

# THE INTERNATIONAL TIMBER TRADE: A Working List of Commercial Timber Tree Species

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**The International Timber Trade:**  
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**By Jennifer Mark,  
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**Cover Image:**

Sapele sawn timber being put together at IFO in the Republic of Congo. Photo credit:  
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## Introduction

It is widely recognised that human activities are placing global biodiversity under increasing pressure<sup>1,2</sup>. Tropical and temperate forests are amongst the world's most biodiverse ecosystems<sup>3</sup>, supporting over 50% of all terrestrial species<sup>4</sup>.

Forests also provide a multitude of ecosystem services, including maintenance of vital biogeochemical processes such as nutrient cycling, carbon sequestration, water filtration and localised climate control<sup>5</sup>. Some 350 million people around the world rely on forests for everyday subsistence<sup>6</sup>, and timber, food and medicinal forest species support multimillion dollar industries<sup>7</sup>. However, this wealth of biodiversity and ecosystem services remains at risk from deforestation and forest degradation<sup>8</sup>.

One of the first steps towards safeguarding forest biodiversity is to identify the species most at risk. To address this knowledge gap, Target 2 of the Global Strategy for Plant Conservation (GSPC) calls for “*an assessment of the conservation status of all known plant species*” by 2020<sup>9</sup>. Currently, conservation status assessments meeting the globally-recognised standards of the International Union for the Conservation of Nature (IUCN) Red List of Threatened Species<sup>10</sup> have been carried out at the global level for approximately only 4% of known plant species<sup>11</sup>. There is therefore an urgent need to conduct such assessments, particularly for ‘useful’ plants, including tree species valued for timber.

The World Bank estimates that the trade in timber products contributes some \$468 billion annually to global GDP<sup>12</sup>. Timber trees also provide numerous critical ecosystem services. However, despite the escalating threats to timber species from land conversion, illegal trade and unsustainable logging, we lack up-to-date conservation status assessments for many of these species.

A compounding problem is the lack of documentation regarding which tree species are actively being harvested for commercial trade. There is currently no unified database of commercially harvested timber tree species, though numerous different lists exist with varying degrees of overlap.

# Summary

## *Purpose*

The purpose of this publication is to provide a composite working list of timber tree species in trade, by integrating different species lists from seventeen different sources. Each taxon is listed by scientific binomial or trinomial and family. The sources used to compile the working list are described, together with information on the author / publishing organisation of each source, and where it can be accessed. This information is intended to be of use to taxonomists; botanical, conservation and ecological researchers; timber-sourcing organisations; woodworkers; and other interested parties.

It should be noted that this list does not constitute a definitive statement regarding which tree species are traded for timber. This reflects the fact that information relating to the use of timber tree species is poorly documented and highly fragmentary. As many different lists of such species have been produced, the purpose of this publication is to provide a readily accessible summary of this information, to help identify those species for which a strong consensus exists regarding their use for timber, and those for which information is lacking. This working list is provided to encourage further research and assessment, to determine with greater precision the use of different tree species for timber.

## *Aims*

- Provide an integrated list of open access (or easily accessible) sources supplying information on commercial timber tree species.
  
- Provide an overview of which tree species are currently harvested and traded commercially on the international timber market.

## ***Considerations for using the Working List***

### ***1. Choosing source lists to compile***

There are numerous existing timber species lists, from published IUCN Red List assessments to national trade inventories. However, these lists were created for a variety of different purposes, with different degrees of reliability and a varying degree of overlap. It was decided to base the following working list on a thorough review of contemporary open-access resources, including regularly-updated web databases, which list commercial timbers. The decision to omit the IUCN Red List database from these consolidated source lists is explained in greater detail in Section 1.

### ***2. How well does the working list reflect current trade?***

Although the global timber trade is of current and historic importance, it is poorly documented and, consequently, information on which tree species are harvested is sparse and often difficult to access. With this in mind, it was decided that a list incorporating data from a diverse range of recent trade-related resources would provide a useful indication of current species in international trade. This approach enables species to be identified for which a high degree of consensus exists regarding their use as timber. However, the list unavoidably incorporates a high degree of uncertainty, and this should be borne in mind when interpreting the results.

This working list is intended to give a current overview of commercial timbers on the international market. However, trade in any species waxes and wanes with customer demand and species availability. Therefore, it should be acknowledged that any list will require future updates to reflect changes in the trade. The following working list should therefore be considered as a work in progress rather than a definitive statement.

### ***3. Nomenclature***

The names that woods are traded under do not always follow conventional scientific notation. Rather, it is common practice to trade a species under a product type (e.g. 'sawn logs'), or by a common name, which may differ between countries and regions. Trade lists of timber trees described by full Latin binomial are therefore in the minority. This presents a problem when identifying timber species, so to maximise reliability, this working list is compiled from only those sources that use the full Latin binomial or trinomial.

#### **4. Product types**

Timber can be broadly divided into two product groups: a) timber valued for construction qualities such as strength, flexibility or durability; b) timber valued for aesthetic qualities such as colour, patterning or acoustic properties (e.g. in woods used to make musical instruments). Additionally, a timber may be favoured for traditional reasons, for example because its use historically signified wealth or prestige. Some of the species in the working list may have other major commercial uses, for example as fruit trees. These species may be secondarily used for timber products, such as veneers.

#### **5. Illegally traded species**

Despite advances in certification and tracking of wood products from place of harvest to end product, there is still a flourishing illegal trade in timber species. The sources used for this working list do not explicitly focus on illegally traded species, with the exception of species listed on Appendix III of the Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES)<sup>13</sup>. However, consumer demand for timbers with certain desirable aesthetic and construction qualities fuels both illegal and legal trade. Therefore, it seems likely that illegally logged taxa will be represented in the working list.

#### **6. Updates**

As a working list, this species list is intended to evolve and to be refined by users. We welcome relevant information on the timber species listed, or on any commercial timber species that have been unintentionally omitted.

### **Section Guide**

**Section 1** explains the methods and rationale behind this publication.

**Section 2** provides a description of each of the resources used.

**Section 3** is a working list of commercial timber species, compiled from seventeen open-access resources published by conservation organisations, commercial companies, and taxonomic and woodwork databases.

# Section 1: Methods and Rationale

## ***Rationale - Which tree species are internationally traded for timber?***

Our original intention was to base this list on the list of timber species previously assessed for the IUCN Red List, primarily those included in *The World List of Threatened Trees* (Oldfield *et al.*, 1998)<sup>14</sup>. However, after consultation with TRAFFIC<sup>15</sup> and the IUCN<sup>16</sup>, it became apparent that these previous assessments may not accurately reflect species currently in trade. It was concluded that a more representative list might be compiled using more recent data, including CITES-listed timber tree species; trade reports; and publications from conservation organisations. The current integrated list is based on such sources.

We have also included independently run databases such as woodexplorer.com and thewooddatabase.com, used by taxonomists and woodworkers interested in identifying commercial timber products to species level. Some of these resources are regularly updated and may benefit from crowd-sourcing user's comments to rapidly detect and correct errors.

In addition to the well-known timber trade authorities CITES, TRAFFIC, the International Tropical Timber Organisation (ITTO) and L'Association Technique Internationale des Boix Tropicaux (ATIBT), it was decided to include species lists from organisations with a focus on legal sourcing of timber, including Nature Ecology and People Consult (NEPCon), the Forest Stewardship Council (FSC), Greenpeace and the World Wide Fund for Nature (WWF). The former two organisations work directly with private sector sourcing companies, therefore should be indicative of what is actually in trade.

## ***Methods***

### ***1. List compilation***

Taxa lists were extracted from seventeen open-access sources (see Section 2 for a description of each source) and combined into a single list using Microsoft Excel<sup>17</sup>.

### ***2. Data cleaning and taxonomic checks***

First, the composite list was cleaned to remove duplicates, genus-only listings and common/trade names. Next, *The Plant List*<sup>18</sup> was used as a taxonomic reference to check for synonymy and spelling errors.



### **3. Ranking**

To check reliability, we attempted to trace the initial origin of each species list used. In some cases it was impossible to determine exact origins. Therefore, each species was ranked by the number of sources in which it was featured (for full ranked list, see Appendix II – Microsoft Excel spreadsheet). Taxa appearing in only one resource were excluded from the final published working list. By listing only those taxa appearing in two or more resources, we minimised the chance of erroneously including non-timbers.

