5.7; 5.10)		LC	VU (Japan and Taiwan)	NE	✓ Y+
1039	<i>Potaninia mongolica</i>	SE, VR, RL	11-13,16	China	Desert (8.2)		NE	NT (Mongolia)	NT	Y+
1040	<i>Potentilla anserina</i>	WP	1-11, 13-15	Cosmopolitan	Grassland (4.4), Wetlands (5.1; 5.4; 5.10; 5.11)	500-4100	LC	LC (United Kingdom)	NE	✓ Y+
1041	<i>Potentilla aphanes</i>	SE, AP	3,6,7, 10,13,14	China, M and S Asia, Russia	Rocky areas	1500-2400	NE	NE	NE	Y-
1042	<i>Potentilla astragalifolia</i>	SE	3,6,7, 10,11	Russia	Rocky areas, Desert (8.2)		NE	NE	NE	Y+
1043	<i>Potentilla chalchorum</i>	SE	2,3,7,9	Russia	Shrubland (3.4), Grassland (4.4)		NE	NE	NE	Y-
1044	<i>Potentilla</i>	E, AP	2,3	Endemic	Shrubland	1600-	NE	NE	NE	No

	<i>chenteica</i>				(3.4), Wetlands (5.11)	2300					
1045	<i>Potentilla chionea</i>	SE	1-4, 10,13,14	Russia	Shrubland (3.4), Rocky areas		NE	NE	NE		Y+
1046	<i>Potentilla chrysantha</i>	R, RB, AP	7,14	E Europe, China, M Asia, Russia	Grassland (4.4), Wetlands (5.2; 5.4; 5.11)	1000- 2200	NE	NE	NE		Y-
1047	<i>Potentilla crantzii</i>	AP, OR	7	N Europe, Caucasus, Russia, N America	Wetlands (5.1; 5.4; 5.10; 5.11)	1800<	NE	LC (Switzerland)	NE	✓	No
1048	<i>Potentilla desertorum</i>	SE	1,6,7,9, 12-14	China, M and SW Asia, Russia	Rocky areas	<1700	NE	NE	NE		Y+
1049	<i>Potentilla drymeja</i>	E, AP	2,3,13	Endemic	Grassland (4.4), Wetlands (5.11)	1800- 2800	NE	NE	NE		Y+
1050	<i>Potentilla elegans</i>	AP, OR	1	Russia, N America	Rocky areas	1800<	NE	NE	NE	✓	Y+
P 1051	<i>Potentilla exuta</i>	SE, AP	3,7,13,14	Russia	Wetlands (5.2; 5.11)	1800<	NE	NE	NE		Y-
1052	<i>Potentilla gobica</i>	E, OR	14	Endemic	Wetlands (5.2)	1500- 2300	NE	NE	NE	✓	No
1053	<i>Potentilla gracillima</i>	SE	3,10	China, Russia	Wetlands (5.2; 5.11)		NE	NE	NE		Y+
1054	<i>Potentilla hilbigii</i>	E, AP, OR	3	Endemic	Grassland (4.4), Wetlands (5.11)	1800- 2600	NE	NE	NE	✓	No
1055	<i>Potentilla</i>	E, AP, OR	1	Endemic	Wetlands	2000-	NE	NE	NE	✓	No

	<i>hubsugulica</i>				(5.11)	2600						
1056	<i>Potentilla ikonnikovii</i>	E, R, RB, OR	13		Endemic	Rocky areas	1600-2100	NE	NE	NE	✓	Y+
1057	<i>Potentilla imbricata</i>		R 7,10		China, Kazakhstan, Russia	Rocky areas		NE	NE	NE		Y-
1058	<i>Potentilla inopinata</i>	E, AP, OR	6		Endemic	Rocky areas	2000-2500	NE	NE	NE	✓	No
1059	<i>Potentilla jennissejensis</i>		SE 6,7,10		Russia	Rocky areas		NE	NE	NE		No
1060	<i>Potentilla junatovii</i>	SE, AP, OR	7		Kazakhstan, Russia?	Rocky areas	1800<	NE	NE	NE	✓	No
1061	<i>Potentilla kryloviana</i>		SE, AP 3,7,14		Russia	Wetlands (5.4; 5.11)	1800<	NE	NE	NE		Y-
1062	<i>Potentilla laevipes</i>	E, AP, OR	7		Endemic	Wetlands (5.11)	2000-2600	NE	NE	NE	✓	No
1063	<i>Potentilla laevissima</i>		E, OR 7		Endemic	Grassland (4.4)	2000-2500	NE	NE	NE	✓	No
1064	<i>Potentilla lydiae</i>		AP, OR 7		Russia	Rocky areas	1600<	NE	NE	NE	✓	No
1065	<i>Potentilla mongolica</i>	E, AP, OR	3		Endemic	Shrubland (3.4), Grassland (4.4)	1500-2500	NE	NE	NE	✓	Y-
1066	<i>Potentilla nivea subsp. arenosa</i>		R, AP 2-4,6		Europe, China, E Asia, Russia, N America	Grassland (4.4), Wetlands (5.1; 5.10; 5.11)	1800<	NE	VU (Japan)	NE	✓	Y-
1067	<i>Potentilla norvegica</i>		R 1-4		Europe, Asia-Temperate, N America	Wetlands (5.1; 5.10; 5.11)		LC	LC (Estonia)	NE	✓	Y-
1068	<i>Potentilla pamiroalaica</i>		AP, OR 14		China, M Asia	Rocky areas	3300-4700	NE	NE	NE	✓	No

1069	<i>Potentilla rhipidophylla</i>	E, AP, OR	7	Endemic	Rocky areas	2000-2500	NE	NE	NE	✓	No
1070	<i>Potentilla rigidula</i>	SE	6,10	Russia	Wetlands (5.2; 5.11)	1800<	NE	NE	NE		No
1071	<i>Potentilla serrata</i>	E, AP, OR	3	Endemic	Grassland (4.4), Wetlands (5.11)	1800-2600	NE	NE	NE	✓	No
1072	<i>Potentilla sischanensis</i>	SE	4,9	China	Grassland (4.4)	200-3600	NE	NE	NE		No
1073	<i>Potentilla strigosa</i>	SE, OR	12	China, Russia	Grassland (4.4)		NE	NE	NE		Y+
1074	<i>Potentilla subdigitata</i>	SE, AP, OR	7	China	Wetlands (5.11), Rocky areas	2000-2500	NE	NE	NE	✓	No
1075	<i>Potentilla tenella</i>	SE, OR	7	Russia	Rocky areas		NE	NE	NE		Y-
1076	<i>Potentilla turkestanica</i>	SE, AP	7,14	China? M Asia	Rocky areas	1800<	NE	NE	NE		No
1077	<i>Potentilla virgata</i> <i>var. pinnatifida</i>	SE, AP, OR	7	Kazakhstan, Russia	Grassland (4.4), Wetlands (5.4; 5.11)	1800<	NE	NE	NE	✓	No
1078	<i>Primula cortusoides</i>	OR	3	Europe, Kazakhstan, Russia	Shrubland (3.4), Grassland (4.4)		NE	NE	NE		No
1079	<i>Primula maximowiczii</i>	OR	5	China	Grassland (4.4), Introduced Vegetation (13)		NE	NE	NE	✓	No
1080	<i>Psammochloa</i>	SE	3,9-13,	China	Sandy areas,		NE	NE	NE		Y+

	<i>villosa</i>		16		Desert (8.2)					
1081	<i>Pseudolysimachion spicatum</i> (= <i>Veronica porphyriana</i>)	R, AP	7,14	Europe, China, Kazakhstan, Kyrgyzstan, Russia	Forest (1.4); Grassland (4.4), Wetlands (5.1; 5.4; 5.11)	<2500	NE	LC (Switzerland)	NE	Y-
1082	<i>Pteridium aquilinum</i>	R, OU	2-5	Europe, Asia-Temperate, N America	Forest (1.2; 1.4)		LC	LC (Taiwan)	NE	Y+
1083	<i>Puccinellia altaica</i>	SE, OR	14	China, Russia	Wetlands (5.2; 5.4)		NE	NE	NE	✓ Y-
1084	<i>Puccinellia filifolia</i>	SE	8,12	China	Wetlands (5.4)		NE	NE	NE	Y-
1085	<i>Puccinellia hackeliana</i>	OR	7	China, M Asia, Russia	Wetlands (5.1; 5.2; 5.11)		NE	NE	NE	No
1086	<i>Puccinellia przewalskii</i>	SE, R, OR	10	China	Wetlands (5.2)		NE	NE	NE	Y-
1087	<i>Pugionium dolabratum</i>	SE	11-13,16	China	Sandy areas, Desert (8.2)		NE	NE	NE	Y+
1088	<i>Pugionium pterocarpum</i>	SE, R, OR	10	Russia	Sandy areas, Desert (8.2)		NE	NE	NE	Y+
1089	<i>Pulicaria vulgaris</i>	WP, OR	10	Europe, N Africa, Asia-Temperate, Asia-Tropical	Wetlands (5.1; 5.2; 5.4; 5.11)	<2800	LC	EX (Sweden, Switzerland)	NE	✓ Y-
1090	<i>Pulsatilla bungeana</i> var. <i>astragalifolia</i>	OR	10	Russia	Rocky areas		NE	NE	NE	Y+
1091	<i>Pulsatilla dahurica</i>		3,9	China, Japan, Korea, Russia	Grassland (4.4)		NE	NE	NE	Y-
1092	<i>Pyrethrum</i>	R, AP, OR	7	China, Kazakhstan,	Rocky areas	1800-	NE	NE	NE	✓ Y-

	<i>alatavicum</i> (= <i>Tanacetum alatavicum</i>)			Russia		2500						
1093	<i>Pyrethrum changaicum</i>	E, R, RB, AP	3,7,10	Endemic	Rocky areas	2500-3000	NE	NE	NE	✓	Y-	
1094	<i>Pyrethrum krylovianum</i> (= <i>Tanacetum krylovianum</i>)	AP, OR	7	China, Kazakhstan, Russia	Rocky areas	2500-3200	NE	NE	NE	✓	No	
1095	<i>Pyrethrum lanuginosum</i>	SE, AP	1,6,7,13	Russia	Wetlands (5.11), Rocky areas	1800<	NE	NE	NE		Y-	
1096	<i>Pyrethrum pulchellum</i> (= <i>Tanacetum pulchellum</i>)	AP, OR	7	Russia	Rocky areas	2200<	NE	NE	NE	✓	No	
1097	<i>Pyrethrum pulchrum</i> (= <i>Tanacetum pulchrum</i>)	R, RB, AP	3,7,13	China, Kazakhstan, M Asia, Russia	Rocky areas	2600<	NE	NE	NE	✓	Y-	
1098	<i>Pyrethrum pyrethroides</i> (= <i>Tanacetum pyrethroides</i>)	AP, OR	7	China, Kazakhstan, M Asia, Russia	Rocky areas	2200<	NE	NE	NE	✓	No	
1099	<i>Pyrola minor</i>	OR	2	Europe, Caucasus, China, Japan, N Korea, Russia	Forest (1.4), Shrubland (3.4), Wetlands (5.1; 5.4; 5.10; 5.11)		NE	EN (Japan)	NE		Y-	
1100	<i>Ranunculus acris</i>	WP	1-5, 7-10	Europe, China, Russia, N America	Forest (1.2; 1.4),		LC	EN (Sweden)	NE	✓	Y-	

P

R

					Wetlands (5.1; 5.4; 5.10; 5.11)					
1101	<i>Ranunculus arschantynicus</i>	E	7,14	Endemic	Rocky areas	1300-1700	NE	NE	NE	No
1102	<i>Ranunculus circinatus</i> (= <i>Batrachium circinatum</i>)	WP	3-5,9,10	Europe, China, Kazakhstan, Russia, N America	Wetlands (5.1; 5.4; 5.7; 5.8; 5.10; 5.11)		NE	NE	NE	✓ No
1103	<i>Ranunculus gmelinii</i>	WP	1,2,4,5,9	N Europe, China, Japan, Kazakhstan, Russia, N America	Wetlands (5.1; 5.4; 5.8; 5.10; 5.11)		LC	EX (Japan)	NE	✓ Y+
1104	<i>Ranunculus lasiocarpus</i>	SE, AP	1,3,6,7	Kazakhstan, Russia	Wetlands (5.11)	1800<	NE	NE	NE	No
1105	<i>Ranunculus lingua</i>	WP, OR	14	N Europe, China, Kazakhstan, Russia	Wetlands (5.1; 5.4; 5.8; 5.10; 5.11)		LC	EN (Norway and Croatia)	NE	✓ No
1106	<i>Ranunculus longicaulis</i>	WP	1-3,6,7, 11,14	China, M Asia, Russia	Wetlands (5.1; 5.4; 5.8; 5.10; 5.11)		NE	NE	NE	✓ Y-
1107	<i>Ranunculus natans</i>	WP	1-4,6-10, 13,15	China, M Asia, Russia	Wetlands (5.1; 5.4; 5.8; 5.10; 5.11)		NE	NE	NE	✓ Y+
1108	<i>Ranunculus polyanthemus</i>	OR	6	Europe, China, M Asia, Russia	Forest (1.4), Shrubland (3.4), Grassland (4.4), Wetlands (5.1; 5.4; 5.10; 5.11)		NE	EN (Netherlands)	NE	No
1109	<i>Ranunculus</i>	WP	1-8,10,13	China, Russia	Wetlands		NE	NE	NE	✓ Y+

R

	<i>radicans</i>				(5.1; 5.4; 5.8; 5.10)							
1110	<i>Ranunculus repens</i>	WP	2-9	Cosmopolitan	Wetlands (5.1; 5.4; 5.7; 5.8; 5.10; 5.11)		NE	LC (United Kingdom)	NE	✓	Y+	
1111	<i>Ranunculus reptans</i>	WP	1,2,4,7,10	Europe, China, Kazakhstan, N Japan, Russia, N America	Wetlands (5.1; 5.4; 5.10; 5.11)	<1500	LC	NT (Japan)	NE	✓	Y-	
1112	<i>Ranunculus rigescens</i>	OR	14	China, M Asia, Russia	Wetlands (5.1; 5.2; 5.4; 5.11)	700-1000	NE	NE	NE		Y+	
1113	<i>Ranunculus sapozhnikovii</i>	E, AP, OR	7	Endemic	Wetlands (5.11), Rocky areas	3000-3500	NE	NE	NE	✓	No	
1114	<i>Ranunculus sceleratus</i>	WP	1-9, 11,13,14	M Europe, N Africa, Asia-Temperate, Asia-Tropical, N America	Wetlands (5.1; 5.4; 5.7; 5.8; 5.10; 5.11)		LC	LC (Taiwan)	NE	✓	Y+	
1115	<i>Ranunculus sulphureus</i>	OR	1	N Europe, Russia, N America	Wetlands (5.1; 5.4; 5.10; 5.11)		NE	EN (Finland)	NE		No	
1116	<i>Ranunculus trichophyllus subsp. eradicatus (=Batrachium eradicatum)</i>	WP	2,5,6,7, 8,9,10	Europe, China, Kazakhstan, Russia, N America	Wetlands (5.1; 5.4; 5.8; 5.10; 5.11)		NE	NT (Switzerland)	NE	✓	Y-	
1117	<i>Ranunculus tuvunicus</i>	SE, AP, OR	7	Russia	Wetlands (5.4; 5.11)	1600<	NE	NE	NE	✓	No	
1118	<i>Reaumuria</i>	RL	3,6-16	China, M Asia,	Desert (8.2),		NE	NE	NE		Y+	

	<i>soongarica</i>			Russia	Coastline (10.2)					
1119	<i>Rhammatophyllum kamelinii</i> (= <i>Prionotrichon kamelinii</i>)	SE, OR	14	China?	Wetlands (5.1; 5.4)		NE	NE	NE	No
1120	<i>Rhamnus parvifolia</i>	VR	2,4,5,9	China, Korea, Russia, Taiwan	Grassland (4.4), Rocky areas		NE	LC (Taiwan)	VU	Y+
1121	<i>Rhamnus ussuriensis</i>	VR	4,5,9	China, Japan, Korea, Russia	Wetlands (5.1; 5.3)		NE	NT (Mongolia)	NT	No
1122	<i>Rhaponticum carthamoides</i>	VR, AP, OR	7	China, Kazakhstan, Russia	Forest (1.4), Grassland (4.4), Wetlands (5.11)	2000- 2700	NE	VU (Mongolia)	VU	✓ No
1123	<i>Rheum uninerve</i>	SE, VR, OR	13	China	Rocky areas	1100- 2300	NE	CR (Mongolia)	CR	No
1124	<i>Rhinactinidia eremophila</i> (= <i>Krylovia eremophila</i>)	R	3,6,7, 10,11,13,14	China, Kazakhstan, Russia	Rocky areas, Desert (8.2)		NE	VU (Mongolia)	VU	Y+
1125	<i>Rhinactinidia eremophila subsp. grubovii</i>	E, OR	7	Endemic	Rocky areas, Desert (8.2)	1100- 2000	NE	NE	NE	No
1126	<i>Rhinactinidia limoniifolia</i>	OR	7	China, M Asia, Russia	Rocky areas		NE	NE	NE	No
1127	<i>Rhinanthus serotinus</i>	AP, OR	2	Europe, Russia	Shrubland (3.4), Grassland (4.4), Wetlands	1800<	NE	LC (Estonia)	NE	✓ No

