

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



Twenty-fifth meeting of the Plants Committee
Geneva (Switzerland), 17 and 20-23 July 2020

Species specific matters

Maintenance of the Appendices

ANNOTATIONS FOR APPENDIX II ORCHIDS

1. This document has been submitted by Management Authority of Switzerland and Liechtenstein.*

Background

2. At the 17th meeting of the Conference of the Parties (CoP17, Johannesburg 2016), the Parties adopted Decisions 17.318 and 17.319 on *Annotations for Appendix II orchids*, which directed the Plants Committee to re-establish a working group on Annotations for Appendix II orchids with the mandate to develop a questionnaire to consider the potential conservation impact of exempting orchid products from CITES controls; consider actions, such as further case studies, to enable a full analysis of the potential conservation impact of orchid exemptions; analyse the risks of trade in orchid products to conservation and provide its conclusions about such risks; review the current annotation for Appendix II-listed orchids, and suggest such amendments as it considers appropriate, if any; and consider and highlight the knowledge gaps of the orchid species in trade.
3. At the 23rd meeting of the Plants Committee (PC23, Geneva, 2017) Switzerland submitted document [PC23 Doc. 32](#), in which it presented five in-depth case studies (*Vanda coerulea*, *Vanda tessellata*, *Papilionanthe teres* (*Vanda teres*), *Cypripedium parviflorum* var. *pubescens*, *Gastrodia elata*) and additional overviews on salep and chikanda and the use of orchid species in the cosmetic and personal care product trade, including flower and vibrational essences and fragrances. All case studies examined the size and stability of wild populations, the conservation status of the various species, the extent of artificial propagation and the different products in and size of international trade. Recognizing that considerable research had been carried out on the use of orchids by the cosmetic and personal care industries, an in-session working group at PC23 agreed that, as a first step, the working group would concentrate on this sector, and this approach was agreed by the Plants Committee.
4. At the 24th meeting of the Plants Committee (PC24, Geneva, 2018) Switzerland submitted an in-depth case study of *Cymbidium* species used in the cosmetic and personal care industry, an overview of several other genera identified as being used by this sector and reported on the results of the questionnaire outlined in Decisions 17.318 and 17.319. In addition, Switzerland invited the Plants Committee to endorse a draft definition for the term 'cosmetics' for inclusion in the Guidelines for the preparation and submission of the CITES annual trade report and in the Guidelines for the preparation and submission of the CITES annual illegal trade report to enable clear and accurate reporting

* The geographical designations employed in this document do not imply the expression of any opinion whatsoever on the part of the CITES Secretariat (or the United Nations Environment Programme) concerning the legal status of any country, territory, or area, or concerning the delimitation of its frontiers or boundaries. The responsibility for the contents of the document rests exclusively with its author.

5. At the 70th meeting of the Standing Committee (SC70, Sochi, 2018) the Chair of the Plants Committee invited the Standing Committee to include the definition of 'cosmetics' in the aforementioned Guidelines.
6. At the 18th meeting of the Conference of the Parties (CoP18, Geneva, 2019), the Parties adopted [Decisions 18.327 to 18.330](#) on *Annotations for Appendix II orchids*, which directed the Secretariat, inter alia, to assess the potential conservation impact of exempting orchid products and derivatives (wild and artificially propagated) from CITES controls, thereby completing the work already initiated on orchids used in the production of cosmetics and personal care products, and considering orchids used in other commodities (e.g., medicinals).
7. Switzerland has now completed case studies on the following genera and species used by the cosmetic and personal care industry:

Anacamptis; Cycnoches; Cymbidium; Cyripedium; Dactylorhiza; Gastrodia elata; Orchis; Papilionanthe teres; Phalaenopsis; Vanda coerulea; and Vanda tessellata. In addition, overviews of the trade in chikanda, salep, flower and vibrational essences and in all species used in cosmetics have also been completed by Switzerland.
8. In 2019 the Chinese Scientific Authority carried out a review of the harvest and trade of *Bletilla striata*.

Discussion

9. Based on these case studies, the questionnaire and contact with authorities and industries, Switzerland intends to propose an amendment to the annotation for Appendix II orchids that would exempt finished cosmetic and personal care products containing parts and derivatives of artificially propagated specimens of *Bletilla striata*, *Cycnoches cooperi*, *Gastrodia elata*, *Phalaenopsis amabilis* and *Phalaenopsis lobbii* from CITES requirements in light of the evidence from the case studies indicating that it is highly unlikely that any wild-harvested specimens of these orchids are found in internationally traded finished cosmetic and personal care products. Brief summaries of the findings are included in the Annex to this document.
10. By exempting those products that do not contain wild specimens, it is hoped that there can be increased focus on regulation and enforcement of international trade that affects wild-harvested material and thus support the agreed intention of the annotations as outlined in [Resolution Conference 11.21 \(Rev. Cop 18\)](#), which includes the following guidance and principles:
 - i. controls should concentrate on those commodities that first appear in international trade as exports from range States; these may range from crude to processed material; and
 - ii. controls should include only those commodities that dominate the trade and the demand for the wild resource;
11. Following further discussion with the Standing Committee Working Group on Annotations, Switzerland intends to propose an amendment to Annotation #4, with the addition of new paragraph g), to read:

'(g) Finished cosmetic products packaged and ready for retail trade containing parts and derivatives of artificially propagated specimens of *Bletilla striata*, *Cycnoches cooperi*, *Gastrodia elata*, *Phalaenopsis amabilis* and *Phalaenopsis lobbii*'
12. In this case the method of production would have to conform to the either source code A (artificially propagated) or the new source code Y used for assisted production adopted at CoP18, as noted in [Resolution Conf. 11.11 \(Rev. CoP18\)](#) on *Regulation on Trade in Plants*:
 - a) 'assisted production' shall be used to refer to plant specimens that:
 - i) do not fall within the definition of 'artificially propagated', and
 - ii) are considered not to be 'wild' because they are propagated or planted in an environment with some level of human intervention for the purpose of plant production;
 - b) material used to produce plant specimens from 'assisted production' systems can be derived from plant material that is exempt from the provisions of the Convention, or derived from artificially propagated

plants, or derived from plants grown in an environment with some level of human intervention or derived from plant materials collected sustainably from wild populations in accordance with the provisions of CITES and relevant national laws and in a manner not detrimental to the survival of the species in the wild”

13. If, at its 19th meeting (CoP19; scheduled to be held in 2022), the Conference of the Parties adopts an amendment to Annotation #4, in order to qualify for the exemption, the label on cosmetic and personal care products would have to include the scientific name of the orchid species. Products containing the ingredient ‘orchid extract’ would not qualify for the exemption.
14. Any product that did not contain the information above would continue to be subject to CITES regulations.
15. Switzerland is aware of and remains concerned about the illegal trade in wild-harvested orchids for a number of purposes and supports the continuation of work within the Plants Committee to address these issues. It is hoped that the amendment of Annotation #4 will alleviate enforcement burdens and allow for a reallocation of limited available resources to areas where they are needed more.
16. Following discussion by the Plants Committee and the Standing Committee, Switzerland will plan to prepare a draft proposal for submission to CoP19.

Recommendations

17. The Plants Committee is invited to consider the work carried out to date and discuss the proposal outlined above.
18. The Standing Committee Working Group on Annotations is invited to consider the amendment to Annotation #4 discussed in this document and develop a definition for the term ‘finished cosmetic products packaged and ready for retail trade’.

Brief summaries/conclusions for species selected
for possible exemption from CITES regulations

1) ***Bletilla striata***

The Chinese CITES Management Authorities have conducted a survey on the trade of *Bletilla striata* (Bai Ji) and have concluded that the entire cosmetics market is supplied with artificially propagated material. This is confirmed by other information we have gathered, including the following from Joseph Brinckmann, a medicinal plants specialist: "January 2020 brief report¹ on the topic of overstock conditions of selected medicinal plants at end of 2019. Section 9 (Price of Bai ji plummets – market remains in the doldrums) discusses the situation with Bai ji, indicating that the commercial supply had 'previously' been dependent on wild collected material. In 2010 the average market price for wild collected material was 100 CNY per kg, but as supply became scarcer, market prices steadily increased year-after-year, until reaching an all-time high in 2017 of 850 CNY/kg. Such high market prices motivated farmers to collect seeds and plant baiji, leading to the development of large-scale plantations and a drop in the average market price. In 2019, due to cost support, the cultivated baiji market was maintained at an average price at least 100 CNY/kg (back to what the market price for wild Bai ji was ten years ago). Currently, artificial propagation of baiji is still huge. The projected yields over the next few years are considerable, and therefore the market situation of excess capacity and oversupply will continue." Additionally, in Europe *Bletilla striata* is cultivated, also specifically for Pharma/Cosmetics by Phytisia: <http://www.phytisia.com/en/pharma-cosmetics-natural-extract-orchids.php>

2) ***Cycnoches cooperi***

Cycnoches cooperi is a pseudobulb epiphyte with a distribution range from northern Brazil to northern Peru and is the only species in the genus used by the cosmetics and personal care industry. It is traded under a variety of names, such as *Cycnoches Cooperi* (Flower/Leaves) Extract, Black Orchid and Orchid Extract and is used as an antioxidant, emollient and general skin conditioner in creams, serums, shampoos and shower gels.

Data from the CITES trade database covering the period 2008 - 2018 show a reported export of 2166 live plants, purpose code T, with Peru, Ecuador and the United States of America the main exporters. All plants are reported to be artificially propagated. Cosmetics, derivatives, extracts and oil all originate from France, and our research strongly indicates that the raw material for such products comes from artificially propagated plants grown in nurseries in non-range State France and are re-exported by Germany and Switzerland. Cosmetics were traded in relatively small amounts to several countries (a total of 1,417L and 17,023g). The main importer of extract is Fiji. Several manufacturers selling cosmetic products containing *C. cooperi* were identified in Canada, France, Poland, Singapore, South Africa and the USA. The only country offering cosmetic products containing *C.cooperi* extracts with no registered import of any *C. cooperi* material is Poland.