### **4. Removing gymnosperms**

Gymnosperm taxa were removed from the compiled list using *The Gymnosperm Database*<sup>19</sup> as a taxonomic reference. They are presented in Appendix I.

## Section 2: Resources List

The following seventeen resources were produced by international development, conservation and forest certification organisations; consultants on the timber trade; national forestry departments; taxonomists; and woodworkers.

Table 1 - Resources used to compile working list of commercial timbers

Resource name	Organisation / Author	Date published / version used	Will resource be updated in future?
<b>CITES Appendices I, II, III</b>	Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES)	2013	Yes - CITES member states convene every 3 years at a Conference of the Parties (CoP). Amendments to Appendices I & II must be made at a CoP. Species may be added or removed from Appendix III at any time.
Resource description	The CITES Appendices are lists of species of fauna and flora, including some timber tree species, that are or may soon become threatened with extinction. CITES affords these species different levels of protection from over-exploitation by regulating their commercial trade.		
Available from	<a href="http://www.cites.org/eng/app/appendices.php">http://www.cites.org/eng/app/appendices.php</a>		
<b>Good Wood Guide</b>	Greenpeace	2004	Not updated
Resource description	Consumer guide listing traditionally-harvested timbers together with more sustainable, FSC certified alternatives. Provides information on IUCN Red List status of the 'traditional' species.		
Available from	<a href="http://www.greenpeace.org.uk/MultimediaFiles/Live/FullReport/6759.pdf">http://www.greenpeace.org.uk/MultimediaFiles/Live/FullReport/6759.pdf</a>		
<b>FSC Species Terminology</b>	Forest Stewardship Council (FSC)	2007	Not updated
Resource description	A compilation of tree species commonly used in international trade, giving both scientific and common names, as well as synonyms. Updates discontinued. For more information, please contact FSC.		
Available from	<a href="FSC_STD_40_004b_V1_0_EN_FSC_Species_Terminology.pdf">FSC_STD_40_004b_V1_0_EN_FSC_Species_Terminology.pdf</a>		
<b>Good Wood Guide Checklist</b>	Friends of the Earth; Fauna and Flora International	Unknown	Not updated
Resource description	Consumer guide to sustainably-sourced wood for construction (or similar) projects. Lists timber species by common and scientific name, and provides information on uses, geographic origin and global threat status (according to the IUCN Red List and CITES).		
Available from	<a href="http://www.foe.co.uk/campaigns/biodiversity/resource/good_wood_guide/wood_timber_types_a_to_g.html">http://www.foe.co.uk/campaigns/biodiversity/resource/good_wood_guide/wood_timber_types_a_to_g.html</a>		

Resource name	Organisation / Author	Date / Version	Will resource be updated in future?
<b>An assessment of tree species which warrant listing in CITES</b>	Hewitt, J	2007	Not updated
Resource description	Report prepared for Milieudefensie (Friends of the Earth, Netherlands), giving case studies of 17 commercial timber species considered to warrant CITES listing due to perceived threat from unsustainable or illegal trade. Also provides information on 4 CITES-listed species.		
Available from	<a href="https://milieudefensie.nl/publicaties/rapporten/an-assessment-of-tree-species-which-warrant-listing-in-cites">https://milieudefensie.nl/publicaties/rapporten/an-assessment-of-tree-species-which-warrant-listing-in-cites</a>		

<b>Annual review and assessment of the world timber situation - Appendix 3: Major tropical species traded in 2010 and 2011</b>	International Tropical Timber Organization (ITTO)	2012	Yes – this publication is now produced biannually (since 2013).
Resource description	ITTO Annual Reviews provide statistics on global production and trade in timber, with main focus on tropical regions. They utilise data submitted by ITTO member countries. Appendix 3 of the 2012 report gives common and scientific names of the major tropical timber species in trade (2010-2011).		
Available from	<a href="http://www.itto.int/annual_review/">http://www.itto.int/annual_review/</a>		

<b>Nomenclature générale des bois tropicaux (p.2-40)</b>	L'Association Technique Internationale des Bois Tropicaux (ATIBT)	2013	Future updates possible
Resource description	Internationally-recognised nomenclature linking common name to correct scientific name for commercially traded tropical timber species. Common name given is that under which each species is traded by the main country of export or import. An English language version of this document is available on request from ATIBT.		
Available from	<a href="http://www.atibt.org/wp-content/uploads/2013/06/Nomenclature-ATIBT-26062013.pdf">http://www.atibt.org/wp-content/uploads/2013/06/Nomenclature-ATIBT-26062013.pdf</a>		

<b>NEPCon LegalSource™ Due Diligence System</b>	NEPCon	2013	Not updated
Resource description	NEPCon's LegalSource™ Due Diligence System provides resources for client organisations wanting to ensure legal timber sourcing. Online guidance material includes an example list of timber species in trade. Registration is required to access this resource.		
Available from	<a href="http://www.nepcon.net/5174/English/Certification/Timber_legality_services/Due_diligence_system/">http://www.nepcon.net/5174/English/Certification/Timber_legality_services/Due_diligence_system/</a>		

Resource name	Organisation / Author	Date / Version	Will resource be updated in future?
<b>Commercial timbers: descriptions, illustrations, identification and information retrieval</b>	Richter, H.G. and Dallwitz, M.J.	Dates from 2000. Version: 25 <sup>th</sup> June 2009	Future updates possible
Resource description	Database of common hardwood timber species in international trade. Provides taxa descriptions and an interactive identification system for 350+ commercial timbers.		
Available from	<a href="http://delta-intkey.com">http://delta-intkey.com</a>		

<b>Wood Species Database</b>	The Timber Research and Development Association (TRADA)	Version: 2002-2014	Future updates likely
Resource description	A searchable, illustrated database of 150+ commercial timber species, including information on mechanical properties and common end uses of each wood. Registration (free) is required to access this resource.		
Available from	<a href="http://www.trada.co.uk/techinfo/tsg">http://www.trada.co.uk/techinfo/tsg</a>		

<b>The Wood Database</b>	Meier, E	Version: 2014	Yes – resource continues to be updated
Resource description	Comprehensive database for woodworkers, searchable by scientific name, common name or wood appearance. Species-specific information on general distribution, average tree size, appearance and mechanical properties of wood. A regularly updated resource.		
Available from	<a href="http://www.wood-database.com/wood-identification/by-scientific-name/">http://www.wood-database.com/wood-identification/by-scientific-name/</a>		

<b>Timber species imported into the UK</b>	Timber Trade Federation (TTF)	2009	Not updated
Resource description	Guide to UK timber species imports, divided into three categories: natural forest hardwoods, natural forest softwoods and plantation species. The guide also details which of these taxa are CITES-listed. Non-TTF members will need to request access to this resource.		
Available from	<a href="http://www.ttf.co.uk/Article/Detail.aspx?ArticleUid=ee39cec8-21b6-4be4-9361-6001612c7190">http://www.ttf.co.uk/Article/Detail.aspx?ArticleUid=ee39cec8-21b6-4be4-9361-6001612c7190</a>		

Resource name	Organisation / Author	Date / Version	Will resource be updated in future?
<b>Precious woods: Exploitation of the finest timber (p.36-45)</b>	TRAFFIC	2012	Not updated
Resource description	Report on high value timbers, commissioned by Chatham House as a background paper for their meeting: ' <i>Tackling the Trade in Illegal Precious Woods</i> ' on 23-24 April 2012.		
Available from	<a href="http://www.illegal-logging.info/sites/default/files/uploads/PreciousWoodsbackgroundpaper1TheTradeinPreciousWoodsTRAFFIC.pdf">http://www.illegal-logging.info/sites/default/files/uploads/PreciousWoodsbackgroundpaper1TheTradeinPreciousWoodsTRAFFIC.pdf</a>		

<b>Wood Properties Techsheets</b>	United States Department of Agriculture Forest Products Laboratory	Publication date unknown	Unlikely to be updated
Resource description	Four 'Techsheets': Lesser known woods; North American hardwoods; North American softwoods; tropical hardwoods. Provide information on distribution, commercial use, wood mechanical properties and appearance of selected timber taxa.		
Available from	<a href="http://www.fpl.fs.fed.us/research/centers/woodanatomy/">http://www.fpl.fs.fed.us/research/centers/woodanatomy/</a>		

