

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



Twenty-fourth meeting of the Plants Committee
Geneva (Switzerland), 20, 21 and 23-26 July 2018

Species specific matters

Maintenance of the Appendices

ANNOTATIONS FOR APPENDIX II ORCHIDS:
REPORT OF THE INTERSESSIONAL WORKING GROUP

1. This document has been submitted by Switzerland and prepared by the Chair (Ms. Moser) of the Plants Committee Working Group on Annotations for Appendix-II orchids.*

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) the Intersessional Working Group on Annotations for Appendix II Orchids was re-established in accordance with Decision 17.318.
4. The membership of the intersessional working group was as follows:

Chair: Switzerland (Ms. Moser);

Parties: Canada, China, Cuba, Czech Republic, European Union, France, Germany, Ireland, Italy, Latvia, Mexico, Netherlands, Peru, Republic of Korea, Slovakia, Sweden, Thailand, United Kingdom of Great Britain and Northern Ireland and United States of America; and

IGOs and NGOs: International Trade Centre (ITC), United Nations Conference on Trade and Development (UNCTAD), UNEP-WCMC, IUCN, American Herbal Products Association, FTS Botanics, Species Survival Network, Fédération des Entreprises de la Beauté (FEBEA), Personal Care Products Council (PCPC), Cosmetic Toiletry and Perfumery Association (CTPA) and TRAFFIC.

* *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.*

Discussion

5. Recognizing that considerable research (see document [PC23 Doc.32 Annex 2](#)) has 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. In this way, the initial goal of the working group was to identify whether finished products of any orchid species or higher taxonomic groups of orchids could be exempted from CITES regulation, based on the principles outlined in Resolution Conf. 11.21 (Rev. CoP17) on *Use of annotations in Appendices I and II*, namely that CITES controls should concentrate on those commodities that first appear in international trade as exports from range States, and should include those commodities that dominate the trade and the demand for the wild resource.
6. The Swiss Management Authority commissioned an in-depth case study of *Cymbidium* species used in the cosmetic and personal care industry together with an overview of several other genera identified as being used by this sector (see summary in Annex 2).
7. In accordance with Decision 17.318, the working group developed a questionnaire, which was distributed to the Parties in Notification to the Parties 2018/004. Although the questionnaire was directed to CITES Parties, it urged them to undertake consultations with many different stakeholders in order to ensure that the information provided to the working group was meaningful and accurately captured the use of orchids by the cosmetic and personal care products industries.
8. Thirteen responses were received and the results were analysed; several additional species of orchid were identified as being in trade in the cosmetic and personal care industries (see Annex 3), and all quantitative data were collected by the trade associations, consolidated and anonymised before being shared. Several Parties acknowledged trade in both live orchids and in unprocessed orchid parts, derivatives and extracts but most were unaware of the final use of this trade. Four Parties noted that they produced artificially propagated orchids for use in cosmetic products and one reported harvest of wild orchids for use in this industry. However, with a few exceptions, knowledge of national and international trade in orchid parts used as ingredients in the cosmetic industry was generally poor. Engagement by the cosmetic and personal care products industries was low, with some exceptions in Europe and Asia, making it difficult to fully understand this trade.
9. Discussion was initiated with the Standing Committee Working Group on Annotations to identify potential implementation, identification and definition problems of an annotation to exempt cosmetic products of certain orchid species packaged and ready for retail trade.
10. The working group agreed that additional consideration of the use of orchids in personal care products, medicinals, and foodstuffs is needed, and that such consideration will need to continue to the next intersessional period. The working group also agreed that the evaluation of the use of orchids in cosmetics and personal care products should be concluded before moving on to other sectors.
11. More case studies are planned for completion over the next year, with the intention of determining whether the family Orchidaceae or certain orchid taxa can be excluded from CITES controls when they are traded as cosmetics that are finished products packaged and ready for retail trade.

