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

PRODUCTS CONTAINING SPECIMENS OF APPENDIX-II ORCHIDS

1. This document has been prepared by the Secretariat.

Background

2. At its 18th meeting (CoP18, Geneva, 2019), the Conference of the Parties adopted Decisions 18.327 to 18.330 on *Products containing specimens of Appendix-II orchids*:

18.327 Directed to the Secretariat

Subject to available resources, the Secretariat shall:

a) 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);

b) where necessary and appropriate to complement the assessment under paragraph a), seek pertinent information from Parties and relevant stakeholder groups, including industry, such as

i) on the trade in orchid products from source to final product, including the identification of the major industry sectors involved in the trade;

ii) how non-detriment findings and legal acquisition findings are made;

iii) traceability along the supply and value chains; and

iv) conservation concerns for wild populations; and

c) analyse the information received under paragraphs a) and b) with a view towards potential conservation impacts of trade in products containing orchids and derivatives of orchids, highlight any knowledge gaps, and report to the Plants Committee.

18.328 Directed to Parties

Parties are encouraged to:

a) submit pertinent information as requested in Decision 18.327 to the Secretariat; and

b) provide assistance to the Secretariat in reaching out to other stakeholders and user groups that may be able to support this work.

18.329 Directed to the Plants Committee

The Plants Committee shall:

a) consider the outcomes of Decision 18.327;

b) in consultation with the Standing Committee, as appropriate, review the current annotation for Appendix II-listed orchids, and suggest amendments; and

c) make recommendations to the Standing Committee.

18.330 Directed to the Standing Committee

The Standing Committee shall consider the recommendations of the Plants Committee and make recommendations to the 19th meeting of the Conference of the Parties.

Progress in the implementation of Decision 18.327

3. With more than 28,000 species covered by the family *Orchidaceae*, orchids represent 78% of all the species listed in the CITES Appendices. The international trade in orchids is relevant for several industries, such as the ornamental plant industry, the medicinal and aromatic sectors, and the cosmetic and food industries. The supply and value chains of that international trade quite complex. Additionally, the family *Orchidaceae* is widely distributed; its international trade is large and varied; and the existing annotations that exempt certain orchid products and derivatives from CITES controls may be challenging to implement.

4. The Secretariat estimates that the full implementation of Decision 18.327 would require USD 100,000 to commission a study and undertake additional expert and range State consultations (see Notification No. 2020/032). At the time of writing, these funds remain to be secured. In parallel to this, the Secretariat is making progress in the implementation of relevant aspects of paragraph a) of Decision 18.327; specifically by reviewing in detail the work on orchids that was initiated following the 17th meeting of the Conference of the Parties (see documents PC23 Doc. 32 and PC24 Doc. 28). The Secretariat has also reviewed the original reports on which these documents were based.

5. Together, the documents contain eight case studies, and 19 summaries on orchid taxa and specimens found in international trade. The selection of orchid taxa and products for case studies and summaries was guided by a survey of orchid taxa traded in the European market (see document PC22 Doc. 22.1). The case studies provide comprehensive information on several taxa (*Cymbidium* spp*., Cypripedium parviflorum var. pubescens, Gastrodia elata, Papilionanthe teres (Vanda teres), Vanda coerula, V. tesselata*) and on two orchid products (Salep and Chikanda), and insights regarding the conservation impact of trade in these taxa and products. The reports also provide summary information (range States, main exporting and importing countries, and products in trade) for a number of additional orchid species, genera and products, which are listed in the Annex to the present document. However, the Secretariat considers that this summary information is insufficient to draw reliable conclusions regarding the conservation impact of trade in the orchid taxa and products involved.

