

CONVENTION ON INTERNATIONAL TRADE IN ENDANGERED SPECIES
OF WILD FAUNA AND FLORA



Eleventh meeting of the Plants Committee
Langkawi (Malaysia), 3-7 September 2001

Review of the Appendices

REVIEW OF ORCHIDACEAE SPP.

1. This document has been prepared by the Secretariat.
2. At its 10th meeting, the Plants Committee discussed document Doc. PC.10.12.1 in which the Secretariat suggested some ideas on how to proceed with the review of Orchidaceae spp.
3. In that document, 40 Appendix-II genera were mentioned that were frequently traded. It seems that each genus contains species for which trade needs to be regulated, whereas the other species in the genera should be maintained in Appendix II for look-alike reasons. These genera are:

Aerangis, Aerides, Angraecum, Agrostophyllum, Angraecum, Appendicula, Ascocentrum, Bletilla, Brassavola, Bulbophyllum, Calanthe, Catasetum, Cattleya, Cleisostoma, Coelogyne, Comparettia, Cymbidium, Cypripedium, Dendrochilum, Dendrobium, Disa, Dracula, Encyclia, Epidendrum, Eria, Laelia, Lycaste, Masdevallia, Miltonia, Miltoniopsis, Oncidium, Paphiopedilum, Phalaenopsis, Phragmipedium, Pleione, Renanthera, Rhynchostylis, Rossioglossum, Sophronitis, Vanda and Vandopsis.
4. The Appendix-I genera had already been reviewed by the Plants Committee at an earlier stage, and it was concluded that maintaining them in Appendix I was justified.
5. The Annex to that same document contained a list of 225 genera that had never been recorded in trade. In the context of the review these could be deleted from Appendix II.
6. The main problem was how to deal with the more than 500 remaining genera. At the 10th meeting, it was agreed that a working group should consider these genera on the basis of annual report data provided by UNEP-WCMC. These trade data related to the period 1995-1999. A copy of all these printouts (18 cm thick) will be available for consultation at the meeting, and has also been sent to each member of the working group.
7. Trade data were provided for all genera mentioned in paragraph 3. above. These will not be discussed here, although the members of the working group might note trade details that would warrant discussion under agenda item 11.2.3.

8. Other sets of data were provided on:

- a) species only traded for scientific purposes;
- b) species traded in quantities of less than 50 wild specimens; species traded in quantities of 50-150 wild specimens; species traded in quantities of 151-300 wild specimens; species traded in quantities of 301-1,000 wild specimens; species traded in quantities of more than 1,000 wild specimens;
- c) species traded in quantities of less than 50 artificially propagated specimens or with no source code; species traded in quantities of 50-150 artificially propagated specimens or with no source code; species traded in quantities of 151-300 artificially propagated specimens or with no source code; species traded in quantities of 301-1,000 artificially propagated specimens or with no source code; species traded in quantities of more than 1,000 artificially propagated specimens or with no source code;
- d) trade in wild specimens only; species with quantities of specimens;
- e) trade in artificially propagated specimens and specimens without source code; species with quantities of specimens.

These will also be available for consultation at the meeting.

9. Comparing the information referred to in paragraph 8.a) (Annex 1) with that referred to in 8.b) (Annex 2) would provide a list of 36 genera¹ of which all species are not commercially traded as wild specimens (or very few specimens only), and which could, potentially, be deleted from the Appendices:²

Angraecopsis, Apostasia, Basiphyllea, Baskervillea, Benthamia, Briegeria, Calypstrochilum, Corymboris*, Cranichis, Cyclopogon*, Disperis, Domingoa*, Dresslerela*, Eltoplectric, Epidanthus, Gastorchis, Gudrunia, Helliella, Lepanthopsis*, Macroclinium, Miltoniodes*, Pachystele, Palmorchis, Perreiriella, Platanthera*, Platylepis, Platythelys, Quiskea, Reichenbachanthus*, Satirium*, Sigmatostalyx*, Sophronia, Systeloglossum*, Telipogon*, Thicoglossum and Wullschlaegelia.*

10. A further analysis of the trade data referred to in paragraph 8.d) would be needed to determine whether the following 14 genera can be added to the list in paragraph 9. These are genera of which some species are only traded for scientific purposes, whereas other species are traded in small (< 50) quantities of wild specimens:²

Brachycorythis, Cryptarrhena*, Cryptocentrum*, Dilomilis, Elleanthus*, Goodyera*, Hexadesmia*, Jaquiniella*, Lockhartia*, Malaxis*, Ponthieva*, Psychillis*, Tetramicra* and Xylobium*.*

11. Genera of which all species were traded in quantities of less than 50 wild specimens over the period 1995-1999 are also potential candidates for delisting. The analysis of Annex 2 provided the following 115 genera:²

Adenoncos, Agrostophyllum*, Amparoa*, Ania*, Armodorium*, Ascochilus, Aspasia*, Barbosella*, Barlia, Basiphyllea, Beadlea, Bletia*, Brachypeza, Calopogon*, Cannaeorchis, Cattleyopsis, Ceratostylis*, Chrysoglossum*, Cleistes, Clematopistephium, Cochleanthus*, Coelia, Crossoglossa, Cyrtorchis, Cyrtosia, Diaphanathe*, Dimorphorchis*, Dinema*, Diplocaulobium*, Dipodium*, Disperis, Eparmatostigma, Epistephium, Eriaxis*, Eriopsis*, Erythrodes*, Euanthe*, Eurystylus, Fregea, Genyorchis*, Govenia, Graphorkis*, Hapalorchis*, Harrisella*, Hispaniella*,*

¹ Because of look-alike problems, individual species have not been considered.

² For clarification of * see paragraph 13.

