

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



Twenty-sixth meeting of the Plants Committee  
Geneva (Switzerland), 5 – 9 June 2023

Appendices of the Convention

Nomenclature matters

Flora

Report of the specialist on botanical nomenclature

OVERVIEW OF FLORA NOMENCLATURE MATTERS FOR THE PERIOD COP19–COP20

1. This document has been submitted by the specialist on botanical nomenclature of the Plants Committee (Ms. Ronell R Klopper).\*
2. This document highlights the updates for agreements of the Conference of the Parties at its 19th meeting (CoP19; Panama City, 2022) relating to: standard nomenclature references; Decisions in force relevant to nomenclature for flora; and the work plan of the Plants Committee in matters related to nomenclature.
3. At its 19th meeting, the Conference of the Parties adopted or revised ten sets of decisions on nomenclature matters for flora as included in the Annex to the present document and listed below:
  - a) Nomenclature for aloes (*Aloe* spp.): Decisions 19.279 and 19.280;
  - b) Cactaceae Checklist and its Supplement: Decisions 18.304 (Rev. CoP19) to 18.306 (Rev. CoP19);
  - c) Production of a CITES Checklist for rosewoods (*Dalbergia* spp.): Decisions 18.307 (Rev. CoP19) and 18.308 (Rev. CoP19);
  - d) Nomenclature for ebonies (*Diospyros* spp.) (populations of Madagascar): Decisions 19.281 and 19.282;
  - e) Standard nomenclature for cumarus (*Dipteryx* spp.): Decision 19.283;
  - f) Standard nomenclature for African mahoganies (*Khaya* spp.): Decision 19.284;
  - g) Nomenclature of Appendix-II listed orchids (Orchidaceae spp.): Decisions 19.285 and 19.286;
  - h) Nomenclature for pachypodiums (*Pachypodium* spp.): Decision 19.287 and 19.288;
  - i) Standard nomenclature for roseroots (*Rhodiola* spp.): Decision 19.289; and,
  - j) Nomenclature for yews (*Taxus* spp.): Decisions 19.290 and 19.291.

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\* 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.

4. Updates on the implementation of Decisions 18.307 (Rev. CoP19) and 18.308 (Rev. CoP19) on *Production of a CITES Checklist for rosewoods (Dalbergia spp.)* and Decisions 19.285 and 19.286 on *Nomenclature of Appendix-II listed orchids (Orchidaceae spp.)* are reported in the present document.
5. Progress on the implementation of the remaining decisions, listed in paragraph 3 to the present document, is reported in documents PC26 Doc. 43.2 to PC26 Doc. 43.9 for consideration at the present meeting of the Plants Committee.
6. Additionally, at its 19th meeting, the Conference of the Parties adopted three sets of nomenclature decisions with mandates addressed to both the Animals and Plants Committee, these are:
  - a) Nomenclature of Appendix III listings: Decisions 18.313 (Rev. CoP19) and 18.314 (Rev. CoP19);
  - b) Higher taxon listings in the Appendices: Decisions 19.272 and 19.273; and
  - c) Development of a standardized global checklist of species: Decision 19.274.
7. Progress on the implementation of the decisions listed in paragraph *supra* is reported under agenda item 42 on *Botanical and zoological nomenclature* (see documents PC26 Doc. 42.1, PC26 Doc. 42.2 and PC26 Doc. 42.3).

Decisions 18.307 (Rev. CoP19) and 18.308 (Rev. CoP19) on *Production of a Checklist for rosewoods (Dalbergia spp.)*

8. At its 19th meeting (CoP19; Panama City, 2022), the Conference of the Parties revised Resolution Conf. 12.11 (Rev. CoP19) on *Standard nomenclature* to adopt, *inter alia*, the following taxonomic reference for the genus *Dalbergia* spp.:

*Cowell C., Williams E., Bullough L.-A., Grey J., Klitgaard B., Govaerts R., Andriambololonera S., Cervantes A., Crameri S., Lima, H.C., Lachenaud O., Li S.-J., Linares J.L., Phillipson P., Rakotonirina N., Wilding N., van der Burgt X., Vatanparast M., Barker A., Barstow M., Beentje H., and Plummer, J. 2022. CITES Dalbergia Checklist. Commissioned by the CITES Secretariat. Royal Botanic Gardens, Kew, Surrey.*

Accessible in English, French and Spanish at: <https://www.kew.org/science/our-science/science-services/UK-CITES/cites-resources>