Issues for consideration

12. In considering an amendment to Annotation #4 for the Appendix-II orchid species, the following points should be taken into consideration:
 - a) The Guidelines for the preparation and submission of CITES annual reports (see [Notification to the Parties No. 2017/006](#) of 16 January 2017) includes the term 'cosmetics' in the section under Description of specimens and units of quantity. The explanation of this term is '*cosmetics which include extracts of CITES listed species. The quantity should reflect the amount of CITES-listed species present*'. However, there is no definition of the term 'cosmetic'. The case studies carried out so far together with research and analysis of the trade data indicate that there are a substantial number of cosmetics in trade containing CITES-listed species. Many cosmetic products are currently reported using the term 'derivatives'; this makes such trade difficult to track and the working group believed that it would be useful to develop a definition in an effort to refine reporting by Parties and give a clearer picture of this trade.

- b) It is recognised that cosmetic products and personal care products are regulated globally under national legislation and that individual Parties and economic regions already have an established definition of 'cosmetics'. However, the guidance adopted by the Parties in Resolution Conf. 9.24 (Rev. CoP17) on *Criteria for amendment of Appendices I and II* advises that Parties should "provide clear and simple definitions of any terms in the annotation that may not be easily understood by enforcement personnel and user groups (noting that definitions should be specific to CITES and scientifically and technically precise to the extent practicable for purposes of the annotation)." This guidance explicitly recognises that under CITES, definitions of terms in annotations may not precisely line up with definitions agreed for other purposes.
- c) A draft CITES definition of 'cosmetics' that is an amalgamation of the differing national/regional definitions currently in use is proposed below:

Any product or mixture of products which is applied to an external part of the body only (e.g. skin, hair, nails, external genital organs, teeth or the mucous membranes of the oral cavity) with a view to clean, odourise, change the appearance or protect and/or keep these parts in good condition. Cosmetics may include the following: make-up, perfume, skin cream, nail polish, hair colourants, soap, shampoo, shaving cream, deodorant, sunscreens, toothpaste.

- 13. Parties are cautioned that any exemption from CITES controls of orchid taxa used in the production of cosmetics, when they are traded as finished products packaged and ready for retail trade, would not apply to products that use multiple species of orchids unless all of the orchid species used in the product are subject to the same exemption.
- 14. It is essential that the cosmetic and personal care industry help inform discussions by providing an accurate and complete picture of the orchid species used in cosmetic production, together with information on the source and trade chain for orchid parts and derivatives used. In addition, the input of this industry is critical in the drafting any revised annotation to ensure that the text of the annotation is clear and unambiguous and that it is enforceable.
- 15. Further consultation needs to be undertaken with the cosmetic and personal care industries in China, India, Japan, and the United States, as key players in the production, manufacture and supply of cosmetic products, in order to fully understand the global trade in orchid species used by this industry

Recommendations

- 16. The Plants Committee is invited to:
 - i) Consider the work carried out to date (in-depth case studies and overviews), including identification of knowledge gaps and conclusions, in order to continue the assessment of whether certain products containing orchid parts and derivatives may be eligible for exemption and to identify further case studies that need to be carried out.
 - ii) Endorse the draft definition of "cosmetic" contained in paragraph 12 c) and request the Depositary Government to submit this definition for adoption to the eighteenth meeting of the Conference of the Parties on behalf of the Plants Committee.
 - iii) Endorse also the draft revisions to Decisions 17.318 to 17.319 on *Annotations for Appendix II orchids* contained in Annex 1 in order to continue this work during the next intersessional period, and request the Depositary Government to submit the draft revised Decisions for adoption to the eighteenth meeting of the Conference of the Parties on behalf of the Plants Committee.
 - iv) Identify possible funding sources for further in-depth studies on other finished products that contain orchids, including medicinals and food.

Decisions 17.318 to 17.319 on Annotations for Appendix II orchids

17.318 (Rev. CoP18)

The Plants Committee shall:

- a) Re-establish a working group on Annotations for Appendix II Orchids. The working group shall be chaired by a member of the Plants Committee and work on the basis of the following terms of reference:
 - i) The working group shall seek information on the trade in orchid parts and derivatives (wild and artificially propagated) in consideration of the potential conservation impact of exempting orchid products from CITES controls, completing first the work already initiated on orchids used in the production of cosmetics and personal care products and then considering orchids used in other commodities (e.g., medicinals and foodstuffs), subject to the availability of funding.
 - A) ~~The questionnaire should invite Parties to provide available information~~ working group should seek information from Parties and relevant other stakeholder groups, including industry, on: the trade in orchid products from source to final product, including the identification of the major industry sectors involved in the trade; how NDFs are made; traceability along the trade chain; and trade reporting. It should also request information on orchid parts and derivatives used in products, sectors involved (cosmetics, nutritional supplements, traditional medicine, foodstuffs – in particular flours -etc.), and conservation concerns for wild populations.
 - ~~B) The questionnaire should be transmitted to the Parties via a Notification and should emphasize the importance of responses from range States, with a sufficient deadline for responding.~~
 - ii) Subject to the availability of funding, the working group may also consider actions to enable a full analysis of the potential conservation impact of orchid exemptions. These may include developing case studies on key orchid species identified in trade as finished products, including the 39 species identified in the Annex of document PC22 Doc. 22.1, as well as the two cases of orchid foodstuffs outlined in PC22 Inf. 6, workshop(s), or a study on trade data sources.
 - iii) Based on the information obtained from Parties in their responses to the questionnaire, as well as other information from the potential actions identified above, and other appropriate sources, the working group shall analyse the risks of trade in orchid products to conservation and provide its conclusions about such risks. Based on the findings and the analyses, the working group shall review the current annotation for Appendix II-listed orchids, and suggest such amendments, as it considers appropriate, if any.
 - iv) The working group shall also consider and highlight the knowledge gaps of the orchid species in trade, i.e., consider identification, nomenclature and distributional information gaps where these are found to exist, and highlight these to the wider orchid research community and traders during trade events and forthcoming international meetings and workshops.
 - v) The working group will conduct its work via electronic means and work in close consultation with the Standing Committee, including its Working Group on Annotations.
 - vi) The working group will report its findings to the Plants Committee;
- b) Consider the results of the working group; and
- c) Report its findings and recommendations to the Standing Committee for its consideration.

17.319 (Rev. CoP18)

Directed to the Standing Committee

The Standing Committee shall consider the findings and recommendations of the Plants Committee together with the results of its working group on annotations, and provide the results of the work and its recommendations to the ~~18th~~19th meeting of the Conference of the Parties.

Summary of Case study on species of *Cymbidium* used in the cosmetic and personal care industry

First described by Olof Swartz in 1799, the genus *Cymbidium* contains approximately 52 species (eMonocot, 2018) with many cultivars, varieties and natural and cultivated hybrids, widely distributed in SE Asia. *Cymbidium* orchids are usually terrestrial, epiphytic or lithophytic. They, and their many hybrids, have been popular in cultivation for hundreds of years, due to their adaptability and cold tolerance, together with the spectacular flowers of many species. They are often culturally important and are widely used in the cut flower industry, as well as the medicinal, food and the cosmetic and personal care sectors.

Cymbidium and their hybrids are traded as extracts that are included as ingredients in finished cosmetic products. Research carried out for this report indicates that the trade flow from raw material to finished cosmetic or personal care product can entail unprocessed or processed material (e.g. stems, aerial/flower tips, tissue cultured live plants, dried plants) being sourced from horticultural nurseries in range States (Taiwan (PoC), PR China, and Korea). No nurseries specifically growing orchids for extraction purposes were identified for this report. This material goes through an extraction process, often carried out by companies based in range States, the USA and France.

From CITES trade statistics covering the period 2006-2016 the trade in live specimens and parts and derivatives of this genus shows a clear pattern between a defined group of CITES Parties. The trade in live plants has remained relatively stable over the last decade, with Taiwan (PoC) consistently exporting between 85-95% of all live trade. Much of the trade in dried plants and extracts is comparatively new, commencing in 2012/13, which corresponds with the increased availability of cosmetic products containing extracts of this genus as well as increased submission of patents documenting the cosmetic properties of *Cymbidium*. Overall, the trade is in artificially propagated live specimens and parts and derivatives of this genus and is large in volume, although there are no unique HS customs tariff codes to allow an in-depth analysis. The trade revolves around Taiwan (PoC), PR China, Republic of Korea, Japan and the USA. The Republic of Korea is the only exporter of extracts which implies the manufacture of extracts is being carried out in that country. However, there are several large pharmaceutical and/or cosmetic and personal care companies manufacturing both extracts and finished products containing *Cymbidium* species based in the USA; it has proved difficult to either track this trade or engage with the companies involved. Further outreach to these US based companies is necessary in order to fully understand the trade flow of finished products containing parts and derivatives of this and other orchid genera. In addition, given France's position as a global leader in the innovation and production of cosmetic products, it is likely that they are also producing extracts from this genus for use in this industry, either from live plants grown in nurseries or tissue cultured plants grown in laboratories.

