

CONSIDERATION OF PROPOSALS FOR AMENDMENT OF APPENDICES I AND II

A. Proposal

Annotation of Orchidaceae in Appendix II to exclude artificially propagated hybrids of the following taxa, exclusively under the condition that specimens are flowering, potted and labelled, professionally processed for commercial retail sale and that they allow easy identification:

<i>Cymbidium</i>	Interspecific hybrids within the genus and intergeneric hybrids
<i>Dendrobium</i>	Interspecific hybrids within the genus known in horticulture as " <i>nobile</i> -types" and " <i>phalaenopsis</i> -types," both of which are clearly recognizable by commercial growers and hobbyists
<i>Miltonia</i>	Interspecific hybrids within the genus and intergeneric hybrids
<i>Odontoglossum</i>	Interspecific hybrids within the genus and intergeneric hybrids
<i>Oncidium</i>	Interspecific hybrids within the genus and intergeneric hybrids
<i>Phalaenopsis</i>	Interspecific hybrids within the genus and intergeneric hybrids
<i>Vanda</i>	Interspecific hybrids within the genus and intergeneric hybrids

The annotation to specifically read as follows:

Artificially propagated specimens of hybrids are not subject to the provisions of the Convention when:

- a) they are traded in flowering state, i.e. with at least one open flower per specimen, with reflexed petals;
- b) they are professionally processed for commercial retail sale, e.g. labelled with printed labels and packaged with printed packages;
- c) they can be readily recognized as artificially propagated specimens by exhibiting a high degree of cleanliness, undamaged inflorescences, intact root systems and general absence of damage or injury that could be attributable to plants originating in the wild;
- d) plants do not exhibit characteristics of wild origin, such as damage by insects or other animals, fungi or algae adhering to leaves, or mechanical damage to inflorescences, roots, leaves or other parts resulting from collection; and
- e) labels or packages indicate the trade name of the specimen, the country of artificial propagation or, in case of international trade during the production process, the country where the specimen was labelled and packaged; and labels or packages show a photograph of the flower, or demonstrate by other means the appropriate use of labels and packages in an easily verifiable way.

Plants not clearly qualifying for the exemption must be accompanied by appropriate CITES documents.

B. Proponent

Switzerland.

C. Supporting Statement

1. Taxonomy

- 1.1 Class: Monocotyledonae
- 1.2 Order: Orchidales
- 1.3 Family: Orchidaceae
- 1.4 Genera:
- 1.4.1 *Cymbidium* Schltr. (approximately 11,000 man-made hybrids)
 - 1.4.2 *Dendrobium nobile* Lindl. and *Dendrobium bigibbum* Lindl. [= *D. Phalaenopsis* Fitzg.] (thousands of man-made hybrids known in trade as "nobile-type" and "phalaenopsis-type" dendrobiums)
 - 1.4.3 *Odontoglossum* H. B. & K. (approximately 7'500 man-made hybrids involving the genera *Odontoglossum*, *Oncidium* and *Miltonia*)
 - 1.4.4 *Oncidium* Sw. (see above)
 - 1.4.5 *Miltonia* Lindl. (see above)
 - 1.4.6 *Phalaenopsis* Blume (over 22,000 man-made hybrids)
 - 1.4.7 *Vanda* Jones (approximately 6,000 man-made hybrids)
- 1.5 Scientific synonyms: See Annex 1 of Proposition. 12.51 for names of intergeneric hybrids.
- 1.6 Common names**:
- | | |
|----------|-----------------------|
| English: | Orchid hybrids |
| French: | Hybrides d'orchidées |
| Spanish: | Híbridos de orquídeas |

** Orchid hybrids are often traded under their scientific generic names, see 1.4 and the Annex 1; there are a few common names like "Moth orchid" (*Phalaenopsis*) or "Dancing lady orchid" (*Oncidium*). Intergeneric hybrids of *Odontoglossum*, *Oncidium*, *Miltonia*, *Cochlioda* Lindl. and *Brassia* R. Br. are in trade as "Cambria".

2. Biological Parameters

These parameters are not relevant for this proposal, since it does not refer to wild-collected specimens, or even to naturally occurring entities in most cases (i.e., except for natural hybrids, which may also be artificially produced in cultivation). The majority of these artificially propagated hybrids are complex interspecific or intergeneric hybrids, often several generations removed from the original species used to create them, with their origins pre-dating the Convention.