*Homalopetalum**, *Huntleya**, *Hymenorchis**, *Kefersteinia**, *Kegeliella**, *Koellensteinia**, *Lacaena*, *Laeliopsis**, *Lemboglossum**, *Lemurella*, *Leochilus**, *Leptotes**, *Macropodanthus*, *Malleola**, *Mediocalcar**, *Megastylis*, *Mendoncella**, *Mesospinidium**, *Microterangus**, *Miltonioides**, *Mischobulbum**, *Monomeria**, *Nageliella**, *Nanodes**, *Neofinetia**, *Nephelaphyllum**, *Nervilia**, *Neuwiedia**, *Nidema*, *Oerstedella**, *Ophrys**, *Orchis**, *Osmoglossum**, *Otochilus**, *Pachyphyllum*, *Pachyplextron*, *Panisea**, *Pelexia**, *Plocoglottis**, *Podochilus**, *Prescottia*, *Pterostylis**, *Rangaeris**, *Restrepia**, *Saccolabiopsis*, *Sarcochilus**, *Sarcoglottis**, *Sarcoglyphus*, *Selochilus**, *Schlimmia*, *Serapias**, *Sievekingia**, *Stenorrhunchos**, *Stereochilus**, *Steveniella*, *Taeniophyllum**, *Tainia**, *Telipogon**, *Tetragamestus**, *Tetramicra**, *Thecostele*, *Thelasis**, *Ticoglossum**, *Trichoceros**, *Trichotosia**, *Trizeuxis*, *Warmingia**, *Warrea**, *Xylobium**, and *Zootrophion**.

12. The total of genera mentioned in paragraphs 9., 10. and 11. above, and those referred to in the Annex to document Doc. PC10.12.1 is 390 (out of a total of approximately 890 genera in the family). All these can be potentially deleted from the Appendices. However, it should be verified first whether they are look-alikes of genera that are maintained in the Appendices, in which case the genera concerned should not be deleted.
13. Specimens of species of the genera that are listed in the paragraphs 9. - 11. marked with * were also traded as being artificially propagated (source code 'A') or without source code. The quantities vary from a dozen specimens per species to several thousands. It should be determined to which extent these specimens are of wild origin or traded as 'artificially propagated' to circumvent export restrictions for wild specimens.
14. The Plants Committee should then decide whether there is a need to evaluate the conservation status of the species in the remaining genera, or whether it believes that because of the limited amounts of trade there is no real threat to their survival in the wild.
15. Increasing the acceptable trade level to 150 or 300 wild specimens over the period 1995-1999 would certainly increase the list of genera that could be potentially deleted from the Appendices. This analysis has not yet been made.
16. There is, however, another point that needs to be considered. Delisting several hundred genera of orchids from the Appendices may be the logical outcome of this review process, and would be an important step in the process of cleaning-up the Appendices. It is, however, very questionable whether this cleaning-up would make the implementation of the Convention much easier.
17. If the continuation of the review further increased the number of genera that may be delisted, there would still remain a few hundred genera in the Appendices, each recorded separately. With about 50 names per page, the Appendices would probably contain five pages of only names of orchid genera, plus at least one page in the interpretation only dealing with synonyms of these orchid genera.
18. This would make the Appendices very complex, and it is doubtful whether enforcement officers will be able to understand which orchids are subject to CITES controls, and which are not. For this reason, the Secretariat would prefer that the current listing, Orchidaceae spp., be maintained.
19. The Plants Committee should therefore carefully consider whether it wants to progress this review, and find the answer to the question: who would be able to carry this out?