Finished products containing this species are traded globally and are regulated under CITES, but from analysis of the trade data it is unlikely that the full trade is documented or legal under CITES. This may be due to the misinterpretation or lack of knowledge of CITES among industry, deliberate circumvention of CITES regulations, poor knowledge of orchid extracts in cosmetics by CITES and enforcement authorities and the burden placed on both Parties and industry to comply with CITES implementation given the large quantities of commodities in trade.

Quick summary of some other orchid species used in the cosmetic and personal care industry

There are approximately 30 orchid species from around 13 genera used in as ingredients in cosmetic and personal care products, several of which have not yet been the subject of in depth case studies. It appears that many of these species are artificially propagated in large numbers, particularly in Asia and Europe, specifically for use as ingredients in finished products in the medicinal, food and cosmetic and personal care industries. Some of these species have been used in traditional medicine for many years; others have only recently entered into trade as extracts used in the cosmetic and personal care industry. Brief overviews of some species are provided below; however there are several other species that would benefit from further research. See Annex 3 to this document for the scientific names and related INCI names of all orchids currently identified as being in use as ingredients in the cosmetic and personal care industries.

Bletilla striata

Bletilla striata (Thunb. ex A. Murray) Rchb.f. is considered easy to cultivate as an ornamental, including by seed, and can be grown rapidly by division. It is widely grown in Yunnan, Sichuan, Guizhou and Hunan where the technique of directly sowing seeds for seedlings is applied widely, reducing the cost of producing seedlings. It is estimated there are about 5,000 hectares cultivating *Bletilla striata* in China. *Bletilla striata* is in trade as an orchid extract used in the cosmetic industry and as a medicinal and is reported in the CITES Trade Database as in trade as live and dried plants, extracts, derivatives, medicines and roots, the majority from artificially propagated sources. Japan is the main exporter of live plants but the trade in extracts (2013-2016) shows the Republic of Korea as the major exporter and re-exporter, mainly to Japan. It is difficult to interpret this trade to assess whether it is to supply the horticultural or medicinal industries, but given the rise in the use of orchids in cosmetics, coupled with the large cosmetic industries in Japan and the Republic of Korea some of this trade may be for the cosmetic and personal care product industry.

Cycnoches cooperi

The only *Cycnoches* species found in trade as a component of cosmetic and personal care products is a species from Peru and Brazil, ***Cycnoches cooperi*** Rolfe. In wide cultivation since it was first described in 1913, it is in trade as species and hybrids, in particular crossed with the genus *Catesetum*. Trade statistics record *C. cooperi* in trade as live plants, extracts, derivatives and oil, all reported from artificially propagated sources. France is the main exporter of *C. cooperi* derivatives, extracts and oil, with the majority going to Switzerland. Quantifying the trade is not possible as the units of quantity are not always recorded for derivatives. The trade in derivatives and oil commences between 2012 and 2014 and for extracts from 2009. This trade coincides with an increased interest in the use of orchids in cosmetics and personal care products and the submission of related patents.