<b>The Wood Explorer</b>	The Wood Explorer, Inc.	Version: 2014	Yes – resource continues to be updated
Resource description	Free access to a searchable list of 1650 commercial species, including scientific, trade and common names. Species pages include common end uses and a description of both tree and wood properties. Additional data available for a fee.		
Available from	<a href="http://www.thewoodexplorer.com/species.html">http://www.thewoodexplorer.com/species.html</a>		

<b>Woodworkers Source Wood Library</b>	Woodworkers Source	2008	Future updates likely
Resource description	Database of commercial timber species, listed by scientific and common name. Species-specific information on timber end uses, geographic region, wood working properties, and appearance of tree and wood.		
Available from	<a href="http://www.woodworkerssource.com/wood_library.php">http://www.woodworkerssource.com/wood_library.php</a>		

<b>Guide to lesser-known tropical timber species (p.4-86)</b>	World Wildlife Fund (WWF) Global Forest & Trade Network	2013	Not updated
Resource description	Consumer guide to lesser-known species as alternatives for traditionally-sourced timbers. Provides information on IUCN Red List status of the traditional species, and possible end uses of the lesser-known species profiled.		
Available from	<a href="http://www.wwf.org.uk/gftn_lkts_guide_final_oct_2013.pdf">wwf_gftn_lkts_guide_final_oct_2013.pdf</a>		

## Section 3: Timber tree species working list

The following is a working list of 1,575 timber taxa, listed alphabetically by family. A full breakdown of the number of resources in which each taxon was listed, as well as resource identity (see Table 1 above for a description of each resource used) is provided in Appendix II.

<b>Family:</b>	<b>Scientific name:</b>
<b><i>Achariaceae</i></b>	<i>Scottellia coriacea</i>
	<i>Scottellia kamerunensis</i>
<b><i>Altingiaceae</i></b>	<i>Altingia excelsa</i>
	<i>Liquidambar formosana</i>
	<i>Liquidambar styraciflua</i>
<b><i>Anacardiaceae</i></b>	<i>Anacardium excelsum</i>
	<i>Anacardium giganteum</i>
	<i>Anacardium occidentale</i>
	<i>Anacardium spruceanum</i>
	<i>Antrocaryon klaineianum</i>
	<i>Antrocaryon micraster</i>
	<i>Astronium fraxinifolium</i>
	<i>Astronium graveolens</i>
	<i>Astronium lecointei</i>
	<i>Astronium urundeuva</i>
	<i>Buchanania arborescens</i>
	<i>Buchanania latifolia</i>
	<i>Camptosperma auriculatum</i>
	<i>Camptosperma brevipetiolatum</i>
	<i>Camptosperma coriaceum</i>
	<i>Camptosperma montanum</i>
	<i>Camptosperma panamense</i>
	<i>Camptosperma squamatum</i>
	<i>Dracontomelon costatum</i>
	<i>Dracontomelon dao</i>
	<i>Dracontomelon lenticulatum</i>
	<i>Euroschinus vieillardii</i>
	<i>Gluta curtisii</i>
	<i>Gluta papuana</i>
	<i>Gluta renghas</i>
	<i>Gluta tourtour</i>
	<i>Gluta wallichii</i>
	<i>Koordersiodendron pinnatum</i>
	<i>Lannea coromandelica</i>
	<i>Lannea welwitschii</i>

*Loxopterygium sagotii*  
*Mangifera altissima*  
*Mangifera caloneura*  
*Mangifera foetida*  
*Mangifera indica*  
*Mangifera mucronulata*  
*Mangifera salomonensis*  
*Metopium brownei*  
*Parishia insignis*  
*Rhus typhina*  
*Schinopsis balansae*  
*Schinopsis lorentzii*  
*Schinopsis quebracho-colorado*  
*Schinus molle*  
*Spondias mombin*  
*Swintonia floribunda*  
*Swintonia schwenckii*  
*Swintonia spicifera*  
*Tapirira guianensis*

***Anisophylleaceae***

*Combretocarpus rotundatus*  
*Poga oleosa*

***Annonaceae***

*Annickia chlorantha*  
*Anonidium mannii*  
*Cananga odorata*  
*Cleistopholis glauca*  
*Cleistopholis patens*  
*Duguetia confinis*  
*Duguetia staudtii*  
*Mezzettia parviflora*  
*Oxandra lanceolata*  
*Polyalthia fragrans*  
*Polyalthia oblongifolia*

***Apocynaceae***

*Alstonia actinophylla*  
*Alstonia angustifolia*  
*Alstonia angustiloba*  
*Alstonia boonei*  
*Alstonia congensis*  
*Alstonia macrophylla*  
*Alstonia scholaris*  
*Alstonia spatulata*  
*Aspidosperma album*  
*Aspidosperma desmanthum*  
*Aspidosperma megalocarpon*  
*Aspidosperma polyneuron*

*Aspidosperma quebracho-blanco*  
*Aspidosperma tomentosum*  
*Aspidosperma vargasii*  
*Cerbera odollam*  
*Couma macrocarpa*  
*Dyera costulata*  
*Dyera polyphylla*  
*Funtumia africana*  
*Gonioma kamassi*  
*Wrightia arborea*  
*Wrightia pubescens*

***Aquifoliaceae***

*Ilex aggregata*  
*Ilex amplifolia*  
*Ilex anomala*  
*Ilex aquifolium*  
*Ilex boliviana*  
*Ilex laurina*  
*Ilex mitis*  
*Ilex opaca*  
*Ilex petiolaris*

***Araliaceae***

*Dendropanax arboreus*  
*Dendropanax cuneatus*  
*Kalopanax septemlobus*  
*Polyscias ornifolia*  
*Schefflera decaphylla*  
*Schefflera morototoni*

***Areaceae***

*Beccariophoenix madagascariensis*  
*Borassus flabellifer*  
*Caryota urens*  
*Cocos nucifera*  
*Dypsis decaryi*  
*Dypsis decipiens*  
*Lemurophoenix halleuxii*  
*Marojejya darianii*  
*Oenocarpus bataua*  
*Ravenea louvelii*  
*Ravenea rivularis*  
*Satranala decussilvae*

***Asteropeiaceae***

*Asteropeia rhopaloides*

***Atherospermataceae***

*Atherosperma moschatum*  
*Doryphora sassafras*  
*Laurelia novae-zelandiae*



*Laurelia sempervirens*  
*Laureliopsis philippiana*

***Berberidaceae***

*Sinopodophyllum hexandrum*

***Betulaceae***

*Alnus glutinosa*  
*Alnus incana*  
*Alnus nepalensis*  
*Alnus rubra*  
*Betula alleghaniensis*  
*Betula alnoides*  
*Betula lenta*  
*Betula maximowicziana*  
*Betula nigra*  
*Betula papyrifera*  
*Betula pendula*  
*Betula populifolia*  
*Betula pubescens*  
*Betula schmidtii*  
*Carpinus betulus*  
*Carpinus caroliniana*  
*Corylus avellana*  
*Corylus colurna*  
*Ostrya virginiana*

***Bignoniaceae***

*Catalpa bignonioides*  
*Catalpa speciosa*  
*Daniella thurifera*  
*Daniellia klainei*  
*Handroanthus capitatus*  
*Handroanthus guayacan*  
*Handroanthus heptaphyllus*  
*Handroanthus serratifolius*  
*Jacaranda acutifolia*  
*Jacaranda caroba*  
*Jacaranda copaia*  
*Jacaranda cuspidifolia*  
*Jacaranda micrantha*  
*Jacaranda mimosifolia*  
*Jacaranda obtusifolia* subsp. *rhombofolia*  
*Jacaranda obtusifolia*  
*Jacaranda puberula*  
*Kigelia africana*  
*Paratecoma peroba*  
*Phyllarthron madagascariense*  
*Roseodendron donnell-smithii*  
*Spathodea campanulata*

