

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

STANDARD NOMENCLATURE FOR CUMARUS (*DIPTERYX* SPP.)

1. This document has been prepared by the Secretariat, in consultation with the specialist on botanical nomenclature of the Plants Committee (Ms. Ronell R. Klopper).
2. Following consideration of [CoP19 Prop. 48](#) at its 19th meeting (CoP19; Panama City, 2022), the Conference of the Parties agreed the inclusion of the genus *Dipteryx* spp. in Appendix II with annotation #17 (*Logs, sawn wood, veneer sheets, plywood and transformed wood*), and with an entry into effect delayed by 24 months, i.e. until 25 November 2024.
3. The Conference of the Parties did not, however, adopt a taxonomic reference for the genus *Dipteryx* [see Resolution Conf. 12.11 (Rev. CoP19) on *Standard nomenclature*]. Therefore, as a complement to the inclusion of *Dipteryx* spp. in Appendix II, CoP19 adopted Decision 19.283 on *Standard nomenclature for cumarus (Dipteryx spp.)* as follows:

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.*
4. For ease of reference, document CoP19 Doc. 84.2 [cited in paragraph a) of Decision 19.283] is included in the Annex to the present document.
 5. The nomenclature and taxonomy of the genus *Dipteryx* is currently not entirely resolved even though a recent revision of the genus is available (Carvalho et al., 2020)¹ as explained in paragraph 1.4 of CoP19 Prop. 48 and paragraph 3 of document CoP19 Doc. 84.2 (see Annex).

¹ Carvalho, C.S., de Fraga, N.C., Cardoso, D.B.O.S. & Lima, H.C. 2020. *Tonka, baru and cumaru: Nomenclatural overview, typification and updated checklist of Dipteryx (Leguminosae)*. *Taxon* 69(3): 582–592. <https://doi.org/10.1002/tax.12238>

6. The most recent revision of the genus (Carvalho *et al.*, 2020) recognizes 14 accepted species. This publication was used as the taxonomic framework for CoP19 Prop. 48. Further taxonomic revision of the genus is underway and might result in revised taxon concepts and changes in the number of species recognized.
7. At the time of writing (31 March 2023), the *Plants of the World Online*² and the *World Flora Online Plant List*³ both recognized the same 12 accepted species in the genus *Dipteryx*, while the *Global Biodiversity Information Facility*⁴ recognized 17 accepted species. In all three instances, the taxonomy followed in these websites differ in some respects from that proposed by Carvalho *et al.* (2020).
8. A single species (*D. hermetopascoaliana* C.S.Carvalho, H.C.Lima & D.B.O.S.Cardoso) has been published since publication of Carvalho *et al.* (2020) and will not be included in the proposed standard nomenclature reference. It might thus also be required to add the protologue of this new species (Carvalho *et al.*, 2023)⁵ as standard reference, in addition to Carvalho *et al.* (2020).
9. Furthermore, a name conservation proposal is currently being considered by the Nomenclature Committee for Vascular Plants of the International Association for Plant Taxonomy (IAPT) for the name *Dipteryx panamensis* (Pittier) Record & Mell (1924). This is a younger name for *D. oleifera* Benth. (1850). If this proposal is successful, the correct name for this taxon will be *D. panamensis*. But if the proposal is not successful, the principle of priority contained in the *International Code of Nomenclature for algae, fungi, and plants* will prescribe that the correct name is *D. oleifera*, as currently treated in Carvalho *et al.* (2020). Range States of the species have already indicated that they prefer the use of *D. oleifera* and this message was conveyed to the Nomenclature Committee for Vascular Plants of IAPT. Although said Committee has voted on this proposal in early 2023, the results of this ballot have not yet been made available at the time of writing.

Recommendations

10. In accordance with Decision 19.283, the Plants Committee is invited to:
 - a) consider and evaluate the nomenclatural issues related to *Dipteryx* spp., as outlined in the present document and its Annex (document CoP19 Doc. 84.2);
 - b) identify a suitable nomenclatural reference for amendment of the Annex to Resolution Conf. 12.11 (Rev. CoP19) on *Standard nomenclature*; and
 - c) formulate recommendations to the 20th meeting of the Conference of the Parties.