Dendrobium

Other than those identified by Brinckmann* (2014), no ***Dendrobium*** species were found to be in trade for the cosmetic industry, although a number of finished products and technical and trade names for *Dendrobium* extracts were identified. The global trade in medicinal products, dietary supplements and body/muscle enhancing powders and pills that list *Dendrobium* as an ingredient is extensive. The majority of cultures of *Dendrobium* hybrids are exported by Thailand to France, derivatives from Indonesia to the Republic of Korea, dried plants from Thailand to PR China and extracts from Japan to Hong Kong SAR, Canada and France. The majority of this material is reported as artificially propagated. Raw material of ***Dendrobium chrysotoxum*** Lindl. (found in China, India and Indo-China) is documented as sourced from the TianZi Nature Reserve, PR China for research purposes and to supply material for extraction. The trade in dried plants commenced in 2010, the main exporter is PR China, followed by much smaller amounts from Thailand and Switzerland, and France is the only importer. The majority of the trade in derivatives and extracts of *D. chrysotoxum* are re-exports from France (origin Thailand and PR China, source artificially propagated), that are imported by Japan, Switzerland, and Turkey. The trade in derivatives commenced in 2012 and in extracts in 2015. ***Dendrobium fimbriatum*** Hook. has quite a wide distribution from Himalaya to S. China and Peninsular Malaysia. It is a species widely used in Traditional Chinese Medicine and there is a large area in Yunnan and Guangxi Provinces (nearly 200 hectares) dedicated to cultivating this, and other, species of *Dendrobium* for use in TCM as powder (around 1 million kg). The other species cultivated in this area include *D. chrysotoxum*, *D. aphyllum*, *D. chrysanthum* and *D. aduncum*. It is not known how much of this is used for the cosmetic and personal care industries. Trade in extract and powder is mainly from PR China to the UK, USA and Switzerland, some of which appears to be wild sourced. Trade in artificially propagated extracts of ***Dendrobium moniliforme*** (L) Sw. (Himalaya to Temperate East Asia) is all recent exports (from 2015) from the Republic of Korea. ***Dendrobium nobile*** Lindl. (from Nepal to S. China and Indo-China) is in trade as live and dried plants, derivatives, extracts, powder, medicine, roots and stems, the majority reported from artificially propagated sources. Powder and extracts are all exported by PR China, Hong Kong and Korea to the US and Japan. Indonesia is the largest exporter of derivatives, imported by the Republic of Korea, followed by the Republic of Korea exporting to Japan. It is also the largest exporter of dried plants and stems, again to the Republic of Korea. There is some trade in wild sourced material; stems and roots from PR China imported by the Republic of Korea and Canada, and roots and dried plants from Vietnam to the Republic of Korea. The trade in ***Dendrobium officinale*** (a synonym of ***Dendrobium catenatum*** Lindl., found in S. China, S. Japan to EC. Taiwan) is in live plants, derivatives, powder and stems. The trade in derivatives is from PR China to Malaysia (22kg) and artificially propagated powder and stems are exported from PR China to New Zealand. The trade in ***Dendrobium phalaenopsis*** Fitzg., native to Australia, is in live and dried plants and extracts. The trade in extracts is all from artificially propagated sources, with France exporting 18kg of extracts to Switzerland between 2009 and 2010.

Orchis

Other than those identified by Brinckmann (2014), no **Orchis** species were found to be in trade for the cosmetic industry, although a number of finished products and technical and trade names for *Orchis* extracts were identified. **Orchis mascula** (L.) L. (found in Macaronesia, N. & C. Europe to Iran) is in trade as artificially propagated derivatives, extracts, dried and live plants and medicine. For derivatives India is the largest exporter with major importers in the Middle East, in particular the United Arab Emirates, followed by Malaysia, with source code "I" (seizures/confiscated) recorded for material from India and Pakistan. For extracts from 2014 onwards India has been the largest exporter (largest importer is Latvia) and France the only re-exporter (origin Belgium) principally to the US. For live plants Belgium is the largest exporter, to India, and for medicine India is the largest exporter, to the Russian Federation, Malaysia and the Middle East. **Orchis maculata**, a synonym of **Dactylorhiza maculata** (L.) Soó (found in NW. Africa, Europe to C. Siberia) is only in trade as artificially propagated live plants, exported from Belgium, the Netherlands and Canada to Switzerland, USA, UK and Finland; however this species is known to be used in the cosmetic industry so it assumed that extraction is carried out by the importers/ manufacturers. **Orchis morio**, a synonym of **Anacamptis morio** (L.) R.M.Bateman, Pridgeon & M.W.Chase (found in Europe, Medit. to Iran) is in trade as artificially propagated live plants; Austria is the largest exporter followed by Belgium, and Switzerland is the only importer. For derivatives France is re-exporting artificially propagated material (origin Belgium) worldwide.

