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CONVENTION ON THE CONSERVATION OF EUROPEAN WILDLIFE
AND NATURAL HABITATS

Standing Committee

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Draft list of the IAS to be considered within the frame of
the second reporting on the conservation status of species
and habitats of the Bern Convention

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Introduction

At the 5th meeting of the *Ad hoc* Working Group on Reporting four options for designing a list of Invasive Alien Species (IAS) to be considered for the reporting on the conservation status of species and habitats under Resolution No. 8 (2012) were presented and discussed (see document T-PVS/PA(2024)06¹).

The *Ad hoc* Working Group on Reporting supported that non-EU Contracting Parties to the Bern Convention would:

- mandatorily report on any IAS of Union concern² that represent a threat for the species and habitats protected by the Bern Convention;
- voluntarily report on species other than those of the Union list to be selected from the EASIN or the GRIIS databases or if relevant, on species from national lists of IAS.

As a follow up, for the purpose of the reporting under Resolution No. 8 (2012)³, this document aims at providing a proposal for a draft list of IAS of concern of non-EU Contracting Parties to the Bern Convention (hereafter referred to as the “shortlist”) that represent a threat for the species and habitats protected by the Bern Convention and occurring on their respective territories.

The draft list of IAS presented in this document is based on the data included in the GRIIS database. The methodology used to analyse and select the data is presented, along with a discussion on the result achieved and relevant caveats and opportunities for amendments by interested Parties.

The dataset

The dataset used in this document was kindly provided by the Global Register of Introduced and Invasive Species⁴ (GRIIS).

GRIIS was developed as a concept and prototype by the IUCN SSC Invasive Species Specialist Group (ISSG) in 2006, and was further revisited and expanded by the ISSG to address Aichi Biodiversity Target 9 and support its achievement. It includes an annotated country inventory of introduced and invasive alien species derived from a comprehensive literature review of authoritative and credible source information compiled by a team support by country editors. Specifically, in this study, the GRIIS 2024 update checklists are used, including new data taken from literature and currently being reviewed and validated by country editors, who are national experts designated by the GRIIS data manager of ISSG. The dataset includes country, species name (accepted name and synonym if used by the source), higher taxonomy, environmental/system in which the species occurs, pathways, biological status (native/alien, provenance uncertain/cryptogenic, and invasiveness-evidence of impact). One important feature of GRIIS is that to apply a consistent taxonomy across the inventories of all countries, species names recorded from source information are referred to the taxonomic editor the Global Biodiversity Information Facility⁵ (GBIF).

As requested by the Secretariat, the data retrieved from GRIIS were relative to a list of 15 Parties to the Bern Convention (see table 1 below). The initial dataset included a total of 12,455 records relative to over 5800 taxa listed. Of the total number of records, over ¾ were relative to 5 Parties only, namely Norway (36%), UK (23%, Ukraine (9%), Switzerland (5%), and Georgia (5%).

The full dataset of each Party which has been part of this study is provided as annex in relevant Excel files.

¹ <https://rm.coe.int/pa06e-2024-exploring-options-for-a-coe-list-of-ias-final-version-2771-/1680af63e0>

² https://environment.ec.europa.eu/topics/nature-and-biodiversity/invasive-alien-species_en

³ <https://www.coe.int/en/web/bern-convention/reporting-res.-8-2012->

⁴ <https://griis.org/>

⁵ <https://www.gbif.org>

Table 1 – Number of GRIIS records per country

Country	No. of GRIIS records	Country	No. of GRIIS records
Albania	360	Monaco	18
Andorra	26	Montenegro	131
Armenia	444	North Macedonia	151
Azerbaijan	106	Norway	4501
Bosnia and Herzegovina	327	Serbia	335
Georgia	599	Switzerland	622
Iceland	438	UK	2841
Liechtenstein	119	Ukraine	1107
Republic of Moldova	330		

Toward a short list of IAS

The development of the short list proposed in this document is the result of a selection process based on a 6-steps approach, which allowed to extract 134 species from the initial long list including over 5800 taxa and a total of 12,455 records. In particular, the following 6 steps were undertaken:

- Step 1 – Removal of species that are not invasive;
- Step 2 – Removal of species that are identified as native within a part of the country;
- Step 3 – Removal of duplicate records (for species which have more records for a single country);
- Step 4 – Exclusion of species that are present in one country only;
- Step 5 – Exclusion of species that are native in at least one of the countries which are Parties to the Bern Convention;
- Step 6 – Exclusion of species already listed among those of Union concern, as of Regulation (EU) 1143/2014.

Here follows a short description of each step undertaken to reduce the initial long list and achieve the proposed shortlist of species for voluntarily report on those invasive alien species having an impact on the species and habitats protected by the Bern Convention Parties that are not EU member States.

Step 1. The goal of this study was the identification of species having an impact on the species and habitats protected under the Bern Convention, therefore the initial long list of 12,455 records was used as a basis to select only those species that were indicated as having an "Evidence of impact" (expressed in the dataset with a binary choice of Yes/ No). This first selection allowed to downsize the initial dataset significantly, to some 1777 records. The number of records per country available after this step is shown in table 2 below.

Step 2. In order to ensure that only species actually alien to a country were retained, any record having an indication of mixed native/alien "origin" (thus indicating that the species is native in a part of a country and alien in another part) was selected. This led to the further removal of 933 records, all from Norway (in other countries, similar records were already removed through Step 1, as they were relative to species having no evidence of impact). The number of records per country available after this step is shown in table 2 below.