² <https://powo.science.kew.org/taxon/urn:lsid:ipni.org:names:331562-2>

³ <https://wfo.plantlist.org/plant-list/taxon/wfo-4000012093-2022-12?page=1>

⁴ <https://www.gbif.org/species/2947121>

⁵ Carvalho, C.S., Lima, H.C., Zuanny D.C., Gregorio, B.S. & Cardoso, D.B.O.S. 2023. The discovery of a new giant legume tree species in a severely fragmented landscape underscores the alarming threats to the biodiversity of the Brazilian Atlantic Forest. *Botanical Journal of the Linnean Society* 201(2): 215–229. <https://doi.org/10.1093/botlinnean/boac034>

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



Nineteenth meeting of the Conference of the Parties
Panama City (Republic of Panama), 14 - 25 November 2022

Species specific matters

Maintenance of the Appendices

Standard nomenclature

STANDARD NOMENCLATURE FOR *DIPTERYX* SPP.

1. This document has been submitted by the European Union and its Member States*

Background

2. In CoP19 Prop. 48 it is proposed to amend CITES App. II to include the genus *Dipteryx*. *Dipteryx* encompasses 14 species of large, canopy emergent, slow growing trees, distributed across Central and South America. The genus is targeted for its valuable hardwood timber, as well as its seeds, known as tonka beans, which are in demand internationally for use in the fragrance and food industries.
3. There is considerable taxonomic uncertainty regarding the genus *Dipteryx*. CoP19 Prop. 48 follows the nomenclature outlined in Carvalho *et al.* (2020), which recognises 14 species:

D. alata Vogel (1837)
D. casiquiarensis (Pittier) G.P. Lewis & Gasson (2000)
D. charapilla (J. F. Macbr.) Ducke (1948)
D. ferrea (Ducke) Ducke (1940)
D. lacunifera Ducke (1948)
D. magnifica (Ducke) Ducke (1940)
D. micrantha Harms (1926)
D. odorata (Aubl.) Forsyth f. (1794)
D. oleifera Benth. (1850)
D. polyphylla Huber (1913)
D. punctata (S.F.Blake) Amshoff (1939)
D. rosea Spruce ex Benth. (1860)
D. tetraphylla Benth. (1860) and
D. trifoliolata (Ducke) Ducke (1940).

* 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.

However, Royal Botanic Gardens Kew's Plants of the World Online database does not recognise *D. casiquiarensis* or *D. trifoliolata*, and Botanic Gardens Conservation International's GlobalTreeSearch database does not recognise *D. casiquiarensis*, *D. ferrea*, *D. tetraphylla* or *D. trifoliolata*. In 2021, Carvalho *et al.* (2021) additionally published a proposal to rename *D. oleifera* under its synonym "*Coumarouna panamensis* (*D. panamensis*)", on the basis that *C. panamensis* and *D. panamensis* are more well-established names for the species, and have been used in numerous national and regional floras, government publications and long-term ecological and socioeconomic studies. A new systematic revision of the genus *Dipteryx* is currently underway, based on morphological and molecular data; this review will reportedly consider *D. trifoliolata* to be a synonym of *D. punctata*.

4. If the proposal to include the genus *Dipteryx* in CITES Appendix II is adopted, the above-mentioned nomenclatural discrepancies and ambiguities create the potential for confusion or misinterpretation among Parties in the context of implementation and enforcement of trade controls for *Dipteryx* under CITES. In order to address such issues, and with regard to Res. Conf. 12.11 (Rev. CoP18) on *Standard Nomenclature*, it is considered that a CITES standard nomenclatural reference for *Dipteryx* spp. would become necessary. Carvalho *et al.* (2020) is suggested to be the most suitable current candidate for this.