9. The CITES *Dalbergia* Checklist (Cowell *et al.*, 2022) was funded by the European Union through the EU-CITES project “Implementation of CITES CoP18 Outcomes implemented by the Secretariat”.
10. The CITES *Dalbergia* Checklist (Cowell *et al.*, 2022) sets a new standard for CITES nomenclature references and includes several novel ways of delivering the required information in a user-friendly manner. As with other CITES checklists, this publication contains alphabetical lists of names for the accepted names and synonyms of *Dalbergia* species, as well as country checklists of the species known to occur within each country. The novelty of the publication lies within the species profile pages, where a wealth of information about each species is provided using intuitive icons, rather than text, thus providing a quick and easy to understand reference for the basic information of each species.
11. Decision 18.307 (Rev. CoP19) instructs the Secretariat to, subject to the availability of external resources, and in close cooperation with the nomenclature specialist of Plants Committee, develop an annotated edition of the CITES *Dalbergia* Checklist (Cowell *et al.*, 2022). In Notification No. 2023/024 on *Status of funding for the implementation of valid Decisions after CoP19*, the Secretariat has estimated USD 50,000 for this activity. While at the time of writing, the Secretariat is mobilizing the needed resources for the implementation of Decision 18.307 (Rev. CoP19), it could be ready to provide an oral update on this at PC26.
12. Provided the external resources are secured for the implementation of Decision 18.307 (Rev. CoP19), the Secretariat will prepare a report on progress to the next meeting of Plants Committee, for its consideration in accordance with Decision 18.308 (Rev. CoP19).

Decisions 19.285 and 19.286 on Nomenclature of Appendix-II listed orchids (Orchidaceae spp.)

13. At its 19th meeting (CoP19; Panama City, 2022), the Conference of the Parties revised Resolution Conf. 12.11 (Rev. CoP19) on *Standard nomenclature* to adopt, *inter alia*, a new taxonomic reference for the following Appendix-II listed orchids:

Taxa concerned: *Aerangis* (not *A. ellisii*), *Aerides*, *Angraecum*, *Bletilla*, *Brassavola*, *Bulbophyllum*, *Calanthe*, *Catasetum*, *Cattleya* (not *C. jongheana* or *C. lobata*), *Coelogyne*, *Comparettia*, *Cymbidium*, *Cypripedium*, *Dendrobium* (not *D. cruentum*), *Disa*, *Dracula*, *Encyclia*, *Laelia*, *Masdevallia*, *Miltonia*, *Miltoniopsis*, *Phalaenopsis*, *Pleione*, *Renanthera*, *Rhynchostylis*, *Rossioglossum*, *Vanda*, and *Vandopsis*

Reference: *Dhanda, S., Caromel, A., Govaerts, R., Pavitt, A., Bullough, L.-A. & Hartley, H. 2022. CITES Appendix II Orchid Checklist. Royal Botanic Gardens, Kew, Surrey, and UNEP-WCMC, Cambridge.*

Accessible in English, French and Spanish at: <https://www.kew.org/science/our-science/science-services/UK-CITES/cites-resources>

14. Decision 19.285 instructs the Secretariat to, *inter alia*, seek feedback from Parties and relevant expert on their experience in using the standard nomenclatural reference for Appendix-II listed orchids. In order to provide Parties sufficient time in using the new taxonomic reference, the Secretariat intends to issue a notification by the first quarter of 2024.
15. Further, in Notification No. 2023/024 on *Status of funding for the implementation of valid Decisions after CoP19*, the Secretariat has estimated at USD 15,000 the implementation of paragraph b) of Decision 19.285 on the development of an updated standard nomenclature reference for Appendix-II orchids. At the time of writing, the Secretariat has partially secured the resources needed for the implementation of paragraph b) of Decision 19.285 and could be ready to provide an oral update on this at PC26.
16. Provided the external resources needed for the implementation of Decision 19.285 are fully and timely secured, the Secretariat will prepare a report on progress to the next meeting of the Plants Committee, for its consideration in accordance with Decision 19.286.