This proposal is made in accordance with the provisions of paragraph f) under the second RESOLVES in Resolution Conf. 9.24 (Rev. CoP12):

"species of which all specimens in trade have been bred in captivity or artificially propagated should not be included in the Appendices if there is no probability of trade taking place in specimens of wild origin:"

as well as in accordance with the provisions of paragraph a) under DETERMINES in the section of Resolution Conf. 11.11 Regarding hybrids:

"hybrids shall be subject to the provisions of the Convention even though not specifically included in the Appendices if one or both of their parents are of taxa included in the

Appendices, unless the hybrids are excluded from CITES controls by a specific annotation in Appendix II or III (see annotation °608 in the Interpretation of Appendices I and II)."

3. Utilization and Trade

3.1 National utilization

A country-by-country account of national utilization of these hybrids would not be meaningful because they are not natural entities and they are traded worldwide.

3.2 Legal international trade

Data from the World Conservation Monitoring Centre for the years 1980 to 1998 (the period given in proposal 12.51) show an increasing number of artificially propagated specimens, including an increasing percentage, make up the total recorded legal trade. Of the tens of millions of orchids traded annually, approximately 95% or more are artificially propagated (see Annex 2 of proposal 12.51). At the same time, the total numbers of wild-collected plants in trade appear to be declining (see Annex 3 of proposal. 12.51), although it is difficult to make such a statement with certainty due to the potential for recent years' data to be incomplete.

3.3 Illegal trade

Artificially propagated hybrid specimens of these genera are illegally traded, although deliberate efforts to smuggle orchids generally involve species, especially wild-collected specimens of newly discovered or described species. Illegal trade in hybrids often consists of small numbers of specimens by tourists who are unaware of documentation requirements. Commercial growers are usually aware of the requirements for permits or certificates and obtain them as needed, although occasional irregularities occur, first of all in international retail sale, in mixed shipments containing also ornamental plants other than orchids, mostly non-CITES plants.

3.4 Actual or potential trade impacts

Concern over the impact of trade is not related to these entities, but to the naturally occurring species within these genera. Exempting artificially propagated hybrids may be harmful to wild populations if wild-collected specimens of these genera are misrepresented in trade as artificially propagated hybrids. However, this risk is the same as the risk of wild-collected specimens being traded with permits or certificates issued for artificially propagated specimens. The restrictions in the proposed annotation are intended to preclude abuse of the exemption by traders in wild-collected species, which generally (a) are traded in sterile (non-flowering) state and with naked roots; (b) are not uniform in appearance; and (c) exhibit characteristics of wild origin.

3.5 Captive breeding or artificial propagation for commercial purposes (outside country of origin)

Artificially propagated specimens of the genera *Cattleya*, *Cymbidium*, *Dendrobium*, *Oncidium*, *Phalaenopsis* and *Vanda* for example (see proposal. 12.51), are represented by over 80,000 hybrid gregi (plural of grex, the term used for the progeny resulting from a cross of two particular parental plants; number as of December 2001). They constitute by far the largest component of international commercial orchid trade. Breeding in these six genera has occurred since hybridization began in the orchid family in the middle of the 19th Century. A *Cattleya* hybrid was the first interspecific hybrid recorded, ca. 1850, though it was not the first to flower. Since 1922, when Lewis Knudson introduced asymbiotic seed culture for orchids, their hybridization has exploded, with over 110,000 hybrid gregi registered by the end of 2000. Seed culture, while still a vital part of large-scale commercial orchid production (particularly in *Phalaenopsis*, by far the leader in numbers of plants produced) has been topped by tissue culture or cloning ("meristemming") of popular cultivars. This has enabled the global market to grow at an exponential rate.

The phenomenal growth rate of the global orchid trade, as evidenced by trade figures, has been fueled by several factors. These include: an increase in popularity and the realization by consumers that orchids are affordable and amenable to home culture; technological

improvements in orchid culture, which enable plants to be grown in greater quantities, faster, and therefore at a lower cost; improved transport from lower-cost production areas to distant markets where production is less cost-effective; and improved communication between producer countries and consumer countries, where higher prices can be obtained by superior marketing.