LIST OF ORCHIDS SPECIES ONLY TRADED FOR SCIENTIFIC PURPOSES

<i>Acrorchis roseola</i>	<i>Disa uncinata</i>	<i>Lepanthes ciliata</i>
<i>Aerangis alata</i>	<i>Disa vasselotii</i>	<i>Lepanthes comet-halleyi</i>
<i>Aerangis xerophyta</i>	<i>Disperis oppositifolia</i>	<i>Lepanthes costaricensis</i>
<i>Aeranthus</i> spp.	<i>Domingoa haematochila</i>	<i>Lepanthes diaziae</i>
<i>Aerides miniatum</i>	<i>Domingoa nodosa</i>	<i>Lepanthes domingensis</i>
<i>Amparao</i> spp.	<i>Dresslerella hispida</i>	<i>Lepanthes dressleri</i>
<i>Angraecopsis parviflora</i>	<i>Elleanthus cordidactylus</i>	<i>Lepanthes fulva</i>
<i>Angraecum cucullatum</i>	<i>Elleanthus graminifolius</i>	<i>Lepanthes helleri</i>
<i>Angraecum panicifolium</i>	<i>Elleanthus hymenophorus</i>	<i>Lepanthes melanocaulon</i>
<i>Angraecum parvulum</i>	<i>Elleanthus muscicola</i>	<i>Lepanthes minima-mundana</i>
<i>Angraecum pectinatum</i>	<i>Elleanthus poiformis</i>	<i>Lepanthes obliquiloba</i>
<i>Apostasia</i> spp.	<i>Elleanthus tonduzii</i>	<i>Lepanthes palpebralis</i>
<i>Apostasia nuda</i>	<i>Elleanthus tricallosus</i>	<i>Lepanthes silvae</i>
<i>Apostasia wallichii</i>	<i>Eltroplectris calcarata</i>	<i>Lepanthes trichodactyla</i>
<i>Appendicula pendula</i>	<i>Encyclia chapadensis</i>	<i>Lepanthopsis microlepanthes</i>
<i>Basiphyllaea</i> spp.	<i>Encyclia gravida</i>	<i>Liparis gracillipes</i>
<i>Baskervillea</i> spp.	<i>Encyclia isochila</i>	<i>Lockhartia hercodonta</i>
<i>Benthamia</i> spp.	<i>Encyclia pseudopygmaea</i>	<i>Lockhartia micrantha</i>
<i>Brachycorythis pleistophylla</i>	<i>Epidanthus muscicola</i>	<i>Macroclinium</i> spp.
<i>Briegeria teretifolia</i>	<i>Epidendrum annabellae</i>	<i>Malaxis unifolia</i>
<i>Bulbophyllum caespitosum</i>	<i>Epidendrum anoglossoides</i>	<i>Maxillaria acutifolia</i>
<i>Bulbophyllum ceriodorum</i>	<i>Epidendrum firmum</i>	<i>Maxillaria inaudita</i>
<i>Bulbophyllum fasciatum</i>	<i>Epidendrum fuscatum</i>	<i>Maxillaria parviflora</i>
<i>Bulbophyllum incurvum</i>	<i>Epidendrum hiorami</i>	<i>Miltonioides stenoglossa</i>
<i>Bulbophyllum mauritianum</i>	<i>Epidendrum lacustre</i>	<i>Mormodes colossus</i>
<i>Bulbophyllum nutans</i>	<i>Epidendrum mirabile</i>	<i>Myrmecophila thomsoniana</i>
<i>Bulbophyllum pendulum</i>	<i>Epidendrum paranaense</i>	<i>Neocogniauxia</i> spp.
<i>Calanthe calanthoides</i>	<i>Epidendrum paucifolium</i>	<i>Octomeria tridentata</i>
<i>Calyptrochilum</i> spp.	<i>Epidendrum pyriforme</i>	<i>Odontoglossum confusum</i>
<i>Catasetum longifolium</i>	<i>Epidendrum rivulare</i>	<i>Odontoglossum oerstedii</i>
<i>Corymborkis corymbis</i>	<i>Epidendrum sancti-ramoni</i>	<i>Oerstedella centropetala</i>
<i>Cranichis</i> spp.	<i>Epidendrum serrulatum</i>	<i>Oerstedella pentadactyla</i>
<i>Cryptarrhena guatemalensis</i>	<i>Epidendrum umbellatum</i>	<i>Oncidium ansiferum</i>
<i>Cryptocentrum latifolium</i>	<i>Eulophia palmicola</i>	<i>Oncidium biflorum</i>
<i>Cyclopogon cranichoides</i>	<i>Gastorchis</i> spp.	<i>Oncidium bracteatum</i>
<i>Dendrobium wallissii</i>	<i>Goodyera rubicunda</i>	<i>Oncidium bryolophotum</i>
<i>Dendrophylax helorrhiza</i>	<i>Gudrunia tuerckheimii</i>	<i>Oncidium compressicaule</i>
<i>Dichaea latifolia</i>	<i>Habenaria quinqueseta</i>	<i>Oncidium guianense</i>
<i>Dilomilis montana</i>	<i>Helleriella</i> spp.	<i>Oncidium lemonianum</i>
<i>Dilomilis oligophylla</i>	<i>Hexadesmia cruriger</i>	<i>Oncidium luteum</i>
<i>Disa caulescens</i>	<i>Hexadesmia micrantha</i>	<i>Oncidium prionocheilum</i>
<i>Disa cornuta</i>	<i>Isochilus latibracteatus</i>	<i>Oncidium quadrilobum</i>
<i>Disa glandulosa</i>	<i>Jacquinella teres</i>	<i>Oncidium schroederianum</i>
<i>Disa sagittalis</i>	<i>Jumellea recta</i>	<i>Oncidium stenotis</i>
<i>Orchis aristata</i>	<i>Sobralia macra</i>	
<i>Pachystele corallorrhiza</i>	<i>Sophronia cernua</i>	
<i>Pachystele densa</i>	<i>Spiranthes torta</i>	
<i>Pachystele jimenezii</i>	<i>Stanhopea ruckeri</i>	

<i>Palmorchis</i> spp.	<i>Stelis gracilis</i>
<i>Pecteilis radiata</i>	<i>Stelis ophioglossoides</i>
<i>Perrieriella madagascariensis</i>	<i>Systemoglossum</i> spp.
<i>Phaius tetragonus</i>	<i>Systemoglossum costaricense</i>
<i>Platanthera mandarinorum</i>	<i>Telipogon biolleyi</i>
<i>Platylepis</i> spp.	<i>Tetramicra bulbosa</i>
<i>Platythelys</i> spp.	<i>Tetramicra ekmanii</i>
<i>Pleurothallis domingensis</i>	<i>Tetramicra eulophiae</i>
<i>Pleurothallis lanceola</i>	<i>Ticoglossum</i> spp.
<i>Pleurothallis llamachoi</i>	<i>Ticoglossum oerstedii</i>
<i>Pleurothallis longilabris</i>	<i>Trichosalpinx foliata</i>
<i>Pleurothallis nummularia</i>	<i>Trigonidium lankesteri</i>
<i>Pleurothallis richteri</i>	<i>Vanilla bicolor</i>
<i>Pleurothallis wilsonii</i>	<i>Vanilla poitaei</i>
<i>Polystachya cubensis</i>	<i>Vanilla wrightii</i>
<i>Polystachya fusiformis</i>	<i>Wulfschlaegelia aphylla</i>
<i>Polystachya tayloriana</i>	<i>Xylobium palmifolium</i>
<i>Polystachya tsinjoarivensis</i>	
<i>Ponthieva brenesii</i>	
<i>Psychilis bifida</i>	
<i>Psychilis olivacea</i>	
<i>Psychilis truncata</i>	
<i>Psygmorchis pumilio</i>	
<i>Quisqueya</i> spp.	
<i>Quisqueya ekmanii</i>	
<i>Quisqueya fuertesii</i>	
<i>Reichenbachanthus</i> spp.	
<i>Rhynchostele</i> spp.	
<i>Satyrium trinerve</i>	
<i>Scaphyglottis acostaei</i>	
<i>Scaphyglottis amparoana</i>	
<i>Scaphyglottis corallorrhiza</i>	
<i>Scaphyglottis crurigera</i>	
<i>Scaphyglottis graminifolia</i>	
<i>Scaphyglottis limonensis</i>	
<i>Scaphyglottis mesocopis</i>	
<i>Scaphyglottis micrantha</i>	
<i>Scaphyglottis modesta</i>	
<i>Scaphyglottis sigmoidea</i>	
<i>Scaphyglottis spathulata</i>	
<i>Schomburgkia marginata</i>	
<i>Sigmatostalix hymenantha</i>	
<i>Sigmatostalix unguiculata</i>	
<i>Sobralia amabilis</i>	