Additional nomenclature matters for flora for the period CoP19–CoP20

17. In addition to the package of Decisions covered in this document, in paragraph 16 of my report to CoP19 (document CoP19 Doc. 84.1), I raised the following matters as proposed additions to the CoP19–CoP20 flora nomenclature workplan:
- Dipteryx oleifera* Benth. (1850) was found to be an older name for the Appendix III-listed *Dipteryx panamensis* (Pittier) Record & Mell (1924). This matter is further detailed in document PC26 Doc. 43.5 on *Standard nomenclature for cumarus* (*Dipteryx spp.*), including relevant recommendations for consideration at the present meeting;
  - changes were made to the classification of the genus *Bulnesia*. The Appendix II-listed *Bulnesia sarmientoi* Lorentz ex Griseb. was transferred in two separate papers to the genus *Gonopterodendron* as *Gonopterodendron sarmientoi* (Lorentz ex Griseb.) Godoy-Bürki (in April 2018) and to the genus *Plectrocarpa* as *Plectrocarpa sarmientoi* (Lorentz ex Griseb.) Christenh. & Byng (in February 2018). The Plants Committee should discuss which of the two proposed current names to use for this taxon. Thereafter the status of these names and their synonymy need to be updated; and
  - Turbinicarpus ×roeseiflorus* Backeb. should be treated as a natural hybrid. This has implications on how it is treated in the Appendices. A decision is needed on the treatment of this name and its placement on the Appendices.
18. Additionally, in my role as nomenclature specialist of the Plants Committee, I have identified the following aspects that could be added to the work plan outlined in paragraph *supra*:
- in accordance with Resolution Conf. 12.11 (Rev. CoP19), the current standard nomenclature reference for *Cyclamen* is the *CITES Bulb Checklist* (Davis *et al.*, 1999). This publication also serves as standard reference for *Galanthus* and *Sternbergia*. The section on *Cyclamen* especially is apparently severely outdated. The *Cyclamen* Society is in the process of producing a list of accepted species and is

interested to assist CITES to update the standard reference for *Cyclamen*. It would be useful to discuss this matter at PC26 to find out if the Plants Committee agree that there is a need to update the standard reference for *Cyclamen*. If so, a decision would also be needed whether only *Cyclamen* can be updated and the current *CITES Bulb Checklist* remain as standard reference for *Galanthus* and *Sternbergia*, or whether all three genera will need to be updated simultaneously;

- b) there are two homonyms for the name *Dracaena marginata* that are treated as synonyms of two different plants, one being a CITES-listed species and the other a non-listed species:
  - i) *Dracaena marginata* Aiton (1789) is a synonym of *Aloe purpurea* Lam., which is endemic to Mauritius and included in the genus listing of aloes on Appendix II. This synonymy is correctly reflected in Species+; and,
  - ii) *Dracaena marginata* Lam. (1786) is a synonym of *Dracaena reflexa* var. *angustifolia* Baker, a species occurring on Madagascar and other Western Indian Ocean Islands, and a commonly cultivated ornamental plant (dragon tree, song of India). This taxon is not listed on the CITES Appendices and is thus not included in Species+. Therefore, customs officials are unaware of the second homonym.

Dragon trees of the genus *Dracaena* are commonly traded under the name '*Dracaena marginata*', which causes delays at borders due to the confusion about whether or not CITES permits are needed for these plants. A suggested solution would be to add a note to the name *Dracaena marginata* Aiton in Species+ to alert users to the non-CITES-listed *Dracaena marginata* Lam. There are likely other such examples of homonyms and misapplied names that would benefit from a similar note. The opinion of the Plants Committee on this matter and on the wording of such a note, if deemed necessary, would be welcomed; and,

- c) documents CoP19 Inf. 12 (Rev. 1) and CoP19 Inf. 5 (Rev. 1) provide information on the agarwood-producing genera *Aquilaria* and *Gyrinops*. There is considerable confusion regarding the taxonomy and nomenclature of species in these two genera. Different sources provide varying numbers of species included in each genus, and different scientific names are applied to the same species in several cases. Furthermore, not all species in the two genera produce agarwood. It was suggested that the taxonomy and nomenclature of these two genera be revised to provide a clearer framework for management and conservation. The views of the Plants Committee on a way forward would be welcomed.

19. The above matters could be followed up either by identifying new taxonomic references for the *taxa* concerned or drafting decisions for consideration of the next meeting of the Conference of the Parties.