Step 3. Some national datasets included duplicated records for a few single species within the same country, for example in situations where different introduction pathways were indicated. The removal of duplicate records allowed to obtain a final long list of 1228 records, relative to a total of 840 invasive alien species occurring in the 15 Parties to the Bern Convention. The number of records per country available after this step is shown in table 2 below.

Table 2 - Number of records for each Party at each different selection step 1-3

Selection steps	Step 1 – All non invasives removed	Step 2 – All native/alien within a country removed	Step 3 – All duplicated species within a country removed
Albania	11	11	11
Andorra	3	3	3
Armenia	26	26	23
Azerbaijan	24	24	22
Bosnia and Herzegovina	80	80	78
Georgia	22	22	22
Iceland	6	6	6
Liechtenstein	21	21	21
Republic of Moldova	39	39	39
Monaco	2	2	2
Montenegro	28	28	28
North Macedonia	30	30	25
Norway	950	933	422
Serbia	179	179	175
Switzerland	86	86	81
Ukraine	89	89	89
United Kingdom	181	181	181

Step 4. The contribution of each Party to the list obtained after Step 1-3 appeared strongly biased toward the same countries with the highest number of records shown initially. Also at this stage, such countries contributed to over ¾ of the records, with Norway and UK alone contributing to nearly 50% of the records. To overcome this bias, all records of species which were indicated as invasive in only one country were removed. This selection allowed the removal of 636 species, which are distributed among the different Parties as shown in the table 3 below.

The rationale for Step 4 was chosen out of convenience, but allowed to reduce the list to a number that is more manageable for the purpose of reporting, while removing also a number of species which were native to other countries that are Parties to the Bern Convention. The full list of species removed under Step 4 is provided as annex in Excel file.

Table 3 - Number of single-country records removed

Country	Number of single-country records removed	Country	Number of single-country records removed
Albania	4	Republic of Moldova	21
Andorra	1	Montenegro	6
Armenia	7	North Macedonia	1
Azerbaijan	7	Norway	308
Bosnia and Herzegovina	7	Serbia	87
Georgia	13	Switzerland	29
Iceland	2	Ukraine	50
Liechtenstein	3	United Kingdom	89
Monaco	1		

The list obtained included a total of 386 records, relative to 204 species.

Step 5. To fine tune the list, 46 species apparently native in one or more countries which are Party to the Bern Convention were extracted and removed from the list. On this regard it is worth noting that the selection done

at Step 4, which was aimed at removing those species considered as invasive in one country only, had already contributed to remove several other species that although considered alien in a country, would be native to others. The 17 species of plants (step 5a) and 29 species of animals (step 5b) removed through this selection phase are shown in table 4 below.

Step 6. As a last refinement of the shortlist, 24 species which are already listed among the species of Union concern as of Regulation (EU) 1143/2014 were excluded (all species included in the Union list would be mandatorily reported anyway, so their presence in this list would just represent a duplication). The species excluded through this step are shown in table 4 below.

