

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

NOMENCLATURE FOR YEWS (*TAXUS* 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. Resolution Conf. 12.11 (Rev. CoP19) on *Standard nomenclature* lists the following taxonomic reference for *Taxus* spp.:

*World Checklist and Bibliography of Conifers (A. Farjon, 2001) as a guideline when making reference to the names of species of Taxus.*

3. At its 19th meeting (Panama City, 2022), the Conference of the Parties adopted Decisions 19.290 and 19.291 on *Nomenclature for yews (Taxus spp.)*, as follows:

***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.*

#### Progress in the implementation of Decision 19.290

4. The Secretariat estimates the cost of the development of the checklist for the genus *Taxus* spp. called for in Decision 19.290 at USD 80,000 (see also [Notification No. 2023/024](#))<sup>1</sup>. At the time of writing, the Secretariat is in the process reviewing this estimate to ensure the timely and effective implementation of Decision 19.290 and will provide an update on this at the present meeting.
5. In parallel and in consultation with the specialist on botanical nomenclature, the Secretariat has developed draft terms of reference for the development of a checklist for the genus *Taxus*, as contained in Annex 1 to the present document.
6. Noting that paragraph a) of Decision 19.290 calls for consideration of relevant elements of paragraph 10 of the Addendum to document PC25 Doc. 31, these have been included as Annex 2 to the present document for ease of reference at the present meeting.
7. In consultation with the specialist on botanical nomenclature, the Secretariat also highlights the following aspects relevant to the nomenclature of the genus *Taxus*:
  - a) the taxonomy and nomenclature of the genus *Taxus* is complicated and unresolved. Furthermore, morphological distinction of certain species, especially in Asia, is difficult. See Annex 2 to the present document for more detailed information;
  - b) the number of recognized species differs significantly among different sources. At the time of writing, the *Plants of the World Online* and the *World Flora Online Plant List* recognized 12 accepted species in the genus *Taxus*, while the Global Biodiversity Information Facility recognized 45 accepted species. However, many of the names treated as accepted by the Global Biodiversity Information Facility are nomenclaturally illegitimate later homonyms, hybrid names, and unresolved names.
  - c) the current standard nomenclature reference for *Taxus* (Farjon, 2001)<sup>2</sup> is outdated. Other references and sources to consider are listed in Annex 2 to the present document. A World Flora Online Taxonomic Expert Network is working towards creating a consensus classification for conifers and could be a promising potential source to consult.
8. The above considerations have been accounted for in the draft terms of reference contained in Annex 1 to the present document for further discussion at the present meeting.

#### Recommendations

9. The Plants Committee is invited to:
  - a) consider progress in the implementation of Decision 19.290; and,
  - b) in accordance with paragraph a) of Decision 19.291, provide input to the draft terms of reference contained in Annex 1 to the present document.

---

<sup>1</sup> The estimate is based on the funds that were needed for the Secretariat to commission the development of the CITES Dalbergia Checklist (available at: <https://www.kew.org/sites/default/files/2022-05/CITES%20Dalbergia%20Checklist%202022%20%28EN%29%20%28PDF%29.pdf>)

<sup>2</sup> Farjon, A. 2001. *World checklist and bibliography of conifers*. Royal Botanic Gardens Kew, Surrey.

DRAFT TERMS OF REFERENCE FOR A CHECKLIST FOR *TAXUS* SPP.