TRADE IN LIVE WILD ORCHIDS GROUPED BY VOLUME, FOR TAXA NOT SPECIFIED IN REQUEST

< 50 (not 0)

Acampe ochracea
Acampe spp.
Acanthephippium spp.
Acineta spp.
Acineta superba
Acriopsis javanica
Acriopsis spp.
Acrorchis roseola
Ada spp.
Adenoncos major
Adenoncos parviflora
Adenoncos spp.
Adenoncos vesiculosa
Aeranthus adenopoda
Aeranthus aemula
Aeranthus antennophora
Aeranthus brevivaginanis
Aeranthus ecalcarata
Aeranthus filipes
Aeranthus laxiflora
Aeranthus parvula
Aeranthus setiformis
Aeranthus setipes
Aeranthus tenella
Aeranthus tricalcarata
Agrostophyllum khasianum
Agrostophyllum longifolium
Amparoa spp.
Angraecopsis parviflora
Angraecopsis pobeguini
Anguloa uniflora
Ania hookeriana
Ania latifolia
Ania penangiana
Anoectochilus burmannicus

51 - 150

Acriopsis indica
Aeranthus arachnites
Aeranthus denticulata
Aeranthus peyrotii
Arachnis maingayi
Beclardia macrostachya
Broughtonia negrilensis
Campylocentrum micranthum
Campylocentrum spp.
Capanemia micromera
Capanemia spp.
Caularthron spp.
Chamaeangis spp.
Chiloschista spp.
Chysis aurea
Cleisomeria lanata
Coryanthes macrantha
Cycnoches warszewiczii
Cymbidiella falcigera
Cymbidiella spp.
Cyrtopodium virescens
Dactylorhiza baltica
Dactylorhiza incarnata
Dendrophyllax funalis
Dichaea spp.
Dimerandra spp.
Diploprora championi
Dipodium pictum
Dryadella spp.
Eulophia flava
Eulophia keithii
Eulophia spectabilis
Flickingeria compressa
Flickingeria fimbriata
Flickingeria pallens

151 - 300

Aeranthus longipes
Aeranthus nidus
Anoectochilus roxburghii
Anoectochilus spp.
Arpophyllum giganteum
Broughtonia spp.
Caularthron bilamellatum
Chiloschista sweelimii
Clowesia russelliana
Coryanthes spp.
Cycnoches ventricosum var. *chlorochilon*
Cymbidiella flabellata
Cynorkis gibbosa
Cynorkis spp.
Cynorkis uncinata
Eulophia graminea
Eulophiella elisabethae
Eulophiella roempleriana
Eurychone rothschildiana
Galeandra spp.
Gastrochilus acaulis
Gastrochilus spp.
Geodorum siamense
Gongora armeniaca
Grammatophyllum speciosum
Grosourdia appendiculata
Ionopsis satyrioides
Ionopsis utricularioides
Isochilus linearis
Isochilus spp.
Jumellea major
Jumellea teretifolia
Lepanthes spp.
Leptotes unicolor
Microcoelia macrantha

301 - 1000

Acampe rigida
Aeranthus caudata
Aeranthus grandiflora
Aeranthus ramosa
Aeranthus spp.
Bothriochilus bellus
Brassia caudata
Brassia maculata
Brassia verrucosa
Bromheadia aporoides
Broughtonia sanguinea
Chysis spp.
Coryanthes speciosa
Cryptopus paniculatus
Cycnoches spp.
Cymbidiella pardalina
Dimerandra emarginata
Doritis spp.
Epigeneium amplum
Epigeneium spp.
Eulophia andamanensis
Eulophia macrobullbon
Eulophia spp.
Flickingeria albopurpurea
Gastrochilus bellinus
Gastrochilus dasypogon
Gongora quinquenervis
Gongora spp.
Gongora unicolor
Grammangis ellisii
Habenaria carnea
Holcoglossum subulifolium
Jumellea ibityana
Jumellea pandurata
Jumellea spp.

> 1000

Acampe papillosa
Aeranthus henrici
Arundina graminifolia
Chiloschista lunifera
Chiloschista usneoides
Christensonia vietnamica
Chysis bractescens
Cyrtopodium punctatum
Galeandra batemanii
Galeandra baueri
Habenaria acuífera
Habenaria rhodocheila
Habenaria spp.
Holcoglossum kimballianum
Hygrochilus parishii
Kingidium deliciosum
Liparis spp.
Ludisia discolor
Maxillaria tenuifolia
Myrmecophila tibicinis
Neobathiea filicornu
Notylia barkeri
Orchidaceae hybrid
Orchidaceae spp.
Papilionanthe teres
Pecteilis sagarikii
Phaius humblotii
Psygmorchis pusilla
Rhynchoelaia glauca
Schoenorchis fragrans
Schoenorchis pachyacris
Seidenfadenia mitrata
Smitinandia micrantha
Spathoglottis affinis
Spathoglottis plicata

< 50 (not 0)

Anoectochilus siamensis
Anoectochilus sikkimensis
Ansellia spp.
Arachnis flos-aeris
Arachnis hookeriana
Arachnis spp.
Armorum labrosum
Armorum siamense
Arundina bambusifolia
Arundina spp.
Ascochilus spp.
Aspasia spp.
Aspasia variegata
Barbosella microphylla
Barbosella spp.
Barkeria lindleyana
Barkeria spp.
Barlia robertiana
Basiphyllaea spp.
Beadlea spp.
Beclardia spp.
Benthamia graminea
Benthamia spp.
Bletia catenulata
Bletia florida
Bletia patula
Bletia spp.
Bothriochilus macrostachyus
Brachycorythis acuta
Brachycorythis galeandra
Brachycorythis spp.
Brachypeza spp.
Brassia allenii
Brassia lanceana
Brassia longissima
Brassia peruviana
Brassia spp.
Briegeria cobanensis