Table 4 – List of species removed through step 5 and 6

Step 5a - Plant species native to Bern Convention Parties removed from the list	Step 5b - Animal species native to Bern Convention Parties removed from the list	Step 6 - Species of Union concern removed from the list
<i>Alchemilla mollis</i> (Buser) Rothm.	<i>Arion lusitanicus</i> Mabile, 1868	<i>Ailanthus altissima</i> (Mill.) Swingle
<i>Armoracia rusticana</i> P.Gaertn., B.Mey. & Scherb.	<i>Astacus leptodactylus</i> (Eschscholtz, 1823)	<i>Alopochen aegyptiaca</i> (Linnaeus, 1766)
<i>Artemisia annua</i> L.	<i>Cameraria ohridella</i> Deschka & Dimić, 1986	<i>Ameiurus melas</i> (Rafinesque, 1820)
<i>Bunias orientalis</i> L.	<i>Carassius gibelio</i> (Bloch, 1782)	<i>Asclepias syriaca</i> L.
<i>Centaurea diffusa</i> Lam.	<i>Cercopagis pengoi</i> (Ostroumov, 1891)	<i>Elodea nuttallii</i> (Planch.) H.St.John
<i>Cytisus scoparius</i> (L.) Link	<i>Chaetogammarus ischnus</i> (Stebbing, 1899)	<i>Eriocheir sinensis</i> H.Milne Edwards, 1853
<i>Echinochloa crus-galli</i> (L.) P.Beauv.	<i>Chaetogammarus warpachowskyi</i> (G.O.Sars, 1894)	<i>Faxonius limosus</i> (Rafinesque, 1817)
<i>Elaeagnus angustifolia</i> L.	<i>Chelicorophium curvispinum</i> (G.O.Sars, 1895)	<i>Gambusia holbrooki</i> Girard, 1859
<i>Pinus nigra</i> J.F.Arnold	<i>Cordylophora caspia</i> (Pallas, 1771)	<i>Heraclium mantegazzianum</i> Sommier & Levier
<i>Portulaca oleracea</i> L.	<i>Cyprinus carpio</i> Linnaeus, 1758	<i>Impatiens glandulifera</i> Royle
<i>Prunus laurocerasus</i> L.	<i>Dikergammarus haemobaphes</i> (Eichwald, 1841)	<i>Koenigia polystachya</i> (Wall. ex Meisn.) T.M.Schust. & Reveal
<i>Rubus armeniacus</i> Focke	<i>Dikergammarus villosus</i> (Sowinsky, 1894)	<i>Lagarosiphon major</i> (Ridl.) Moss
<i>Spiraea salicifolia</i> L.	<i>Dreissena bugensis</i> (Andrusov, 1897)	<i>Lepomis gibbosus</i> (Linnaeus, 1758)
<i>Syringa vulgaris</i> L.	<i>Dreissena polymorpha</i> (Pallas, 1771)	<i>Lithobates catesbeianus</i> (Shaw, 1802)
<i>Vallisneria spiralis</i> L.	<i>Hemimysis anomala</i> G.O.Sars, 1907	<i>Lysichiton americanus</i> Hultén & H.St.John
<i>Vinca minor</i> L.	<i>Ichthyosaura alpestris</i> (Laurenti, 1768)	<i>Myocastor coypus</i> (Molina, 1782)
<i>Xanthium strumarium</i> L.	<i>Lasius neglectus</i> Van Loon, Boomsma & Andrasfalvy, 1990	<i>Myriophyllum aquaticum</i> (Vell.) Verdc.
	<i>Lithoglyphus naticoides</i> (C.Pfeiffer, 1828)	<i>Myriophyllum heterophyllum</i> Michx.
	<i>Lumbricus rubellus</i> Hoffmeister, 1843	<i>Pacifastacus leniusculus</i> (Dana, 1852)
	<i>Lymantria dispar</i> Linnaeus, 1758	<i>Perccottus glenii</i> Dybowski, 1877
	<i>Neogobius fluviatilis</i> (Pallas, 1814)	<i>Procambarus clarkii</i> (Girard, 1852)
	<i>Neogobius melanostomus</i> (Pallas, 1814)	<i>Procyon lotor</i> (Linnaeus, 1758)
	<i>Obesogammarus crassus</i> (G.O.Sars, 1894)	<i>Pseudorasbora parva</i> (Temminck & Schlegel, 1846)
	<i>Obesogammarus obesus</i> (G.O.Sars, 1894)	<i>Sciurus carolinensis</i> Gmelin, 1788
	<i>Oryctolagus cuniculus</i> (Linnaeus, 1758)	
	<i>Pelophylax ridibundus</i> (Pallas, 1771)	
	<i>Ponticola kessleri</i> (Günther, 1861)	
	<i>Pontogammarus robustoides</i> (Sars, 1894)	
	<i>Triturus carnifex</i> (Laurenti, 1768)	

The proposed final short list includes 134 species, of which 89 plants, 41 animals, 3 chromista and 1 fungus (see table 6 below).

Recommendations

The approach proposed in this study is as objective as possible, and the entire selection process builds on a series of datasets that are considered among the most updated for the target countries, which are the 15 Parties to the Bern Convention which are not EU member States.

However, it is worth considering that the sources of data used for this study are regularly under review, and because of the very dynamic nature of the data of occurrence and impact in the field of biological invasions, may be not always updated and comprehensive.

Moreover, because the shortlist is only built for (voluntary) reporting purposes, it is definitely possible to propose further amendments which could further reduce or extend the shortlist, as appropriate.

For this reason, the following recommendations are made:

- 1) Check if any of the species currently present in the short list is actually native to any Party to the Bern Convention (including those that are also EU member States) in which case it would need to be removed (and consider this point when following the next 3 recommendations below).
- 2) Check the initial GRIIS datasets to verify whether any record needs to be added, removed or updated, so to suggest whether any additional invasive alien species would qualify for being shortlisted.
- 3) Check if any of the species removed at Step 4 needs to be reconsidered for inclusion in the shortlist for reporting purposes.
- 4) Check if any invasive alien species (among those occurring in any Party to the Bern Convention which is not also EU member States) which may have a strong impact on the species and habitats protected by the Bern Convention has been totally disregarded and needs to be added to the shortlist.

Please inform the Bern Convention Secretariat about any of the results of the checks made in relation to the recommendations above. Any input will be carefully evaluated, and relevant records will be considered for the improvement of the shortlist.

Please also consider that any contribution and support to improve the initial GRIIS country datasets are very welcome. Any new references or national lists of alien species, as well as any gaps or inaccuracies spotted in any of the national datasets should be communicated to the GRIIS data manager Shyama Pagad directly at the following email address: s.pagad@auckland.ac.nz and, if this could have an impact on the shortlist, to the Bern Convention Secretariat.

Final consolidated list

Following the 6th meeting of the *Ad hoc* Working Group on Reporting, held online on 25 October 2024, some indications for improvement of the list were received from some non-EU Contracting Parties Bern Convention, namely Monaco, Montenegro, Norway and the Republic of Moldova.

In particular, in line with Step 5, aimed at excluding species native to the territory of at least one of the Bern Convention Parties, *Silurus glanis* Linnaeus, 1758, was removed from the former version of the draft shortlist.

Moreover, some non-EU Parties suggested some minor amendments which led to the addition of a total 19 species (12 plants and 7 animals, see table 5 below). All suggested species were checked and corrected against the taxonomic editor the GBIF. Those species which are synonyms of species already present in the shortlist, or which are native to at least one of the Bern Convention Parties (or with uncertain origin), or which are already listed among those of Union concern, were not considered for listing in this document.