					(5.1; 5.4; 5.11)							
1128	<i>Rhodiola algida</i>	SE, R, RB, AP	6,7		China?, Kazakhstan, Russia	Wetlands (5.1; 5.11)	1800<	NE	NE	NE	✓	Y+
1129	<i>Rhodiola krylovii</i>	SE, AP, OR	7		Russia	Rocky areas		NE	NE	NE	✓	No
1130	<i>Rhodiola pinnatifida</i>	SE, AP, OU	1,2,6,7		China, Russia	Wetlands (5.1; 5.11), Rocky areas	2200	NE	NE	NE		Y-
1131	<i>Rhodiola subpinnata</i>	SE, AP	1,7		Russia?	Rocky areas		NE	NE	NE		No
1132	<i>Rhododendron adamsii</i>	VR, AP	1,3		Russia	Forest (1.2; 1.4), Wetlands (5.4), Rocky areas	1800<	NE	VU (Mongolia)	VU	✓	Y+
1133	<i>Rhododendron aureum</i>	VR, RB, AP, OU	1,2		China, Japan, Korea, Russia	Forest (1.2; 1.4), Wetlands (5.1; 5.11), Rocky areas	1000- 2500	NE	EN (R. Korea)	VU	✓	Y+
1134	<i>Rhododendron dauricum</i>	VR, OU	1-5		China, Japan, Korea, Russia	Forest (1.2; 1.4), Shrubland (3.4)		NE	VU (Japan), DD (R. Korea)	NT		Y+
1135	<i>Rhododendron lapponicum (=Rh. parvifolium)</i>	VR, AP	1-3		N Europe, China, Japan, Korea, Russia, N America	Forest (1.1; 1.2), Wetlands (5.1; 5.10; 5.11), Rocky areas	<1900	NE	VU (Japan)	LC	✓	Y+
1136	<i>Rhododendron</i>	VR, AP	1,3		Russia	Forest (1.2;	1800<	NE	NT (Mongolia)	NT	✓	Y-

	<i>ledebourii</i>				1.4), Rocky areas					
1137	<i>Ribes aciculare</i> (= <i>Grossularia acicularis</i>)	R, AP, OU	2-4,6-8, 10,13,14	China, Russia	Forest (1.4), Rocky areas	1500- 2100	NE	NE	NE	Y-
1138	<i>Ribes fragrans</i>	R	1,2	Russia	Forest (1.2; 1.4)		NE	NE	NE	✓ No
1139	<i>Ribes graveolens</i>	SE, R, AP	1,7	China, Kazakhstan, Russia	Wetlands (5.11), Rocky areas		NE	NE	NE	✓ No
1140	<i>Ribes heterotrichum</i>	SE, R, RB, AP	6,7,10,14	China, Russia	Wetlands (5.1; 5.11), Rocky areas	1200- 2500	NE	NE	NE	No
1141	<i>Rochelia leiocarpa</i>	R	6,14	China, M and SW Asia, Russia	Wetlands (5.1; 5.2), Rocky areas		NE	NE	NE	No
1142	<i>Rorippa palustris</i>	WP	1-11,13,14	Cosmopolitan	Grassland (4.4), Wetlands (5.1; 5.4; 5.10; 5.11)		NE	VU (United Kingdom)	NE	✓ Y+
1143	<i>Rosa albertii</i>	R, RB, AP, OR	7	China, Kazakhstan, Russia	Wetlands (5.11)	1200- 2000	NE	NE	NE	✓ No
1144	<i>Rosa baitagensis</i>	E, AP, OR	14	Endemic	Rocky areas	1800- 2500	NE	NE	NE	✓ No
1145	<i>Rosa beggeriana</i>	R, RB, OR	14	Afghanistan, China, Kazakhstan	Rocky areas		NE	NE	NE	✓ No
1146	<i>Rosa kokanica</i>	VR, RB, OR	7	Afghanistan, China, Kazakhstan, SW Asia	Wetlands (5.2; 5.4), Rocky areas		NE	VU (Mongolia)	VU	✓ No
1147	<i>Rosa laxa</i>	VR	6,7,13-15	China, M Asia, Russia	Rocky areas		NE	NT (Mongolia)	NT	Y+

1148	<i>Rosa platyacantha</i>	R, RB, OR	14	China, Kazakhstan, Russia	Shrubland (3.4), Grassland (4.4); Wetlands (5.1; 5.4)	1100-1800	NE	NE	NE	✓	Y-
1149	<i>Rosa xanthina</i>	OR	9	China, Kazakhstan	Grassland (4.4)		NE	NE	NE		No
1150	<i>Rubus chamaemorus</i>	AP, OR	2	Europe, China, Japan, Korea, Russia, N America	Shrubland (3.4), Wetlands (5.4; 5.11)		LC	CR (Ireland and Norway)	NE	✓	No
1151	<i>Rumex acetosa</i>	WP	1-3,6,7	Europe, Asia-Temperate, N America	Grassland (4.4), Wetlands (5.4)		NE	LC (Taiwan)	NE	✓	Y+
1152	<i>Rumex aquaticus</i>	WP	1-10,14	Europe, Asia-Temperate, N America	Wetlands (5.1; 5.4; 5.8; 5.10; 5.11)		NE	EN (Norway)	NE	✓	Y+
1153	<i>Rumex crispus</i>	WP	1,7,9,10,14	Europe, Asia-Temperate, Asia-Tropical, N America	Wetlands (5.1; 5.4; 5.11)		NE	LC (Taiwan)	NE	✓	Y-
1154	<i>Rumex maritimus</i>	WP	2-5, 8-11,14	Europe, Asia-Temperate, Asia-Tropical, N America	Wetlands (5.1; 5.4; 5.10)		NE	LC (Taiwan)	NE	✓	Y-
1155	<i>Rumex pseudonatronatus</i>	SE, R	11,13	Europe, Asia-Temperate	Wetlands (5.1; 5.4)		NE	EN (Hungary)	NE		No
1156	<i>Rumex similans</i>	SE	2-4,6,7, 10-12,14,15	SE Europe, China, Kazakhstan, Russia	Wetlands (5.1; 5.2; 5.4; 5.10)	800-1500	NE	NE	NE		Y-

1157	<i>Ruppia maritima</i>	WP, OR	10	Cosmopolitan	Wetlands (5.1; 5.4; 5.5-5.8; 5.10)		LC	NT (Japan), LC (Taiwan)	NE	✓	No
1158	<i>Sagina saginoides</i>	AP, OR	7	Europe, Asia-Temperate, Asia-Tropical, N America	Wetlands (5.1; 5.1; 5.10; 5.11), Rocky areas	1400-4200	NE	CR (Japan)	NE	✓	No
1159	<i>Sagittaria natans</i>	VR, WP	4,9,10,14	Europe, China, Japan, Korea, Russia	Wetlands (5.1; 5.4; 5.7; 5.8)		NE	CR (Japan)	LC	✓	No
1160	<i>Sagittaria trifolia</i>	WP	1,4,5,9,14	Europe, Asia-Temperate, Asia-Tropical	Wetlands (5.1; 5.4; 5.7; 5.8; 5.10; 5.11)		LC	LC (Taiwan)	NE	✓	Y-
1161	<i>Sajania monstrosa</i> (= <i>Sajanella monstrosa</i>)	SE, R, RB, AP, OR	2	Kazakhstan, Russia	Wetlands (5.4; 5.11)	1800<	NE	NE	NE	✓	No
1162	<i>Salicornia altaica</i>	SE, OR	7	Russia	Wetlands (5.2; 5.9)		NE	NE	NE		No
1163	<i>Salix polaris</i>	AP, OR	1	N Europe, Russia, N America	Wetlands (5.1; 5.4; 5.10; 5.11)	2000<	NE	NE	NE	✓	No
1164	<i>Salix sajanensis</i>	SE, AP	1,6,7	China, Kazakhstan, Russia	Wetlands (5.10; 5.11)	1800<	NE	NE	NE		Y-
1165	<i>Salix triandra</i>	SE	1,3,4,14	China, M and SW Asia, Russia	Wetlands (5.1; 5.3; 5.4; 5.11)		NE	NE	NE		Y-
1166	<i>Salix udensis</i>	OR	9	China, Japan, Korea, Russia	Forest (1.4), Shrubland (3.4), Wetlands (5.1)		NE	NE	NE		No

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1167	<i>Salsola foliosa</i>	SE, OR	14	SE Europe, Caucasus, China, M and SW Asia, Russia	Desert (8.2), Coastline (10.2)	NE	NE	NE	No
1168	<i>Salsola ikonnikovii</i>	SE	7,11-13	China	Desert (8.2), Coastline (10.2)	NE	NE	NE	Y-
1169	<i>Salsola monoptera</i>	SE	3,6-13	China, M Asia, Russia	Desert (8.2)	NE	NE	NE	Y-
1170	<i>Salsola passerina</i>	SE, RL	8,10-13, 15,16	China, Russia	Desert (8.2)	NE	NE	NE	Y+
1171	<i>Salvia deserta</i>	VR, RB, OR	6	Caucasus, China, Kazakhstan, Kyrgyzstan, Russia	Grasslands (4.4), Wetlands (5.1; 5.4; 5.11)	NE	NE	NE	No
1172	<i>Sambucus williamsii</i>	OR	5	China, Korea, Russia	Forest (1.4), Rocky areas	NE	VU (Mongolia)	VU	✓ No
1173	<i>Sanguisorba alpina</i>	VR, AP	3,6,7	China, M Asia, Russia	Forest (1.4), Wetlands (5.11)	NE	VU (Mongolia)	VU	✓ Y-
1174	<i>Sanguisorba tenuifolia</i>	OR	9	China, Japan, Korea, Russia	Forest (1.4), Shrubland (3.4), Wetlands (5.1; 5.4)	NE	NE	NE	No
1175	<i>Saposhnikovia divaricata</i>	R, RB, OU	2-6,8,9	China, Korea, Russia	Shrubland (3.4), Grassland (4.4)	NE	NE	NE	Y+
1176	<i>Sarcozygium kaschgaricum</i>	R	13-15	China, Kazakhstan	Desert (8.2)	NE	NE	NE	Y+

(<i>=Zygophyllum kaschgaricum</i>)										
1177	<i>Saussurea acuminata</i>	R	2,4,5	China, Japan, Russia	Shrubland (3.4), Grassland (4.4), Wetlands (5.4)		NE	VU (Japan)	NE	Y+
1178	<i>Saussurea alaschanica</i>	SE	6,10	China	Rocky areas, Desert (8.2)		NE	NE	NE	No
1179	<i>Saussurea arctecapitulata</i>	SE, AP	1,3	Russia	Wetlands (5.11), Rocky areas	1800<	NE	NE	NE	Y-
1180	<i>Saussurea baicalensis</i>	SE, AP	1-3,7	China, Russia	Forest (1.4), Shrubland (3.4), Wetlands (5.4; 5.11)	2000-3200	NE	NE	NE	Y+
1181	<i>Saussurea catharinae</i>	E, R, RB, AP, OR	15	Endemic	Rocky areas	1600-2200	NE	NE	NE	✓ Y+
1182	<i>Saussurea ceterachifolia</i>	SE, AP	3,6,7	Russia	Wetlands (5.1; 5.4)	2000<	NE	NE	NE	✓ Y+
1183	<i>Saussurea congesta</i>	AP, OR	1	Russia	Wetlands (5.11), Rocky areas	2000<	NE	NE	NE	✓ Y-
1184	<i>Saussurea coronata</i>	AP, OR	7	China, Kazakhstan	Rocky areas	1400-2100	NE	NE	NE	✓ No
1185	<i>Saussurea dorogostaiskii</i>	SE, R, RB, AP, OU	1,2	Russia	Shrubland (3.4), Rocky areas	1800<	NE	CR (Mongolia)	CR	✓ Y+
1186	<i>Saussurea elata</i>	SE, OR	7	China, India?, Kazakhstan,	Grassland (4.4)		NE	NT (India)	NE	No

				Russia						
1187	<i>Saussurea foliosa</i>	R, AP	6,7	China?, Kazakhstan, Russia	Wetlands (5.11), Rocky areas	1800<	NE	NT (India)	NE	Y-
1188	<i>Saussurea glacialis</i>	SE, R, AP	3,6,7,13	China, M and SW Asia, Russia	Rocky areas	3800- 5200	NE	NE	NE	Y-
1189	<i>Saussurea grubovii</i>	SE	7,14,15	China, Kazakhstan	Wetlands (5.2; 5.4)	<1900	NE	NE	NE	Y-
1190	<i>Saussurea gubanovii</i>	E, OR	15	Endemic	Wetlands (5.2), Rocky areas	1200- 1800	NE	NE	NE	No
1191	<i>Saussurea involucrata</i>	VR, RB, RL, AP, OU	3,6,7, 13,14	China, Kazakhstan, Kyrgyzstan, Russia?	Rocky areas	2400- 4100	NE	EN (Mongolia)	EN	✓ Y-
1192	<i>Saussurea japonica</i>	OR	9	China, Japan, Korea, Russia?	Forest (1.5), Shrubland (3.4), Wetlands (5.1; 5.4)	<2900	NE	EN (Japan)	NE	No
1193	<i>Saussurea klementzii</i>	E, R, RB, AP, OR	7	Endemic	Rocky areas	1800- 2300	NE	NE	NE	✓ Y-
1194	<i>Saussurea krasnoborovii</i>	AP, OR	1	Russia	Wetlands (5.11)	2000<	NE	NE	NE	✓ No
1195	<i>Saussurea krylovii</i>	AP, OR	7	China, Kazakhstan, Russia	Shrubland (3.4), Rocky areas	2300- 2800	NE	NE	NE	✓ No
1196	<i>Saussurea latifolia</i>	R, AP	3,7	China, Kazakhstan, Russia	Forest (1.4), Wetlands (5.4; 5.11), Rocky areas	<2500	NE	NE	NE	Y-
1197	<i>Saussurea lipschitzii</i>	SE, AP	7,13	Kazakhstan	Rocky areas	1800<	NE	NE	NE	Y+

1198	<i>Saussurea mongolica</i>	OR	5	China, Korea	Forest (1.5), Wetlands (5.1; 5.4)	<2900	NE	NE	NE	✓	No
1199	<i>Saussurea odontolepis</i>	OR	5	China, Korea, Russia	Forest (1.5), Grassland (4.4), Wetlands (5.1; 5.4)	<700	NE	NE	NE	✓	No
1200	<i>Saussurea orgaadayi</i>	SE, AP, OR	7	China, Russia	Shrubland (3.4), Rocky areas	1800<	NE	NE	NE	✓	No
1201	<i>Saussurea popovii</i>	SE, OR	14	China	Wetlands (5.2), Rocky areas	800<	NE	NE	NE		No
1202	<i>Saussurea pricei</i>	SE	3,6-8, 10,11,13,14	China?, Russia	Wetlands (5.2), Rocky areas, Desert (8.2)		NE	NE	NE		Y+
1203	<i>Saussurea pseudosalsa</i>	SE	15,16	China, Tashikhstan	Wetlands (5.2), Coastline (10.2)		NE	NE	NE		Y-
1204	<i>Saussurea pulchella</i>	SE	5,7-9	China, Japan, Korea, Russia	Shrubland (3.4), Wetlands (5.1; 5.4)	<2200	NE	NE	NE		Y-
1205	<i>Saussurea ramosa</i>	E	3,10,11,15	Endemic	Wetlands (5.4), Coastline (10.2)	1000- 1500	NE	NE	NE		Y-
1206	<i>Saussurea saichanensis</i>	E, AP	1-3,6,7, 13,14	Endemic	Rocky areas	1800- 2800	NE	NE	NE		Y+

