



## Exotic Wood Trade: Is It Legal?

In recent decades, the international trade in illegal wood has grown to such an extent that a number of countries have come together to take vigorous measures aiming to curb this business, which is frequently carried out under the protection of organized crime. According to INTERPOL (2019), illegally cut trees account for between 15 and 30% of all timber sold worldwide. According to the same source, the annual dollar value of this illegal trade is estimated at between USD 51 billion and USD 152 billion.

This trade has disastrous economic, environmental and social consequences, not only in the countries where the wood is harvested, but also in Canada, since Canada's forest industry is competing in international markets against cheaper products from illegal sources. Moreover, products made from this wood can be found on the shelves of our stores, unbeknownst to consumers, and even to retailers...

### An overview of the problem

According to various sources, the volume of timber logged fraudulently in some developing countries is greater than the volume of legally harvested wood. These sources maintain that illegal logging accounts for 50 to 90% of all forestry activities in the major tropical forests, such as those of the Amazon Basin, Central Africa and Southeast Asia. Aside from the destruction of biodiversity, this improper harvesting is slowing down the fight against climate change, in particular by increasing CO<sub>2</sub> emissions and the soil erosion that frequently follows deforestation, especially in tropical countries. Various tools and agreements exist to promote fair trade and protect the most vulnerable species, such as the Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES, <https://www.cites.org/>).

This agreement, adopted by some 180 countries, including Canada, ensures that trade in these endangered species (see Appendices: <https://cites.org/eng/app/appendices.php>) does not affect their survival. To date, trade in some 5,800 animal species and 30,000 plant species, including approximately 900 tree species, is regulated by CITES.

### Canadian involvement

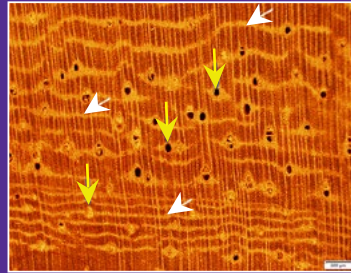
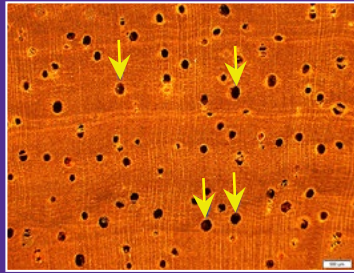
Canada is committed to fighting the illegal trade in forest products, namely by implementing the expertise developed in its scientific

research centres. The Canada Border Services Agency informs officers of the Wildlife Enforcement Directorate and Environment and Climate Change Canada (ECCC) of any suspicious imports of exotic wood. One of ECCC's mandates is to ensure the protection and enforcement of international and interprovincial trade laws concerning wild fauna and flora, including those species included in CITES checklists. ECCC officers perform an initial analysis based on import permits and the appearance and macroscopic structure of the wood (e.g., its colour, odour, density, texture, pore frequency

Rosewood on the endangered list and regulated under CITES. Logs loaded on a boat in the port of Toamasina (Tamatave), Madagascar.

Source: Pierre-Yves Babelon/Alamy.





Cross-sections: (left) Brazilian rosewood (*Dalbergia nigra*), endangered according to CITES; (right) a species of Morado (*Machaerium*) not regulated by CITES. The two types of wood are similar (e.g., in terms of colour and density), but under the microscope, the pores (yellow arrows) appear larger in *D. nigra*, whereas the wavy bands of clear parenchyma cells (white arrows) are more visible and numerous in the Morado.

Source: Martine Blais, NRCan.

and pore size. If there is any doubt, samples are sent to the Laurentian Forestry Centre (LFC) of the Canadian Forest Service (CFS), where the wood is subjected to microscopic identification. This traditional method is usually sufficient to achieve identification at least at the genus level (see inset and figures). If necessary, the samples are compared to those from the CFS collection. The collection, which is managed by the Canadian Wood Fibre Centre, comprises over 4,000 wood specimens and several thousand microscopic slides. The LFC is also developing other methods of analysis, such as genetic profiles, to help identify more precisely the type of wood being examined. In addition, the LFC is working with other CFS and ECCC branches to improve the Canadian government's ability to correctly identify wood in order to combat illegal imports. For example, with support from the CFS, ECCC is developing mass spectrometry technology in its Vancouver forensic laboratory to identify the specific chemical signature of wood from the various species listed by CITES.

## Fighting illegal trade together

In recent years, combating the trade in illegal timber has become a worldwide economic and environmental issue. Many countries, including Canada, have committed to fighting this scourge, and major developments have been achieved to improve the traceability and identification of timber passing through the international market at all levels of the supply chain. In collaboration with various federal agencies and departments, CFS scientists are continuing their research in order to remain a reliable source of wood identification, thereby contributing to international efforts.

For more information for importers on how to ensure responsible forest supplies: <http://cfs.nrcan.gc.ca/pubwarehouse/pdfs/36620.pdf>.

Information on suspected illegal activity may be emailed to [ec.enviroinfo.ec@canada.ca](mailto:ec.enviroinfo.ec@canada.ca). Tips can also be shared anonymously by calling *Crime Stoppers* at 1-800-222-8472 (TIPS). You may receive a reward of up to \$2,000 for doing so.

INTERPOL. 2019. Global Forestry Enforcement - Strengthening Law Enforcement Cooperation Against Forestry Crime. <https://www.interpol.int/en/content/download/5149/file/Global%20Forestry%20Enforcement%20Prospectus%202019-web.pdf>

All species of *Dalbergia* (rosewood) are threatened and are regulated by CITES. They alone constitute ~35% of the value of all plants and animals seized worldwide in recent years. The remarkable physical qualities of this wood, together with its beautiful, generally reddish but sometimes very dark to deep black hue excite a strong international demand for products made of rosewood, such as furniture and musical instruments. In Madagascar, where the rich biodiversity is largely dependent on forests, deforestation resulting from illegal activities is of great concern. It is in fact the only place in the world where ebony is also regulated under CITES.

### For further information, please contact:

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