

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

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

IDENTIFICATION OF TIMBER AND OTHER PRODUCTS

1. This information document has been submitted by the United Kingdom of Great Britain and Northern Ireland. It relates to PC26 Doc.20 on identification of timber and other products.
2. The purpose of this document is to share information about work that has been undertaken by World Forest ID, supported by the United Kingdom and other Parties, to build a georeferenced collection of timber and agricultural samples and reference data that will facilitate emerging scientific techniques to validate species and location of harvest declarations.



## Information Document on the Identification of Timber and Other Wood Products for the 26th Meeting of the Plants Committee to the Convention on International Trade in Endangered Species (CITES).

### Context

Of the estimated 780 or so tree species listed in the CITES Appendices, almost 700 have been included in the last decade, ranging from single species to entire genera. While not all are traded for timber, or even in trade at all, this large increase in tree species, including species in the same genera and/or with similar wood characteristics, has intensified identification challenges which hamper effective enforcement and contribute to illegal logging and associated trade.

To support implementation of these listings, increasingly sophisticated scientific tools and reference materials have recently been developed that will enable more powerful and practical identification of CITES-listed tree species in trade. There has been less focus, however, on the development of tools that can validate the geographic location of harvest claims, even when the species is known. Nonetheless scientific techniques that support location of harvest verification are rapidly evolving. This has important implications for effective implementation of many of the recent CITES tree species listings, with implications for non-detriment findings, determination of legal acquisition, and identifying whether particular samples originate in a range state covered by a listing, or not.

In response to Notification No. 2023/051, Decisions 19.142-148 and previous decisions related to the identification of timber and the development of scientific reference collections, the following information has been prepared related to World Forest ID, a non-profit organization developing a georeferenced collection of physical samples and reference data that will facilitate emerging techniques to validate species and location of harvest declarations.

### World Forest ID and the role of reference material

Most scientific testing techniques for location of harvest ultimately require comparison of the timber product to be tested against extensive verified reference samples from the natural range and there remain significant gaps in the availability of high caliber reference material with geolocation coordinates.

World Forest ID was specifically established to fill this gap with funding from the governments of the United Kingdom and the United States, and to enable more comprehensive testing for identification of timber and other wood products. World Forest ID emerged out of an international group of organizations, each recognizing the need for opensource reference data and global consensus building on scientific protocols and bringing their expertise in forestry, traceability and biological sciences together; The Forest Stewardship Council (FSC), Royal Botanic Gardens, Kew, U.S Forest Service International Programs, and the World Resources Institute (WRI).

World Forest ID has trained collectors on five continents to take physical samples of timber producing tree species since 2019. As of May 2023, World Forest ID has collected over 10,000 samples of timber and agricultural commodities. This covers 347 species collected in 80 expeditions, across 45 countries.

### The role of scientific testing for location in CITES implementation

As of 2023, there are over 400 timber-producing tree species listed in the CITES Appendices. While many listings are species specific, several recent decisions have reflected locationbased genera listings, such as the CoP19 adoption of the African populations of *Pterocarpus* and *Afzelia* in Appendix II. Location-based listings create an additional enforcement challenge requiring tools that can verify both species and location claims for many CITES listed timber species and World Forest ID is developing a database of reference samples that are both species- and location-validated.

### Status of World Forest ID CITES listed timber species collections

World Forest ID started collecting endangered and highly traded timber species to support implementation of regulations designed to tackle nature crime. More recently, World Forest ID has collected close to 700 samples of CITES listed timber species. This includes almost 450 reference samples of timber species currently listed on Appendix II and 19 of timber species listed on Appendix III. World Forest ID has already collected 216 samples of timber species in the genera *Dipteryx*, *Handroanthus* and *Tabebuia*, with additional collections planned in the next twelve months to support implementation and enforcement of the listings when they come into force in November 2024.

World Forest ID's physical sample collections of CITES listed timber species cover at least 14 countries with the largest collections for *Cedrela* and *Handroanthus* spp. across Brazil, *Pterocarpus* spp. from Cameroon, Democratic Republic of the Congo, the Republic of the Congo and Gabon and *Dipteryx* spp. from Peru. In all instances, the samples have been collected with associated geolocation coordinates to support Parties to scrutinize locationbased claims.

World Forest ID is now prioritizing collections of CITES listed timber species, to complete the full range of all species already partially collected in the World Forest ID database. This includes gathering additional samples of *Afzelia* and *Pterocarpus* spp. across the full range so that enforcement agents can distinguish between listed and unlisted specimens of the same genus. Additional collections will focus on *Dipteryx*, *Handroanthus*, *Khaya* and *Tabebuia* spp.

### **Challenges in collecting samples of CITES-listed species**

Despite amendments to Resolution 12.3 (Rev. CoP19) on Permits and Certificates and to Resolution 11.14 (Rev. CoP18) on *Non-commercial loan, donation or exchange of museum, herbarium, diagnostic and forensic research specimens*, shipping of samples to partner laboratories has proven time consuming and complicated. There are still very few Registered Scientific Institutes (RSIs) to enable quick and easy international transfer between institutions.

A lack of NDFs for many highly exploited timber species also prevents export from countries without RSIs, despite an acknowledgement within CITES Parties that making an NDF for a scientific sample collected without damaging the tree is a simple and straightforward process. An increase in awareness of these procedures would greatly support and improve the process of collecting samples at scale to enable credible scrutiny of location of harvest claims.

### **Supporting CITES implementation**

All reference data developed by World Forest ID will be available for comparison by laboratories testing traded samples on behalf of enforcement officials wishing to verify compliance with CITES. The current dataset includes stable isotope and trace element values, as well as a growing set of environmental, land use and spatial data layers which limit the number of possible harvest locations, and which contribute to the model accuracy for verification and determination queries.

Currently, comparison of traded product values with the reference data set is manual, undertaken by World Forest ID data scientists, but over the next 12 months, World Forest ID is developing a "user interface", which will allow CITES enforcement officials to interact with the data to see how many reference samples exist for a particular species or area, as well as view other environmental data layers to help to determine the origin of the timber in the product traded.

World Forest ID asks that Parties recognise the work being undertaken to collect and geolocate timber species samples at CoP20 and make use of the World Forest ID database. It is critical that donors invest significant resources in the rapid expansion of scientific tools and reference materials while also making these resources more accessible to relevant range states and CITES enforcement authorities.

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