6. The documents and studies mentioned in paragraphs 4 and 5 above cover many of the research aspects called for under Decision 18.237, paragraph a) for one genus, five additional species and two orchid products. However, more comprehensive assessments of *"the potential conservation impact of exempting orchid products and derivatives from CITES controls*" remain to be undertaken; and will be proposed as a priority to address through external funds, as soon as these are identified and secured (see paragraph 4). In the meantime and building upon on the progress developed during the CoP17-CoP18 intersessional period, as an initial approach to the implementation of paragraph a) of Decision 18.237, the Secretariat assessed the available information against four guiding questions, which address possible conservation impacts from exempting certain orchid products from CITES controls. This allowed the identification of information gaps that would require complementary research, in line with Decision 18.327, paragraph b). The results of this analysis are included in an Annex to this document. The four guiding questions are:

   a) Is wild harvest for international trade known to have direct detrimental conservation impacts on the assessed orchid taxon?

b) Is wild harvest for international trade known to be a contributing factor to an overall detrimental use or declining population of the assessed orchid taxon?

c) Are exemptions of derivatives and/or finished products likely to result in conservation impacts by complicating overall regulation of trade in the taxon (e.g. facilitating illegal trade, challenging product identification, traceability)?

d) Are exemptions of derivatives and/or finished products likely to result in conservation impacts by complicating overall regulation of trade in other orchid taxa (e.g. look-alike issues)?

7. On the basis of the analysis in the Annex, the Secretariat summarizes its findings in the table below. It also provides suggestions for additional pertinent information that could be sought, as per Decision 18.237, paragraph b).

Guiding question		**Synthesis and assessment of available information to support the implementation of Decision 18.237, paragraph b)**
a)	Is wild harvest for international trade known to have direct detrimental conservation impacts on the assessed orchid taxon?	Case studies suggest that most of the assessed international trade in cosmetic and medicinal products involves artificially propagated specimens. Yet the reports caution that for some species not all trade might be documented or legal, and sources thus remain partially uncertain. For these taxa, it could be verified with specialist institutions if, and at what scale, trade in derivatives or finished products are sourced from the wild. The assessed food products Salep and Chikanda, produced from a large and rather indiscriminate selection of tuberous orchids, highlight challenges for the regulation of trade in wild orchids. Information suggests that derivatives or finished products from orchid tubers should not be exempted. The implementation of CITES regulations for trade in these products seems to remain problematic, with significant room for improvement.
b)	Is wild harvest for international trade known to be a contributing factor to an overall detrimental use or declining population of the assessed orchid taxon?	Case studies suggest that the conservation status of some of the taxa is unclear at a global and/or regional level; however, for some species of orchids international trade is suspected to be a contributing factor to overall dwindling populations. These instances could be addressed in collaboration with the International Union for Conservation of Nature (IUCN) and range States with the aim to assess whether exemptions are warranted.
c)	Are exemptions of derivatives and/or finished products likely to result in conservation impacts by complicating overall regulation of trade in the taxon (e.g. facilitating illegal trade, challenging product identification, traceability)?	Case studies suggest that several of the assessed taxa show high intra-specific variability, thus posing challenges for distinguishing natural from hybrid specimens, which complicates potential exemptions of hybrids. The conservation impact of further exemptions of trade in derivatives and finished products from hybrids could be examined, for example under conditions along the lines of the current footnote 10 to the CITES listing of orchids. Particular scrutiny might be warranted for those derivatives and finished products that are exported from range States, and whose exemption would thus exclude the entire trade chain from CITES controls.
d)	Are exemptions of derivatives and/or finished products of orchids likely to result in conservation impacts by complicating overall regulation of trade in other taxa (e.g. look-alike issues)?	The available information does not address look-alike issues, or the effects of potential exemptions for certain taxa on the conservation of other orchid species. Due to the large number of orchid species, the highly processed forms of traded derivatives and the many finished products in trade, conservation impacts caused by look-alike issues seem quite likely. Therefore, the Plants Committee might consider the appropriate scope of any exemptions, especially whether any exemptions should be at the species, genus, or family level.

8. Based on its analysis of available information, the Secretariat considers that, subject to the available resources requested in the Decision, additional research would need to be undertaken for the full implementation of Decision 18.327, paragraph b), focusing particularly on the following:

   a) an overview of orchid taxa that are particularly affected by wild harvest;

   b) an assessment of the conservation impacts of exempting artificially propagated hybrids of certain orchid taxa from CITES regulations, as articulated in footnote 10;

   c) an assessment of the conservation impacts of exempting derivatives and/or finished products of certain orchid taxa from CITES regulations through annotation #4; and

   d) potential challenges posed by the identification of orchid hybrids and look-alike issues.