#### Recommendation

20. The Plants Committee is invited to:

- a) note the sets of Decisions on nomenclature matters for flora as contained in the Annex to the present document;
- b) note the progress in the implementation of Decisions 18.307 (Rev. CoP19) and 18.308 (Rev. CoP19) on *Production of a CITES Checklist for rosewoods (Dalbergia spp.)* and Decisions 19.285 and 19.286 on Nomenclature of Appendix-II listed orchids (*Orchidaceae* spp.); and
- c) develop recommendations for consideration of the Conference of the Parties for the additional nomenclature matters outlined in paragraphs 17 to 19 of the present document.

DECISIONS ON NOMENCLATURE MATTERS FOR FLORA

**NOMENCLATURE MATTERS**

**FLORA**

**Nomenclature for aloes (*Aloe* spp.)**

***Directed to the Secretariat, in close cooperation with the nomenclature specialist of the Plants Committee***

**19.279** The Secretariat shall, in close cooperation with the nomenclature specialist of the Plants Committee:

- a) subject to the availability of external resources, commission the drafting of an updated standard nomenclature reference for *Aloe* spp., taking into consideration relevant elements of paragraph 5 of the Addendum to document PC25 Doc. 31 and the Annex to PC25 Com. 5; and
- b) report on progress or results of this work to the Plants Committee.

***Directed to the Plants Committee***

**19.280** The Plants Committee shall:

- a) consider progress and results reported by the Secretariat as per Decision 19.279;
- b) provide input to assist with the preparation of the updated *Aloe* spp. checklist, as noted in paragraph 5 of the Addendum to document PC25 Doc. 31; and
- c) make recommendations to the Conference of the Parties, as appropriate.

**Cactaceae Checklist and its Supplement**

***Directed to Parties***

**18.304 (Rev. CoP19)** Parties shall inform the Secretariat on their experience in using the *CITES Cactaceae Checklist* (3rd edition) and its *Supplement* (2018) and any issues that may arise as they apply these lists, including feedback to improve it in the light of relevant updates of cacti taxonomy.

***Directed to the Secretariat***

**18.305 (Rev. CoP19)** The Secretariat shall:

- a) liaise with the United Nations Environment Programme – World Conservation Monitoring Centre (UNEP-WCMC) to obtain feedback on the utility of the *CITES Cactaceae Checklist* (3rd edition) and its *Supplement* (2018) and any queries that arise as they update relevant databases, taking into account feedback provided by Parties as per Decision 18.304 (Rev. CoP19); and
- b) report to the Plants Committee of this feedback and any comments it receives from the Parties in order for the Committee to review this at its regular meetings.

***Directed to the Plants Committee***

**18.306 (Rev. CoP19)** The Plants Committee shall review any report from the Secretariat related to the implementation of Decision 18.305 (Rev. CoP19) and, as appropriate, make recommendations to the Conference of the Parties at its 20th meeting.

### **Production of a CITES Checklist for rosewoods (*Dalbergia* spp.)**

***Directed to the Secretariat, in close cooperation with the nomenclature specialist of the Plants Committee***

**18.307 (Rev. CoP19)** The Secretariat shall, in close cooperation with the nomenclature specialist of the Plants Committee:

- a) subject to availability of external resources, develop an annotated CITES Checklist of *Dalbergia* spp., taking into consideration:
  - i) the Checklist as included in Resolution Conf. 12.11 (Rev. CoP19) on *Standard nomenclature*;
  - ii) research and other work needed for the production of such a Checklist; and
  - iii) aspects related to its publication; and
- b) report on progress to the Plants Committee at its regular meetings and seek its advice and input.

***Directed to the Plants Committee***

**18.308 (Rev. CoP19)** The Plants Committee shall:

- a) consider progress reported by the Secretariat as per Decision 18.307 (Rev. CoP19); and
- b) make recommendations to the Secretariat and the Conference of the Parties, as appropriate.

### **Nomenclature for ebonies (*Diospyros* spp.) (populations of Madagascar)**

***Directed to the Secretariat, in close cooperation with the nomenclature specialist of the Plants Committee***

**19.281** The Secretariat shall, in close cooperation with the nomenclature specialist of the Plants Committee:

- a) subject to the availability of external resources, commission the drafting of an updated standard nomenclature reference of *Diospyros* spp. (populations of Madagascar), taking into consideration relevant elements of paragraph 8 of the Addendum to document PC25 Doc. 31; and
- b) report on progress or results of this work to the Plants Committee.

***Directed to the Plants Committee***

**19.282** The Plants Committee shall:

- a) consider progress and results reported by the Secretariat as per Decision 19.281; and
- b) make recommendations to the Conference of the Parties, as appropriate.