Recommendations

5. Should CoP19 Prop. 48 on the inclusion of the genus *Dipteryx* in Appendix II be adopted by CoP19, it is recommended that the Conference of the Parties takes note of the nomenclatural ambiguities for the genus outlined above and directs the Plants Committee to provide advice on the possible amendment of the Annex to Res. Conf. 12.11 (Rev. CoP18) by proposing a standard reference for the genus. The following draft decisions are proposed for consideration and adoption by the Conference of the Parties:

Directed to the Plants Committee

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

- 19.AA a) Consider and evaluate the nomenclatural issues related to *Dipteryx* spp., and, if considered appropriate, propose a standard nomenclatural reference for amendment of the Annex to Res. Conf. 12.11 (Rev. CoP18) on *Standard Nomenclature*.
- b) Formulate recommendations to the 20th meeting of the Conference of the Parties.

References

- Carvalho, C.S., de Fraga, N.C., Cardoso, D.B.O.S. and Lima, H.C. 2020. Tonka, baru and cumaru: Nomenclatural overview, typification and updated checklist of *Dipteryx* (Leguminosae). *Taxon*. 69(3), pp.582-592
- Carvalho, C.S., Cardoso, D.B., de Lima, H.C., Zamora, N.A. and Klitgaard, B.B. 2021. (2842) Proposal to conserve *Coumarouna panamensis* (*Dipteryx panamensis*) against *D. oleifera* (Leguminosae). *Taxon*, 70(5) pp.1142-1144.

COMMENTS OF THE SECRETARIAT

- A. The Secretariat recommends that the Conference of the Parties adopt the draft decision in the document, subject to proposal CoP19 Prop. 48 being adopted at the present meeting. The Secretariat therefore recommends this document be considered together with CoP19 Prop. 48 on *Dipteryx* spp. The Secretariat also points Parties attention to its assessment of said proposal as contained in document CoP19 Doc. 89.1.
- B. Although the taxonomy and nomenclature of the species subject to CoP19 Prop.48 is under review, in order to address possible confusion or misinterpretation among Parties if the proposal is adopted, the proponents, suggest that 'Carvalho, C.S., de Fraga, N.C., Cardoso, D.B.O.S. and Lima, H.C. 2020. Tonka, baru and cumaru: Nomenclatural overview, typification and updated checklist of *Dipteryx* (Leguminosae).

Taxon. 69(3), pp.582-592', be adopted by addition to Resolution Conf. 12.11 (Rev. CoP18) on *Standard nomenclature*. The Secretariat recommends that the Conference of the Parties adopt this suggestion.

- C. Should proposal CoP19 Prop 48 be adopted, the Secretariat recommends the adoption of the draft decision contained in in paragraph 5 of the document, with the following revisions:

Proposed new text is underlined, proposed deletions are indicated in ~~strike~~through.

Directed to the Plants Committee

19.AA The Plants Committee, with support of the Secretariat, shall:

- a) ~~C~~onsider and evaluate the nomenclatural issues related to *Dipteryx* spp., as outlined in document CoP19 Doc. 84.2 and identify a suitable, ~~if considered appropriate, propose a~~ standard nomenclatural reference for amendment of the Annex to Resolution Conf. 12.11 (Rev. CoP18) on *Standard nomenclature*; and
- b) ~~F~~ormulate recommendations to the 20th meeting of the Conference of the Parties.

D. Further, should the draft decision be adopted, the Secretariat also draws Parties' attention to paragraph 3 of Resolution Conf. 12.11 (Rev. CoP18) which outlines the procedure for updating current standard nomenclatural references and adoption of new ones.

TENTATIVE BUDGET AND SOURCE OF FUNDING
FOR THE IMPLEMENTATION OF DRAFT RESOLUTIONS OR DECISIONS

According to Resolution Conf. 4.6 (Rev. CoP18) on *Submission of draft resolutions, draft decisions and other documents for meetings of the Conference of the Parties*, the Conference of the Parties decided that any draft resolutions or decisions submitted for consideration at a meeting of the Conference of the Parties that have budgetary and workload implications for the Secretariat or permanent committees must contain or be accompanied by a budget for the work involved and an indication of the source of funding. The Secretariat proposes the following tentative budget and source of funding.

As no new nomenclature reference is proposed for development during the upcoming intersessional period, the Secretariat considers that the workload implications for the implementation of the draft decision by the Plants Committee (and the Secretariat, should the revisions proposed be adopted) can be accommodated using existing resources.