	<i>Tabebuia insignis</i>
	<i>Tabebuia pallida</i>
	<i>Tabebuia rosea</i>
<b>Bixaceae</b>	<i>Bixa arborea</i>
	<i>Bixa orellana</i>
<b>Boraginaceae</b>	<i>Cordia africana</i>
	<i>Cordia alliodora</i>
	<i>Cordia americana</i>
	<i>Cordia collococca</i>
	<i>Cordia dichotoma</i>
	<i>Cordia dodecandra</i>
	<i>Cordia elaeagnoides</i>
	<i>Cordia fragrantissima</i>
	<i>Cordia gerascanthus</i>
	<i>Cordia glabrata</i>
	<i>Cordia goeldiana</i>
	<i>Cordia millenii</i>
	<i>Cordia platythyrsa</i>
	<i>Cordia sebestena</i>
	<i>Cordia subcordata</i>
	<i>Cordia trichotoma</i>
<b>Burseraceae</b>	<i>Aucoumea klaineana</i>
	<i>Bursera simaruba</i>
	<i>Canarium euphyllum</i>
	<i>Canarium hirsutum</i>
	<i>Canarium indicum</i>
	<i>Canarium littorale</i>
	<i>Canarium luzonicum</i>
	<i>Canarium schweinfurtii</i>
	<i>Dacryodes buettneri</i>
	<i>Dacryodes excelsa</i>
	<i>Dacryodes igaganga</i>
	<i>Garuga pinnata</i>
	<i>Protium altsonii</i>
	<i>Protium decandrum</i>
	<i>Protium sagotianum</i>
	<i>Santiria laevigata</i>
	<i>Tetragastris altissima</i>
	<i>Tetragastris panamensis</i>
<b>Buxaceae</b>	<i>Buxus macowanii</i>
	<i>Buxus sempervirens</i>
<b>Calophyllaceae</b>	<i>Mammea africana</i>

	<i>Mammea americana</i>
	<i>Mesua ferrea</i>
<b>Canellaceae</b>	<i>Warburgia ugandensis</i>
<b>Cannabaceae</b>	<i>Aphananthe philippinensis</i>
	<i>Celtis adolfi-friderici</i>
	<i>Celtis laevigata</i>
	<i>Celtis laevigata</i> var. <i>reticulata</i>
	<i>Celtis mildbraedii</i>
	<i>Celtis occidentalis</i>
	<i>Celtis philippensis</i>
	<i>Celtis rigescens</i>
	<i>Celtis zenkeri</i>
	<i>Trema orientalis</i>
<b>Caryocaraceae</b>	<i>Caryocar costaricense</i>
	<i>Caryocar glabrum</i>
	<i>Caryocar nuciferum</i>
	<i>Caryocar villosum</i>
<b>Casuarinaceae</b>	<i>Casuarina cunninghamiana</i>
	<i>Casuarina equisetifolia</i>
<b>Celastraceae</b>	<i>Kokoona littoralis</i>
	<i>Kokoona reflexa</i>
	<i>Lophopetalum beccarianum</i>
	<i>Lophopetalum duperreanum</i>
	<i>Lophopetalum floribundum</i>
	<i>Lophopetalum javanum</i>
	<i>Lophopetalum multinervium</i>
	<i>Lophopetalum pachyphyllum</i>
	<i>Lophopetalum pallidum</i>
	<i>Lophopetalum rigidum</i>
	<i>Lophopetalum subobovatum</i>
	<i>Lophopetalum wightianum</i>
	<i>Siphonodon australis</i>
<b>Cercidiphyllaceae</b>	<i>Cercidiphyllum japonicum</i>
<b>Chrysobalanaceae</b>	<i>Licania divaricata</i>
	<i>Licania heteromorpha</i>
	<i>Licania hypoleuca</i>
	<i>Licania macrophylla</i>
	<i>Licania platypus</i>
	<i>Licania sparsipilis</i>
	<i>Licaria capitata</i>

*Parinari campestris*  
*Parinari curatellifolia*  
*Parinari excelsa*

**Clusiaceae**

*Calophyllum brasiliense*  
*Calophyllum ferrugineum*  
*Calophyllum inophyllum*  
*Calophyllum papuanum*  
*Calophyllum peekelii*  
*Calophyllum tetrapterum*  
*Calophyllum tomentosum*  
*Calophyllum vitiense*  
*Garcinia cowa*  
*Pentadesma butyracea*  
*Platonia insignis*  
*Symphonia globulifera*

**Combretaceae**

*Anogeissus acuminata*  
*Anogeissus latifolia*  
*Buchenavia tetraphylla*  
*Bucida buceras*  
*Combretum imberbe*  
*Conocarpus erectus*  
*Pteleopsis hylodendron*  
*Pteleopsis myrtifolia*  
*Terminalia alata*  
*Terminalia amazonia*  
*Terminalia arjuna*  
*Terminalia bellirica*  
*Terminalia bialata*  
*Terminalia brassii*  
*Terminalia calamansanay*  
*Terminalia catappa*  
*Terminalia celebica*  
*Terminalia chebula*  
*Terminalia complanata*  
*Terminalia guyanensis*  
*Terminalia ivorensis*  
*Terminalia macroptera*  
*Terminalia microcarpa*  
*Terminalia nitens*  
*Terminalia oblonga*  
*Terminalia paniculata*  
*Terminalia procera*  
*Terminalia solomonensis*  
*Terminalia superba*  
*Terminalia tomentosa*

<b>Compositae</b>	<i>Brachylaena huillensis</i> <i>Brachylaena merana</i> <i>Brachylaena ramiflora</i>
<b>Convolvulaceae</b>	<i>Humbertia madagascariensis</i>
<b>Cornaceae</b>	<i>Alangium meyeri</i> <i>Cornus florida</i> <i>Nyssa aquatica</i> <i>Nyssa ogeche</i> <i>Nyssa sylvatica</i>
<b>Ctenolophonaceae</b>	<i>Ctenolophon englerianus</i> <i>Ctenolophon parvifolius</i>
<b>Cunoniaceae</b>	<i>Ceratopetalum succirubrum</i> <i>Eucryphia cordifolia</i> <i>Eucryphia lucida</i> <i>Geissois benthamiana</i> <i>Geissois biagiana</i> <i>Weinmannia trichosperma</i>
<b>Dilleniaceae</b>	<i>Dillenia excelsa</i> <i>Dillenia indica</i> <i>Dillenia luzoniensis</i> <i>Dillenia ovata</i> <i>Dillenia papuana</i> <i>Dillenia pentagyna</i> <i>Dillenia philippinensis</i> <i>Dillenia pulchella</i> <i>Dillenia reticulata</i> <i>Dillenia salomonensis</i> <i>Dillenia schlechteri</i>
<b>Dipterocarpaceae</b>	<i>Anisoptera costata</i> <i>Anisoptera curtisii</i> <i>Anisoptera laevis</i> <i>Anisoptera marginata</i> <i>Anisoptera scaphula</i> <i>Anisoptera thurifera</i> <i>Balanocarpus heimii</i> <i>Cotylelobium burckii</i> <i>Cotylelobium lanceolatum</i> <i>Cotylelobium melanoxydon</i> <i>Dipterocarpus acutangulus</i> <i>Dipterocarpus alatus</i>

*Dipterocarpus basilanicus*  
*Dipterocarpus baudii*  
*Dipterocarpus borneensis*  
*Dipterocarpus caudiferus*  
*Dipterocarpus costulatus*  
*Dipterocarpus grandiflorus*  
*Dipterocarpus kerrii*  
*Dipterocarpus lowii*  
*Dipterocarpus retusus*  
*Dipterocarpus validus*  
*Dipterocarpus verrucosus*  
*Dryobalanops beccarii*  
*Dryobalanops lanceolata*  
*Dryobalanops oblongifolia*  
*Dryobalanops sumatrensis*  
*Hopea acuminata*  
*Hopea beccariana*  
*Hopea dryobalanoides*  
*Hopea ferrea*  
*Hopea forbesii*  
*Hopea foxworthyi*  
*Hopea helferi*  
*Hopea iriana*  
*Hopea mengarawan*  
*Hopea nervosa*  
*Hopea nutans*  
*Hopea odorata*  
*Hopea sangal*  
*Hopea scaphula*  
*Hopea semicuneata*  
*Neobalanocarpus heimii*  
*Parashorea aptera*  
*Parashorea densiflora*  
*Parashorea lucida*  
*Parashorea macrophylla*  
*Parashorea malaanonan*  
*Parashorea parvifolia*  
*Parashorea plicata*  
*Parashorea smythiesii*  
*Parashorea tomentella*  
*Pentacme contorta*  
*Shorea acuminata*  
*Shorea acuminatissima*  
*Shorea albida*  
*Shorea assamica*  
*Shorea atrinervosa*  
*Shorea balangeran*