1207	<i>Saussurea squarrosa</i>	SE, AP, OR	1	Russia	Rocky areas	2600<	NE	NE	NE	✓	No
1208	<i>Saussurea ussuriensis</i>	OR	5	China, Japan, Korea, Russia	Wetlands (5.1; 5.4; 5.11)	1100-2900	NE	NE	NE	✓	Y-
1209	<i>Saxifraga hirculus</i>	VR, AP	1-7,13	N and M Europe, Asia-Temperate, N America	Wetlands (5.1; 5.4; 5.10; 5.11)	2100-5000	LC	CR (France)	EN		Y+
1210	<i>Saxifraga nivalis</i>	AP, OR	1	Europe, Russia	Wetlands (5.10; 5.11), Rocky areas	2000<	NE	CR (Ireland)	NE	✓	No
1211	<i>Scheuchzeria palustris</i>	VR, RB, WP, OR	2	Europe, Asia-Temperate, Asia-Tropical, N America	Wetlands (5.4; 5.10; 5.11)		LC	NT (Croatia)	LC	✓	No
1212	<i>Schismus arabicus</i>	R	4,7,11,14	Cosmopolitan	Wetlands (5.2); Sandy areas		NE	EX (Malta)	NE		Y-
1213	<i>Schizachne purpurascens subsp. callosa (=Sch. callosa)</i>	R	2-5	Europe, China, E Kazakhstan, Korea, Japan, Russia	Forest (1.4), Grassland (4.4)		NE	CR (Japan)	NE		No
1214	<i>Schoenoplectus lacustris subsp. hippolytii (=Scirpus hippolyti)</i>	WP	1-10, 12-15	Europe, China, E Kazakhstan, Japan, Russia	Wetlands (5.1; 5.4; 5.7)		LC	VU (United Kingdom)	NE	✓	Y-
1215	<i>Schoenoplectus supinus (=Scirpus supinus)</i>	WP, OR	10	Cosmopolitan	Wetlands (5.1; 5.4; 5.7)		LC	LC (Sri Lanka, Taiwan)	NE	✓	Y-
1216	<i>Scirpus orientalis</i>	WP	2-5,9	China, Japan, Korea, Russia	Wetlands (5.1; 5.4; 5.7)	<2700	NE	NE	NE	✓	Y+
1217	<i>Scirpus radicans</i>	R, WP	2-5,9	Europe, Asia-	Wetlands	<900	NE	EN (Finland)	NE	✓	Y-

				Temperate	(5.1; 5.4; 5.7; 5.10)					
1218	<i>Scorochloa festucacea</i>	R, WP, OR	4	Europe, Asia-Temperate, N America	Wetlands (5.1; 5.4; 5.10; 5.11)	LC	EN (Hungary)	NE	✓	No
1219	<i>Scorzonera capito</i>	SE	8,11-16	China	Rocky areas, Desert (8.2)	NE	NE	NE		Y+
1220	<i>Scorzonera divaricata</i>	SE	6-13, 15,16	China	Grassland (4.4), Wetlands (5.2), Desert (8.2)	NE	NE	NE		Y+
1221	<i>Scorzonera grubovii</i>	E, RB, AP	7,14	Endemic	Rocky areas	1500-2000	NE	NE	NE	Y-
1222	<i>Scorzonera ikonnikovii</i>	SE	3,6-15	China, Russia	Rocky areas, Desert (8.2)	1300-1800	NE	NE	NE	Y+
1223	<i>Scorzonera mongolica</i>	SE	10-16	China, Kazakhstan	Desert (8.2)		NE	NE	NE	Y-
1224	<i>Scorzonera parviflora</i>	R, RB, OR	14	Europe, Asia-Temperate, Asia-Tropical	Wetlands (5.1; 5.2; 5.4)	900-1700	NE	CR (Bulgaria)	NE	Y-
1225	<i>Scorzonera pseudodivaricata</i>	SE	3,6-16	China, M Asia	Sandy areas, Desert (8.2)		NE	NE	NE	Y+
1226	<i>Scorzonera sinensis</i>	OR	9	China	Grassland (4.4), Wetlands (5.2; 5.9)		NE	NE	NE	No
1227	<i>Scorzonera subacaulis</i>	OR	6	China, Kazakhstan, Kyrgyzstan	Desert (8.2), Coastline (10.2)		NE	NE	NE	No
1228	<i>Scrophularia altaica</i>	SE, AP	1,3,6,7	Kazakhstan, Russia	Rocky areas	1800<	NE	NE	NE	Y-

1229	<i>Scrophularia hilbigii</i>	E, AP	13,14	Endemic	Grassland (4.4), Rocky areas	1500-2500	NE	NE	NE	No
1230	<i>Scrophularia umbrosa</i>	OR	10	Europe, Caucasus, China, M Asia, Russia	Forest (1.4), Shrubland (3.4), Grassland (4.4), Wetlands (5.1; 5.2; 5.4)		LC	NT (Ireland)	NE	No
1231	<i>Scutellaria altaica</i>	SE, AP, OR	7	China, Kazakhstan, Russia	Rocky areas	1600-2500	NE	NE	NE	✓ No
1232	<i>Scutellaria baicalensis</i>	R, OU	1-5,8,9	China, Japan, Korea, Russia	Grassland (4.4)		NE	NE	NE	Y+
1233	<i>Scutellaria grandiflora subsp. gymnosperma</i>	E	7,13	Endemic	Wetlands (5.2), Rocky areas	1100-1600	NE	NE	NE	Y-
1234	<i>Scutellaria grandiflora subsp. tuvensis</i>	SE, OR	10	Russia	Rocky areas		NE	NE	NE	No
1235	<i>Scutellaria paulsenii</i>	SE, R, RB, OR	7	China, M and W Asia, Russia	Grassland (4.4), Rocky areas		NE	NE	NE	Y-
1236	<i>Scutellaria supina</i>	R	7,14	China, M Asia, Russia	Grassland (4.4)	1900	NE	NE	NE	Y-
1237	<i>Scutellaria viscidula</i>	R, RB, OR	9	China	Grassland (4.4)		NE	NE	NE	Y-
1238	<i>Sedum aizoon</i>	R, OU	1-14	Europe, China, Korea, M Asia, Russia	Shrubland (3.4), Grassland (4.4), Wetlands		NE	NE	NE	Y+

					(5.1; 5.4)					
1239	<i>Sedum roseum</i> (= <i>Rhodiola rosea</i>)	VR, AP, OU	1-8,13,14	N Europe, China, M Asia, Russia, N America	Wetlands (5.4; 5.11), Rocky areas	1600<	NE	VU (Mongolia)	VU	Y+
1240	<i>Senecio argunensis</i>	R, OR	9	China, Japan, Korea, Russia	Grassland (4.4), Wetlands (5.4)		NE	EN (Japan), NT (R. Korea)	NE	No
1241	<i>Senecio atropurpureus</i>	AP, OR	1	Russia	Wetlands (5.10; 5.11)	1800<	NE	NE	NE	✓ Y-
1242	<i>Senecio flammeus</i>	R, RB, OR	5	China, Russia	Forest (1.4), Shrubland (3.4)		NE	NE	NE	No
1243	<i>Senecio kenteicus</i>	E, AP, OR	2	Endemic	Forest (1.4), Shrubland (3.4)	1700- 2200	NE	NE	NE	✓ Y+
1244	<i>Senecio veresczaginii</i>	SE, AP, OR	7	Kazakhstan, Russia	Forest (1.4), Grassland (4.4)	1800<	NE	NE	NE	✓ No
1245	<i>Senecio vulgaris</i>	WP	1-4,7,8,10	Europe, N Africa, Caucasus, China, Kazakhstan, Russia	Wetlands (5.1; 5.4; 5.10; 5.11)		NE	LC (United Kingdom)	NE	✓ Y+
1246	<i>Seriphidium assurgens</i> (= <i>Artemisia assurgens</i>)	SE	7,11, 13-15	China	Desert (8.2)		NE	NE	NE	Y+
1247	<i>Seriphidium borotalense</i> (= <i>Artemisia borotalensis</i>)	SE	7,14	China, Russia	Rocky areas		NE	NE	NE	Y+
1248	<i>Seriphidium</i>	SE, OR	14	China	Rocky areas		NE	NE	NE	No

	<i>gorjaevii</i>									
1249	<i>Seriphidium heptapotamicum</i> (=Artemisia heptapotamica)	SE	7,14	China, Kazakhstan	Desert (8.2)	NE	NE	NE	Y+	
1250	<i>Seriphidium mongolorum</i> (=Artemisia mongolorum)	SE	7,12-15	China	Desert (8.2), Coastline (10.2)	NE	NE	NE	Y+	
1251	<i>Seriphidium subchrysolepis</i> (=Artemisia subchrysolepis)	SE	7,14	China, Russia	Desert (8.2)	NE	NE	NE	No	
1252	<i>Serratula alataavica</i>	OR	6	China?, Kazakhstan	Rocky areas	NE	NE	NE	Y+	
1253	<i>Serratula kirghisorum</i>	SE, OR	7	Kazakhstan, Russia	Grassland (4.4)	NE	NE	NE	No	
1254	<i>Seseli glabratum</i>	OR	7	China, Kazakhstan, Uzbekistan, Russia	Grassland (4.4), Rocky areas	NE	NE	NE	No	
1255	<i>Seseli mucronatum</i>	OR	14	China, M Asia, Russia	Wetlands (5.1; 5.2); Rocky areas	NE	NE	NE	Y+	
1256	<i>Sibbaldia sericea</i> (=Potentilla adpressa var. sericea)	SE	7,8,12,13	China	Grassland (4.4), Rocky areas	NE	NE	NE	Y-	
1257	<i>Sibiraea laevigata</i>	SE, OR	7	SE Europe, China, Kazakhstan, Russia	Forest (1.4), Wetlands (5.1; 5.4; 5.11)	NE	DD (Central Asia)	NE	No	
1258	<i>Silene bungei</i>	SE	1-3,6	China, Kazakhstan,	Grassland	NE	NE	NE	Y+	

	(= <i>Melandrium triste</i>)			Kyrgyzstan, Russia	(4.4), Wetlands (5.11)					
1259	<i>Silene conoidea</i>	OR	7	Europe, N Africa, China, M Asia	Grassland (4.4), Wetlands (5.1; 5.4)	NE	NE	NE		No
1260	<i>Silene iche-bogdo</i>	E, AP, OR	13	Endemic	Rocky areas	1500- 2200	NE	NE	NE	✓ No
1261	<i>Silene intramongolica</i>	OR	7	China	Grassland (4.4)		NE	NE	NE	No
1262	<i>Silene mongolica</i>	E, R	10,13	Endemic	Wetlands (5.2), Rocky areas	1100- 2000	NE	NE	NE	Y-
1263	<i>Silene sibirica</i>	OR	14	China?, Russia	Grassland (4.4), Rocky areas		NE	NE	NE	Y+
1264	<i>Silene sobolevskajae</i>	OR	2	Russia	Grassland (4.4)		NE	NE	NE	No
1265	<i>Silene songarica</i> (= <i>Lychnis mongolica</i>)	SE, R	2-4	China, Kazakhstan, Russia	Shrubland (3.4), Grassland (4.4), Wetlands (5.11)		NE	NE	NE	Y-
1266	<i>Sisymbrium brassiciforme</i>	SE	7,14,15	China, M and SW Asia, Russia	Wetlands (5.2), Desert (8.2), Rocky areas		NE	NE	NE	Y-
1267	<i>Sisymbrium loeselii</i>	R	3,4,14	E Europe, Caucasus, China, M and SW Asia,	Wetlands (5.2; 5.4), Desert (8.2),		NE	EN (Switzerland)	NE	Y-

				Russia	Rocky areas					
1268	<i>Sisymbrium subspinescens</i>	R, OR	14	China, Kazakhstan	Coastline (10.2)		NE	NE	NE	No
1269	<i>Sium suave</i>	WP	1-10,14	China, Japan, Korea, Russia, N America	Wetlands (5.1; 5.4; 5.7; 5.10; 5.11)		LC	VU (Japan), CR (Taiwan)	NE	✓ Y+
1270	<i>Smelowskia altaica</i> (=Hedinia altaica)	SE, AP	6,7	Kazakhstan, Russia	Grassland (4.4), Rocky areas	1800<	NE	NE	NE	Y+
1271	<i>Smelowskia bifurcata</i>	R, AP, OR	1	Russia	Rocky areas	2200<	NE	NE	NE	✓ Y-
1272	<i>Smelowskia mongolica</i>	E, AP	3,7	Endemic	Rocky areas	2200-2800	NE	NE	NE	✓ Y-
1273	<i>Solidago virgaurea</i>	AP, OR	7	Europe, Caucasus, China, M Asia, Russia	Grassland (4.4), Wetlands (5.1; 5.4; 5.11)	1800<	NE	NT (United Kingdom)	NE	✓ No
1274	<i>Solidago virgaurea</i> subsp. <i>dahurica</i> (=S. dahurica)	VR, AP	1-5,7,9	China, M and SW Asia, Russia, Taiwan	Forest (1.4), Wetlands (5.1; 5.11), Rocky areas	1500<	NE	LC (Taiwan)	VU	Y+
1275	<i>Sophora alopecuroides</i>	R, OU	12-16	Caucasus, China, M and SW Asia, Russia	Grassland (4.4), Wetlands (5.2; 5.9), Desert (8.2)		NE	NE	NE	Y+
1276	<i>Sophora flavescens</i>	VR, RB, OU	5,9	China, India, Japan, Korea, Russia, Taiwan	Shrubland (3.4), Grassland (4.4), Wetlands	1500	LC	LC (Taiwan)	EN	No

					(5.1; 5.4)					
1277	<i>Sorbaria sorbifolia</i>	VR	4,5	China, Japan, Korea, Russia	Forest (1.4), Wetlands (5.1; 5.11; 5.13)	NE	VU (Mongolia)	VU		Y+
1278	<i>Sparganium emersum</i>	WP	3,5,6, 7,9,10	Europe, Asia-Temperate, Asia-Tropical, N America	Wetlands (5.1; 5.4; 5.5; 5.7; 5.8)	NE	VU (Hungary)	NE	✓	Y-
1279	<i>Sparganium erectum subsp. stoloniferum</i> (=S. stoloniferum)	WP	1,4,8,9,10	Europe, N Africa, Asia-Temperate, Asia-Tropical, N America	Wetlands (5.1; 5.4; 5.5; 5.7; 5.8)	NE	NE	NE	✓	Y+
1280	<i>Sparganium glomeratum</i>	R, WP	2,4	N Europe, China, Japan, Russia, N America	Wetlands (5.1; 5.4; 5.5; 5.7; 5.8; 5.10; 5.11)	LC	NT (Japan)	NE	✓	Y-
1281	<i>Sparganium natans</i> (=S. minimum)	WP	7,10	Europe, China, Kazakhstan, Russia, N America	Wetlands (5.1; 5.4; 5.7; 5.10)	LC	CR (Bulgaria)	NE	✓	No
1282	<i>Spiraea elegans</i>	OR	4	China, Russia	Forest (1.4), Shrubland (3.4), Rocky areas	NE	NE	NE		No
1283	<i>Spirodela polyrhiza</i>	WP, WP, OR	5	Europe, Asia-Temperate, N America	Wetlands (5.1; 5.4; 5.7)	LC	LC (Taiwan)	NE	✓	No
1284	<i>Spongiocarpella grubovii</i>	SE, VR, RB, RL	15,16	China	Desert (8.2)	NE	EN (Mongolia)	EN		Y-
1285	<i>Stachys palustris</i>	WP	2-6,9,10	Europe, Caucasus, China, M and SW Asia, Russia, N	Shrubland (3.4), Grassland	LC	NT (Switzerland)	NE	✓	No

					America (4.4), Wetlands (5.1; 5.4; 5.11)						
1286	<i>Stellaria dichotoma</i>	R	1-14	China, Russia	Grassland (4.4), Sandy areas		NE	NE	NE	Y+	
1287	<i>Stellaria dichotoma</i> <i>var. lanceolata</i> (=S. <i>gypsophiloides</i>)	SE	3,7-9,11- 13, 15,16	China, Russia	Rocky areas		NE	NE	NE	Y-	
1288	<i>Stellaria imbricata</i>	SE	6,7,14	China, Kazakhstan, Russia	Wetlands (5.2), Rocky areas		NE	NE	NE	No	
1289	<i>Stellaria irrigua</i>	SE, AP	1-4,6,7,13	China, Russia	Wetlands (5.4; 5.11)	1800<	NE	NE	NE	No	
1290	<i>Stellaria</i> <i>martjanovii</i>	SE, AP, OR	7	China, Russia	Rocky areas	1800<	NE	NE	NE	✓ No	
1291	<i>Stellaria media</i>	R	2,3	Europe, Caucasus, SW and E Asia, Russia, N America	Grassland (4.4), Wetlands (5.1; 5.4)		NE	NE	NE	Y+	
1292	<i>Stellaria palustris</i>	WP	2,3,7,9	Europe, Caucasus, China, M and SW Asia, Russia	Wetlands (5.1; 5.4)		NE	EN (Hungary)	NE	✓ Y+	
S	1293	<i>Stellaria pulvinata</i>	E, R, AP	6,7	Endemic	Rocky areas	2700- 3300	NE	NE	NE	✓ Y+
	1294	<i>Stellaria radians</i>	R	5,9	China, Japan, Korea, Russia	Forest (1.4), Grassland (4.4)		NE	NE	NE	Y-
	1295	<i>Stenocoelium</i> <i>athamantoides</i>	SE, R	6,7	Kazakhstan, Russia	Rocky areas		NE	NE	NE	Y-
	1296	<i>Sterigmostemum</i>	SE, OR	14	China	Rocky areas		NE	NE	NE	No