### **Standard nomenclature for cumarus (*Dipteryx* spp.)**

***Directed to the Plants Committee, with the support of the Secretariat***

**19.283** The Plants Committee, with the support of the Secretariat, shall:

- a) consider and evaluate the nomenclatural issues related to *Dipteryx* spp., as outlined in document CoP19 Doc. 84.2 and identify a suitable standard nomenclatural reference for amendment of the Annex to Resolution Conf. 12.11 (Rev. CoP19) on *Standard nomenclature*; and
- b) formulate recommendations to the 20th meeting of the Conference of the Parties.

### **Standard nomenclature for African mahoganies (*Khaya* spp.)**

***Directed to the Plants Committee, with the support of the Secretariat***

**19.284** The Plants Committee, with the support of the Secretariat, shall:

- a) consider and evaluate the nomenclatural issues related to *Khaya* spp., as outlined in document CoP19 Doc. 84.3 and identify a suitable standard nomenclatural reference for amendment of the Annex to Resolution Conf. 12.11 (Rev. CoP19) on *Standard nomenclature*; and
- b) formulate recommendations to the 20th meeting of the Conference of the Parties.

### **Nomenclature of Appendix-II listed orchids (*Orchidaceae* spp.)**

***Directed to the Secretariat***

**19.285** The Secretariat shall:

- a) seek feedback from Parties and relevant experts on their experience in using the standard nomenclatural reference for Appendix-II listed orchids, in Resolution Conf. 12.11 (Rev. CoP19) on *Standard nomenclature*, including suggestions to improve the standard nomenclature in light of relevant updates in orchid taxonomy;
- b) subject to the availability of external resources, and in close collaboration with the nomenclature specialist of the Plants Committee, commission the drafting of an update of the standard nomenclature references for Appendix II-listed orchids, taking into account feedback received under paragraph a) of this Decision; and
- c) report to the Plants Committee the feedback received for review.

***Directed to the Plants Committee***

**19.286** The Plants Committee shall review any report from the Secretariat related to the implementation of Decision 19.285 and, as appropriate, make recommendations to the Conference of the Parties.

### **Nomenclature for pachypodiums (*Pachypodium* spp.)**

***Directed to the Secretariat, in close cooperation with the nomenclature specialist of the Plants Committee***

**19.287** The Secretariat shall, in close cooperation with the nomenclature specialist of the Plants Committee:

- a) subject to the availability of external resources, commission the drafting of an updated standard nomenclature reference for *Pachypodium* spp., taking into consideration relevant elements of paragraph 6 of the Addendum to document PC25 Doc. 31; and
- b) report on progress or results of this work to the Plants Committee.

***Directed to the Plants Committee***

**19.288** The Plants Committee shall:

- a) consider progress and results reported by the Secretariat as per Decision 19.287;
- b) provide input to assist with the preparation of the updated *Pachypodium* checklist, as noted in paragraph 6 of the Addendum to document PC25 Doc. 31; and
- c) make recommendations to the Conference of the Parties, as appropriate.

### **Standard nomenclature for roseroots (*Rhodiola* spp.)**

***Directed to the Plants Committee, with the support of the Secretariat***

**19.289** The Plants Committee, with the support of the Secretariat, shall:

- a) consider and evaluate the nomenclatural issues related to *Rhodiola* spp., as outlined in document CoP19 Doc. 84.4 and identify a suitable standard nomenclatural reference for amendment of the Annex to Resolution Conf. 12.11 (Rev. CoP19) on *Standard nomenclature*; and,
- b) formulate recommendations to the 20th meeting of the Conference of the Parties.

### **Nomenclature for yews (*Taxus* spp.)**

***Directed to the Secretariat, in close cooperation with the nomenclature specialist of the Plants Committee***

**19.290** The Secretariat shall, in close cooperation with the nomenclature specialist of the Plants Committee:

- a) subject to the availability of external resources, commission the drafting of an update of the standard nomenclature reference for *Taxus* spp., taking into consideration relevant elements of paragraph 10 of the Addendum to document PC25 Doc. 31; and
- b) report on progress or results of this work to the Plants Committee.

***Directed to the Plants Committee***

**19.291** The Plants Committee shall:

- a) consider progress and results reported by the Secretariat as per Decision 19.290; and
- b) make recommendations to the Conference of the Parties, as appropriate.