*Shorea balanocarpoides*  
*Shorea bracteolata*  
*Shorea brunnescens*  
*Shorea collina*  
*Shorea contorta*  
*Shorea crassa*  
*Shorea curtisii*  
*Shorea dasyphylla*  
*Shorea dealbata*  
*Shorea exelliptica*  
*Shorea faguetiana*  
*Shorea foxworthyi*  
*Shorea gibbosa*  
*Shorea glauca*  
*Shorea guiso*  
*Shorea havilandii*  
*Shorea hemsleyana*  
*Shorea hopeifolia*  
*Shorea hypochra*  
*Shorea javanica*  
*Shorea johorensis*  
*Shorea kalunti*  
*Shorea kunstleri*  
*Shorea laevifolia*  
*Shorea laevis*  
*Shorea lamellata*  
*Shorea lepidota*  
*Shorea leprosula*  
*Shorea leptoclados*  
*Shorea leptoderma*  
*Shorea longipetala*  
*Shorea macrantha*  
*Shorea macroptera*  
*Shorea materialis*  
*Shorea maxwelliana*  
*Shorea multiflora*  
*Shorea negrosensis*  
*Shorea ochrophloia*  
*Shorea ovalis*  
*Shorea ovata*  
*Shorea parvifolia*  
*Shorea pauciflora*  
*Shorea plagata*  
*Shorea platyclados*  
*Shorea quadrinervis*  
*Shorea resina-nigra*  
*Shorea roxburghii*

*Shorea rugosa*  
*Shorea seminis*  
*Shorea singkawang*  
*Shorea smithiana*  
*Shorea stellata*  
*Shorea submontana*  
*Shorea sumatrana*  
*Shorea superba*  
*Upuna borneensis*  
*Vatica rassak*  
*Vatica scaphula*  
*Vatica tonkinensis*

***Ebenaceae***

*Diospyros celebica*  
*Diospyros crassiflora*  
*Diospyros discolor*  
*Diospyros ebenum*  
*Diospyros gracilipes*  
*Diospyros insularis*  
*Diospyros korthalsiana*  
*Diospyros kurzii*  
*Diospyros lotus*  
*Diospyros marmorata*  
*Diospyros melanoxylon*  
*Diospyros mespiliformis*  
*Diospyros mindanaensis*  
*Diospyros mollis*  
*Diospyros perrieri*  
*Diospyros pyrrocarpa*  
*Diospyros toxicaria*  
*Diospyros vera*  
*Diospyros virginiana*

***Elaeagnaceae***

*Elaeagnus angustifolia*

***Ericaceae***

*Arbutus menziesii*  
*Arbutus unedo*  
*Kalmia latifolia*  
*Oxydendrum arboreum*

***Erythroxylaceae***

*Erythroxylum mannii*

***Euphorbiaceae***

*Alchornea triplinervia*  
*Aleurites moluccanus*  
*Balakata baccata*  
*Balakata luzonica*  
*Croton megalocarpus*



*Elateriospermum tapos*  
*Endospermum diadenum*  
*Endospermum macrophyllum*  
*Endospermum medullosum*  
*Endospermum moluccanum*  
*Endospermum peltatum*  
*Excoecaria agallocha*  
*Falconeria insignis*  
*Glycydendron amazonicum*  
*Gymnanthes lucida*  
*Hevea brasiliensis*  
*Hura crepitans*  
*Hura polyandra*  
*Ricinodendron heudelotii*  
*Sapium glandulosum*  
*Sapium haematospermum*  
*Sapium jenmannii*  
*Sapium laurifolium*  
*Sapium laurocerasus*  
*Sapium marmieri*  
*Sapium stylare*  
*Schinziophyton rautanenii*  
*Sclerocroton integerrimus*  
*Shirakiopsis elliptica*  
*Shirakiopsis indica*  
*Spirostachys africana*  
*Triadica cochinchinensis*

**Fagaceae**

*Castanea crenata*  
*Castanea dentata*  
*Castanea sativa*  
*Castanopsis acuminatissima*  
*Castanopsis argentea*  
*Castanopsis cuspidata*  
*Castanopsis javanica*  
*Castanopsis tungurrut*  
*Chrysolepis chrysophylla*  
*Fagus grandifolia*  
*Fagus sylvatica*  
*Lithocarpus amygdalifolius*  
*Lithocarpus cyrtorhyncha*  
*Lithocarpus daphnoideus*  
*Lithocarpus henryi*  
*Lithocarpus solerianus*  
*Lithocarpus vinkii*  
*Notholithocarpus densiflorus*  
*Quercus acuta*

*Quercus alba*  
*Quercus arkansana*  
*Quercus bicolor*  
*Quercus cerris*  
*Quercus chrysolepis*  
*Quercus coccinea*  
*Quercus dentata*  
*Quercus falcata*  
*Quercus garryana*  
*Quercus kelloggii*  
*Quercus lobata*  
*Quercus lyrata*  
*Quercus macrocarpa*  
*Quercus michauxii*  
*Quercus mongolica*  
*Quercus mongolica* subsp. *crispula*  
*Quercus montana*  
*Quercus muehlenbergii*  
*Quercus myrsinifolia*  
*Quercus palustris*  
*Quercus petraea*  
*Quercus phillyreoides*  
*Quercus robur*  
*Quercus rubra*  
*Quercus shumardii*  
*Quercus stellata*  
*Quercus velutina*  
*Quercus virginiana*

***Gentianaceae***

*Fagraea crenulata*  
*Fagraea elliptica*  
*Fagraea fragrans*  
*Fagraea gracilipes*

***Goupiaceae***

*Goupia glabra*

***Hamamelidaceae***

*Exbucklandia populnea*  
*Hamamelis virginiana*

***Hernandiaceae***

*Hazomalania voyronii*

***Humiriaceae***

*Endopleura uchi*  
*Humiria balsamifera*  
*Sacoglottis cydonioides*  
*Sacoglottis gabonensis*  
*Sacoglottis guianensis*

**Hypericaceae**

*Cratoxylum arborescens*  
*Cratoxylum formosum*  
*Harungana madagascariensis*

**Irvingiaceae**

*Irvingia gabonensis*  
*Irvingia grandifolia*  
*Irvingia malayana*  
*Klainedoxa gabonensis*

**Juglandaceae**

*Carya alba*  
*Carya aquatica*  
*Carya cordiformis*  
*Carya glabra*  
*Carya illinoensis*  
*Carya laciniata*  
*Carya myristiciformis*  
*Carya ovata*  
*Engelhardtia roxburghiana*  
*Juglans australis*  
*Juglans boliviana*  
*Juglans cinerea*  
*Juglans hindsii*  
*Juglans jamaicensis*  
*Juglans neotropica*  
*Juglans nigra*  
*Juglans olanchana*  
*Juglans regia*

**Lamiaceae**

*Gmelina arborea*  
*Gmelina fasciculiflora*  
*Gmelina leichardtii*  
*Gmelina moluccana*  
*Peronema canescens*  
*Tectona grandis*  
*Vitex cofassus*  
*Vitex doniana*  
*Vitex gaumeri*  
*Vitex glabrata*  
*Vitex micrantha*  
*Vitex parviflora*  
*Vitex phaeotricha*  
*Vitex pinnata*  
*Vitex quinata*  
*Vitex triflora*  
*Vitex turczaninowii*  
*Vitex vestita*