Major producing nations include Brazil, China, Costa Rica, Indonesia, Malaysia, the Netherlands, the Philippines, Thailand, and the United States of America. Increasing demand in developed nations provides the opportunity for the development of export markets by other developing nations in Southeast Asia and Latin America.

Thailand is the world's largest exporter of tropical orchids, mostly of *Dendrobium*. The industry was founded on the Pompadour orchid, which was extremely successful when introduced on a wide scale in the mid-1970s. In the early 1980s, Thailand developed new export varieties to meet consumer preferences and diversify its product line, which was suffering from overproduction and low prices. *Dendrobium* orchids have become synonymous with Thailand on the world market thanks to the country's capability to perform advanced research, including tissue propagation; good climate, which permits year-round production; inexpensive labor; and efficient postharvest handling and transport. Thailand exports orchids to more than 50 countries, Japan being the major market.

4. Conservation and Management

4.1 Legal status

Artificially propagated hybrids may be subject to legal controls at the national level to effect the protection of species. These hybrids currently require CITES export documents to ensure that their export is both legal and not detrimental to their parent species.

4.2 Species management

Not relevant for this proposal.

4.3 Control measures

Artificially propagated, flowering, labelled and packaged hybrids of *Cymbidium*, *Dendrobium*, *Miltonia*, *Odontoglossum*, *Oncidium*, *Phalaenopsis*, and *Vanda* can be distinguished from wild orchid specimens by the following characteristics:

- wild orchid specimens are normally traded in sterile (non-flowering) state and cultivated to flower in the country of final destination;
- wild orchid specimens are normally traded with naked roots; they are potted or mounted, and labelled in the country of final destination;
- artificially propagated hybrids are generally free of pests, disease, and damage;
- artificially propagated hybrids are typically grown in pots and often will have roots conforming to the shape of the pot in which they were grown;
- prices of artificially propagated hybrids are typically low and consistent within taxa;
- artificially propagated, flowering hybrids will often be exported in tourist traffic in small quantities and openly carried in hand luggage;
- or they are exported for commercial retail sale in rather small to quite large quantities together with other ornamental (non-CITES-) plants;

- commercial trade in flowering orchid hybrids is often outside the specialised orchid market and involves retail sale such as florist shops, garden centres, shopping centres and souvenir shops.

5. Information on Similar Species

This proposal only relates to artificially propagated, flowering and labelled orchid hybrids, which are relatively easy to identify to genus or type. They may be confused in trade with flowering, artificially propagated specimens of their parent species (congeners), which still need permits, due to similarity of appearance. But this could only happen, if species would be incorrectly labelled as hybrids. As prices for botanical species are generally higher, this is not very likely to happen. Furthermore, the combination of flowers, labels and packages allows differentiation between hybrids and artificially propagated botanical species.

Most importantly, confusion with wild-collected orchids is not probable, because differences are numerous and very obvious.

6. Other Comments

History

This proposal is closely linked with Proposal 12.51, which was developed as a consequence of a review of the listing of the Orchidaceae. This review was begun at the 10th meeting of the Plants Committee (Shepherdstown, 2000) by a Working Group, with the assistance of the Secretariat. At the 11th meeting of the Plants Committee (Langkawi, 2001), it was determined that a thorough review of all Orchidaceae was not practicable, due to limited resources and the enormity of the task. However, to make the listing of Orchidaceae more effective, it was agreed that another Working Group would investigate the feasibility of annotating selected genera to exempt their artificially propagated hybrids from CITES controls. A draft proposal entered by the United States of America was discussed and endorsed by the Plants Committee at its 12th meeting (Leiden, 2002, PC12 Doc. 10.1).

Switzerland expressed the opinion in Leiden, that flowering and labelled orchid hybrids should generally be exempted, as it is the case for "in vitro" orchids. This idea was however not considered, when the draft proposal was subsequently re-worded and submitted for consideration at CoP12. When proposal 12.51 was finally notified to the Parties, there was no opportunity to modify it accordingly, as this would have widened its scope. The idea to generally exempt flowering and labelled orchid hybrids had to be postponed.

Proposal 12.51 was revised at the CoP and restricted to *Phalaenopsis*; it was adopted. Consequently, a draft proposal was presented by Switzerland at the 13th meeting of the Plants Committee (Geneva 2003, PC13 Doc. 11.1). The Plants Committee urged Switzerland to continue working on this project. There was support from a number of observing Parties, but also concern. Various Parties stated, that the impact of the exemption of *Phalaenopsis* hybrids should first be analyzed.