Table 5 – Species added to the list as suggested by some non-EU Contracting Parties to the Bern Convention

Plants	Animals
Carpobrotus acinaciformis (L.) L.Bolus	Corythucha arcuata (Say, 1832)
Carpobrotus edulis (L.) N.E.Br.	Corythucha ciliata (Say, 1832)
Eleusine tristachya (Lam.) Lam	Diabrotica virgifera LeConte, 1868
Erigeron floribundus (Kunth) Sch.Bip.	Erasmoneura vulnerata (Fitch, 1851)
Euphorbia prostrata Aiton	Frankliniella occidentalis (Pergande, 1895)
Helianthus × laetiflorus Pers.	Hyphantria cunea (Drury, 1773)
Oenothera × fallax Renner	Periplaneta americana (Linnaeus, 1758)
Opuntia ficus-indica (L.) Mill.	
Opuntia humifusa (Raf.) Raf.	
Oxalis pes-caprae L.	
Sporobolus junceus (P.Beauv.) Kunth	
Sporobolus vaginiflorus (Torr. ex A.Gray) Alph.Wood	

As a result, the final draft shortlist was expanded from 134 species to a total of 152 species (see consolidated list, table 6 below).

Table 6 – Final consolidated draft shortlist

N	Species	Kingdom	Phylum	Class	Order	Family	Habitat
1.	<i>Abutilon theophrasti</i> Medik.	Plantae	Tracheophyta	Magnoliopsida	Malvales	Malvaceae	terrestrial
2.	<i>Acer negundo</i> L.	Plantae	Tracheophyta	Magnoliopsida	Sapindales	Sapindaceae	terrestrial
3.	<i>Aedes albopictus</i> (Skuse, 1894)	Animalia	Arthropoda	Insecta	Diptera	Culicidae	terrestrial
4.	<i>Aix galericulata</i> (Linnaeus, 1758)	Animalia	Chordata	Aves	Anseriformes	Anatidae	terrestrial freshwater
5.	<i>Amaranthus albus</i> L.	Plantae	Tracheophyta	Magnoliopsida	Caryophyllales	Amaranthaceae	terrestrial
6.	<i>Amaranthus blitoides</i> S.Watson	Plantae	Tracheophyta	Magnoliopsida	Caryophyllales	Amaranthaceae	terrestrial
7.	<i>Amaranthus deflexus</i> L.	Plantae	Tracheophyta	Magnoliopsida	Caryophyllales	Amaranthaceae	terrestrial
8.	<i>Amaranthus retroflexus</i> L.	Plantae	Tracheophyta	Magnoliopsida	Caryophyllales	Amaranthaceae	terrestrial
9.	<i>Ambrosia artemisiifolia</i> L.	Plantae	Tracheophyta	Magnoliopsida	Asterales	Asteraceae	terrestrial
10.	<i>Ambrosia polystachya</i> DC.	Plantae	Tracheophyta	Magnoliopsida	Asterales	Asteraceae	terrestrial
11.	<i>Ameiurus nebulosus</i> (Lesueur, 1819)	Animalia	Chordata		Siluriformes	Ictaluridae	freshwater brackish
12.	<i>Amelanchier xlamarkii</i> F.G.Schroed.	Plantae	Tracheophyta	Magnoliopsida	Rosales	Rosaceae	terrestrial
13.	<i>Amorpha fruticosa</i> L.	Plantae	Tracheophyta	Magnoliopsida	Fabales	Fabaceae	terrestrial
14.	<i>Amphibalanus improvisus</i> (Darwin, 1854)	Animalia	Arthropoda	Maxillopoda	Sessilia	Balanidae	marine
15.	<i>Anguillicola crassus</i> Kuwahara, Niimi & Itagaki, 1974	Animalia	Nematoda	Chromadorea	Rhabditida	Anguillicolidae	freshwater
16.	<i>Aphanomyces astaci</i> Schikora	Chromista	Oomycota	Peronosporae	Saprolegniales	Leptolegniaceae	freshwater
17.	<i>Arcuatula senhousia</i> (W.H.Benson, 1842)	Animalia	Mollusca	Bivalvia	Mytilida	Mytilidae	marine
18.	<i>Artemisia verlotiorum</i> Lamotte	Plantae	Tracheophyta	Magnoliopsida	Asterales	Asteraceae	terrestrial
19.	<i>Asparagopsis armata</i> Harv.	Plantae	Rhodophyta	Florideophyceae	Bonnemaisoniales	Bonnemaisoniaceae	marine
20.	<i>Austrominius modestus</i> (Darwin, 1854)	Animalia	Arthropoda			Elminiidae	marine
21.	<i>Azolla filiculoides</i> Lam.	Plantae	Tracheophyta	Polypodiopsida	Salvinales	Salviniaceae	freshwater
22.	<i>Bidens frondosa</i> L.	Plantae	Tracheophyta	Magnoliopsida	Asterales	Asteraceae	terrestrial
23.	<i>Bidens subalternans</i> DC.	Plantae	Tracheophyta	Magnoliopsida	Asterales	Asteraceae	terrestrial
24.	<i>Bonnemaisonia hamifera</i> Hariot	Plantae	Rhodophyta	Florideophyceae	Bonnemaisoniales	Bonnemaisoniaceae	marine
25.	<i>Botrylloides violaceus</i> Oka, 1927	Animalia	Chordata	Ascidiacea	Stolidobranchia	Styelidae	marine
26.	<i>Branta canadensis</i> (Linnaeus, 1758)	Animalia	Chordata	Aves	Anseriformes	Anatidae	terrestrial freshwater
27.	<i>Broussonetia papyrifera</i> (L.) L'Hér. ex Vent.	Plantae	Tracheophyta	Magnoliopsida	Rosales	Moraceae	terrestrial
28.	<i>Buddleja davidii</i> Franch.	Plantae	Tracheophyta	Magnoliopsida	Lamiales	Scrophulariaceae	terrestrial
29.	<i>Campylopus introflexus</i> (Hedw.) Brid.	Plantae	Bryophyta	Bryopsida	Dicranales	Leucobryaceae	brackish marine