**Lauraceae**

*Alseodaphne archboldiana*  
*Alseodaphne malabonga*  
*Aniba canellila*  
*Aniba parviflora*  
*Aniba rosaeodora*  
*Aspidostemon perrieri*  
*Beilschmiedia letouzeyi*  
*Beilschmiedia mannii*  
*Beilschmiedia tawa*  
*Beilschmiedia velutina*  
*Chlorocardium rodiei*  
*Cinnamomum camphora*  
*Cinnamomum iners*  
*Cinnamomum porrectum*  
*Endiandra laxiflora*  
*Endiandra palmerstonii*  
*Eusideroxylon melagangai*  
*Eusideroxylon zwageri*  
*Licaria canella*  
*Licaria subbullata*  
*Litsea ferruginea*  
*Litsea reticulata*  
*Mezilaurus ita-uba*  
*Mezilaurus lindaviana*  
*Mezilaurus navalium*  
*Nectandra lanceolata*  
*Nectandra megapotamica*  
*Nothaphoebe elata*  
*Nothaphoebe kingiana*  
*Nothaphoebe panduriformis*  
*Nothaphoebe spathulata*  
*Nothaphoebe umbelliflora*  
*Ocotea comoriensis*  
*Ocotea porosa*  
*Ocotea puberula*  
*Ocotea thouvenotii*  
*Ocotea usambarensis*  
*Persea lingue*  
*Persea odoratissima*  
*Phoebe elongata*  
*Phoebe hainesiana*  
*Sassafras albidum*  
*Sextonia rubra*  
*Umbellularia californica*

**Lecythidaceae**

*Allantoma integrifolia*

*Allantoma pluriflora*  
*Barringtonia acutangula*  
*Bertholletia excelsa*  
*Cariniana domestica*  
*Cariniana estrellensis*  
*Cariniana legalis*  
*Cariniana pyriformis*  
*Couratari guianensis*  
*Couratari macrosperma*  
*Couratari multiflora*  
*Couratari oblongifolia*  
*Couratari stellata*  
*Couroupita guianensis*  
*Couroupita nicaraguarensis*  
*Eschweilera sagotiana*  
*Lecythis lurida*  
*Petersianthus macrocarpus*  
*Planchonia papuana*  
*Planchonia valida*  
*Scytopetalum tieghemii*

**Leguminosae**

*Acacia auriculiformis*  
*Acacia crassicarpa*  
*Acacia decurrens*  
*Acacia koa*  
*Acacia mangium*  
*Acacia mearnsii*  
*Acacia melanoxylon*  
*Acacia nilotica*  
*Acacia pubescens*  
*Acosmium panamense*  
*Acrocarpus fraxinifolius*  
*Adenantha pavonina*  
*Afzelia africana*  
*Afzelia bella*  
*Afzelia bipindensis*  
*Afzelia pachyloba*  
*Afzelia quanzensis*  
*Afzelia rhomboidea*  
*Afzelia xylocarpa*  
*Albizia adianthifolia*  
*Albizia antunesiana*  
*Albizia ferruginea*  
*Albizia guachapele*  
*Albizia gummifera*  
*Albizia lebbeck*  
*Albizia lebbekoides*

*Albizia pedicellaris*  
*Albizia procera*  
*Albizia saman*  
*Albizia versicolor*  
*Albizia zygia*  
*Alexa grandiflora*  
*Alexa imperatricis*  
*Alexa wachenheimii*  
*Amblygonocarpus andongensis*  
*Amburana cearensis*  
*Amphimas ferrugineus*  
*Amphimas pterocarpoides*  
*Andira coriacea*  
*Andira inermis*  
*Aphanocalyx heitzii*  
*Apuleia leiocarpa*  
*Archidendropsis xanthoxylon*  
*Baikiaea insignis*  
*Baikiaea plurijuga*  
*Baphia nitida*  
*Batesia floribunda*  
*Berlinia auriculata*  
*Berlinia bracteosa*  
*Berlinia confusa*  
*Berlinia grandiflora*  
*Bobgunnia fistuloides*  
*Bobgunnia madagascariensis*  
*Bowdichia nitida*  
*Bowdichia virgilioides*  
*Brachystegia cynometroides*  
*Brachystegia eurycoma*  
*Brachystegia laurentii*  
*Brachystegia leonensis*  
*Brachystegia mildbraedii*  
*Brachystegia nigerica*  
*Brachystegia spiciformis*  
*Brachystegia zenkeri*  
*Burkea africana*  
*Caesalpinia echinata*  
*Caesalpinia ferrea*  
*Caesalpinia granadillo*  
*Caesalpinia paraguariensis*  
*Caesalpinia platyloba*  
*Calpocalyx heitzii*  
*Cassia javanica*  
*Castanospermum australe*  
*Cedrelinga cateniformis*

*Centrolobium ochroxylon*  
*Centrolobium paraense*  
*Centrolobium paraense* var. *orenocense*  
*Chamaecrista apoucouita*  
*Clathrotropis brachypetala*  
*Clathrotropis macrocarpa*  
*Cojoba arborea*  
*Colophospermum mopane*  
*Copaifera langsdorffii*  
*Copaifera mildbraedii*  
*Copaifera multijuga*  
*Copaifera officinalis*  
*Copaifera religiosa*  
*Copaifera salikounda*  
*Cordyla africana*  
*Cylicodiscus gabunensis*  
*Cynometra alexandri*  
*Cynometra ananta*  
*Cynometra elmeri*  
*Cynometra inaequifolia*  
*Cynometra malaccensis*  
*Cynometra mirabilis*  
*Cynometra ramiflora*  
*Dalbergia bariensis*  
*Dalbergia baronii*  
*Dalbergia brownei*  
*Dalbergia cambodiana*  
*Dalbergia cearensis*  
*Dalbergia cochinchinensis*  
*Dalbergia congestiflora*  
*Dalbergia cubilquitzensis*  
*Dalbergia cultrata*  
*Dalbergia cuscatlanica*  
*Dalbergia decipularis*  
*Dalbergia ecastaphyllum*  
*Dalbergia frutescens*  
*Dalbergia glabra*  
*Dalbergia granadillo*  
*Dalbergia greveana*  
*Dalbergia latifolia*  
*Dalbergia louvelii*  
*Dalbergia madagascariensis*  
*Dalbergia maritima*  
*Dalbergia melanoxylon*  
*Dalbergia monticola*  
*Dalbergia nigra*  
*Dalbergia oliveri*

*Dalbergia pervillei*  
*Dalbergia retusa*  
*Dalbergia rimosa*  
*Dalbergia sissooides*  
*Dalbergia sissoo*  
*Dalbergia spruceana*  
*Dalbergia stevensonii*  
*Dalbergia tucurensis*  
*Daniellia ogea*  
*Daniellia thurifera*  
*Desmodium oojeinense*  
*Detarium macrocarpum*  
*Detarium senegalense*  
*Dialium cochinchinense*  
*Dialium dinklagei*  
*Dialium guianense*  
*Dialium indum*  
*Dialium kunstleri*  
*Dialium patens*  
*Dialium platysepalum*  
*Dialium procerum*  
*Dicorynia guianensis*  
*Dicorynia paraensis*  
*Didelotia africana*  
*Didelotia brevipaniculata*  
*Didelotia idae*  
*Didelotia letouzeyi*  
*Dimorphandra polyandra*  
*Dinizia excelsa*  
*Diploptropis martiusii*  
*Diploptropis purpurea*  
*Dipteryx odorata*  
*Dipteryx oleifera*  
*Distemonanthus benthamianus*  
*Enterolobium contortisiliquum*  
*Enterolobium cyclocarpum*  
*Enterolobium schomburgkii*  
*Enterolobium timbouva*  
*Eperua falcata*  
*Eperua grandiflora*  
*Eperua jenmanii*  
*Eperua rubiginosa*  
*Erythrophleum ivorense*  
*Erythrophleum suaveolens*  
*Falcataria moluccana*  
*Fillaeopsis discophora*  
*Gilbertiodendron brachystegioides*