51 - 150

Geodorum densiflorum
Grammangis fallax
Grammatophyllum spp.
Grammatophyllum stapeliiflorum
Hexisea spp.
Isochilus carnosiflorus
Jumellea angustifolia
Jumellea henryi
Jumellea maxillarioides
Jumellea punctata
Jumellea rigida
Liparis viridiflora
Listera spp.
Luisia psyche
Luisia spp.
Luisia zollingeri
Maxillaria conferta
Maxillaria crassifolia
Maxillaria friedrichsthalii
Maxillaria rufescens
Maxillaria uncata
Maxillaria variabilis
Microsaccus griffithii
Neobathiea spp.
Neocogniauxia monophylla
Nidema boothii
Notylia bicolor
Oberonia disticha
Oberonia iridifolia
Oberonia nitida
Octomeria spp.
Oeceoclades decaryana
Ornithocephalus spp.
Palumbina candida
Papilionanthe masperoae
Pelatantheria ctenoglossa
Phaius flavus
Phaius pulchellus

151 - 300

Micropera obtusa
Mormodes spp.
Mormolyca ringens
Myrmecophila brysiانا
Neolehmannia difformis
Oberonia spp.
Oeceoclades maculata
Ornithocephalus bicornis
Ornithocephalus gladius
Ornithochilus difformis
Pelatantheria bicuspidata
Podangis dactyloceras
Pomatocalpa spicata
Renanthera annamensis
Scaphyglottis spp.
Schomburgkia thomsoniana
Sobralia decora
Sobralia spp.
Stilifolium jonesianum
Thunia marshalliana
Trias picta
Trias vitrina
Trudelia pumila
Vanilla planifolia
Vanilla spp.

301 - 1000

Kingidium decumbens
Macradenia brassavolae
Maxillaria densa
Maxillaria spp.
Micropera rostrata
Neobathiea perrieri
Oeceoclades spp.
Oeonia oncidiflora
Oeonia volucris
Oeoniella polystachys
Otochilus fusca
Papilionanthe spp.
Paraphalaenopsis spp.
Pectellis susannae
Phaius francoisii
Phaius luteus
Phaius spp.
Phaius tankervilleae
Phaius tuberculatus
Pholidota articulata
Pholidota imbricata
Pholidota pallida
Pholidota spp.
Pleurothallis grobyi
Pleurothallis spp.
Polystachya spp.
Pteroceras spp.
Pteroceras teres
Robiquetia succisa
Schomburgkia spp.
Sobennikoffia humbertiana
Sobennikoffia robusta
Solenangis spp.
Stanhopea oculata
Stanhopea spp.
Staurochilus dawsonianus
Stilifolium cebolleta
Trias intermedia

> 1000

Spathoglottis pubescens
Staurochilus fasciatus
Stilifolium ascendens
Thunia bracteata
Uncifera dalatensis
Vanilla aphylla

< 50 (not 0)

Briegeria teretifolia
Calopogon tuberosus
Campylocentrum fasciola
Campylocentrum microphyllum
Campylocentrum pachyrrhizum
Cannaeorchis cymatoleguum
Cannaeorchis fractiflexa
Cannaeorchis polycladium
Cannaeorchis steatoglossa
Cannaeorchis verrucifera
Capanemia superflua
Cattleyopsis spp.
Caularthron bicornutum
Ceratostylis spp.
Chamaeangis gracilis
Chiloschista exuperei
Chiloschista parishii
Chiloschista ramifera
Chiloschista viridiflava
Christensonia spp.
Chrysoglossum spp.
Chysis tricostata
Cleisomeria pilosula
Cleisomeria spp.
Cleistis spp.
Clematepistephium smilacifolium
Cochleanthes amazonica
Cochleanthes discolor
Cochleanthes flabelliformis
Cochleanthes picta
Cochleanthes spp.
Coelia triptera
Corymborkis corymbis
Cranichis muscosa
Cranichis spp.
Cranichis wagneri
Crossoglossa caulescens
Cryptarrhena lunata

51 - 150

Plectrelminthus caudatus
Pleurothallis brighamii
Pleurothallis ochracea
Pleurothallis tikalensis
Pleurothallis tribuloides
Polystachya concreta
Polystachya foliosa
Ponera striata
Porpax lanii
Porpax meirax
Porpax meirax var. *elwesii*
Pteroceras semiteretifolium
Robiquetia pachyphylla
Robiquetia spatulata
Saccolabium spp.
Sarcanthus spp.
Scaphyglottis behrii
Scaphyglottis prolifera
Schoenorchis gemmata
Schoenorchis spp.
Schomburgkia lyonsii
Smitinandia helferi
Sobralia fragrans
Sobralia macrantha
Spathoglottis spp.
Spiranthes spp.
Stanhopea ecomuta
Stanhopea wardii
Stelis ciliaris
Stelis spp.
Stilifolium stipitatum
Sunipia annamensis
Thrixspermum acuminatissimum
Thrixspermum centipeda
Thrixspermum spp.
Thunia bensoniae
Trichoglottis retusa
Trichoglottis spp.

151 - 300**301 - 1000**

Trias nana
Trias nasuta
Trichoglottis tomentosa
Trigonidium egertonianum
Vanilla pilifera

> 1000

< 50 (not 0)

Cryptarrhena spp.
Cryptocentrum latifolium
Cryptocentrum spp.
Cryptopus elatus
Cryptopus spp.
Cryptopylos clausus
Cyclopogon elatus
Cycnoches cooperi
Cycnoches egertonianum
Cycnoches pentadactylon
Cycnoches peruvianum
Cycnoches ventricosum
Cynorkis elegans
Cynorkis fastigiata
Cynorkis flexuosa
Cynorkis globulosa
Cynorkis gracilis
Cynorkis grandiflora
Cynorkis hirtula
Cynorkis laeta
Cynorkis nutans
Cynorkis spatulata
Cynorkis squamosa
Cynorkis uniflora
Cyrtopodium hatschbachii
Cyrtopodium palmifrons
Cyrtorchis arcuata
Cyrtorchis spp.
Cyrtosia spp.
Dactylorhiza fuchsii
Dactylorhiza maculata
Dactylorhiza majalis ssp. *baltica*
Dactylorhiza romana ssp. *markusii*
Dactylorhiza spp.
Dendrophyllax barrettiae
Dendrophyllax fawcettii
Dendrophyllax helorrhiza