Recommendations

9. The Plants Committee is invited to establish an intersessional working group on products containing specimens of Appendix II-listed orchids to:

   a) review the information available in documents PC23 Doc. 32 and PC24 Doc. 28, the studies on which these documents were based, and the synthesis and assessment in the present document;

   b) provide recommendations to the Secretariat regarding the scope of additional research needs, as proposed in paragraph 8;

   c) review further reports from the Secretariat on its implementation of Decision 18.327 if these become available in the intersessional period leading to the 26th meeting of the Plants Committee;

   d) draft suggestions and recommendations in preparation for potential reporting to the Standing Committee, as per Decision 18.329, paragraphs b) and c); and

   e) submit the outcomes of its work to the Plants Committee for consideration at its 26th meeting, including draft recommendations for the Standing Committee at its 74th meeting.

Analysis of the available information and information gaps for the work already initiated on orchids
[orchid species used in the production of cosmetics and personal care products]

Taxa or product	Source	Guiding question			
		Is wild harvest for international trade known to have direct detrimental conservation impacts on the assessed orchid taxon?	**Is wild harvest for international trade known to be a contributing factor to an overall detrimental use or declining population of the assessed orchid taxon?**	**Are exemptions of derivatives and/or finished products likely to result in conservation impacts by complicating overall regulation of trade in the taxon (e.g. facilitating illegal trade, challenging product identification, traceability)?**	**Are exemptions of derivatives and/or finished products of orchids likely to result in conservation impacts by complicating overall regulation of trade in other taxa (e.g. look-alike issues)?**
Vanda coerula	Case study	No indication of wild collection for international trade, the vast majority is from artificially propagated hybrids. Yet, analysis of trade data suggests that it is unlikely that the full trade is documented or legal.	Information on conservation status is incomplete or unavailable. There seems to be some wild collection for local and regional markets, and the species' range has been reduced in the past due to harvest and habitat loss. Remaining accessible populations might still be threatened.	Most international trade is from artificially propagated hybrids (that are as live plants exempted from CITES regulations under certain conditions) and most processing is done in non-range States. Thus, exempting derivatives and final products would not exempt an entire trade chain. There is a high degree of intra-specific variability, rendering the distinction of natural and hybrid specimens challenging.	No information on look-alike issues with other species.
Vanda tessellata	Case study	All legal international trade is from artificial propagation. Yet, analysis of trade data suggests that it is unlikely that the full trade is documented or legal.	Global population assessed as least concern, but considered vulnerable in Sri Lanka and critically endangered in parts of India. Overall population seems to decline. Wild collection for local and regional markets is documented.	Most legal international trade is from artificially propagated hybrids (that are as live plants exempted from CITES regulation under certain conditions). Processed exports of derivatives come almost exclusively from a range State (India). Thus, exempting derivatives and final products would exempt the entire trade chain from a country in which the species is considered critically endangered. There is a high degree of intra-specific variability, rendering the distinction of natural and hybrid specimens challenging. The scale of local and regional illegal trade might be substantial.	The trade name "rasna" is also used for other species, and the roots show similarity to other species.