N	Species	Kingdom	Phylum	Class	Order	Family	Habitat
30.	<i>Caprella mutica</i> Schurin, 1935	Animalia	Arthropoda	Malacostraca	Amphipoda	Caprellidae	marine
31.	<i>Carassius auratus</i> (Linnaeus, 1758)	Animalia	Chordata		Cypriniformes	Cyprinidae	freshwater brackish
32.	<i>Carpobrotus acinaciformis</i> (L.) L.Bolus	Plantae	Tracheophyta	Magnoliopsida	Caryophyllales	Aizoaceae	terrestrial
33.	<i>Carpobrotus edulis</i> (L.) N.E.Br.	Plantae	Tracheophyta	Magnoliopsida	Caryophyllales	Aizoaceae	terrestrial
34.	<i>Caulerpa racemosa</i> (Forssk.) J.Agardh	Plantae	Chlorophyta	Ulvophyceae	Bryopsidales	Caulerpaceae	marine
35.	<i>Cervus nippon</i> Temminck, 1838	Animalia	Chordata	Mammalia	Artiodactyla	Cervidae	terrestrial
36.	<i>Codium fragile</i> (Suringar) Har.	Plantae	Chlorophyta	Ulvophyceae	Bryopsidales	Codiaceae	marine
37.	<i>Commelina communis</i> L.	Plantae	Tracheophyta	Liliopsida	Commelinales	Commelinaceae	terrestrial
38.	<i>Corbicula fluminalis</i> (O.F.Müller, 1774)	Animalia	Mollusca	Bivalvia	Venerida	Cyrenidae	freshwater
39.	<i>Corbicula fluminea</i> (O.F.Müller, 1774)	Animalia	Mollusca	Bivalvia	Venerida	Cyrenidae	freshwater
40.	<i>Coregonus peled</i> (Gmelin, 1789)	Animalia	Chordata		Salmoniformes	Salmonidae	freshwater
41.	<i>Corella eumyota</i> Traustedt, 1882	Animalia	Chordata	Ascidiacea	Phlebobranchia	Corellidae	marine
42.	<i>Cornus sericea</i> L.	Plantae	Tracheophyta	Magnoliopsida	Cornales	Cornaceae	terrestrial
43.	<i>Corythucha arcuata</i> (Say, 1832)	Animalia	Arthropoda	Insecta	Hemiptera	Tingidae	terrestrial
44.	<i>Corythucha ciliata</i> (Say, 1832)	Animalia	Arthropoda	Insecta	Hemiptera	Tingidae	terrestrial
45.	<i>Cotoneaster horizontalis</i> Decne.	Plantae	Tracheophyta	Magnoliopsida	Rosales	Rosaceae	terrestrial
46.	<i>Crassula helmsii</i> (Kirk) Cockayne	Plantae	Tracheophyta	Magnoliopsida	Saxifragales	Crassulaceae	terrestrial freshwater
47.	<i>Crepidula fornicata</i> (Linnaeus, 1758)	Animalia	Mollusca	Gastropoda	Littorinimorpha	Calyptraeidae	marine
48.	<i>Cuscuta campestris</i> Yunck.	Plantae	Tracheophyta	Magnoliopsida	Solanales	Convolvulaceae	host
49.	<i>Cyclachaena xanthiifolia</i> (Nutt.) Fresen.	Plantae	Tracheophyta	Magnoliopsida	Asterales	Asteraceae	terrestrial
50.	<i>Cydalima perspectalis</i> (Walker, 1859)	Animalia	Arthropoda	Insecta	Lepidoptera	Crambidae	terrestrial
51.	<i>Dasysiphonia japonica</i> (Yendo) H.-S.Kim	Plantae	Rhodophyta	Florideophyceae	Ceramiales	Dasyaceae	marine
52.	<i>Datura stramonium</i> L.	Plantae	Tracheophyta	Magnoliopsida	Solanales	Solanaceae	terrestrial
53.	<i>Diabrotica virgifera</i> LeConte, 1868	Animalia	Arthropoda	Insecta	Coleoptera	Crysomelidae	terrestrial
54.	<i>Didemnum vexillum</i> Kott, 2002	Animalia	Chordata	Ascidiacea	Aplousobranchia	Didemnidae	marine
55.	<i>Dysphania ambrosioides</i> (L.) Mosyakin & Clemants	Plantae	Tracheophyta	Magnoliopsida	Caryophyllales	Amaranthaceae	terrestrial
56.	<i>Echinocystis lobata</i> (Michx.) Torr. & A.Gray	Plantae	Tracheophyta	Magnoliopsida	Cucurbitales	Cucurbitaceae	terrestrial
57.	<i>Eleusine indica</i> (L.) Gaertn.	Plantae	Tracheophyta	Liliopsida	Poales	Poaceae	terrestrial
58.	<i>Eleusine tristachya</i> (Lam.) Lam.	Plantae	Tracheophyta	Liliopsida	Poales	Poaceae	terrestrial
59.	<i>Elodea canadensis</i> Michx.	Plantae	Tracheophyta	Liliopsida	Alismatales	Hydrocharitaceae	freshwater
60.	<i>Elodea densa</i> (Planch.) Casp.	Plantae	Tracheophyta	Liliopsida	Alismatales	Hydrocharitaceae	freshwater