	<i>regeliorum</i>										
1297	<i>Stevenia sergievskajae</i>	AP, OR	3	Russia	Rocky areas	1800<	NE	NE	NE	✓	No
1298	<i>Stilpnolepis intricata</i>	SE	3,4,7,9-13,15	China	Rocky areas, Desert (8.2)		NE	NE	NE		No
1299	<i>Stipa consanguinea</i>	R	2,7,10	China, M Asia, Russia	Wetlands (5.2), Rocky areas		NE	NE	NE		Y-
1300	<i>Stipa inebrians</i>	R	7,12,13,16	China	Wetlands (5.2), Desert (8.2)		NE	NE	NE		Y-
1301	<i>Stipa mongholica</i> (=Ptilagrostis mongholica)	RL, AP	1-4,7	China, M and SW Asia, Russia	Grassland (4.4)	2000-4600	NE	NE	NE		Y+
1302	<i>Stipa mongolorum</i>	SE	7,8,10-12	China	Grassland (4.4), Desert (8.2)		NE	NE	NE		Y+
1303	<i>Stipa pelliottii</i> (=Ptilagrostis pelliottii)	RL	7,11-16	China, Russia	Rocky areas, Desert (8.2)	1100-3500	NE	NE	NE		Y+
1304	<i>Stipa sczerbakovii</i>	SE, OR	7	Russia	Rocky areas		NE	NE	NE		No
1305	<i>Stipa tianschanica</i> subsp. <i>gobica</i> (=S. <i>gobica</i>)	SE	3,4,7-16	China	Grassland (4.4), Rocky areas, Desert (8.2)		NE	NE	NE		Y+
1306	<i>Stipa tianschanica</i> var. <i>klemenzii</i> (=S. <i>klemenzii</i>)	SE	3,4,6-13	China, Russia	Grassland (4.4), Rocky areas		NE	NE	NE		Y+
1307	<i>Stipa zalesskii</i> (=S. <i>rubens</i>)	R	3,7,10	SE Europe, Caucasus, China, M Asia, Russia	Grassland (4.4), Rocky areas		NE	CR (Bulgaria)	NE		Y-
1308	<i>Stuckenia filiformis</i>	WP	1,3,6-11,	Europe, Asia-	Wetlands		LC	CR (Spain)	NE	✓	Y+

	(= <i>Potamogeton filiformis</i>)		13,15		Temperate, Asia-Tropical, N and S America	(5.1; 5.4-5.10)						
1309	<i>Stuckenia pectinata</i> (= <i>Potamogeton pectinatus</i>)	WP	1-11		Cosmopolitan	Wetlands (5.1; 5.3-5.11)	LC	VU (R. Korea), NT (Japan)	NE	✓	Y+	
1310	<i>Stuckenia vaginata</i> (= <i>Potamogeton vaginatus</i>)	WP	1,3-8, 10,11,13		N Europe, Asia-Temperate, N America	Wetlands (5.1; 5.4-5.11)	LC	VU (Norway)	NE	✓	Y+	
1311	<i>Suaeda linifolia</i>	R	10,14		SE Europe, Caucasus, China, M Asia, Russia	Grassland (4.4), Desert (8.2), Coastline (10.2)	NE	NE	NE		Y-	
1312	<i>Suaeda maritima</i> (= <i>S. prostrata</i>)	WP	6,9-13,16		S Europe, Caucasus, China, M and SW Asia, Russia	Coastline (10.2)	NE	VU (Japan), NT (Taiwan)	NE	✓	Y+	
1313	<i>Suaeda przewalskii</i>	SE	10-13		China	Desert (8.2), Coastline (10.2)	NE	NE	NE		Y-	
1314	<i>Suaeda tschujensis</i>	SE	6,7		Russia	Wetlands (5.2; 5.9)	NE	NE	NE		No	
S 1315	<i>Subularia aquatica</i>	WP	3,6		N Europe, Asia-Temperate, N America	Wetlands (5.1; 5.4; 5.11)	LC	EN (Japan)		✓	No	
1316	<i>Swertia banzragczii</i>	E, VR, RB, AP	6,7		Endemic	Grassland (4.4), Wetlands (5.11)	1800-3000	NE	VU (Mongolia)	VU	✓	Y+
1317	<i>Swertia komarovii</i>	SE, AP, OR	1		Russia	Wetlands	2200<	NE	NE	NE	✓	No

					(5.11)				
1318	<i>Sympegma regelii</i>	RL	7,10-16	China, Kazakhstan	Rocky areas, Desert (8.2)	NE	NE	NE	Y+
1319	<i>Synurus deltoides</i>	R	4,5	China, Japan, Korea, Russia	Forest (1.4), Grassland (4.4), Wetlands (5.1; 5.4)	NE	NE	NE	Y+
1320	<i>Tamarix arceuthoides</i>	RL	10,14,15	China, M and SW Asia	Wetlands (5.3; 5.8; 5.9), Coastline (10.2)	NE	NE	NE	No
1321	<i>Tamarix elongata</i>	RL, OR	11	China, Kazakhstan, Russia, Turkmenistan, Uzbekistan	Wetlands (5.3; 5.8), Coastline (10.2)	NE	NE	NE	No
1322	<i>Tamarix gracilis</i>	RL	13,15,16	SE Europe, Caucasus, China, M and SW Asia, Russia	Wetlands (5.3; 5.8; 5.9), Coastline (10.2)	NE	NE	NE	Y+
1323	<i>Tamarix hispida</i>	R, RB, RL, OR	13	China, M and SW Asia	Wetlands (5.2; 5.4)	NE	NE	NE	No
1324	<i>Tamarix karelinii</i>	RL	10,14-16	China, M and SW Asia, Russia	Wetlands (5.3; 5.8; 5.9), Coastline (10.2)	NE	NE	NE	Y-
1325	<i>Tamarix kasakhorum</i>	RL	15,16	China, Kazakhstan	Wetlands (5.3; 5.9), Coastline (10.2)	NE	NE	NE	No
1326	<i>Tamarix laxa</i>	RL	11,12,15	E Europe, Caucasus, China, M	Grassland (4.4),	NE	NE	NE	Y+

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					and SW Asia, Russia	Wetlands (5.3; 5.8; 5.9), Coastline (10.2)					
1327	<i>Tamarix leptostachya</i>	RL	10,13-16		China, M Asia	Wetlands (5.3; 5.8; 5.9), Coastline (10.2)	NE	NE	NE		Y-
1328	<i>Tamarix ramosissima</i>	RL	10,12-16		E Europe, Caucasus, China, M and SW Asia	Wetlands (5.3; 5.8; 5.9), Coastline (10.2)	LC	NE	NE		Y+
1329	<i>Tanacetum crassipes</i>	SE, AP, OR	7		China, M Asia, Russia	Grassland (4.4), Wetlands (5.11)	2100<	NE	NE	NE	✓ No
1330	<i>Tanacetum sinuatum</i> (= <i>Chrysanthemum sinuatum</i> ; = <i>Dendranthema sinuatum</i>)	SE, VR, AP	6,7		Russia	Rocky areas	1800<	NE	EN (Mongolia)	EN	Y-
1331	<i>Tanacetum tanacetoides</i>	R	2,3,6,7		China, Kazakhstan, Russia	Grassland (4.4), Rocky areas		NE	NE	NE	Y-
1332	<i>Taraxacum altaicum</i>	SE, AP	3,6,7		Kazakhstan, Russia	Wetlands (5.1; 5.4; 5.11)	1600<	NE	NE	NE	Y+
1333	<i>Taraxacum armeriifolium</i>	SE, R, AP	3-5,7, 9-14,16		Afghanistan, China, India, Tajikistan	Shrubland (3.4), Grassland (4.4),	1500- 2800	NE	NE	NE	Y-

					Wetlands (5.1; 5.4; 5.11)					
1334	<i>Taraxacum borealisinense</i>	OR	15	China	Coastline (10.2)		NE	NE	NE	No
1335	<i>Taraxacum bornuureense</i>	E, AP	3,4,6,7	Endemic	Shrubland (3.4), Wetlands (5.1; 5.4; 5.11)	1500- 2800	NE	NE	NE	No
1336	<i>Taraxacum commixtiforme</i>	SE	4,8-10, 13,14	Russia	Grassland (4.4), Wetlands (5.1; 5.4)		NE	NE	NE	Y-
1337	<i>Taraxacum erythrospermum</i>	OR	3	Europe, China?, M Asia, Russia	Grassland (4.4), Wetlands (5.4)		NE	NE	NE	No
1338	<i>Taraxacum inimitabile</i>	E, AP, OR	13	Endemic	Rocky areas	1600- 2000	NE	NE	NE	✓ No
1339	<i>Taraxacum junatovii</i>	E, AP	3,7,13,14	Endemic	Wetlands (5.11), Rocky areas	2500- 3200	NE	NE	NE	No
1340	<i>Taraxacum kok-saghyz</i>	SE	3,7,13	China?, M Asia	Wetlands (5.1; 5.4)		NE	NE	NE	No
1341	<i>Taraxacum krasnoborovii</i>	SE, OR	7	Kazakhstan?, Russia	Wetlands (5.1)		NE	NE	NE	No
1342	<i>Taraxacum krylovii</i>	SE, OR	7	Russia	Rocky areas	2000<	NE	NE	NE	✓ No
1343	<i>Taraxacum linczevskii</i>	AP, OR	7	Kazakhstan, Russia?	Wetlands (5.11)	2200<	NE	NE	NE	✓ No
1344	<i>Taraxacum lyratum</i>	SE, AP	1,3,6,7	Kazakhstan, Russia, N America	Wetlands (5.10; 5.11),	2400<	NE	NE	NE	No

				Rocky areas						
1345	<i>Taraxacum macilentum</i>	R	1,3,6,7	NE Europe?, Russia	Wetlands (5.1; 5.4)		NE	NE	NE	No
1346	<i>Taraxacum minutilobum</i>	SE, AP, OR	7	Afghanistan, China, India, Pakistan, Tajikistan, Uzbekistan	Rocky areas	3500- 4500	NE	NE	NE	✓ No
1347	<i>Taraxacum mongoliforme</i>	SE	1,2,4,7-11, 13,15	China?, Russia	Wetlands (5.1; 5.4)		NE	NE	NE	Y-
1348	<i>Taraxacum multisectum</i>	OR	9	China, Russia	Grassland (4.4), Wetlands (5.1; 5.4)		NE	NE	NE	No
1349	<i>Taraxacum parvulum</i>	AP, OR	14	Bhutan, China, India, Myanmar, Nepal	Wetlands (5.1; 5.4; 5.11)	2000- 4500	NE	NE	NE	✓ No
1350	<i>Taraxacum pawlodarskum</i>	SE, AP, OR	7	China?, Kazakhstan	Rocky areas	2000<	NE	NE	NE	✓ No
1351	<i>Taraxacum pseudoatratum</i>	AP, OR	6	China, Kazakhstan, Kyrgyzstan, Russia	Wetlands (5.11), Rocky areas	2400<	NE	NE	NE	✓ No
1352	<i>Taraxacum puberulum</i>	OR	14	China, M Asia?	Coastline (10.2)		NE	NE	NE	No
1353	<i>Taraxacum sangilense</i>	SE, AP	1-4,6,7	Russia	Wetlands (5.1; 5.4; 5.11)	2200<	NE	NE	NE	No
1354	<i>Taraxacum selengensis</i>	E, OR	3	Endemic	Wetlands (5.1; 5.4)	1200- 2000	NE	NE	NE	No
1355	<i>Taraxacum smirnovii</i>	SE, AP, OR	7	China, Russia?	Wetlands (5.11), Rocky areas	2800- 3150	NE	NE	NE	✓ No

1356	<i>Taraxacum songoricum</i>	SE, AP	6,7,13	China?, Kazakhstan, Russia?	Wetlands (5.11), Rocky areas	1800<	NE	NE	NE	No
1357	<i>Taraxacum stanjukoviczii</i>	SE, AP	7,13	China?, Kazakhstan, Russia?	Wetlands (5.11), Rocky areas	2000<	NE	NE	NE	No
1358	<i>Taraxacum submacilentum</i>	E, AP, OR	7	Endemic	Rocky areas	2500- 3000	NE	NE	NE	✓ No
1359	<i>Taraxacum tvinense</i>	SE, AP, OR	1	Russia	Rocky areas	2200<	NE	NE	NE	✓ No
1360	<i>Taraxacum ustamenum</i>	AP, OR	7	China?, Kazakhstan, Russia?	Rocky areas		NE	NE	NE	✓ No
1361	<i>Tauscheria lasiocarpa</i>	OR	14	China, M and SW Asia	Rocky areas	<3800	NE	NE	NE	No
1362	<i>Tephroseris palustris</i> (=Senecio arcticus)	WP	1,2,4-10	Europe, Asia- Temperate, N America	Wetlands (5.1; 5.4; 5.8; 5.10; 5.11)		NE	EX (United Kingdom)	NE	✓ Y-
1363	<i>Tetracme quadricornis</i>	R	7,14	China, M and SW Asia	Rocky areas, Desert (8.2); Coastline (10.2)		NE	NE	NE	No
1364	<i>Thalictrum isopyroides</i>	SE	7,14	China, M, W and SW Asia, Russia	Rocky areas		NE	NA (Israel)	NE	Y-
1365	<i>Thalictrum minus</i> <i>subsp. appendiculatum</i>	E, AP, OR	3	Endemic	Shrubland (3.4), Wetlands (5.11)	1800- 2800	NE	NE	NE	✓ Y-
1366	<i>Thalictrum minus</i> <i>subsp. kemense</i>	SE, OR	3	N Europe, Asia- Temperate, Russia	Shrubland (3.4), Wetlands (5.1; 5.4;		NE	NT (Finland)	NE	Y-

						5.10; 5.11)					
1367	<i>Thalictrum schischkinii</i>	SE, OR	7		Russia	Wetlands (5.4; 5.11)		NE	NE	NE	No
1368	<i>Thermopsis lanceolata</i> var. <i>glabra</i>	OR	9		China, Russia	Grassland (4.4), Sandy areas		NE	NE	NE	Y-
1369	<i>Thermopsis longicarpa</i>	SE	6,10		China?	Sandy areas, Desert (8.2)		NE	NE	NE	No
1370	<i>Thermopsis mongolica</i> (= <i>Th. grubovii</i> ; <i>Th. hirsutissima</i>)	SE, R, RB, OU	6,7, 10-14,16		China, Kazakhstan, Russia	Sandy areas, Desert (8.2)		NE	NE	NE	Y+
1371	<i>Thermopsis przewalskii</i>	SE	9,13		China, M Asia?	Grassland (4.4)	1500-2600	NE	NE	NE	Y-
1372	<i>Thesium chinense</i>	OR	9		China, Japan, Korea, Russia, Taiwan	Grassland (4.4), Wetlands (5.1; 5.4)		NE	VU (Taiwan)	NE	No
1373	<i>Thlaspi ceratocarpum</i> (= <i>Carpoceras ceratocarpum</i>)	R	6,10,14		China, Russia	Wetlands (5.2), Rocky areas		NE	NE	NE	No
1374	<i>Thymus altaicus</i>	SE, OU	3,6,7,10		China, Kazakhstan, Russia	Wetlands (5.1; 5.2), Rocky areas	1100-1400	NE	NE	NE	Y-
1375	<i>Thymus bituminosus</i>	OR	1		Russia	Wetlands (5.4)		NE	NE	NE	No
1376	<i>Thymus gobi-altaicus</i>	E, R, RB, AP, OR	13		Endemic	Rocky areas	1600-2500	NE	NE	NE	✓ Y-
1377	<i>Thymus gobicus</i>	SE, OU	2-4,7-13		Russia	Grassland (4.4), Rocky areas		NE	NE	NE	Y+