51 - 150

Trichopilia spp.
Trichosalpinx ciliaris
Zygostates alleniana

151 - 300**301 - 1000****> 1000**

< 50 (not 0)

Dendrophyllax spp.
Diaphananthe pellucida
Diaphananthe quintasii
Dichaea brachypoda
Dichaea glauca
Dichaea hystricina
Dichaea morrisii
Dichaea muricatoides
Dichaea panamensis
Dichaea pendula
Dichaea picta
Dichaea squarrosa
Dichaea trichocarpa
Dichaea trulla
Dichaea verrucosa
Dilomilis montana
Dimorphorchis lowii
Dinema spp.
Diplocaulobium ou-hinnae
Dipodium paludosum
Dipodium spp.
Disperis spp.
Domingoa hymenodes
Domingoa nodosa
Dryadella linearifolia
Dryadella obrieniana
Earina deplanchei
Earina valida
Elleanthus caricoides
Elleanthus cynarocephalus
Elleanthus graminifolius
Elleanthus linifolius
Elleanthus longibracteatus
Elleanthus muscicola
Elleanthus poiformis
Elleanthus spp.
Elleanthus tonduzii
Epimatostigma dives

< 50 (not 0)

Epimatostigma spp.
Epidanthus muscicola
Epidanthus paranthicus
Epigeneium chapaense
Epistephium spp.
Eriaxis rigida
Eriopsis biloba
Erythrodes hirtella
Erythrodes killipii
Erythrodes nobilis
Erythrodes plantaginea
Erythrodes spp.
Euanthe sanderiana
Eulophia beravensis
Eulophia dufosseii
Eulophia galbana
Eulophia hologlossa
Eulophia horsfallii
Eulophia humbertii
Eulophia livingstoneana
Eulophia macrostachya
Eulophia milnei
Eulophia nervosa
Eulophia nysae
Eulophia palmicola
Eulophia ramosa
Eulophia scripta
Eulophia siamensis
Eulophia stricta
Eulophiella spp.
Eurystyles ananassocomos
Flickingeria pardalina
Flickingeria pumila
Flickingeria spp.
Fregea amabilis
Gastrochilus biggibus
Genyorchis pumila
Geodorum citrinum

< 50 (not 0)

Geodorum purpureum
Geodorum spp.
Gomesa planifolia
Gonatostylis vieillardii
Gongora cassidea
Gongora sanderiana
Gongora scaphephorus
Goodyera spp.
Govenia spp.
Grammangis spectabilis
Grammangis spp.
Graphorkis scripta
Graphorkis spp.
Grosourdyia muscosa
Grosourdyia spp.
Gudrunia tuerckheimii
Habenaria dentata
Habenaria lindleyana
Habenaria malintana
Habenaria medioflexa
Habenaria monorrhiza
Habenaria repens
Habenaria roseata
Habenaria rostrata
Hapalorchis lineatus
Harrisella porrecta
Hexadesmia crurigera
Hexadesmia micrantha
Hexadesmia spp.
Hexisea bidentata
Hispaniella henekenii
Holcoglossum amesianum
Holcoglossum spp.
Homalopetalum pumilio
Huntleya fasciata
Huntleya meleagris
Hygrochilus spp.
Hymenorchis spp.

< 50 (not 0)

Ionopsis spp.
Isabelia spp.
Isochilus latibracteatus
Jacquiiniella globosa
Jacquiiniella spp.
Jumellea amplifolia
Jumellea arborescens
Jumellea bathiei
Jumellea brachycentra
Jumellea brevifolia
Jumellea confusa
Jumellea cyrtoceras
Jumellea densifoliata
Jumellea flavescens
Jumellea fragrans
Jumellea gracilipes
Jumellea hyalina
Jumellea neglecta
Jumellea pachyra
Jumellea recta
Jumellea sagittata
Jumellea similis
Kefersteinia costaricensis
Kefersteinia lactea
Kefersteinia spp.
Kegeliella kupperi
Kegeliella spp.
Kingidium chibae
Kingidium minus
Kingidium spp.
Koellensteinia tricolor
Lacaena spectabilis
Laeliopsis domingensis
Lemboglossum bictioniense
Lemurella culcifera
Lemurorchis madagascariensis
Leochilus labiatus
Leochilus spp.

< 50 (not 0)

Lepanthes acuminata
Lepanthes cochlearifolia
Lepanthes comet-halleyi
Lepanthes costaricensis
Lepanthes disticha
Lepanthes divaricata
Lepanthes domingensis
Lepanthes dorsalis
Lepanthes elata
Lepanthes helleri
Lepanthes intermedia
Lepanthes melanocaulon
Lepanthes turialvae
Lepanthes woodiana
Lepanthopsis spp.
Leptotes bicolor
Liparis anthericoides
Liparis bootanensis
Liparis caespitosa
Liparis cardiophylla
Liparis condylobulbon
Liparis elata
Liparis gracilipes
Liparis lacerata
Liparis latifolia
Liparis listeroides
Liparis nervosa
Liparis pallida
Liparis parviflora
Liparis resupinata
Liparis rhodochila
Liparis rivalis
Liparis vestita
Liparis wrayi
Lockhartia amoena
Lockhartia hercodonta
Lockhartia lunifera
Lockhartia micrantha

< 50 (not 0)