N	Species	Kingdom	Phylum	Class	Order	Family	Habitat
61.	<i>Erasmoneura vulnerata</i> (Fitch, 1851)	Animalia	Arthropoda	Insecta	Hemiptera	Cicadellidae	terrestrial
62.	<i>Erigeron annuus</i> (L.) Pers.	Plantae	Tracheophyta	Magnoliopsida	Asterales	Asteraceae	terrestrial
63.	<i>Erigeron bonariensis</i> L.	Plantae	Tracheophyta	Magnoliopsida	Asterales	Asteraceae	terrestrial
64.	<i>Erigeron canadensis</i> L.	Plantae	Tracheophyta	Magnoliopsida	Asterales	Asteraceae	terrestrial
65.	<i>Erigeron floribundus</i> (Kunth) Sch.Bip.	Plantae	Tracheophyta	Magnoliopsida	Asterales	Asteraceae	terrestrial
66.	<i>Erigeron sumatrensis</i> Retz.	Plantae	Tracheophyta	Magnoliopsida	Asterales	Asteraceae	terrestrial
67.	<i>Euphorbia maculata</i> L.	Plantae	Tracheophyta	Magnoliopsida	Malpighiales	Euphorbiaceae	terrestrial
68.	<i>Euphorbia prostrata</i> Aiton	Plantae	Tracheophyta	Magnoliopsida	Malpighiales	Euphorbiaceae	terrestrial
69.	<i>Frankliniella occidentalis</i> (Pergande, 1895)	Animalia	Arthropoda	Insecta	Thysanoptera	Thripidae	host
70.	<i>Galinsoga parviflora</i> Cav.	Plantae	Tracheophyta	Magnoliopsida	Asterales	Asteraceae	terrestrial
71.	<i>Galinsoga quadriradiata</i> Ruiz & Pav.	Plantae	Tracheophyta	Magnoliopsida	Asterales	Asteraceae	terrestrial
72.	<i>Gammarus tigrinus</i> Sexton, 1939	Animalia	Arthropoda	Malacostraca	Amphipoda	Gammaridae	marine
73.	<i>Grateloupia turuturu</i> Yamada	Plantae	Rhodophyta	Florideophyceae	Halymeniales	Halymeniaceae	marine
74.	<i>Grindelia squarrosa</i> (Pursh) Dunal	Plantae	Tracheophyta	Magnoliopsida	Asterales	Asteraceae	terrestrial
75.	<i>Halyomorpha halys</i> (Stål, 1855)	Animalia	Arthropoda	Insecta	Hemiptera	Pentatomidae	host
76.	<i>Harmonia axyridis</i> (Pallas, 1773)	Animalia	Arthropoda	Insecta	Coleoptera	Coccinellidae	terrestrial
77.	<i>Helianthus pauciflorus</i> Nutt.	Plantae	Tracheophyta	Magnoliopsida	Asterales	Asteraceae	terrestrial
78.	<i>Helianthus tuberosus</i> L.	Plantae	Tracheophyta	Magnoliopsida	Asterales	Asteraceae	terrestrial
79.	<i>Helianthus</i> × <i>laetiflorus</i> Pers.	Plantae	Tracheophyta	Magnoliopsida	Asterales	Asteraceae	terrestrial
80.	<i>Hemigrapsus sanguineus</i> (De Haan, 1835)	Animalia	Arthropoda	Malacostraca	Decapoda	Varunidae	marine
81.	<i>Hemigrapsus takanoi</i> Asakura & Watanabe, 2005	Animalia	Arthropoda	Malacostraca	Decapoda	Varunidae	marine
82.	<i>Hyphantria cunea</i> (Drury, 1773)	Animalia	Arthropoda	Insecta	Lepidoptera	Erebidae	terrestrial
83.	<i>Ictalurus punctatus</i> (Rafinesque, 1818)	Animalia	Chordata		Siluriformes	Ictaluridae	freshwater
84.	<i>Impatiens balfourii</i> Hook.fil.	Plantae	Tracheophyta	Magnoliopsida	Ericales	Balsaminaceae	terrestrial
85.	<i>Impatiens parviflora</i> DC.	Plantae	Tracheophyta	Magnoliopsida	Ericales	Balsaminaceae	terrestrial
86.	<i>Juncus tenuis</i> Willd.	Plantae	Tracheophyta	Liliopsida	Poales	Juncaceae	terrestrial
87.	<i>Koeleruteria paniculata</i> Laxm.	Plantae	Tracheophyta	Magnoliopsida	Sapindales	Sapindaceae	terrestrial
88.	<i>Lepidium virginicum</i> L.	Plantae	Tracheophyta	Magnoliopsida	Brassicales	Brassicaceae	terrestrial
89.	<i>Linepithema humile</i> (Mayr, 1868)	Animalia	Arthropoda	Insecta	Hymenoptera	Formicidae	terrestrial
90.	<i>Ludwigia grandiflora</i> (Michx.) Greuter & Burdet	Plantae	Tracheophyta	Magnoliopsida	Myrtales	Onagraceae	terrestrial freshwater
91.	<i>Lupinus nootkatensis</i> Donn ex Sims	Plantae	Tracheophyta	Magnoliopsida	Fabales	Fabaceae	terrestrial