1378	<i>Thymus komarovii</i>	R	9		Russia	Grassland (4.4)		NE	NE	NE		No
1379	<i>Thymus minussinensis</i>	OR	10		Russia	Rocky areas		NE	NE	NE		No
1380	<i>Thymus mongolicus</i>	SE, R, RB	7		China, Russia	Wetlands (5.2), Rocky areas	1100-3600	NE	NE	NE	✓	Y+
1381	<i>Thymus narymensis</i>	SE	7		Kazakhstan, Russia	Wetlands (5.11), Rocky areas	2200<	NE	NE	NE	✓	No
1382	<i>Thymus pavlovii</i>	R	1,3		Kazakhstan, Russia	Rocky areas	1600<	NE	NE	NE		Y-
1383	<i>Thymus roseus</i>	R	7		Kazakhstan, Russia	Rocky areas	1800<	NE	NE	NE	✓	Y-
1384	<i>Thymus sibiricus</i>	OR	4		Russia	Grassland (4.4), Sandy areas		NE	NE	NE		No
1385	<i>Thymus turczaninovii</i>	OR	9		Russia	Grassland (4.4)		NE	NE	NE		No
1386	<i>Tofieldia coccinea</i>	VR, RB, AP, OR	1		N Europe, China, Japan, Korea, Russia, N America	Shrubland (3.4), Wetlands (5.1; 5.4; 5.11)	1800-2400	NE	EN (Japan)	VU	✓	No
1387	<i>Tragopogon kasahstanicus</i>	OR	7		Kazakhstan	Grassland (4.4), Sandy areas		NE	NE	NE		No
1388	<i>Tragus mongolorum</i>	SE	12,13		China, M and SW Asia, Ocean Islands, Thailand	Rocky areas, Desert (8.2)		NE	NA (India)	NE		Y-
1389	<i>Trifolium repens</i>	R	2,7		Europe, N Africa, Asia-Temperate,	Grassland (4.4),		NE	LC (United Kingdom)	NE		Y-

				Asia-Tropical	Wetlands (5.1; 5.4; 5.11)					
1390	<i>Triglochin maritima</i>	WP	1-16	Europe, N Africa, Asia-Temperate, Asia-Tropical, N America	Wetlands (5.1; 5.4- 5.11)	LC	NT (Japan)	NE	✓	Y+
1391	<i>Triglochin palustris</i>	WP	1-9, 11-16	Europe, Asia- Temperate, Asia- Tropical, N America	Wetlands (5.1; 5.4- 5.11)	LC	VU (Japan)	NE	✓	Y+
1392	<i>Trigonella caerulea</i>	OR	4	Europe, Caucasus, China, Russia	Grassland (4.4), Wetlands (5.1; 5.4)	NE	VU (Switzerland)	NE		No
1393	<i>Trigonella geminiflora</i>	OR	7	Caucasus?, China, M Asia	Wetlands (5.2), Coastline (10.2)	NE	NE	NE		No
1394	<i>Trollius altaicus</i>	R, AP	6,7,14	China, M Asia, Russia	Forest (1.4), Shrubland (3.4), Wetlands (5.1; 5.4; 5.11)	1200- 2700	NE	NE	NE	Y+
1395	<i>Trollius chinensis</i>	R, RB	5,9	China, Russia	Forest (1.4), Shrubland (3.4), Wetlands (5.1; 5.4)		NE	NE	NE	No
1396	<i>Trollius lilacinus (=Hegemone)</i>	R, AP	1,2,6,7	China, M Asia, Russia	Forest (1.4), Shrubland	2600- 3500	NE	NE	NE	No

	<i>lilacina</i>)					(3.4), Wetlands (5.1; 5.4; 5.11)						
1397	<i>Trollius sajanensis</i>	SE, VR, AP, OR	1		Russia	Wetlands (5.11)	1800<	NE	DD (Mongolia)	DD	✓	No
1398	<i>Trommsdorffia ciliata</i>		OR	5	China, Japan, Russia	Shrubland (3.4), Wetlands (5.1; 5.4)		NE	NE	NE		No
1399	<i>Tugarinovia mongolica</i>	SE, VR, RB, RL	11-13,16		China	Rocky areas, Desert (8.2)		NE	VU (Mongolia)	VU		Y+
1400	<i>Tulipa uniflora</i>		VR, OU	3,5, 7-10,14	China, Kazakhstan, Russia	Rocky areas, Desert (8.2)		NE	VU (Mongolia)	VU		Y+
1401	<i>Turritis glabra</i>		AP, OR	7		Cosmopolitan Forest (1.4), Grassland (4.4), Wetlands (5.1; 5.4; 5.11)	1000- 3500	NE	EN (United Kingdom)	NE	✓	Y+
1402	<i>Typha angustifolia</i>		WP	1,10		Cosmopolitan Wetlands (5.1; 5.3-5.8; 5.10-5.14)		LC	LC (Taiwan)	NE	✓	No
1403	<i>Typha australis</i>		WP	4,10		Cosmopolitan Wetlands (5.1; 5.3-5.8; 5.10-5.14)		LC	CR (France)	NE	✓	No
1404	<i>Typha joannis</i>		WP, OR	9		China, Russia Wetlands (5.1; 5.4; 5.8)		NE	NE	NE	✓	No
1405	<i>Typha laxmannii</i>		WP	3-6,8,9,11		Europe, China, M and SW Asia, Russia Wetlands (5.1; 5.4; 5.8)		LC	CR (Croatia)	NE	✓	Y-
1406	<i>Typha minima</i>		VR, WP	9,10		Europe, China, M Wetlands		LC	EX (Hungary)	NT	✓	No

				and SW Asia, Russia	(5.1; 5.4; 5.8)						
1407	<i>Typha orientalis</i>	WP, OR	5	Cosmopolitan	Wetlands (5.1; 5.3-5.8; 5.10-5.14)		LC	LC (Taiwan)	NE	✓	No
1408	<i>Typha tzvelevii</i>	WP, OR	4	Russia	Wetlands (5.1; 5.4)		NE	NE	NE	✓	No
1409	<i>Ulmus davidiana</i> <i>var. japonica</i> (= <i>U. japonica</i>)	RL	4,5,8	China, Japan, Korea, Russia	Forest (1.5), Wetlands (5.1; 5.4)		NE	NE	NE		Y-
1410	<i>Ulmus macrocarpa</i>	RL	2,4,5, 8,9,12	China, Japan, Korea, Russia	Wetlands (5.1; 5.2; 5.4), Rocky areas		NE	NE	NE		Y+
1411	<i>Ulmus pumila</i>	RL	2-5,7-9, 11,13,16	E Europe, Caucasus, China, M Asia, Korea, Russia	Wetlands (5.2), Rocky areas, Desert (8.2)		NE	NE	NE		Y+
1412	<i>Utricularia</i> <i>australis</i>	WP	10,14	Cosmopolitan	Wetlands (5.3-5.8)		LC	EX (Israel), NT (Japan), CR (Taiwan)	NE	✓	No
1413	<i>Utricularia</i> <i>intermedia</i>	WP	1-3,6	Europe, Asia- Temperate, N America	Wetlands (5.3; 5.4; 5.7; 5.11)	<4000	LC	EN (R. Korea)	NE	✓	No
1414	<i>Utricularia minor</i>	WP	3,9,10,14	Europe, Asia- Temperate, Asia- Tropical, N America	Wetlands (5.3; 5.4; 5.7)		LC	NT (Japan), DD (R. Korea)	NE	✓	No
1415	<i>Utricularia vulgaris</i>	WP	1-11,14,15	Europe, N Africa, Asia-Temperate, Asia-Tropical, N America	Wetlands (5.3-5.8)		LC	NT (Japan)	NE	✓	Y-
1416	<i>Vaccinium</i>	VR, RB, AP	1,2	Europe, Caucasus,	Forest (1.2; 1800<		NE	VU (Japan)	CR	✓	Y-

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	<i>microcarpum</i> (= <i>Oxycoccus microcarpus</i>)			China, Japan, Korea, Russia, N America	1.4), Wetlands (5.4; 5.11)					
1417	<i>Vaccinium myrtilus</i>	VR, AP, OU	1,2	Europe, Caucasus, China, Russia, N America	Forest (1.4)	2200-2800	NE	VU (Spain)	VU	Y+
1418	<i>Vaccinium uliginosum</i>	AP, OU	1-4,6	Europe, Asia-Temperate, N America	Forest (1.2; 1.4)	<2400	NE	VU (R. Korea)	NE	Y+
1419	<i>Valeriana altaica</i>	SE, AP	1,2	Russia	Forest (1.4), Shrubland (3.4), Wetlands (5.4; 5.11)	1800<	NE	NE	NE	No
1420	<i>Valeriana capitata</i>	R, RB, AP, OR, OU	1	Russia, N America	Forest (1.2; 1.4), Shrubland (3.4), Wetlands (5.1; 5.4; 5.11), Rocky areas	1800<	NE	NE	NE	✓ Y+
1421	<i>Valeriana saichanensis</i>	E, VR, RB, AP, OR	13	Endemic	Wetlands (5.11), Rocky areas	1500-2500	NE	VU (Mongolia)	VU	✓ Y-
1422	<i>Valeriana tangutica</i>	SE, OR	16?	China	Wetlands (5.2)	2000-4200	NE	NE	NE	No
1423	<i>Veronica anagallis-aquatica</i>	WP	1-4,7-16	Europe, Asia-Temperate, Asia-Tropical, N America	Wetlands (5.1; 5.2; 5.3; 5.4; 5.10; 5.11)		LC	NT (Finland)	NE	✓ Y+
1424	<i>Veronica</i>	WP	3,7,8	Europe, Asia-	Wetlands		LC	LC (Switzerland)	NE	✓ Y-

	<i>beccabunga</i>			Temperate, N America	(5.1; 5.2; 5.4)						
1425	<i>Veronica peregrina</i> (= <i>V. peregrina</i> <i>subsp. asiatica</i>)	R, AP, OR	4	Europe, China, Japan, Korea, Russia, N America	Forest (1.4), Wetlands (5.1; 5.4; 5.10; 5.11)	<3000	LC	LC (Switzerland)	NE	✓	Y-
1426	<i>Veronica pinnata</i> <i>subsp. nana</i>	SE, OR	7	Russia	Grassland (4.4)		NE	NE	NE		Y-
1427	<i>Veronica sajanensis</i>	SE, AP, OR	7	Russia	Wetlands (5.11)	2000<	NE	NE	NE	✓	No
1428	<i>Veronica</i> <i>sapozhnikovii</i>	E	7,14	Endemic	Grassland (4.4), Rocky areas	1500- 2000	NE	NE	NE		No
1429	<i>Veronica</i> <i>schmakovii</i>	SE, AP, OR	7	Russia	Wetlands (5.11)	1800<	NE	NE	NE	✓	No
1430	<i>Veronica scutellata</i>	WP, OR	7	Europe, Caucasus, Kazakhstan, Russia, N America	Wetlands (5.1; 5.4; 5.11)		LC	VU (Andorra, Switzerland)	NE	✓	No
1431	<i>Veronica</i> <i>sessiliflora</i>	SE, OR	7	China, Kazakhstan, Russia	Grassland (4.4), Wetlands (5.1; 5.4)		NE	NE	NE		No
1432	<i>Veronica smirnovii</i>	E, AP, OR	7	Endemic	Rocky areas	1800- 2500	NE	NE	NE	✓	No
1433	<i>Veronicastrum</i> <i>tubiflorum</i>	OR	4	China, Russia	Shrubland (3.4), Wetlands (5.4)		NE	NE	NE		No
1434	<i>Viburnum</i> <i>burejaeticum</i>	OR	5	China, N Korea, Russia	Forest (1.4), Shrubland (3.4)		NE	NE	NE	✓	Y+
1435	<i>Viburnum</i>	SE, VR, RB	4,5,8,9	China, Russia	Rocky areas		NE	CR (Mongolia)	CR	✓	Y-

<i>mongolicum</i>										
1436	<i>Viburnum sargentii</i>	VR, RB, OR	5	China, Japan, Korea, Russia	Shrubland (3.4), Wetlands (5.1; 5.3; 5.4)		NE	VU (Mongolia)	VU	No
1437	<i>Vicia angustifolia</i>	OR	11	Europe, Asia-Temperate	Grassland (4.4), Wetlands (5.1; 5.2; 5.4)		NE	VU (Hungary)	NE	No
1438	<i>Vicia geminiflora</i>	SE, R	3-5	China, Russia	Wetlands (5.1; 5.4)		NE	NE	NE	Y+
1439	<i>Vicia japonica</i> (= <i>V. japonica subsp. pallida</i>)	R	2,5	China, Japan, Korea, Russia	Forest (1.4), Shrubland (3.4), Wetlands (5.1; 5.4)		NE	NE	NE	No
1440	<i>Vicia semenovii</i>	R, AP	3,13	China?, M Asia?, Russia	Rocky areas	1600<	NE	NE	NE	Y+
1441	<i>Vicia sepium</i>	OR	4	Europe, Asia-Temperate, Asia-Tropical	Forest (1.4), Shrubland (3.4), Grassland (4.4), Wetlands (5.1; 5.4; 5.11)		NE	LC (Switzerland, Ireland)	NE	No
1442	<i>Vicia tsydenii</i>	SE, VR, OR	4	Russia	Sandy areas		NE	VU (Mongolia)	VU	Y-
1443	<i>Viola acuminata</i>	R	4,5,9	China, Japan, Korea, Russia	Forest (1.4), Shrubland (3.4), Grassland (4.4),		NE	NE	NE	No

					Wetlands (5.1; 5.4)					
1444	<i>Viola alexandrowiana</i>	SE, OR	4	Russia	Forest (1.4)		NE	NE	NE	No
1445	<i>Viola altaica</i>	SE, AP	3,7	SE Europe, Caucasus, China, M Asia, Russia	Forest (1.4), Shrubland (3.4), Grassland (4.4), Wetlands (5.1; 5.4; 5.11)	1500- 4000	NE	NE	NE	Y+
1446	<i>Viola arvensis</i>	OR	4	Europe, N Africa, China, M and SW Asia, Russia	Forest (1.4), Grassland (4.4), Wetlands (5.1; 5.4)		NE	LC (Switzerland, United Kingdom)	NE	No
1447	<i>Viola brachyceras</i>	VR, RB, OR	2	China, Russia	Forest (1.4), Rocky areas		NE	VU (Mongolia)	VU	Y+
1448	<i>Viola collina</i>	R, RB, AP	5,7	Europe, China, Japan, Korea, Russia, Tajikistan	Grassland (4.4), Wetlands (5.1; 5.4; 5.11)	<2800	NE	EN (Finland)	NE	No
1449	<i>Viola disjuncta</i>	SE, AP, OR	7	China?, M Asia, Russia	Forest (1.4), Wetlands (5.11)	2000<	NE	NE	NE	✓ No
1450	<i>Viola dissecta</i>	SE	1-5,7, 9,13	China, Kazakhstan, Korea, Russia	Forest (1.4), Wetlands (5.11), Rocky areas	<3000	NE	NE	NE	Y+
1451	<i>Viola epipsiloides</i>	SE	1,2	Europe, China,	Forest (1.4),		NE	EN (Japan)	NE	No

				Japan, Korea, Russia, N America	Shrubland (3.4); Wetlands (5.1; 5.4; 5.11)					
1452	<i>Viola incisa</i> (= <i>V. fissifolia</i>)	SE	2,4	Russia	Forest (1.4), Shrubland (3.4); Wetlands (5.1; 5.4; 5.11)	NE	NE	NE		No
1453	<i>Viola ircutiana</i>	SE	2	Russia	Forest (1.4), Wetlands (5.4; 5.11)	NE	NE	NE		No
1454	<i>Viola macroceras</i>	SE, AP, OR	7	China, M and SW Asia, Russia	Wetlands (5.11), Rocky areas	1500-2200	NE	NA (India)	NE	✓ No
1455	<i>Viola patrinii</i>	R	2,5,7,9, 10,14	China, Japan, Korea, Russia	Forest (1.4); Shrubland (3.4), Wetlands (5.1; 5.2; 5.4)		NE	VU (Japan)	NE	Y-
1456	<i>Viola rudolfii</i>	SE	4,5	Russia	Forest (1.4); Wetlands (5.1; 5.2; 5.4)		NE	NE	NE	No
1457	<i>Viola schauoi</i>	SE	2,4	Russia	Forest (1.4)		NE	NE	NE	No
1458	<i>Viola selkirkii</i>	OR	2	Europe, China, Japan, Korea, Russia, N America	Forest (1.4), Shrubland (3.4)		NE	CR (Estonia)	NE	No
1459	<i>Woodsia glabella</i>	AP	1,7,10	China, Japan, Korea, Russia, N America	Rocky areas	2100-3700	LC	VU (R. Korea)	NE	Y-

1460	<i>Zannichellia palustris</i> (=Z. pedunculata)	WP	3,4, 7-11,15	Europe, Asia- Temperate, Asia- Tropical, N America	Wetlands (5.1; 5.4-5.8)		LC	VU (Japan and Taiwan)	NE	✓	Y+
1461	<i>Zizania latifolia</i>	VR, RB, OR	9	Europe, China, NE India, Japan, Korea, Myanmar, Russia	Wetlands (5.1; 5.4-5.8)		NE	NA (Estonia)	NT	✓	No
1462	<i>Ziziphora clinopodioides</i>	R	7,14	China?, M Asia, Russia	Desert (8.2)		NE	NE	NE		Y+
1463	<i>Zygophyllum gobicum</i>	SE, R, RL, OR	15	China, Kazakhstan	Desert (8.2)		NE	NE	NE	✓	Y-
1464	<i>Zygophyllum melongena</i>	SE	3,6,7, 10,11,13,14	Russia	Wetlands (5.2), Desert (8.2), Coastline (10.2)		NE	NE	NE		Y+
1465	<i>Zygophyllum mucronatum</i>	SE, R, RB	15,16	China	Desert (8.2)	800- 2500	NE	NE	NE		No
1466	<i>Zygophyllum neglectum</i>	SE, R, RB	14,16	China	Desert (8.2)		NE	NE	NE		Y-
1467	<i>Zygophyllum pinnatum</i>	SE, R	7,14	E Europe, Caucasus, China, M Asia, Russia	Rocky areas, Desert (8.2), Coastline (10.2)		NE	NE	NE		Y-
1468	<i>Zygophyllum potaninii</i>	SE, VR, RL, OU	6,7,13-16	China, Kazakhstan	Rocky areas, Desert (8.2)		NE	EN (Mongolia)	EN		Y+
1469	<i>Zygophyllum pterocarpum</i>	RL, OU	6,7,10-16	China, Kazakhstan, Russia	Rocky areas, Desert (8.2)		NE	NE	NE		Y+
1470	<i>Zygophyllum rosowii</i>	RL, OU	3,7,8,10-16	China, Kazakhstan, Kyrgyzstan, Tajikistan	Rocky areas, Desert (8.2), Coastline	<1200	NE	NE	NE		Y+

(10.2)										
1471	<i>Zygophyllum rosowii</i> var. <i>latifolium</i> (= <i>Z. latifolium</i>)	R, RL	14-16	China, Kazakhstan	Rocky areas, Desert (8.2)		NE	NE	NE	Y-
1472	<i>Zygophyllum xanthoxylon</i>	SE, RL	7,8, 10-16	China	Wetlands (5.2; 5.9), Rocky areas, Desert (8.2)	1600-2600	NE	NE	NE	Y+

NOTE: Red color illustration in the table indicates the need to investigate the threats of this species and to care for its future.