Ambiguous trade names, such as Orchid Extract and Black Orchid together with confidentiality concerns of cosmetic companies using *C. cooperi* in their products make it challenging to track the trade. However, there are no indications of wild harvest for this species in general and our research indicates that it is highly unlikely that wild material is used in the cosmetic and personal care industry. We therefore conclude that exempting *C. cooperi* in finished cosmetics and personal care products is unlikely to have a detrimental effect on wild populations.

3) ***Gastrodia elata***

Gastrodia elata (Tian Ma) is endemic to eastern Asia. This species is cultivated on a large scale in PR China and Republic of Korea and is collected from the wild in PR China, mainly from Yunnan Province. Wild populations in the Gaoligong Mountains are reportedly dwindling due to over-collection for commercial trade.

¹ From the Chengdu Tiandi Net Information Technology Ltd. (a Chinese herbal medicine industry market intelligence portal): Wang, Y.L., 天地网年度盘点:2019年产能过剩的品种, 18 January 2020. Available at: <https://www.zyctd.com/zixun/202/487552.html>

No data were found on wild collection in Japan, Democratic People's Republic of Korea, Republic of Korea and Russian Federation.

Importers of *G. elata* ingredients of Chinese origin (Hong Kong SAR, Japan, Malaysia, Republic of Korea, Taiwan, Australia, New Zealand, and Canada) appear to use it mainly in the manufacture of medicinal products. It is used by French and Chinese cosmetic companies but apart from that there is very little evidence found for *G. elata* ingredients or finished products in European commerce.

Joseph Brinckmann commented as follows: "I do not anticipate that the price of wild-collected tian ma will ever drop to a level anywhere near competitive pricing against cultivated rhizomes coming to market from medium- to large-scale farming operations. [...] Regarding risk of wild gastrodia being used in cosmetic products: Theoretically, if a high-end cosmetic company had a compelling reason to pay significantly higher raw material costs in order to intentionally select wild over farmed gastrodia, the exemption shouldn't apply."

In addition, Barnabas Seyler of Sichuan University notes "we agree that for *Bletilla striata* and *Gastrodia elata*, the use of these two species for cosmetics is not derived from wild-collected sources due to the prevalence and low-cost of the artificially produced stock (oversupply discourages their wild-collection). As you said, there may be some minimal cross-border import of wild-collected specimens, but we do not think these two species are of concern for wild-collection even for the medicinal trade. In Nepal, the area where *G. elata* grows naturally is relatively small, so even if a few specimens are being collected for sale, the sheer volume of trade in China of sustainably propagated *G. elata* make this not economically viable (even for medicinal uses). We believe the same is true of *Bletilla*, due to the oversupply of artificially propagated stock."

4) *Phalaenopsis amabilis* and 5) *Phalaenopsis lobbii*

The genus *Phalaenopsis* is distributed from tropical and subtropical Asia to North Eastern Australia. Based on information from the CITES trade database (2008-2018), online research and information provided by cosmetics and extraction companies, it seems that the *Phalaenopsis amabilis*, *P. lobbii* and *Phalaenopsis* hybrids are currently the only *Phalaenopsis* species used in cosmetics. *P. amabilis* extract is used in creams, deodorants, handwash, eye masks, serums and shower gels as humectant and *P. lobbii* extract is used in creams and mascaras for its whitening effect. Millions of live *P. amabilis* are reported to be traded. Main exporters are China, Taiwan, Thailand and The Netherlands. During this period only 1,380 live *P. lobbii* plants were reported to be exported.

The total reported amount of *P. amabilis* extract exported between 2008 and 2018 is 3505kg, with the main importers being Switzerland (1488kg), Germany (1095kg) and Fiji (530kg), although Switzerland seems to re-export a large part of their imported extracts to Germany. All material is reported to originate from France and the Netherlands from artificial propagation. There are only two exports of a total of 11kg recorded for extract of *P. lobbii*. The exporter reporting country is France and the reported importing country is Monaco. Trade in derivatives is hard to quantify due several unitless records. The exporter reported quantity of *P. amabilis* derivatives is 2.833kg and a cumulative of '11.653', all reported to be artificially propagated. The total amount of reported export of *P. amabilis* cosmetics during the time period examined is 27.59 L and 20.68 kg. Suppliers of finished and unfinished products containing *Phalaenopsis* extracts were identified in Germany, France, Poland and the United States of America.

Our research shows that all plants used for cosmetics, derivatives and extracts appear to be artificially propagated in Belgium, France, Switzerland and the Netherlands. Large amounts of live plants are imported from range States and surrounding countries, but *Phalaenopsis* is one of the most commonly cultivated orchids and there are large companies and clusters of companies involved in the propagation and trade of the plants. Although surveys performed in Southern China and Thailand show that illicit wild orchid trade is taking place in these areas, it appears that *Phalaenopsis* is not among the main targeted genera. There are no indications that an exemption of finished cosmetic and personal care products containing *P. amabilis* and *P. lobbii* is likely to have a detrimental effect on wild populations.