N	Species	Kingdom	Phylum	Class	Order	Family	Habitat
92.	<i>Lupinus polyphyllus</i> Lindl.	Plantae	Tracheophyta	Magnoliopsida	Fabales	Fabaceae	terrestrial
93.	<i>Magallana gigas</i> (Thunberg, 1793)	Animalia	Mollusca	Bivalvia	Ostreida	Ostreidae	brackish marine
94.	<i>Matricaria discoidea</i> DC.	Plantae	Tracheophyta	Magnoliopsida	Asterales	Asteraceae	terrestrial
95.	<i>Mnemiopsis leidyi</i> A.Agassiz, 1865	Animalia	Ctenophora	Tentaculata	Lobata	Bolinopsidae	brackish marine
96.	<i>Mustela vison</i> Schreber, 1777	Animalia	Chordata	Mammalia	Carnivora	Mustelidae	terrestrial freshwater
97.	<i>Mytilopsis leucophaeata</i> (Conrad, 1831)	Animalia	Mollusca	Bivalvia	Myida	Dreissenidae	marine
98.	<i>Oenothera biennis</i> L.	Plantae	Tracheophyta	Magnoliopsida	Myrtales	Onagraceae	terrestrial
99.	<i>Oenothera glazioviana</i> Micheli	Plantae	Tracheophyta	Magnoliopsida	Myrtales	Onagraceae	terrestrial
100.	<i>Oenothera ×fallax</i> Renner	Plantae	Tracheophyta	Magnoliopsida	Myrtales	Onagraceae	terrestrial
101.	<i>Oncorhynchus gorbuscha</i> (Walbaum, 1792)	Animalia	Chordata		Salmoniformes	Salmonidae	freshwater marine
102.	<i>Oncorhynchus mykiss</i> (Walbaum, 1792)	Animalia	Chordata		Salmoniformes	Salmonidae	freshwater marine
103.	<i>Ophiostoma novo-ulmi</i> Brasier	Fungi	Ascomycota	Sordariomycetes	Microascales	Ceratocystidaceae	host
104.	<i>Opuntia humifusa</i> (Raf.) Raf.	Plantae	Tracheophyta	Magnoliopsida	Caryophyllales	Cactaceae	terrestrial
105.	<i>Opuntia ficus-indica</i> (L.) Mill.	Plantae	Tracheophyta	Magnoliopsida	Caryophyllales	Cactaceae	terrestrial
106.	<i>Opuntia humifusa</i> (Raf.) Raf.	Plantae	Tracheophyta	Magnoliopsida	Caryophyllales	Cactaceae	terrestrial
107.	<i>Oxalis pes-caprae</i> L.	Plantae	Tracheophyta	Magnoliopsida	Oxalidales	Oxalidaceae	terrestrial
108.	<i>Oxalis stricta</i> L.	Plantae	Tracheophyta	Magnoliopsida	Oxalidales	Oxalidaceae	terrestrial
109.	<i>Panicum capillare</i> L.	Plantae	Tracheophyta	Liliopsida	Poales	Poaceae	terrestrial
110.	<i>Panicum dichotomiflorum</i> Michx.	Plantae	Tracheophyta	Liliopsida	Poales	Poaceae	terrestrial
111.	<i>Parthenocissus inserta</i> (A.Kern.) Fritsch	Plantae	Tracheophyta	Magnoliopsida	Vitales	Vitaceae	terrestrial
112.	<i>Parthenocissus quinquefolia</i> (L.) Planch.	Plantae	Tracheophyta	Magnoliopsida	Vitales	Vitaceae	terrestrial
113.	<i>Paspalum dilatatum</i> Poir.	Plantae	Tracheophyta	Liliopsida	Poales	Poaceae	terrestrial
114.	<i>Paspalum distichum</i> L.	Plantae	Tracheophyta	Liliopsida	Poales	Poaceae	terrestrial
115.	<i>Periplaneta americana</i> (Linnaeus, 1758)	Animalia	Arthropoda	Insecta	Blattodea	Blattidae	terrestrial
116.	<i>Physella acuta</i> (Draparnaud, 1805)	Animalia	Mollusca	Gastropoda		Physidae	freshwater
117.	<i>Phytolacca americana</i> L.	Plantae	Tracheophyta	Magnoliopsida	Caryophyllales	Phytolaccaceae	terrestrial
118.	<i>Potamopyrgus antipodarum</i> (J.E.Gray, 1843)	Animalia	Mollusca	Gastropoda	Littorinimorpha	Tateidae	freshwater
119.	<i>Prunus serotina</i> Ehrh.	Plantae	Tracheophyta	Magnoliopsida	Rosales	Rosaceae	terrestrial
120.	<i>Pseudosasa japonica</i> (Siebold & Zucc. ex Steud.) Makino ex Nakai	Plantae	Tracheophyta	Liliopsida	Poales	Poaceae	terrestrial
121.	<i>Rapana venosa</i> (Valenciennes, 1846)	Animalia	Mollusca	Gastropoda	Neogastropoda	Muricidae	marine