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- Conservation Status Assessment.** <<http://www.natureserve.org/conservation-tools/>>
- Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES).** <<https://www.cites.org/>>
- Electronic catalogue of the vascular plants of Asian Russia. Flora of Siberia.** <<http://www-sbras.nsc.ru>>
- Electronic data from the Database of the Mongolian Flora** (<<http://www.eic.mn/flora/>>)
- Encyclopedia of Life.** <<http://www.eol.org>>
- Flora and Russian Asia.** <<http://www.izdatgeo.ru>>
- FloraGREIF.** <<https://floragreif.uni-greifswald.de/taxon/>>
- Flora of China.** <http://www.efloras.org/florataxon.aspx?flora_id=3&taxon_id=100018>
- Flora of North America.** <http://www.efloras.org/flora_page.aspx?flora_id=1>
- Full Red List.** <http://www.bgci.org/ourwork/centralasia/>
- Germplasm Resources Information Network (ARS-GRIN).** <<http://www.ars-grin.gov/>>
- Global Biodiversity Information Facility (GBIF).** <<http://www.sp2000.org>>
- Global Compositae Checklist (TICA).** <<http://compositae.landcareresearch.co.nz/Default.aspx>>
- Global Plants on JSTOR.** <<http://plants.jstor.org>>
- Global Taxonomy Initiative (GTI).** <<http://www.cbd.int/gti/>>
- International Association for Plant Taxonomy (IAPT).** <<http://www.iapt-taxon.org/index>>
- International Legume Database & Information Service. (ILDIS).** <<http://www.ildis.org>>
- International Plant Names Index. (IPNI).** <<http://www.ipni.org/ipni/plantnamesearchpage.do>>
- National Red List.** <<http://www.nationalredlist.org>>
- Natura 2000 Network Viewer.** <<http://natura2000.eea.europa.eu/#>>

- NatureServe Explorer.** <<http://www.natureserve.org/explorer>>
Национальный банк-депозитарий живых систем. <<https://plant.depo.msu.ru/#>>
Открытый атлас растений и лишайников России и сопредельных стран. <<http://www.plantarium.ru/>>
Plants of the Online World. <<http://powo.science.kew.org/taxon/>>
Taxonomic Data from the World Umbellifer Database. <<http://rbg-web2.rbge.org.uk/URC>>
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The Climate Wizard. <<http://climatewizard.org>>
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The IUCN Red List of Threatened Species. Version 2017-3. <<http://www.iucnredlist.org>>
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The Gymnosperm Database. <<http://www.conifers.org/zz/gymnosperms.php/>>
The Plant List. <<http://www.theplantlist.org>>
USDA Plants Database. <<https://plants.usda.gov/java/>>
Virtual Guide to the flora of Mongolia. <<http://greif.uni-greifswald.de/floragreif/>>
W3 Tropicos. Missouri Botanical Garden. MOBOT. <<http://www.tropicos.org/Home.aspx>>
World Checklist of Selected Plant (WCSP). <<http://www.apps.kew.org/wcsp>>
World Umbellifer Database. <<http://rbg-web2.rbge.org.uk/URC/>>

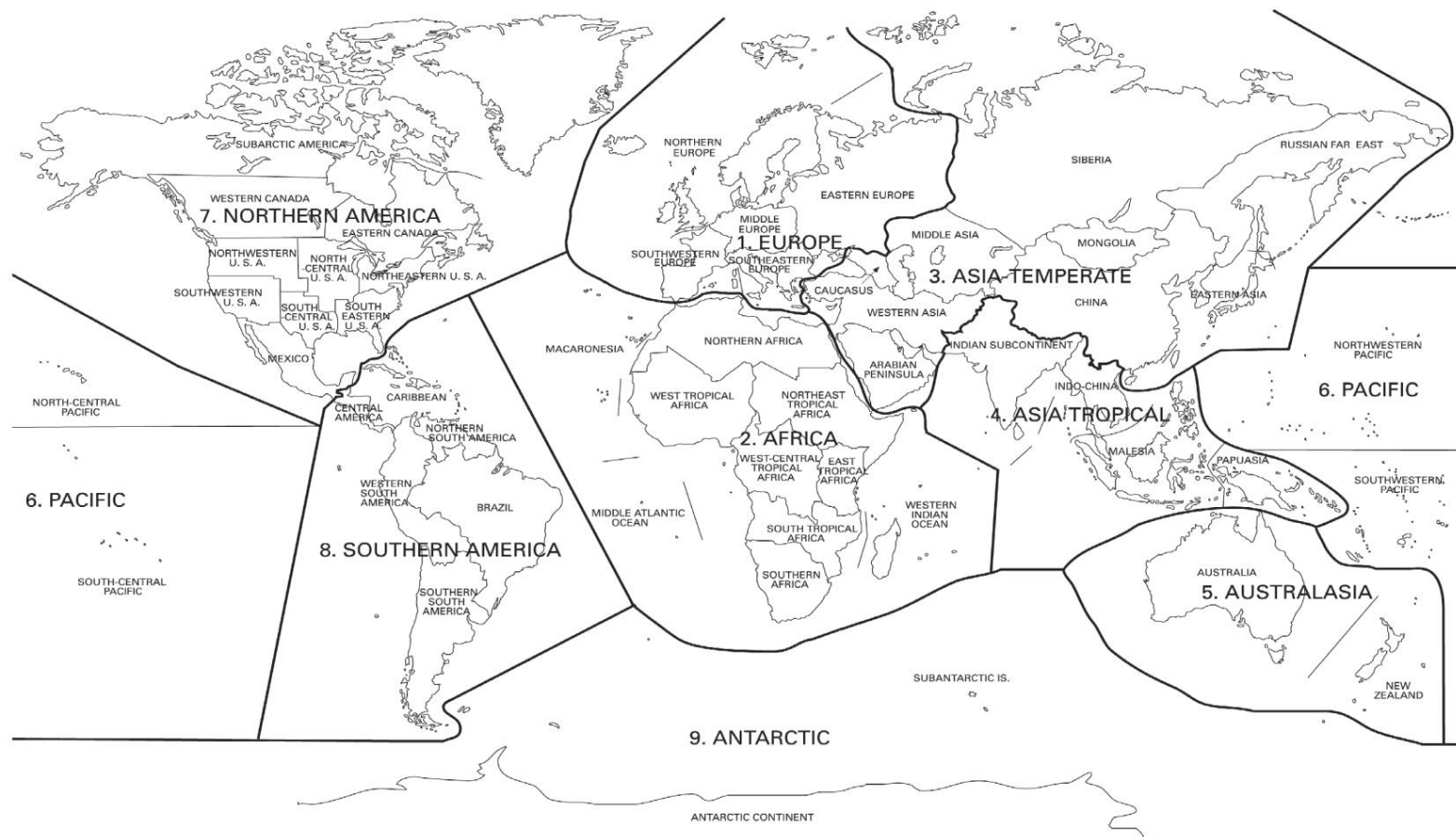
Annex I. The Continental, Regional scheme and Country name with Regional codes (by Brummitt 2001. WGSRPD)

Continental scheme	Regional Code	Regional name	Country name
1. EUROPE	10	Northern Europe	Denmark, Finland, Føroyar, Great Britain, Iceland, Ireland, Northern Ireland, Norway, Svalbard, Sweden
	11	Middle Europe	Austria, Liechtenstein, Belgium, Luxembourg, Czech Republic, Slovakia, Germany, Hungary, Netherlands, Poland, Switzerland
	12	Southwestern Europe	Andorra, Balears, Corse, France, Gibraltar, Monaco, Portugal, Sardegna, Spain
	13	Southeastern Europe	Albania, Bulgaria, Greece, Italy, San Marino, Romania, Sicilia, Malta, Turkey, Bosnia-Herzegovina, Croatia, Kosovo, Macedonia, Montenegro, Serbia, Slovenia
	14	Eastern Europe	Belarus, Estonia, Kaliningrad, Latvia, Lithuania, Krym, Russia, Ukraine
2. AFRICA	20	Northern Africa	Algeria, Egypt, Libya, Morocco, Tunisia, Western Sahara
	21	Macaronesia	Azores, Canary Island, Cape Verde, Madeira, Selvagens
	22	West Tropical Africa	Benin, Burkina, Gambia, Ghana, Guinea-Bissau, Guinea, Ivory Coast, Liberia, Mali, Mauritania, Nigeria, Niger, Senegal, Sierra Leone, Togo
	23	West-Central Tropical Africa	Burundi, Cabinda, Central African Republic, Cameroon, Congo, Equatorial Guinea, Gabon, Gulf of Guinea Island, Annobón, Bioko, Príncipe, São Tomé, Rwanda, Zaïre
	24	Northeast Tropical Africa	Chad, Djibouti, Eritrea, Ethiopia, Socotra, Somalia, Sudan
	25	East Tropical Africa	Kenya, Tanzania, Uganda
	26	South Tropical Africa	Angola, Malawi, Mozambique, Zambia, Zimbabwe
	27	Southern Africa	Botswana, Cape Provinces, Caprivi Strip, Lesotho, Namibia, KwaZulu-Natal, Free State, Swaziland, Northern Provinces
	28	Middle Atlantic Ocean	Ascension, St. Helena
	29	Western Indian Ocean	Aldabra, Chagos Archipelago, Comoros, Mauritius, Mozambique Channel Islands, Madagascar, Réunion, Rodrigues, Seychelles
3. ASIA-TEMPERATE	30	Siberia	Russia (Altay, Buryatiya, Chita, Irkutsk, Krasnoyarsk, Tuva, West Siberia, Yakutiya)
	31	Russian Far East	Russia (Amur, Kamchatka, Khabarovsk, Kuril Islands, Magadan, Primorye, Sakhalin)
	32	Middle Asia	Kazakhstan, Kirgizstan, Turkmenistan, Tadzhikistan, Uzbekistan
	33	Caucasus	North Caucasus (Russia), Transcaucasus (Abkhaziya, Adzhariya, Armenia, Azerbaijan, Gruzziya, Nakhichevan, Nagorno Karabakh)
	34	Western Asia	Afghanistan, Cyprus, East Aegean Islands, East Aegean Islands, Iran, Iraq,

			Lebanon, Syria, Palestine, Israel, Jordan, Sinai, Turkey
	35	Arabian Peninsula	Gulf States, Bahrain, Qatar, United Arab Emirates, Kuwait, Oman, Saudi Arabia, Yemen
	36	China	China South-Central, Hainan, Inner Mongolia, Manchuria, China North-Central, Qinghai, China Southeast, Tibet, Xinjiang
	37	Mongolia	Mongolia
	38	Eastern Asia	Japan, Korea, Taiwan
4. ASIA-TROPICAL	40	Indian Subcontinent	Assam, Bangladesh, East Himalaya, India, Laccadive Islands, Maldives, Nepal, Pakistan, Sri Lanka, West Himalaya
	41	Indo-China	Andaman Islands, Cambodia, Laos, Myanmar, Nicobar Islands, South China Sea, Thailand, Vietnam
	42	Malesia	Borneo, Cocos, Jawa, Lesser Sunda Islands, Malaya, Peninsular Malaysia, Singapore, Maluku, Philippines, Sulawesi, Sumatera, Christmas I.
	43	Papuasias	Bismarck Archipelago, New Guinea, Solomon Islands
5. AUSTRALIA	50	Australia	Norfolk Islands, New South Wales, Northern Territory, Queensland, South Australia, Tasmania, Victoria, Western Australia
	51	New Zealand	Antipodean Islands, Chatham Islands, Kermadec Islands, New Zealand North, New Zealand South
6. PACIFIC	60	Southwestern Pacific	Fiji, Gilbert Islands, Howland-Baker Islands, Nauru, Niue, New Caledonia, Phoenix Islands, Samoa, Santa Cruz Islands, Tokelau-Manihiki, Tonga, Tuvalu, Vanuatu, Wallis-Futuna Islands
	61	South-Central Pacific	Cook Islands, Easter Islands, Line Islands, Marquesas, Pitcairn Islands, Society Islands, Tuamotu, Tubuai Islands
	62	Northwestern Pacific	Caroline Islands, Marcus, Marianas, Guam, Marshall Islands, Wake,
	63	North-Central Pacific	Hawaii
7. NORTHERN AMERICA	70	Subarctic America	Aleutian Islands, Alaska, Greenland, Nunavut, Northwest Territories, Yukon
	71	Western Canada	Alberta, British Columbia, Manitoba, Saskatchewan
	72	Eastern Canada	Labrador, New Brunswick, Newfoundland, St. Pierre-Miquelon, Nova Scotia, Ontario, Prince Edward, Québec
	73	Northwestern U.S.A.	Colorado, Idaho, Montana, Oregon, Washington, Wyoming
	74	North-Central U.S.A.	Illinois, Iowa, Kansas, Minnesota, Missouri, North Dakota, Nebraska, Oklahoma, South Dakota, Wisconsin,
	75	Northeastern U.S.A.	Connecticut, Indiana, Maine, Massachusetts, Michigan, New Hampshire, New Jersey, New York, Ohio, Pennsylvania, Rhode Island, Vermont, West

			Virginia
	76	Southwestern U.S.A.	Arizona, California, Nevada, Utah
	77	South-Central U.S.A.	New Mexico, Texas
	78	Southeastern U.S.A.	Alabama, Arkansas, Delaware, Florida, Georgia, Kentucky, Louisiana, Maryland, Mississippi, North Carolina, South Carolina, Tennessee, Virginia, District of Columbia
	79	Mexico	Mexico Central, Mexico Northeast, Mexican Pacific Mexico Gulf, Islands, Mexico Northwest, Mexico Southwest, Mexico Southeast
8. SOUTHERN AMERICA	80	Central America	Belize, Costa Rica, Central American Pacific Islands, El Salvador, Guatemala, Honduras, Nicaragua, Panama
	81	Caribbean	Aruba, Bahamas, Bermuda, Cayman Islands, Cuba, Dominican Republic, Haiti, Jamaica, Leeward Islands, Antigua-Barbuda, Netherlands Antilles, Bonaire, Puerto Rico, Southwest Caribbean, Colombian Caribbean Islands, Turks-Caicos Islands, Trinidad-Tobago, Venezuelan Antilles, Windward Islands, Barbados
	82	Northern South America	French Guiana, Guyana, Suriname, Venezuela
	83	Western South America	Bolivia, Colombia, Ecuador, Galápagos, Peru
	84	Brazil	Brazil West-Central, Brazil Northeast, Brazil Southeast, Brazil North, Brazil South
	85	Southern South America	Argentina Northeast, Argentina South, Argentina Northwest, Chile Central, Chile North, Chile South, Desventurados Islands, Juan Fernández Islands, Paraguay, Uruguay
9. ANTARCTIC	90	Subantarctic Islands	Amsterdam-St. Paul Islands, Bouvet, Crozet Islands, Falkland Islands, Heard-McDonald Islands, Kerguelen, Macquarie Islands, Marion-Prince Edward Islands, South Georgia, South Sandwich Islands, Tristan da Cu
	91	Antarctic Continent	Antarctica