Papilionanthe teres (Vanda teres)	Case study	No indication of wild collection for international trade. All legal international trade is in artificially propagated hybrids on a small scale. Yet, analysis of trade data suggests that it is unlikely that the full trade is documented or legal.	Information on conservation status is incomplete or unavailable, but the species is considered vulnerable due to habitat loss and illegal trade for local and regional markets.	All legal international trade in derivatives and finished products is from artificial propagation, much from hybrids (that are as live plants exempted under certain conditions). Exports in derivatives from non-range States. Thus, exempting derivatives and final products would not exempt an entire trade chain. There is a high degree of intra-specific variability, rendering the distinction of natural and hybrid specimen challenging. The scale of local and regional illegal trade seems substantial.	No information on look-alike issues with other species.
Cypripedium parviflorum var. pubescens	Case study	Historically wild collected due to cultivation challenges. International trade is of small scale, most derivatives are homeopathic finished products, and source appears to now be artificial propagation. Impacts on species conservation is arguably limited.	The species is classified as least concern, even though there are some threats and its population is regionally endangered and might still be in overall decline. Wild collection for local purposes in range States is small-scale and highly regulated.	All international trade in derivatives and finished products is from artificial propagation in non-range States. There is a high degree of intra-specific variability, rendering the distinction of natural and hybrid specimen challenging. No indication of illegal trade.	No information on look-alike issues with other species, but the report analyses only one of at least three varieties of the species, that are apparently hard to distinguish.
Gastrodia elata	Case study	Most international trade is from cultivated sources. It seems unclear what share is still from wild.	Rather extensive wild collection, commanding premium prices, in range States (China). Hybrids are harder to sell. Very limited information on population status, but at least some populations appear to be dwindling.	Most processing is done in range States. Thus, exempting derivatives and final products would exempt entire trade chain. No information on other indirect effects of exemptions on the overall regulation of trade.	No information on look-alike issues with other species.
Cymbidium spp.	Case study	Trade is overall large in volume. Most seems to come from artificial propagation, partially hybrids, but there is some indication of wild harvest of unknown scale. Analysis of trade data suggests that it is unlikely that the full trade is documented or legal.	The genus has been in local cultivation for many centuries, in addition to wild harvest. Very limited information on population status, but there are reports of overexploitation.	Vast chunks of trade are exempted for being artificially propagated hybrids (that are as live plants exempted under certain conditions) or cut flowers. Extracting and processing takes place in range States and non-range States. Thus, exempting derivatives and final products would partially exempt entire trade chains.	No information on look-alike issues with other species.

Salep (food product containing multiple orchid species)	Case study	Trade in tubers is large and quickly growing, indiscriminately affecting multiple orchid species. 40-50 million wild harvested specimens annually in Turkey, plus many millions across Near and Middle East and India. Products are available wherever there is a Turkish diaspora. The trade does not seem to appear in the CITES trade database, seems largely unregulated, without enforcement of CITES regulations, and to pose serious threats to orchid populations.	Since the trade consists of processed tubers with very limited distinctiveness, and due to the interchangeable use of multiple species, any exemption would likely enhance conservation impact through identification (only possible with chemical or molecular methods) and traceability challenges, switch of harvest to exempted species, and misdeclarations of exported material.
Chikanda (food product containing multiple orchid species)	Case study	Trade in tubers is large and quickly growing, traditionally focusing on three genera (*Disa, Habenaria* and *Satyrium*) in Zambia, but increasingly also affecting other tuberous genera in adjacent countries. Wild harvest for international trade is estimated at five million orchids annually. Orchid populations within Zambia appear depleted, and the trade does not seem to appear in the CITES trade database and seems largely unregulated, without enforcement of CITES regulations.	Since the trade consists of processed tubers with very limited distinctiveness, and due to the interchangeable use of multiple species, any exemption would likely enhance conservation impact through identification (only possible with chemical or molecular methods) and traceability challenges, switch of harvest to exempted species, and misdeclarations of exported material.
Bletilla striata	Summary	The summary information is insufficient to draw conclusions regarding the conservation impact of trade.	
Cycnoches cooperi	Summary		
Bulbophyllum spp.			
Cattleya spp.	Summary		
Orchis spp. (*O. mascula, O. maculata, O. morio*)			
Paphiopedilum spp.	Summary		
Dendrobium spp.			
D. chrysotoxum	Summary		
D. fimbriatum			
D. moniliforme	Summary		
D. nobile			
D. officinale	Summary		
D. phalaenopsis			
Phalaenopsis spp.	Summary		
P. amabilis			
P. pulcherrima	Summary		
P. lobbii			
P. schilleriana	Summary		
Flower and vibrational essences			