In order to address this concerns, the Management Authority of the United States of America conducted a survey on *Phalaenopsis* hybrids and reported to the 14th meeting of the Plants Committee. The overall result was, that there was no significant impact of the existing exemption on trade in *Phalaenopsis* hybrids. This is mainly for two reasons: (a) traders don't trust importing countries to implement the exemption and they don't want to run any risk, and (b) the conditions are too restrictive to attract traders, especially the minimum number of 100 specimens per hybrid. A working group at PC14, chaired by the United States, decided that the minimum number should be reduced to 20, in order to make the exemption more attractive and thus more likely to yield data for a future re-assessment. The same working group also discussed the draft proposal by Switzerland and recommended to restrict it to certain taxa, as well as to provide some identification material and include precautionary measures. The Plants Committee recommended Switzerland to incorporate the comments of the meeting participants and work with the Secretariat to prepare a final proposal for CoP13. This has been considered now.

7. Additional Remarks

7.1 Rationale

Modern orchid trade has changed in a dramatic way in recent years, as outlined in proposal 12.51. It has moved away from wild-collected orchids to hybrids that are mass-produced and internationally traded in an industrial scale. At the other hand, newly discovered and described species are still exploited in unsustainable ways for illegal international trade, such as *Paphiopedilum vietnamense* Perner & Gruss, described in 1999 from Vietnam, or *Phragmipedium kovachii* Atwood, Dalström & Fernandez, described in 2002 from Peru, both listed in Appendix I and both collected to near-extinction in the wild for illegal international trade, shortly after their discovery. This situation is a big challenge for species conservation. CITES must adapt in order to cope with modern orchid trade in an effective way. Enforcement should be allowed to stronger concentrate its efforts and stronger focus the resources and activities on legal trade in wild-collected orchids and also on combat of illegal trade and on intelligence work. The exemption of *Phalaenopsis* hybrids under certain circumstances was a step in this direction. Trade in artificially propagated orchid hybrids should be facilitated as much as possible, as long as such streamlining does not also facilitate illegal trade in wild-collected orchids. CITES should not largely deal with industrial products, but it should rather be an intelligent and agile tool for conservation and sustainable use of wild Flora and Fauna.

In conclusion, permits for industrially mass-produced orchid hybrids are not necessary, as long as such specimens can be correctly identified. It is assumed, that flowering and labelled orchid hybrids constitute a correctly identifiable finished product, which can not be falsified in any profitable way by using wild-collected orchids.

Finally, it has to be emphasized, that there is was no report to the Plants Committee on increased illegal trade linked with the existing *Phalaenopsis* hybrids exemption.

7.2 Precautionary measures

If this proposal should be adopted, the Plants Committee should monitor the implementation of this annotation to determine whether it causes any difficulties, especially with enforcement of requirements of the Convention for non-exempt orchid species and hybrids. If it is determined that adoption of this annotation results in an increase in illegal trade, or creates other significant difficulties in regulating non-exempt specimens, the annotation should be repealed as soon as possible.

7.3 Identification material

Identification sheets in the format of the CITES Identification Manual are provided together with this proposal (Annex 1). Hybrids that qualify for the proposed exemption from CITES are illustrated with colour photos. Further, examples of shipments and labels in current use are illustrated and additionally, names of intergeneric hybrids are listed. This should help to better understand this proposal as well as to implement the exemptions, should the proposal be adopted.

8. References

US Fish and Wildlife Service (2002): Prop. 12.51.

Griesbach, R.J. 2002. Development of *Phalaenopsis* Orchids for the Mass-Market. p. 458–465. In: J. Janick and A. Whipkey (eds.), Trends in new crops and new uses. ASHS Press, Alexandria, VA.

Griesbach, R.J. 2000. ASHS-2000 Symposium: Potted Orchid Production in the New Millennium. Potted *Phalaenopsis* Orchid Production: History, Present Status, and Challenges for the Future. Floral and Nursery Plant Research, U.S. National Arboretum, Beltsville, MD 20705.

The Orchid Database Company Pte Ltd (1998): RHS Orchids 98 (CD-ROM). Singapore.