*Gilbertiodendron dewevrei*  
*Gilbertiodendron mayombense*  
*Gilbertiodendron preussii*  
*Gleditsia triacanthos*  
*Gossweilerodendron balsamiferum*  
*Gossweilerodendron joveri*  
*Guibourtia arnoldiana*  
*Guibourtia coleosperma*  
*Guibourtia conjugata*  
*Guibourtia demeusei*  
*Guibourtia ehie*  
*Guibourtia pellegriniana*  
*Guibourtia schliebenii*  
*Guibourtia tessmannii*  
*Gymnocladus dioica*  
*Haematoxylum campechianum*  
*Haplormosia monophylla*  
*Hardwickia binata*  
*Hymenaea courbaril*  
*Hymenaea intermedia*  
*Hymenolobium elatum*  
*Hymenolobium excelsum*  
*Hymenolobium flavum*  
*Hymenolobium petraeum*  
*Inga alba*  
*Inga pezizifera*  
*Intsia bijuga*  
*Intsia palembanica*  
*Isobertia doka*  
*Isobertia scheffleri*  
*Julbernardia globiflora*  
*Julbernardia pellegriniana*  
*Koompassia excelsa*  
*Koompassia malaccensis*  
*Leucaena pulverulenta*  
*Leucaena trichodes*  
*Lonchocarpus castilloi*  
*Lonchocarpus leucanthus*  
*Lysiloma latisiliquum*  
*Machaerium scleroxylon*  
*Machaerium villosum*  
*Macrolobium acaciifolium*  
*Macrolobium bifolium*  
*Marmaroxylon racemosum*  
*Martiodendron excelsum*  
*Martiodendron parviflorum*  
*Melanoxylon brauna*

*Microberlinia bisulcata*  
*Microberlinia brazzavillensis*  
*Mildbraediodendron excelsum*  
*Millettia laurentii*  
*Millettia leucantha*  
*Millettia stuhlmannii*  
*Mora excelsa*  
*Mora gonggrijpii*  
*Myrocarpus fastigiatus*  
*Myrocarpus frondosus*  
*Myroxylon balsamum*  
*Myroxylon peruiferum*  
*Newtonia buchananii*  
*Olneya tesota*  
*Ormosia coccinea*  
*Ormosia coutinhoi*  
*Ormosia monosperma*  
*Ormosia nobilis*  
*Ormosia paraensis*  
*Oxystigma buchholzii*  
*Oxystigma gilbertii*  
*Oxystigma mannii*  
*Oxystigma oxyphyllum*  
*Parapiptadenia rigida*  
*Parkia bicolor*  
*Parkia pendula*  
*Peltogyne maranhensis*  
*Peltogyne paniculata*  
*Peltogyne paniculata* subsp. *pubescens*  
*Peltogyne porphyrocardia*  
*Peltogyne venosa*  
*Peltophorum dasyrhachis*  
*Peltophorum dubium*  
*Pentaclethra macroloba*  
*Pentaclethra macrophylla*  
*Pericopsis elata*  
*Pericopsis mooniana*  
*Piptadeniastrum africanum*  
*Plathymenia reticulata*  
*Platymiscium pinnatum*  
*Platymiscium trinitatis*  
*Platymiscium ulei*  
*Platymiscium yucatanum*  
*Prioria copaifera*  
*Prosopis africana*  
*Prosopis juliflora*  
*Prosopis nigra*

*Pseudopiptadenia pittieri*  
*Pseudopiptadenia psilostachya*  
*Pseudosindora palustris*  
*Pterocarpus acapulcensis*  
*Pterocarpus angolensis*  
*Pterocarpus dalbergioides*  
*Pterocarpus erinaceus*  
*Pterocarpus indicus*  
*Pterocarpus macrocarpus*  
*Pterocarpus marsupium*  
*Pterocarpus officinalis*  
*Pterocarpus rohrii*  
*Pterocarpus santalinus*  
*Pterocarpus soyauxii*  
*Pterocarpus tinctorius*  
*Pterogyne nitens*  
*Robinia pseudoacacia*  
*Schizolobium amazonicum*  
*Schizolobium parahyba*  
*Senna siamea*  
*Serianthes myriadenia*  
*Sindora bruggemanii*  
*Sindora coriacea*  
*Sindora javanica*  
*Sindora leiocarpa*  
*Sindora siamensis*  
*Sindora supa*  
*Sindora velutina*  
*Sindora wallichii*  
*Swartzia benthamiana*  
*Swartzia cubensis*  
*Swartzia leiocalycina*  
*Swartzia panacoco*  
*Sweetia fruticosa*  
*Sympetalandra densiflora*  
*Tachigali myrmecophila*  
*Tachigali paniculata*  
*Tamarindus indica*  
*Tessmannia africana*  
*Tetraberlinia bifoliolata*  
*Tetraberlinia tubmaniana*  
*Tetrapleura tetraptera*  
*Tipuana tipu*  
*Vatairea guianensis*  
*Vouacapoua americana*  
*Vouacapoua macropetala*  
*Wallacedendron celebicum*

*Xylia xylocarpa*  
*Zollernia paraensis*  
*Zygia racemosa*

**Lythraceae**

*Duabanga grandiflora*  
*Duabanga moluccana*  
*Lagerstroemia angustifolia*  
*Lagerstroemia balansae*  
*Lagerstroemia calyculata*  
*Lagerstroemia cochinchinensis*  
*Lagerstroemia duppereana*  
*Lagerstroemia floribunda*  
*Lagerstroemia hypoleuca*  
*Lagerstroemia ovalifolia*  
*Lagerstroemia piriformis*  
*Lagerstroemia speciosa*  
*Lagerstroemia tomentosa*

**Magnoliaceae**

*Liriodendron tulipifera*  
*Magnolia acuminata*  
*Magnolia grandiflora*  
*Magnolia pubescens*  
*Magnolia sororum*  
*Magnolia tsiampacca* subsp. *mollis*  
*Magnolia tsiampacca*  
*Magnolia virginiana*  
*Magnolia vrieseana*  
*Magnolia yoroconte*

**Malpigiaceae**

*Byrsonima crassifolia*  
*Byrsonima spicata*

**Malvaceae**

*Apeiba glabra*  
*Bastardiopsis densiflora*  
*Bombax brevicuspe*  
*Bombax ceiba*  
*Catostemma commune*  
*Catostemma fragrans*  
*Cavanillesia platanifolia*  
*Ceiba pentandra*  
*Ceiba samauma*  
*Ceiba speciosa*  
*Coelostegia griffithii*  
*Diplodiscus paniculatus*  
*Durio griffithii*  
*Durio lowianus*  
*Durio oxleyanus*

*Durio wyatt-smithii*  
*Durio zibethinus*  
*Eriotheca globosa*  
*Grewia eriocarpa*  
*Guazuma ulmifolia*  
*Heliocarpus americanus*  
*Heliocarpus popayanensis*  
*Heritiera borneensis*  
*Heritiera densiflora*  
*Heritiera elata*  
*Heritiera javanica*  
*Heritiera littoralis*  
*Heritiera ornithocephala*  
*Heritiera simplicifolia*  
*Hibiscus elatus*  
*Hibiscus lasiococcus*  
*Hibiscus tilliaceus*  
*Luehea divaricata*  
*Mansonia altissima*  
*Nesogordonia papaverifera*  
*Ochroma pyramidale*  
*Pachira quinata*  
*Pentace adenophora*  
*Pentace burmanica*  
*Pentace curtisii*  
*Pentace laxiflora*  
*Pentace triptera*  
*Pseudobombax ellipticum*  
*Pterocymbium beccarii*  
*Pterocymbium tinctorium*  
*Pterospermum acerifolium*  
*Pterospermum canescens*  
*Pterospermum elongatum*  
*Pterospermum javanicum*  
*Pterygota alata*  
*Pterygota bequaertii*  
*Pterygota horsfieldii*  
*Pterygota macrocarpa*  
*Rhodognaphalon brevicuspe*  
*Scaphium linearicarpum*  
*Scaphium longiflorum*  
*Scaphium longipetiolatum*  
*Scaphium macropodum*  
*Scaphium scaphigerum*  
*Scleronema micranthum*  
*Sterculia apetala*  
*Sterculia ceramica*

*Sterculia conwentzii*  
*Sterculia oblonga*  
*Sterculia pruriens*  
*Sterculia rhinopetala*  
*Sterculia rugosa*  
*Sterculia vitiensis*  
*Tarrietia densiflora*  
*Tarrietia sylvatica*  
*Tarrietia utilis*  
*Thespesia populnea*  
*Tilia americana*  
*Tilia cordata*  
*Tilia glabra*  
*Tilia platyphyllos*  
*Tilia x europaea*  
*Triplochiton scleroxylon*