Lockhartia oerstedii
Lockhartia pittieri
Lockhartia serra
Lockhartia spp.
Ludisia spp.
Luisia macrotis
Luisia recurva
Luisia teretifolia
Luisia thailandica
Macradenia lutescens
Macradenia spp.
Macropodanthus alatus
Macropodanthus spp.
Malaxis latifolia
Malaxis massonii
Malaxis perakensis
Malaxis spp.
Malleola altocarinata
Malleola dentifera
Malleola spp.
Maxillaria acostaei
Maxillaria acutifolia
Maxillaria adolphii
Maxillaria alba
Maxillaria amparoana
Maxillaria bicallosa
Maxillaria biolleyi
Maxillaria brachybulbon
Maxillaria bracteata
Maxillaria brunnea
Maxillaria camaridii
Maxillaria coccinea
Maxillaria cucullata
Maxillaria dendrobioides
Maxillaria elatior
Maxillaria foliosa
Maxillaria hedwigiae
Maxillaria hematoglossa

< 50 (not 0)

Maxillaria inaudita
Maxillaria meleagris
Maxillaria miniata
Maxillaria nasuta
Maxillaria neglecta
Maxillaria paleata
Maxillaria picta
Maxillaria ponerantha
Maxillaria ringens
Maxillaria rodrigueziana
Maxillaria sanguinea
Maxillaria scorpioidea
Maxillaria splendens
Maxillaria tigrina
Maxillaria umbratilis
Maxillaria valenzuelana
Maxillaria wrightii
Mediocalcar spp.
Megastylis gigas
Megastylis glandulosa
Megastylis spp.
Mendoncella grandiflora
Mesospinidium spp.
Microcoelia aurantiaca
Microcoelia spp.
Micropera pallida
Micropera spp.
Micropera thailandica
Microsaccus spp.
Microterangis hariotiana
Microterangis humblotii
Microterangis oligantha
Miltonioides confusa
Miltonioides pauciflora
Miltonioides stenoglossa
Mischobulbum cordifolium
Mischobulbum spp.
Mischobulbum wrayanum

< 50 (not 0)

Monomeria longipes
Mormodes buccinator
Mormodes frymirei
Mormodes lobata
Mormodes revoluta
Mormodes rolfeana
Mormodes vinacea
Mormolyca spp.
Myoxanthus spp.
Myrmecophila spp.
Myrmecophila wendlandii
Mystacidium spp.
Nageliella angustifolia
Nageliella spp.
Nanodes discolor
Nanodes porpax
Nanodes spp.
Neobenthamia gracilis
Neofinetia falcata
Neolehmannia barbeyana
Neo-Urbania adendrobium
Nephelaphyllum spp.
Nervilia spp.
Neuwiedia annamensis
Neuwiedia spp.
Nidema spp.
Notylia spp.
Oberonia apiculata
Oberonia dalatensis
Oberonia dubia
Oberonia ensiformis
Oberonia falconeri
Oberonia gammiei
Oberonia kanburiensis
Oberonia langbianensis
Oberonia longibracteata
Oberonia pachyphylla
Oberonia pyrulifera

< 50 (not 0)

Oberonia teres
Octomeria deltoglossa
Oeceoclades boinensis
Oeceoclades gracillima
Oeceoclades pandurata
Oeceoclades pulchra
Oeceoclades spathulifera
Oeonia spp.
Oeoniella spp.
Oerstedella endresii
Oerstedella pentadactyla
Oerstedella schweinfurthiana
Oerstedella spp.
Oerstedella wallisii
Ophrys ciliata
Ophrys dyris
Ophrys fusca
Ophrys holoserica
Ophrys lutea
Ophrys sphegodes
Ophrys tenthredinifera
Orchis anatolica
Orchis collina
Orchis coriophora
Orchis longicornu
Orchis mascula
Orchis morio
Orchis morio ssp. *champagneuxii*
Orchis papilionacea
Orchis purpurea
Orchis simia
Orchis spp.
Orchis tridentata
Omithocephalus inflexus
Omithochilus spp.
Osmoglossum pulchellum
Osmoglossum spp.
Otochilus alba

< 50 (not 0)

Otochilus spp.
Pachyphyllum spp.
Pachyplectron neocaledonicum
Pachystele corallorrhiza
Pachystele densa
Pachystele jimenezii
Panisea distelidia
Panisea spp.
Panisea uniflora
Papilionanthe hookeriana
Paraphalaenopsis labukensis
Paraphalaenopsis laycockii
Paraphalaenopsis serpentilingua
Pecteilis henryi
Pecteilis spp.
Pelatantheria spp.
Pelexia roseoalba
Pelexia spp.
Peristeria elata
Perrieriella madagascariensis
Phaius daenikerii
Phaius indigoferus
Phaius mishmensis
Phaius peyrotii
Phaius pulcher
Phaius robertsii
Phaius simulans
Phaius tetragonus
Pholidota annamensis
Pholidota convallariae
Pholidota recurva
Pholidota rubra
Platanthera bifolia
Platylepis spp.
Platystele oxyglossa
Platystele pedicellaris
Platystele spp.
Platystele stenostachya

< 50 (not 0)

Platythelys querceticola
Pleione praecox
Pleurothallis alopex
Pleurothallis amparoana
Pleurothallis angustifolia
Pleurothallis angustisepala
Pleurothallis cardiophyllax
Pleurothallis cardiothallis
Pleurothallis caymanensis
Pleurothallis corniculata
Pleurothallis divexa
Pleurothallis erinacea
Pleurothallis eumecocaulon
Pleurothallis gelida
Pleurothallis glandulosa
Pleurothallis grandis
Pleurothallis hastata
Pleurothallis hirsutula
Pleurothallis immersa
Pleurothallis lewisae
Pleurothallis llamachoi
Pleurothallis longilabris
Pleurothallis matudiana
Pleurothallis minutalis
Pleurothallis nummularia
Pleurothallis oblongifolia
Pleurothallis obovata
Pleurothallis ophioglossoides
Pleurothallis picta
Pleurothallis pruinosa
Pleurothallis quadrifida
Pleurothallis racemiflora
Pleurothallis richteri
Pleurothallis ruscifolia
Pleurothallis sanchoii
Pleurothallis sertularioides
Pleurothallis setosa
Pleurothallis testifolia