Phalaenopsis

Together with the **Phalaenopsis** species identified by Brinckmann (2014), **Phalaenopsis schilleriana** Rchb.f was also identified as being in trade for the cosmetic industry in a response to Notification 2018/004. A number of finished products and technical and trade names for *Phalaenopsis* extracts were identified. **Phalaenopsis amabilis** (L.) Blume (found in Malesia to Papuasia) has been used to create many modern hybrids. It has been in trade since its discovery in 1750 in the Philippines and the current plants in trade are the result of cross-breeding different clones. Looking at the CITES Trade Database (2006-2016), *P. amabilis* is in trade as live and dried plants, derivatives, extracts, flowers and fruit, the majority of which is reported from artificially propagated sources. France is the only exporter of artificially propagated extracts of *P. amabilis* (mainly to Japan and Fiji) and derivatives (over the last three years mainly to Asia including PR China and Malaysia). **Phalaenopsis pulcherrima** (Lindl.) J.J.Sm. is a miniature species that has been in trade since its discovery in 1833 in SE Asia and is traded as artificially propagated live and dried plants. **Phalaenopsis lobbii** (Rchb.f.) H.R.Sweet is a miniature species, distributed from E. Himalaya to China (SE. Yunnan), which has been in cultivation since 1862 and is widely used in hybrid breeding; it is in trade as artificially propagated live plants. **P. schilleriana** is an easy to grow species native to the Philippines and common in trade as live, artificially propagated plants exported mainly by the Philippines and imported by Taiwan. For all three species, dried plants are only exported from Thailand to France.

*Brinckmann, J. (2014). Quick scan of Orchidaceae species in European commerce as components of cosmetic, food and medicinal products. [PC22 Doc. 22.1 Annex](#)

**Species and INCI* names of orchids identified as being in use
in the cosmetic and personal care industry**

Scientific name and author	INCI Name	Uses
<i>Anoectochilus formosanus</i> Hayata	Anoectochilus Formosanus Cell Culture Extract Anoectochilus Formosanus Extract	Eye liner, cleanser Skin conditioner
<i>Bletilla striata</i> (Thunb. ex A.Murray) Rchb.f	Bletia Hyacinthina Bulb Extract Bletilla Striata Root Extract Bletilla Striata Root Powder Bletilla Striata Root/Stalk Powder Bletilla Striata Root Water Bletilla Striata Callus Extract	Creams, serums, make up Shampoo Conditioner
<i>Calanthe discolor</i> Lindley	Calanthe Discolor Extract	Cosmetics Skin conditioning
<i>Cycnoches cooperi</i> Rolfe	Cycnoches Cooperi Extract Cycnoches Cooperi (Orchid) Flower/Leaf Extract	Face products Antioxidant/ emollient
<i>Cymbidium ensifolium</i> (L.) Sw	Unknown	
<i>Cymbidium erythraeum</i> Lindl.	Cymbidium Erythraeum Flower Extract	
<i>Cymbidium goeringii</i> (Rchb.f.) Rchb.f.	Cymbidium Goeringii Extract Orchilean (Cymbidium goeringii extract) TN	Antioxidant Skin and hair conditioner
<i>Cymbidium hookerianum</i> Rchb. (synonym <i>Cymbidium grandiflorum</i>)	Cymbidium Grandiflorum (Orchid) Flower Extract Cymbidium Grandiflorum Oily Extract (=Cymbidium Grandiflorum Root Extract (and) Glycine soja (soybean) oil) Cymbidium Grandiflorum Root Extract Cymbidium Great Flower Bulb Orchid Root Extract	Makeup Foundation Shampoo Conditioner Lipstick
<i>Cymbidium kanran</i> Makino	Cymbidium Kanran Extract Jeju Hanran (Cymbidium kanran Makino) extract-sg (TNM)	Cream Skin conditioner / antioxidant
<i>Cymbidium lancifolium</i> Hook.	Cymbidium Lancifolium Extract	Cream, toner, emulsifier
<i>Cymbidium sinense</i> (Jacks.) Willd.	Rich Brocade Cymbidium Sinense Orchid Extract	
<i>Cypripedium parviflorum</i> var. <i>pubescens</i> (Willd.) Knight (Synonym <i>Cypripedium pubescens</i>)	Cypripedium Pubescens Extract	Skin conditioner/ tonic
<i>Dactylorhiza fuchsii</i> (Druce) Soó	Orchid Extract	Face products
<i>Dactylorhiza maculata</i> (L.) Soó	Orchis maculata Flower /Stem/Leaf Water Orchis maculata Flower Extract Orchid Leaf/Root/Stem Extract	Skin conditioning
<i>Dactylorhiza morio</i> (L.) R.M.Bateman, Pridgeon & M.W.Chase (Syn: <i>Orchis morio</i> L.)	Orchis Morio Water Orchis Morio Flower Extract Orchid Extract Orchid Leaf/Root/Stem Extract	Hair and skin conditioning Soothing component of cosmetic products
<i>Dendrobium candidum</i> Wall ex Lindl.		
<i>Dendrobium catenatum</i> Lindl. (Synonym <i>Dendrobium huoshanense</i>)	Dendrobium Huoshanense Leaf/Stem Extract	Bleaching component of cosmetic products
<i>Dendrobium chrysotoxum</i> Lindl.	Unknown – trade name: Dendrobium chrysotoxum extract	Anti-aging