N	Species	Kingdom	Phylum	Class	Order	Family	Habitat
122.	<i>Reynoutria ×bohemica</i> Chrtek & Chrtková	Plantae	Tracheophyta	Magnoliopsida	Caryophyllales	Polygonaceae	terrestrial
123.	<i>Reynoutria japonica</i> Houtt.	Plantae	Tracheophyta	Magnoliopsida	Caryophyllales	Polygonaceae	terrestrial
124.	<i>Reynoutria sachalinensis</i> (F.Schmidt) Nakai	Plantae	Tracheophyta	Magnoliopsida	Caryophyllales	Polygonaceae	terrestrial
125.	<i>Rhithropanopeus harrisi</i> (Gould, 1841)	Animalia	Arthropoda	Malacostraca	Decapoda	Panopeidae	marine
126.	<i>Rhus typhina</i> L.	Plantae	Tracheophyta	Magnoliopsida	Sapindales	Anacardiaceae	terrestrial
127.	<i>Robinia pseudoacacia</i> L.	Plantae	Tracheophyta	Magnoliopsida	Fabales	Fabaceae	terrestrial
128.	<i>Rosa rugosa</i> Thunb.	Plantae	Tracheophyta	Magnoliopsida	Rosales	Rosaceae	terrestrial
129.	<i>Rudbeckia laciniata</i> L.	Plantae	Tracheophyta	Magnoliopsida	Asterales	Asteraceae	terrestrial
130.	<i>Salvelinus fontinalis</i> (Mitchill, 1814)	Animalia	Chordata		Salmoniformes	Salmonidae	freshwater
131.	<i>Sargassum muticum</i> (Yendo) Fensholt	Chromista	Ochrophyta	Phaeophyceae	Fucales	Sargassaceae	marine
132.	<i>Schizoporella japonica</i> Ortmann, 1890	Animalia	Bryozoa	Gymnolaemata	Cheilostomatida	Schizoporellidae	marine
133.	<i>Senecio inaequidens</i> DC.	Plantae	Tracheophyta	Magnoliopsida	Asterales	Asteraceae	terrestrial
134.	<i>Sicyos angulatus</i> L.	Plantae	Tracheophyta	Magnoliopsida	Cucurbitales	Cucurbitaceae	terrestrial
135.	<i>Sigesbeckia orientalis</i> L.	Plantae	Tracheophyta	Magnoliopsida	Asterales	Asteraceae	terrestrial
136.	<i>Sinanodonta woodiana</i> (I.Lea, 1834)	Animalia	Mollusca	Bivalvia	Unionida	Unionidae	freshwater
137.	<i>Solanum elaeagnifolium</i> Cav.	Plantae	Tracheophyta	Magnoliopsida	Solanales	Solanaceae	terrestrial
138.	<i>Solidago canadensis</i> L.	Plantae	Tracheophyta	Magnoliopsida	Asterales	Asteraceae	terrestrial
139.	<i>Solidago gigantea</i> Aiton	Plantae	Tracheophyta	Magnoliopsida	Asterales	Asteraceae	terrestrial
140.	<i>Sorghum halepense</i> (L.) Pers.	Plantae	Tracheophyta	Liliopsida	Poales	Poaceae	terrestrial
141.	<i>Sporobolus junceus</i> (P.Beauv.) Kunth	Plantae	Tracheophyta	Liliopsida	Poales	Poaceae	terrestrial
142.	<i>Sporobolus vaginiflorus</i> (Torr. ex A.Gray) Alph.Wood	Plantae	Tracheophyta	Liliopsida	Poales	Poaceae	terrestrial
143.	<i>Symphoricarpos albus</i> (L.) K.Koch	Plantae	Tracheophyta	Magnoliopsida	Dipsacales	Caprifoliaceae	terrestrial
144.	<i>Symphyotrichum lanceolatum</i> (Willd.) G.L.Nesom	Plantae	Tracheophyta	Magnoliopsida	Asterales	Asteraceae	terrestrial
145.	<i>Symphyotrichum novi-belgii</i> (L.) G.L.Nesom	Plantae	Tracheophyta	Magnoliopsida	Asterales	Asteraceae	terrestrial
146.	<i>Symphyotrichum squamatum</i> (Spreng.) G.L.Nesom	Plantae	Tracheophyta	Magnoliopsida	Asterales	Asteraceae	terrestrial
147.	<i>Tricellaria inopinata</i> d'Hondt & Occhipinti Ambrogi, 1985	Animalia	Bryozoa	Gymnolaemata	Cheilostomatida	Candidae	marine
148.	<i>Ulmus pumila</i> L.	Plantae	Tracheophyta	Magnoliopsida	Rosales	Ulmaceae	terrestrial
149.	<i>Undaria pinnatifida</i> (Harv.) Suringar	Chromista	Ochrophyta	Phaeophyceae	Laminariales	Alariaceae	marine
150.	<i>Veronica persica</i> Poir.	Plantae	Tracheophyta	Magnoliopsida	Lamiales	Plantaginaceae	terrestrial
151.	<i>Xanthium orientale</i> L.	Plantae	Tracheophyta	Magnoliopsida	Asterales	Asteraceae	terrestrial
152.	<i>Xanthium spinosum</i> L.	Plantae	Tracheophyta	Magnoliopsida	Asterales	Asteraceae	terrestrial