Annex II. Map of Continental and Regional (by Brummitt 2001. WGSRPD)



Annex III. List of Habitat Types used by IUCN Red List

1. Forest
1.1. Boreal
1.2. Subarctic
1.3. Subantarctic
1.4. Temperate
1.5. Subtropical/Tropical Dry
1.6. Subtropical/Tropical Moist Lowland
1.7. Subtropical/Tropical Mangrove
1.8. Subtropical/Tropical Swamp
1.9. Subtropical/Tropical Moist Mountain
2. Savanna
2.1. Dry
2.2. Moist
3. Shrubland
3.1. Subarctic
3.2. Subantarctic
3.3. Boreal
3.4. Temperate
3.5. Subtropical/Tropical Dry
3.6. Subtropical/Tropical Moist
3.7. Subtropical/Tropical High Altitude
3.8. Mediterranean-type Shrubby Vegetation
4. Grassland
4.1. Tundra
4.2. Subarctic
4.3. Subantarctic
4.4. Temperate
4.5. Steppe
4.6. Subtropical/Tropical Seasonally Wet/Flooded Lowland
4.7. Subtropical/Tropical High Altitude
5. Wetlands (inland)
5.1. Permanent Rivers/Streams/Creeks [includes waterfalls]

5.2. Seasonal/Intermittent/Irregular Rivers/Streams/Creeks
5.3. Shrub Dominated Wetlands
5.4. Bogs, Marshes, Swamps, Fens, Peatlands
5.5. Permanent Freshwater Lakes [over 8 ha]
5.6. Seasonal/Intermittent Freshwater Lakes [over 8 ha]
5.7. Permanent Freshwater Marshes/Pools [under 8 ha]
5.8. Seasonal/Intermittent Freshwater Marshes/Pools [under 8 ha]
5.9. Freshwater Springs and Oases
5.10. Tundra Wetlands [includes pools and temporary waters from snowmelt]
5.11. Alpine Wetlands [includes temporary waters from snowmelt]
5.12. Geothermal Wetlands
5.13. Permanent Inland the delta ofs
5.14. Permanent Saline, Brackish or Alkaline Lakes
5.15. Seasonal/Intermittent Saline, Brackish or Alkaline Lakes and Flats
5.16. Permanent Saline, Brackish or Alkaline Marshes/Pools
5.17. Seasonal/Intermittent Saline, Brackish or Alkaline Marshes/Pools
5.18. Karst and Other Subterranean Hydrological Systems [inland]
6. Rocky areas [e.g. inland cliffs, mountain peaks]
7. Caves and Subterranean Habitats (non-aquatic)
7.1. Caves
7.2. Other Subterranean Habitats
8. Desert
8.1. Hot
8.2. Temperate
8.3. Cold
9. Sea
9.1. Open
9.2. Shallow [usually less than 6 m deep at low tide; includes sea bays and straits]
9.3. Subtidal Aquatic Beds [kelp beds, sea- grass beds and tropical marine meadows]
9.4. Coral Reefs
10. Coastline
10.1. Rocky Shores [includes rocky offshore islands and sea cliffs]
10.2. Sand, Shingle or Pebble Shores [includes sand bars, spits, sandy islets, dune systems]
10.3. Estuarine Waters

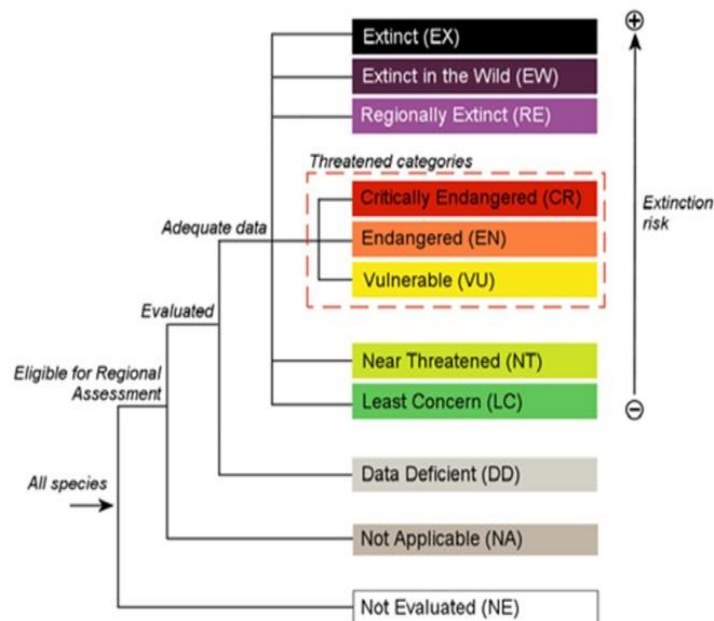
10.4. Intertidal Mud, Sand or Salt Flats
10.5. Intertidal Marshes [includes salt marshes]
10.6. Coastal Brackish/Saline Lagoons
10.7. Coastal Freshwater Lagoons
10.8. Karst and Other Subterranean Hydrological Systems [marine/coastal]
11. Artificial - Terrestrial
11.1. Arable Land
11.2. Pastureland
11.3. Plantations
11.4. Rural Gardens
11.5. Urban Areas
11.6. Subtropical/Tropical Heavily Degraded Former Forest
12. Artificial - Aquatic
12.1. Water Storage Areas (over 8 ha)
12.2. Ponds (below 8 ha)
12.3. Aquaculture Ponds
12.4. Salt Exploitation Sites
12.5. Excavations (open)
12.6. Wastewater Treatment Areas
12.7. Irrigated Land [includes irrigation channels]
12.8. Seasonally Flooded Agricultural Land
12.9. Canals and Drainage Channels, Ditches
12.10. Karst and Other Subterranean Hydrological Systems [human-made]
13. Introduced Vegetation
14. Other
15. Unknown

Annex IV. Definition of the categories used in the Red List (see IUCN 2001, 2003, 2012b)

Extinct (EX)	<i>A taxon is Extinct when there is no reasonable doubt that the last individual has died. A taxon is presumed Extinct when exhaustive surveys in known and/or expected habitat, at appropriate times (diurnal, seasonal, annual), and throughout its historic range have failed to record an individual. Surveys should be over a time frame appropriate to the taxon's life cycle and life form.</i>
Extinct in the Wild (EW)	<i>A taxon is Extinct in the Wild when it is known only to survive in cultivation, in captivity or as a naturalised population (or populations) well outside the past range. A taxon is presumed Extinct in the Wild when exhaustive surveys in known and/or expected habitat, at appropriate times (diurnal, seasonal, annual), and throughout its historic range have failed to record an individual. Surveys should be over a time frame appropriate to the taxon's life cycle and life form.</i>
Regionally Extinct (RE)	<i>A taxon is Regionally Extinct when there is no reasonable doubt that the last individual potentially capable of reproduction within the region has died or disappeared from the region: in the case of a former visiting taxon, individuals no longer visit the region. It is not possible to set general rules for a time period before a species is classified as RE. This will depend on how much effort has been devoted to searches for the species.</i>
Critically Endangered (CR)	<i>A taxon is Critically Endangered when the best available evidence indicates that it meets any of the criteria to E for Critically Endangered, and it is therefore considered to be facing an extremely high risk of extinction in the wild.</i>
Endangered (EN)	<i>A taxon is Endangered when the best available evidence indicates that it meets any of the criteria to E for Endangered and it is therefore considered to be facing a very high risk of extinction in the wild.</i>
Vulnerable (VU)	<i>A taxon is Vulnerable when the best available evidence indicates that it meets any of the criteria to E for Vulnerable and it is therefore considered to be facing a high risk of extinction in the wild.</i>
Near Threatened (NT)	<i>A taxon is Near Threatened when it has been evaluated against the criteria but does not qualify for Critically Endangered, Endangered or Vulnerable now, but is close to qualifying for or is likely to qualify for a threatened category in the near future.</i>
Least Concern (LC)	<i>A taxon is Least Concern when it has been evaluated against the criteria and does not qualify for Critically Endangered, Endangered, Vulnerable or Near Threatened. Widespread and abundant taxa are included in this category.</i>
Data Deficient (DD)	<i>A taxon is Data Deficient when there is inadequate information to make a direct, or indirect, assessment of its risk of extinction based on its distribution and/or population status. A taxon in this category may be well studied, and its biology well known, but appropriate data on abundance and/or distribution are lacking. Data Deficient is therefore not a category of threat. Listing of taxa in this category indicates that more information is required and acknowledges the possibility that future research will show that threatened classification is appropriate. It is important to make positive use of whatever data are available. In many cases great care should be exercised in choosing between DD and a threatened status. If the range of a taxon is suspected to be relatively circumscribed, and a considerable period of time has elapsed since the last record of the taxon, threatened status may well be justified.</i>
Not Applicable (NA)	<i>A taxon deemed to be ineligible for assessment as a regional level.</i>
Not Evaluated (NE)	<i>A taxon is defined as Not Evaluated when it has not yet been evaluated against the criteria.</i>

Annex V. Comparison of NatureServe and IUCN Red List Global Statuses

<i>NatureServe Global Status</i>	<i>IUCN Red List Global Status</i>
Presumed Extinct (GX)	Extinct (EX)
Presumed Extinct in the Wild (GXC)	Extinct in the Wild (EW)
Possibly Extinct (GH)	Critically Endangered (CR) (possibly extinct)
Possibly Extinct in the Wild (GHC)	Critically Endangered (CR) (possibly extinct)
Critically Imperiled (G1)	Critically Endangered (CR)
Critically Imperiled (G1)	Endangered (EN)
Imperiled (G2)	Vulnerable (VU)
Vulnerable (G3)	Near Threatened (NT)
Apparently Secure (G4)	Least Concern (LC)
Secure (G5)	Least Concern (LC)
Unrankable (GU)	Data Deficient (DD)



The IUCN Red List Categories and Criteria (2012b)

The value ranges for NatureServe conservation status ranks (Faber-Langendoenet al. 2012)

<i>Value Range for Calculated Score</i>	<i>Calculated Status Rank</i>	<i>Status Description</i>
score ≤1.5	G1 (N1, S1)	Critically imperiled
1.5 < score ≤2.5	G2 (N2, S2)	Imperiled
2.5 < score ≤3.5	G3 (N3, S3)	Vulnerable
3.5 < score ≤4.5	G4 (N4, S4)	Apparently secure
score >4.5	G5 (N5, S5)	Secure

Annex VI. The IUCN Red List categories and criteria for Mongolian Plants (Nyambayar *et al.* 2011)

Category	Scientific name	Criteria
CR	<i>Allium macrostemon</i>	B1b(i,ii,iii,iv)c(ii)+B2b(i,ii,iii,iv)c(ii)
CR	<i>Allium obliquum</i>	A1ac;B1b(ii,iv)c(ii, iii)+B2b(ii,iv)c(ii, iii)
CR	<i>Androsace longifolia</i>	B1ab(i,ii,iv)+B2ab(i,ii,iv)
CR	<i>Brachanthemum mongolorum</i>	B1ab(iii)+B2ab(iii)
CR	<i>Calypso bulbosa</i>	B1+B2a,b(iii)
CR	<i>Dactylorhiza fuchsii</i> (=D. meyeri)	B1ab(iii, iv)+2ab(iii, iv)
CR	<i>Elaeagnus angustifolia</i> (=E. moorcroftii)	C2a(i);D1
CR	<i>Lancea tibetica</i>	B2ab(i,iii,iv)
CR	<i>Mitella nuda</i>	B2ab(iii,iv)
CR	<i>Neottia camtschatea</i>	D1
CR	<i>Neottianthe cucullata</i>	D1
CR	<i>Platanthera bifolia</i>	D1
CR	<i>Rheum uninerve</i>	B2ab(iii);D1
CR	<i>Saussurea dorogostaiskii</i>	C2a(i)
CR	<i>Vaccinium microcarpum</i> (=Oxycoccus microcarpus)	B2ab(i,ii,iii,iv,v)
CR	<i>Viburnum mongolicum</i>	A1ac
EN	<i>Abies sibirica</i>	B2ab(i,ii)
EN	<i>Aconitum kusnezoffii</i>	B1ab(iii,iv)+B2b(iii,iv)
EN	<i>Adonis mongolica</i>	B2ab(i,ii,iv,v)
EN	<i>Ammopiptanthus mongolicus</i>	B2ab(iii,iv)
EN	<i>Amygdalus mongolica</i>	B1ab(i,ii,iv)+B2ab(i,ii,iv)
EN	<i>Arnica angustifolia</i> subsp. <i>iljinii</i> (=A. iljinii)	B1ab(ii)+B2ab(ii)
EN	<i>Caragana tibetica</i>	B1ab(i,ii)+B2ab(i,ii)
EN	<i>Cardamine parviflora</i>	B1ab(ii)+B2ab(ii)
EN	<i>Cistanche deserticola</i>	A1acd
EN	<i>Codonopsis clematidea</i>	B1ab(ii)+B2ab(ii)

EN	<i>Convallaria keiskei</i>	B1ab(ii)+B2ab(ii)
EN	<i>Dictamnus albus</i> (= <i>D. dasycarpus</i>)	B2ab(i,ii,iii)
EN	<i>Diphasiastrum alpinum</i>	B1ab(i,ii,iii)
EN	<i>Diphasiastrum complanatum</i>	B1ab(i,ii,iii)
EN	<i>Drosera anglica</i>	A4c;B1ab(i,ii,iii)
EN	<i>Drosera rotundifolia</i>	A4c;B1ab(i,ii,iii)
EN	<i>Dryopteris dilatata</i>	B1ab(i,ii,iii)
EN	<i>Ferula feruloides</i>	A2cd
EN	<i>Gentiana algida</i>	A4ac
EN	<i>Glycyrrhiza squamulosa</i>	B2ab(iii)
EN	<i>Hyalea pulchella</i>	B1ab(iii)+B2ab(iii)
EN	<i>Incarvillea potaninii</i>	B2ab(iii)
EN	<i>Juniperus pseudosabina</i>	A3cd
EN	<i>Juniperus sabina</i>	A3cd
EN	<i>Lycopodium clavatum</i>	B1ab(i,ii,iii)
EN	<i>Nuphar pumila</i>	B2ab(i,ii,iii,iv)
EN	<i>Nymphaea candida</i>	B2ab(i,ii,iii,iv)
EN	<i>Nymphaea tetragona</i>	B2ab(i,ii,iii,iv)
EN	<i>Olgaea lomonosowii</i>	B2ab(i,ii,iii)
EN	<i>Orchis militaris</i>	B2ab(i,iii,iv)
EN	<i>Oxytropis mongolica</i>	B2ab(iii, iv)
EN	<i>Paeonia lactiflora</i>	B2ab(i,ii,iii)
EN	<i>Pinus pumila</i>	B2ab(i,ii, iii,iv)
EN	<i>Saussurea involucrata</i>	B1ab(ii)+B2ab(ii)
EN	<i>Saxifraga hirculus</i>	C1
EN	<i>Sophora flavescens</i>	A2ab
EN	<i>Spongiocarpella grubovii</i>	B2ab(i,iv,v)
EN	<i>Tanacetum sinuatum</i> (= <i>Chrysanthemum sinuatum</i> ; = <i>Dendranthema sinuatum</i>)	C1+C2a(ii)