Scientific name and author	INCI Name	Uses
<i>Dendrobium moniliforme</i> (L.) Sw.	Dendrobium Moniliforme Callus Culture Extract Dendrobium Moniliforme Leaf/Stem Extract Onychium Japonicum Extract	Skin conditioning
<i>Dendrobium nobile</i> Lindl.	Dendrobium Nobile Extract	Skin conditioning
<i>Dendrobium phalaenopsis</i> Fitzg.	Dendrobium Phalaenopsis Flower Extract	Skin conditioning
<i>Gastrodia elata</i> Blume	Gastrodia Elata Root Extract	Skin conditioning
<i>Orchis mascula</i> (L.) L	Orchis Mascula Flower Extract Orchis Mascula Extract Orchid Extract Orchid Leaf/Root/Stem Extract	Soothing component of cosmetic products
<i>Papilionanthe teres</i> (Lindley) Garay.(Synonym: <i>Vanda teres</i>)	Unknown but traded as Vanda Teres Stem Extract	
<i>Phalaenopsis amabilis</i> (L.) Blume	Phalaenopsis Amabilis Extract	Humectant component of cosmetic products
<i>Phalaenopsis lobbii</i> (Rchb.f.) H.R.Sweet	Phalaenopsis Lobbii Extract	Bleaching component of cosmetic products
<i>Phalaenopsis pulcherrima</i> (Lindl.) J.J.Sm.	Phalaenopsis Pulcherrima Callus Powder Phalaenopsis Pulcherrima Leaf Cell Extract	Skin conditioning/ antioxidant
<i>Phalaenopsis schilleriana</i> Rchb.f.	Unknown	
<i>Vanda coerulea</i> Griff. ex Lindl.	Vanda Coerulea Extract	Antioxidant
<i>Vanda falcata</i> (syn <i>Neofinetia falcata</i>) (Thunb.) Beer	Neofinetia Falcata Callus Culture Extract	Skin contioning
Hybrids		
<i>Brassocattleya</i> Marcella Koss - an intergeneric hybrid between orchids belonging to the genera <i>Brassavola</i> and <i>Cattleya</i>	Brassocattleya Marcella Koss Leaf/Stem Extract Orchid Extract Trade name: Marvel Orchid	Personal care Skin conditioning
Odontioda Lavender Lace – an intergeneric hybrid between orchids belonging to the genera <i>Odontoglossum</i> and <i>Cochlioda</i> .	Odontioda Lavender Lace Flower Extract	
<i>Cymbidium</i> Great Flower 'Marie Laurencin'	Cymbidium Great Flower Bulb Extract Cymbidium Great Flower Extract Cymbidium Great Flower Flower/ Stem Extract Cymbidium Great Flower Flower/ Stem Water Cymbidium Great Flower Leaf Extract Cymbidium Great Flower Leaf Powder Cymbidium Great Flower Stem Extract Cymbidium Marie Laurencin extract ET (TNM)	Hair conditioning
<i>Cymbidium</i> Lucky Flower 'Anmitsuhime'	Cymbidium Lucky Flower Stem Extract Cymbidium Anmitsu Hime extract ET (TNM)	Hair conditioning
<i>Phalaenopsis</i> Sogo Yukidian	Phalaenopsis Sogo Yukidian Petal Extract	Antioxidant and skin-protecting component of cosmetic products

* INCI names (International Nomenclature Cosmetic Ingredient) are systematic names internationally recognized to identify cosmetic ingredients. They are developed by the International Nomenclature Committee (INC) and published in the International Cosmetic Ingredient Dictionary and Handbook.

Trade Name (TN) or Trade Name Mixture (TNM) - Source: Personal Care Products Council - Buyers Guide