< 50 (not 0)

Pleurothallis tubata
Pleurothallis tuerckheimii
Plocoglottis javanica
Plocoglottis spp.
Podochilus cornutus
Podochilus microphyllus
Podochilus spp.
Polyradicion spp.
Polystachya clavata
Polystachya cornigera
Polystachya cultriformis
Polystachya dolichophylla
Polystachya fusiformis
Polystachya heckeliana
Polystachya henrici
Polystachya humbertii
Polystachya masayensis
Polystachya paniculata
Polystachya rosea
Polystachya tsinjoarivensis
Pomatocalpa arachnanthe
Pomatocalpa latifolia
Pomatocalpa naevata
Pomatocalpa ramosa
Pomatocalpa spp.
Ponera spp.
Ponthieva racemosa
Ponthieva spp.
Porpax grandiflora
Prescottia oligantha
Prescottia spp.
Prescottia stachyodes
Psilochilus macrophyllus
Psychilis kraenzlinii
Psychilis krugii
Psychilis olivacea
Psychilis spp.
Psychilis truncata

< 50 (not 0)

Psygmorchis pumilio
Pteroceras pallidum
Pterostylis curta
Pterostylis obtusa
Quisqueya fuertesii
Quisqueya spp.
Rangaeris muscicola
Reichenbachanthus spp.
Restrepia muscifera
Restrepia spp.
Restrepia subserrata
Rhyncholaelia digbyana
Robiquetia spp.
Rodriguezia lanceolata
Rodriguezia secunda
Saccolabiopsis pallida
Sarcochilus falcatus
Sarcochilus spp.
Sarcoglottis sceptrodes
Sarcoglottis spp.
Sarcoglyphis comberi
Sarcoglyphis thailandica
Sarcoglyphis yunnanensis
Satyrrium trinerve
Scaphosepalum spp.
Scaphyglottis acostaei
Scaphyglottis amparoana
Scaphyglottis graminifolia
Scaphyglottis limonensis
Scaphyglottis lindeniana
Scaphyglottis mesocopis
Scaphyglottis minutiflora
Scaphyglottis sigmoidea
Scaphyglottis spathulata
Scaphyglottis violacea
Scelochilus ottonis
Scelochilus tuerckheimii
Schlimmia alpina

< 50 (not 0)

Schoenorchis micrantha
Schoenorchis tortifolia
Schomburgkia gloriosa
Schomburgkia marginata
Schomburgkia superbiens
Schomburgkia undulata
Serapias cordigera
Serapias lingua
Serapias parviflora
Serapias vomeracea
Sievekingia spp.
Sievekingia suavis
Sigmatostalix guatemalensis
Sigmatostalix hymenantha
Sigmatostalix macrobulbon
Sigmatostalix picta
Sigmatostalix spp.
Sigmatostalix unguiculata
Smitinandia spp.
Sobennikoffia spp.
Sobralia macra
Sobralia macrophylla
Sobralia mucronata
Sobralia powellii
Solenangis aphylla
Solenangis cornuta
Spathoglottis aurea
Spathoglottis eburnea
Spiranthes cranichoides
Stanhopea anfracta
Stanhopea candida
Stanhopea graveolens
Staurochilus spp.
Stelis argentata
Stelis gracilis
Stelis purpurea
Stelis repens
Stenorrhynchos aurantiacus

< 50 (not 0)

Stenorrhynchos calcaratus
Stenorrhynchos lanceolatus
Stenorrhynchos speciosus
Stenorrhynchos spp.
Stereochilus spp.
Steveniella caucasica
Systemoglossum costaricense
Systemoglossum spp.
Taeniophyllum biocellatum
Taeniophyllum spp.
Tainia latilingue
Tainia spp.
Telipogon biolleyi
Telipogon spp.
Tetragamestus modestus
Tetramicra bulbosa
Tetramicra canaliculata
Tetramicra ekmanii
Tetramicra spp.
Thecostele alata
Thecostele spp.
Thelasis capitata
Thelasis spp.
Thrixspermum amplexicaule
Thrixspermum arachnites
Thrixspermum calceolus
Thrixspermum rubrocallosum
Thrixspermum scopa
Thrixspermum subulatum
Thrixspermum sutepense
Thunia spp.
Ticoglossum krameri
Ticoglossum oerstedii
Ticoglossum spp.
Trias oblonga
Trias spp.
Trichocentrum spp.
Trichocentrum tigrinum

< 50 (not 0)

Trichoceros antennifer
Trichoglottis bipunctata
Trichoglottis cirrhifera
Trichoglottis lanceolaria
Trichoglottis philippinensis
Trichoglottis scaphigera
Trichoglottis triflora
Trichopilia maculata
Trichopilia marginata
Trichopilia suavis
Trichopilia tortilis
Trichosalpinx blaisdellii
Trichosalpinx cedralensis
Trichosalpinx foliata
Trichotosia dalatensis
Trichotosia microphylla
Trichotosia mucronata
Trichotosia pulvinata
Trichotosia rigida
Trichotosia sakdisrii
Trichotosia spp.
Trichotosia velutina
Tridactyle bicaudata
Trigonidium acuminatum
Trigonidium insigne
Trigonidium lankesteri

< 50 (not 0)

Trigonidium spp.
Trigonocheilum alatum
Trigonocheilum meirax
Trizeuxis spp.
Tropidia spp.
Vanilla barbellata
Vanilla bicolor
Vanilla claviculata
Vanilla decaryana
Vanilla dilloniana
Vanilla madagascariensis
Vanilla mexicana
Vanilla pfaviana
Vanilla poitaei
Vanilla siamensis
Warmingia eugenii
Warrea spp.
Warrea warreana
Xylobium colleyi
Xylobium palmifolium
Xylobium spp.
Zootrophion atropurpureum
Zootrophion spp.
Zygopetalum maxillare
Zygopetalum spp.
Zygostates spp.

< 50 (not 0)

< 50 (not 0)

< 50 (not 0)