**Activities**

- a) **Activity 1** – Desk study and consultation with experts: in consultation and collaboration with taxonomic *Taxus* experts:
- i) Undertake a literature review using as a baseline document **PC26 Doc. XX** and its Annexes, with a particular focus on the references and taxonomic databases cited in them;
  - ii) Compare the names in the sources considered in paragraph *supra*, and consider any additional input made available by *Taxus* range States;
  - iii) Identify any discrepancies and the range States to which these apply.
- b) **Activity 2** – Develop and submit to the Secretariat for further consideration of the Plants Committee a draft of the “CITES Checklist for *Taxus* spp.” containing the following:
- i) Section 1: Introduction
    - Background
    - Data and information used
    - Methodology for the revision process
    - How to use the CITES Checklist
    - Bibliography
    - Key to symbols and country codes
  - ii) Section 2: Present full and alphabetically ordered lists of
    - scientific binomial names in current usage, and accepted binomials to which they are synonyms
    - accepted scientific binomials, their respective synonyms, and range States in which they occur
    - accepted scientific binomials of species occurring in each *Taxus* range State
  - iii) Section 3: For each species in alphabetical order, present the following information where available:
    - Valid taxon name
    - Synonym(s)
    - Common name(s) in English, French, and Spanish [when available]
    - Life form [e.g., trees (T), shrubs (S)]
    - Maximum height
    - Distribution
    - Vegetation / habitat types (whenever available)
    - Listing in CITES Appendices (annotations included)
    - Conservation status (published or preliminary IUCN Red List assessments, as appropriate)
    - Known to trade or likelihood to be in trade
    - Known uses
    - Known to occur in plantations or artificial propagation
    - Identification resources and illustrations (whenever available)
    - Known reference samples (when applicable)
- c) **Activity 3** – Develop a final “CITES Checklist for *Taxus* spp.”, taking into account feedback provided by the Plants Committee.

PARAGRAPH 10 OF THE ADDENDUM TO DOCUMENT PC25 DOC. 31

10. *Taxus* spp. (PC25 Doc. 31, paragraph 10 e)

The current standard reference for this genus is the 'World Checklist and Bibliography of Conifers' (Farjon 2001)<sup>3</sup>. There is a need to determine whether this list remains valid or if a replacement is required. Of the 11 species, only 5 and their infraspecific taxa are included in the Appendices. Furthermore, of the five species listed on Appendix II, two seem to no longer be accepted: *Taxus sumatrana* is synonymised under *T. wallichiana* (China indicated that this is still accepted); and *T. fauna* under *T. contorta* in other sources, including in 'A handbook of the world's conifers' (Farjon 2010)<sup>4</sup>. It was also suggested that *Taxus chinensis* (Pilg.) Rehder (Appendix II) is a synonym of *Taxus wallichiana* var. *chinensis* (Pilger) Florin (Appendix II) and that this should be changed.

The genus has always been considered difficult among taxonomists based on morphological characteristics, particularly for Asian species where ranges overlap. While there may not be complete agreement on the species delimitation and classification of *Taxus*, it was agreed that the current CITES standard reference is not valid and needs to be replaced, and that there might also be a need to update/amend the listings on Appendix II.

It was mentioned that Aljos Farjon could be consulted for advice, and that China and the USA had tentatively and briefly discussed coordinating on this issue. Farjon's 2001 work informed this issue when these taxa were first included in the Appendices. Farjon has subsequently published two updated books that include: Farjon, A. 2010. A handbook of the world's conifers, 2 vols. Brill Academic Publishers, Leiden; and Farjon, A. & Filer, D. 2013. An atlas of the World's conifers: an analysis of their distribution, biogeography, diversity and conservation status. Brill Academic Publishers, Leiden.

In addition, Farjon maintains a website, "Conifers of the World" (<https://herbaria.plants.ox.ac.uk/bol/conifers>). The Plants Committee could further explore and review these or additional options in detail. Additional references and data sources include:

- World Flora Online (<http://www.worldfloraonline.org>), and the relevant literature adopted therein.
- Fu, L., Li, N. & Mill, R.R. Taxaceae: *Taxus*. Flora of China, Vol. 4. Available online at [http://www.efloras.org/florataxon.aspx?flora\\_id=2&taxon\\_id=132355](http://www.efloras.org/florataxon.aspx?flora_id=2&taxon_id=132355) and <http://www.iplant.cn/info/Taxus?t=foc->
- Spjut, R.W. 2007. Taxonomy and nomenclature of *Taxus* (Taxaceae). Journal of the Botanical Research Institute of Texas. 1: 203–289. (<https://www.jstor.org/stable/41971409>)

---

<sup>3</sup> Farjon, A. 2001. World checklist and bibliography of conifers. Royal Botanic Gardens Kew, Surrey.

<sup>4</sup> Farjon, A. 2010. A handbook of the world's conifers, 2 vols. Brill Academic Publishers, Leiden.