EN	<i>Zygophyllum potaninii</i>	C2a(i);D1
VU	<i>Acorus calamus</i>	B2ab(i,ii)
VU	<i>Allium altaicum</i>	B2b(ii,iii,iv,v)
VU	<i>Anabasis aphylla</i>	B1ab(iv)+B2ab(iv)
VU	<i>Anabasis eriopoda</i>	B1ab(iv)+B2ab(iv)
VU	<i>Artemisia lagocephala subsp. lithophila (=A. lithophila)</i>	D2
VU	<i>Artemisia tomentella</i>	B1ab(iii)+B2ab(iii)
VU	<i>Astragalus dshimensis</i>	B2ab(iii,iv)
VU	<i>Caragana brachypoda</i>	B1ab(iii)+B2ab(iii)
VU	<i>Caragana gobica</i>	B1ab(ii,iii)+B2ab(ii,iii)
VU	<i>Carex parva</i>	D2
VU	<i>Caryopteris mongholica</i>	B1ab(ii)+B2ab(ii)
VU	<i>Clematis glauca</i>	B1ab(iii,v)+B2ab(iii,v)
VU	<i>Comastoma pulmonarium</i>	B2ab(iii)
VU	<i>Corallorhiza trifida</i>	D2
VU	<i>Cypripedium calceolus</i>	A4c
VU	<i>Cypripedium macranthos</i>	A4c
VU	<i>Ephedra equisetina</i>	A4c
VU	<i>Epipogium aphyllum</i>	B2ab(i,ii,iii)
VU	<i>Festuca komarovii</i>	B2ab(i,ii)
VU	<i>Gagea hiensis</i>	B2ab(i,ii,iii)
VU	<i>Gueldenstaedtia monophylla</i>	B2ab(iii)
VU	<i>Gymnocarpos przewalskii</i>	B2ab(i,ii,iii)
VU	<i>Halimodendron halodendron</i>	B1ab(i,ii,iii)
VU	<i>Hedysarum sangilense</i>	B2ab(i,ii,iii)
VU	<i>Iljinia regelii</i>	B2ab(i,ii,iii)
VU	<i>Jurinea mongolica</i>	B2ab(i,ii,iii)
VU	<i>Kobresia robusta</i>	D2

VU	<i>Maianthemum dilatatum</i>	B2ab(i,ii)
VU	<i>Oxytropis fragilifolia</i>	B2ab(i,ii)
VU	<i>Paeonia anomala</i>	B2ab(i,ii)
VU	<i>Paris verticillata</i> (=P. hexaphylla)	B1ab(iii);D2
VU	<i>Pedicularis altaica</i>	B2ab(iii);D2
VU	<i>Peganum harmala</i>	B2ab(ii,iv)
VU	<i>Polygonatum humile</i>	B2ab(ii,iv)
VU	<i>Populus euphratica</i> (=P. diversifolia)	B2ab(iv,v)
VU	<i>Rhamnus parvifolia</i>	D2
VU	<i>Rhaponticum carthamoides</i>	D1+D2
VU	<i>Rhinactinidia eremophila</i> (=Krylovia eremophila)	B1ab(ii,iii)+B2ab(ii,iii)
VU	<i>Rhododendron adamsii</i>	B2ab(v)
VU	<i>Rhododendron aureum</i>	B2ab(v)
VU	<i>Rosa kokanica</i>	D2
VU	<i>Sambucus williamsii</i>	D1
VU	<i>Sanguisorba alpina</i>	B1ab(iii)+2ab(iii)
VU	<i>Sedum roseum</i> (=Rhodiola rosea)	A1acd
VU	<i>Solidago virgaurea subsp. dahurica</i> (=S. dahurica)	B2ab(iii,iv)
VU	<i>Sorbaria sorbifolia</i>	D1+D2
VU	<i>Swertia banzragczii</i>	D2
VU	<i>Tofieldia coccinea</i>	D2
VU	<i>Tugarinovia mongolica</i>	B2ab(i,iii)
VU	<i>Tulipa uniflora</i>	B2b(iii,v)
VU	<i>Vaccinium myrtillus</i>	D2
VU	<i>Valeriana saichanensis</i>	D2
VU	<i>Viburnum sargentii</i>	D2
VU	<i>Vicia tsydenii</i>	D2
VU	<i>Viola brachyceras</i>	D1+D2

Annex VII. The NatureServe Conservation Status Global Rank Definitions

Global Rank	Definition
GX	Presumed Extinct (species)/Eliminated (ecological communities and systems) — Species not located despite intensive searches and virtually no likelihood of rediscovery. Ecological community or system eliminated throughout its range, with no restoration potential.
GH	Possibly Extinct (species)/ Eliminated (ecological communities and systems) — Known from only historical occurrences but still some hope of rediscovery. There is evidence that the species may be extinct or the ecosystem may be eliminated throughout its range, but not enough to state this with certainty.
G1	Critically Imperiled —At very high risk of extinction due to extreme rarity (often 5 or fewer populations), very steep declines, or other factors.
G2	Imperiled —At high risk of extinction or elimination due to very restricted range, very few populations, steep declines, or other factors.
G3	Vulnerable —At moderate risk of extinction or elimination due to a restricted range, relatively few populations, recent and widespread declines, or other factors.
G4	Apparently Secure —Uncommon but not rare; some cause for long-term concern due to declines or other factors.
G5	Secure —Common; widespread and abundant.

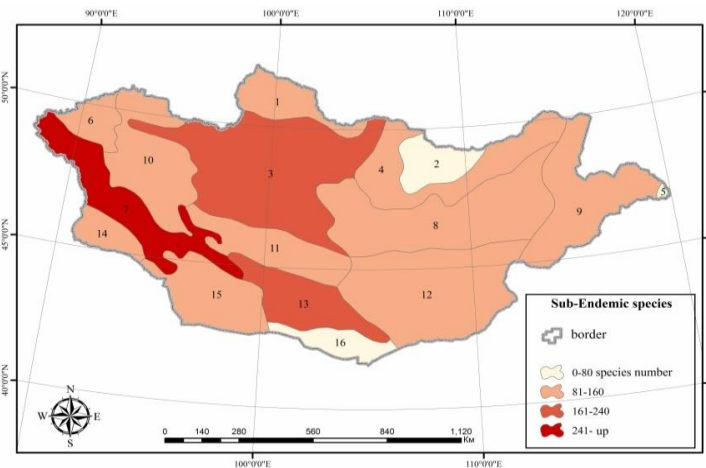
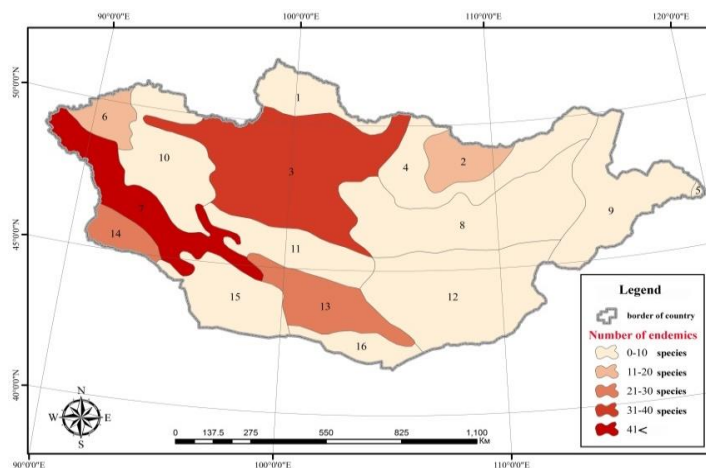
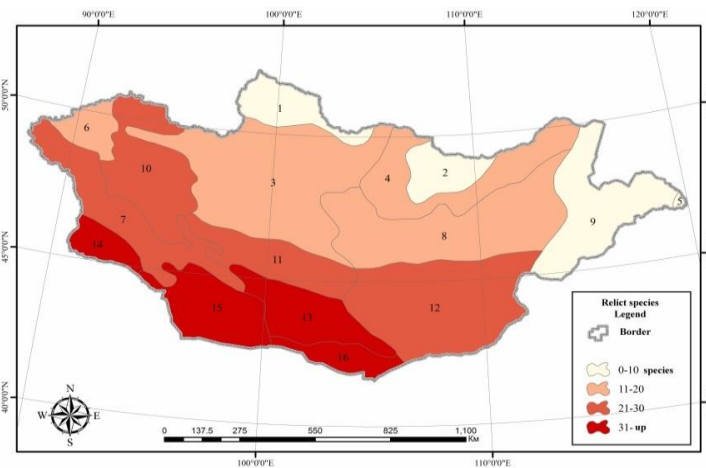
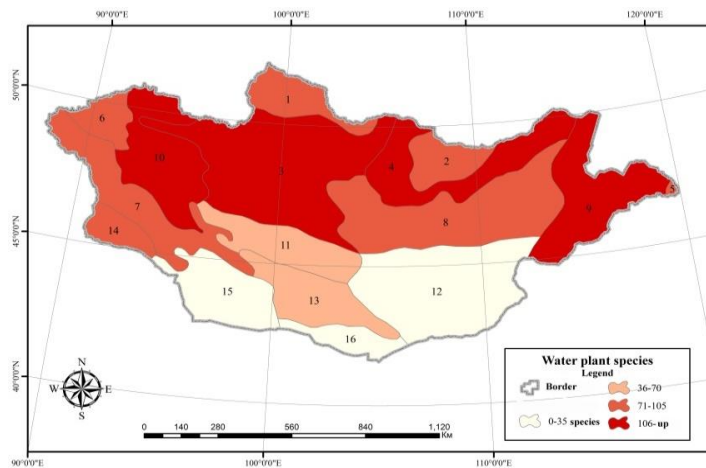
Criteria for proposed L-rank system based on area of occupancy using km² raster grid cells

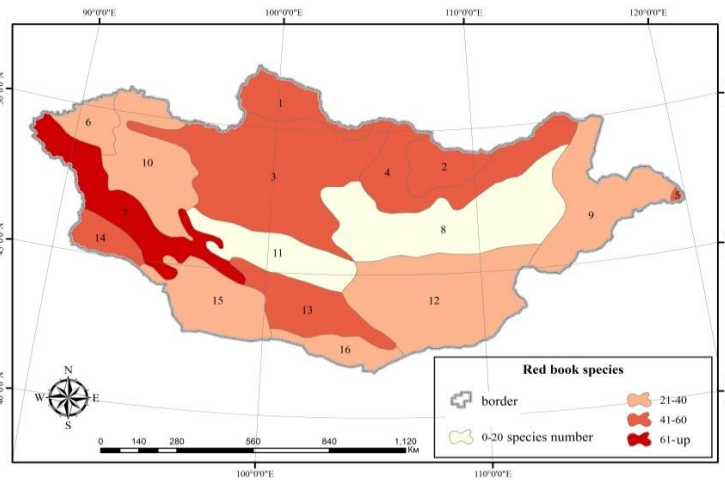
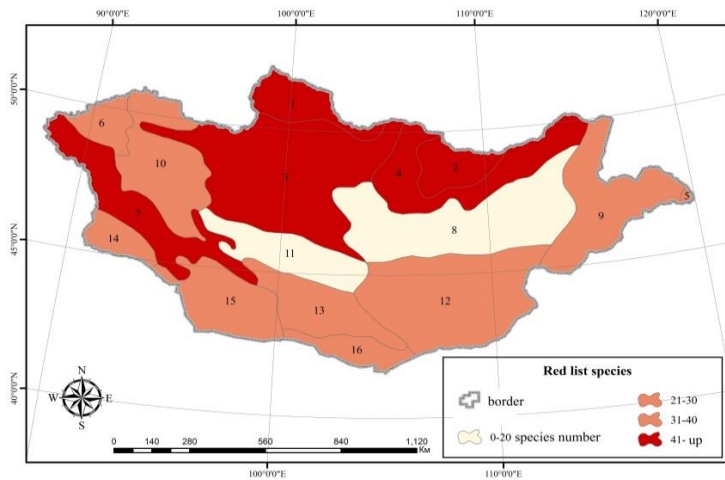
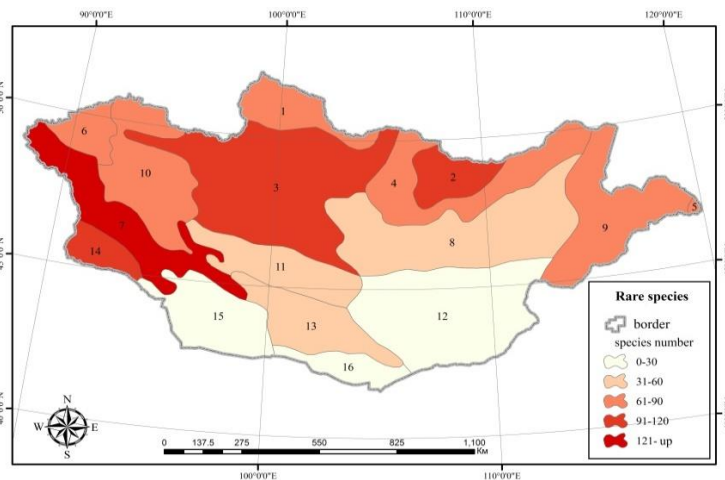
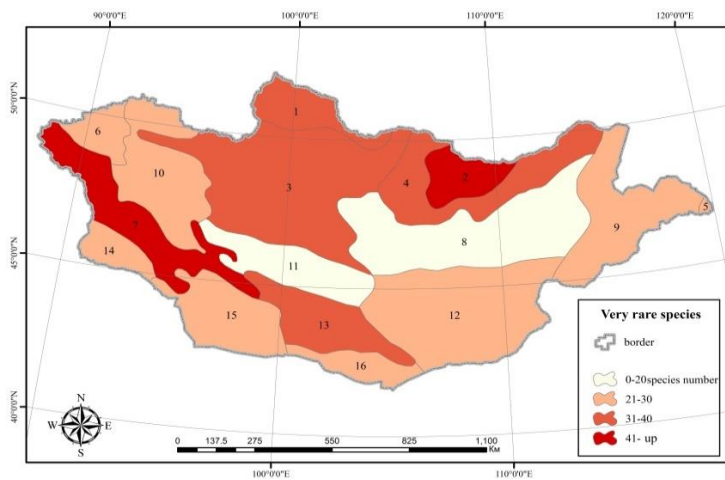
Local (L-rank) categories	Criteria
X = Presumed extinct	Not located despite extensive searches and virtually no likelihood of rediscovery
H = Possibly extinct	Missing; known from only historical occurrences but still some hope of rediscovery
1 = Critically imperiled	Area < 10 km ² (or fewer than ten 1 km ² cells)
2 = Imperiled	Area < 50 km ² (or fewer than fifty 1 km ² cells)
3 = Vulnerable to threat or extinction	Area < 250 km ² (or fewer than two hundred fifty 1 km ² cells)
4 = Apparently secure	Uncommon but not rare, some cause for long-term concern due to declines or other factors
5 = Demonstrably widespread, abundant, and secure	Common; widespread and abundant

Annex VIII. List of overusing rare plants in Mongolia

Scientific name	Scientific name
<i>Aconitum kusnezoffii</i>	<i>Paeonia lactiflora</i>
<i>Acorus calamus</i>	<i>Parasenecio hastatus (=Cacalia hastata)</i>
<i>Adonis mongolica</i>	<i>Pinus sibirica</i>
<i>Allium altaicum</i>	<i>Plantago maritima subsp. ciliata (=P. salsa)</i>
<i>Allium mongolicum</i>	<i>Pteridium aquilinum</i>
<i>Allium obliquum</i>	<i>Rhodiola pinnatifida</i>
<i>Artemisia santolinifolia</i>	<i>Rhododendron aureum</i>
<i>Astragalus mongholicus</i>	<i>Rhododendron dauricum</i>
<i>Bergenia crassifolia</i>	<i>Ribes aciculare (=Grossularia acicularis)</i>
<i>Chelidonium majus</i>	<i>Saposhnikovia divaricata</i>
<i>Cistanche deserticola</i>	<i>Saussurea dorogostaiskii</i>
<i>Crataegus sanguinea</i>	<i>Saussurea involucrata</i>
<i>Cynomorium songaricum</i>	<i>Scutellaria baicalensis</i>
<i>Ephedra sinica</i>	<i>Sedum aizoon</i>
<i>Ferula feruloides</i>	<i>Sedum roseum (=Rhodiola rosea)</i>
<i>Gentiana algida</i>	<i>Sophora alopecuroides</i>
<i>Glycyrrhiza uralensis</i>	<i>Sophora flavescens</i>
<i>Haplophyllum dauricum</i>	<i>Thermopsis mongolica (=Th. grubovii; Th. hirsutissima)</i>
<i>Iris potaninii</i>	<i>Thymus altaicus</i>
<i>Juniperus pseudosabina</i>	<i>Thymus gobicus</i>
<i>Juniperus sabina</i>	<i>Tulipa uniflora</i>
<i>Ledum palustre</i>	<i>Vaccinium myrtillus</i>
<i>Lilium martagon</i>	<i>Vaccinium uliginosum</i>
<i>Lilium pumilum (=L. potaninii)</i>	<i>Valeriana capitata</i>
<i>Lycium ruthenicum</i>	<i>Zygophyllum potaninii</i>
<i>Paeonia anomala</i>	<i>Zygophyllum pterocarpum</i>

Annex IX. Map of the species richness for conservation groups by botanic-geographical regions (Urgamal 2017b)





SPECIES CATALOGUE OF RARE AND THREATENED VASCULAR PLANTS OF MONGOLIA

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