***Melastomataceae***

*Mouriri huberi*

***Meliaceae***

*Aglaia cucullata*  
*Aglaia spectabilis*  
*Azadirachta excelsa*  
*Azadirachta indica*  
*Cabrlea cangerana*  
*Cabrlea canjerana*  
*Carapa grandiflora*  
*Carapa guianensis*  
*Carapa procera*  
*Cedrela angustifolia*  
*Cedrela fissilis*  
*Cedrela odorata*  
*Cedrela serrata*  
*Chisocheton pentandrus*  
*Chukrasia tabularis*  
*Dysoxylum alliaceum*  
*Dysoxylum fraserianum*  
*Dysoxylum malabaricum*  
*Ekebergia capensis*  
*Entandrophragma angolense*  
*Entandrophragma candollei*  
*Entandrophragma congoense*  
*Entandrophragma cylindricum*  
*Entandrophragma utile*  
*Guarea cedrata*  
*Guarea glabra*  
*Guarea guidonia*  
*Guarea laurentii*

*Guarea thompsonii*  
*Khaya anthotheca*  
*Khaya grandifoliola*  
*Khaya ivorensis*  
*Khaya nyasica*  
*Khaya senegalensis*  
*Lovoa brownii*  
*Lovoa swynnertonii*  
*Lovoa trichilioides*  
*Melia azedarach*  
*Sandoricum koetjape*  
*Sandoricum vidalii*  
*Swietenia humilis*  
*Swietenia macrophylla*  
*Swietenia mahagoni*  
*Toona calantas*  
*Toona ciliata*  
*Toona sureni*  
*Turraeanthus africana*  
*Xylocarpus granatum*  
*Xylocarpus moluccensis*

**Monimiaceae**

*Tambourissa thouvenotii*

**Moraceae**

*Antiaris toxicaria* subsp. *welwitschii*  
*Antiaris toxicaria* var. *africana*  
*Antiaris toxicaria*  
*Artocarpus altilis*  
*Artocarpus chama*  
*Artocarpus elasticus*  
*Artocarpus hirsutus*  
*Artocarpus integer*  
*Artocarpus lanceifolius*  
*Artocarpus ovatus*  
*Artocarpus rigidus*  
*Artocarpus scortechinii*  
*Bagassa guianensis*  
*Brosimum alicastrum*  
*Brosimum costaricanum*  
*Brosimum guianense*  
*Brosimum parinarioides*  
*Brosimum potabile*  
*Brosimum rubescens*  
*Brosimum utile*  
*Clarisia racemosa*  
*Ficus coerulescens*  
*Ficus crassiuscula*

*Ficus hartwegii*  
*Ficus insipida*  
*Ficus mathewsii*  
*Ficus nymphaeifolia*  
*Ficus obliqua*  
*Ficus pertusa*  
*Ficus subandina*  
*Ficus trigona*  
*Ficus watkinsiana*  
*Helicostylis tomentosa*  
*Maclura pomifera*  
*Maclura tinctoria*  
*Maquira sclerophylla*  
*Milicia excelsa*  
*Milicia regia*  
*Morus alba*  
*Morus mesozygia*  
*Morus nigra*  
*Morus rubra*  
*Poulsenia armata*

**Moringaceae**

*Moringa oleifera*

**Myristicaceae**

*Cephalosphaera usambarensis*  
*Coelocaryon preussii*  
*Endocomia macrocoma*  
*Horsfieldia amygdalina*  
*Horsfieldia brachiata*  
*Horsfieldia bracteosa*  
*Horsfieldia flocculosa*  
*Horsfieldia glabra*  
*Horsfieldia irya*  
*Horsfieldia lauterbachii*  
*Horsfieldia pilifera*  
*Horsfieldia punctatifolia*  
*Horsfieldia ralunensis*  
*Horsfieldia spicata*  
*Horsfieldia sucosa*  
*Horsfieldia superba*  
*Horsfieldia trifida*  
*Horsfieldia wallichii*  
*Knema conferta*  
*Myristica buchneriana*  
*Myristica chartacea*  
*Myristica elliptica*  
*Myristica gigantea*  
*Myristica hypargyrea*



*Myristica iners*  
*Myristica lowiana*  
*Myristica maingayi*  
*Myristica maxima*  
*Myristica simiarum*  
*Pycnanthus angolensis*  
*Scyphocephalum mannii*  
*Staudtia kamerunensis*  
*Staudtia kamerunensis* var. *gabonensis*  
*Virola albidiflora*  
*Virola carinata*  
*Virola elongata*  
*Virola flexuosa*  
*Virola gardneri*  
*Virola koschnyi*  
*Virola michelii*  
*Virola multicostata*  
*Virola pavonis*  
*Virola sebifera*  
*Virola surinamensis*

**Myrtaceae**

*Corymbia citriodora*  
*Corymbia maculata*  
*Eucalyptus alba*  
*Eucalyptus astringens*  
*Eucalyptus bridgesiana*  
*Eucalyptus camaldulensis*  
*Eucalyptus cloeziana*  
*Eucalyptus coolabah*  
*Eucalyptus deglupta*  
*Eucalyptus delegatensis*  
*Eucalyptus diversicolor*  
*Eucalyptus dives*  
*Eucalyptus eugenioides*  
*Eucalyptus globoidea*  
*Eucalyptus globulus*  
*Eucalyptus globulus* subsp. *maidenii*  
*Eucalyptus grandis*  
*Eucalyptus longifolia*  
*Eucalyptus marginata*  
*Eucalyptus melliodora*  
*Eucalyptus moluccana*  
*Eucalyptus nitens*  
*Eucalyptus obliqua*  
*Eucalyptus paniculata*  
*Eucalyptus papuana*  
*Eucalyptus pilularis*

*Eucalyptus regnans*  
*Eucalyptus resinifera*  
*Eucalyptus robusta*  
*Eucalyptus socialis*  
*Eucalyptus tereticornis*  
*Melaleuca leucadendra*  
*Melaleuca quinquenervia*  
*Myrcianthes pungens*  
*Psidium guajava*  
*Syncarpia glomulifera*  
*Syzygium buettnerianum*  
*Syzygium cumini*  
*Syzygium dyerianum*  
*Syzygium eugenioides*  
*Syzygium kuranda*  
*Syzygium suborbiculare*  
*Tristaniopsis decorticata*

**Nothofagaceae**

*Nothofagus alpina*  
*Nothofagus cunninghamii*  
*Nothofagus dombeyi*  
*Nothofagus menziesii*  
*Nothofagus obliqua*  
*Nothofagus pumilio*

**Ochnaceae**

*Lophira alata*  
*Testulea gabonensis*

**Olacaceae**

*Coula edulis*  
*Minquartia guianensis*  
*Ochanostachys amentacea*  
*Ongokea gore*  
*Scorodocarpus borneensis*  
*Strombosia glaucescens*  
*Strombosia pustulata*

**Oleaceae**

*Fraxinus americana*  
*Fraxinus excelsior*  
*Fraxinus latifolia*  
*Fraxinus mandshurica*  
*Fraxinus nigra*  
*Fraxinus ornus*  
*Fraxinus pennsylvanica*  
*Fraxinus profunda*  
*Fraxinus quadrangulata*  
*Olea capensis*

	<i>Olea europaea</i>
	<i>Olea welwitschii</i>
	<i>Syringa vulgaris</i>
<b><i>Paulowniaceae</i></b>	<i>Paulownia tomentosa</i>
<b><i>Penaeaceae</i></b>	<i>Dactyloctenium aegyptium</i>
<b><i>Peraceae</i></b>	<i>Pera glabrata</i>
<b><i>Phyllanthaceae</i></b>	<i>Bischofia javanica</i>
	<i>Bridelia grandis</i>
	<i>Bridelia micrantha</i>
	<i>Hieronyma alchorneoides</i>
	<i>Hieronyma oblonga</i>
	<i>Uapaca guineensis</i>
	<i>Uapaca heudelotii</i>
<b><i>Picrodendraceae</i></b>	<i>Androstachys johnsonii</i>
	<i>Oldfieldia africana</i>
<b><i>Platanaceae</i></b>	<i>Platanus acerifolia</i>
	<i>Platanus occidentalis</i>
	<i>Platanus orientalis</i>
	<i>Platanus x hispanica</i>
<b><i>Podocarpaceae</i></b>	<i>Retrophyllum vitiense</i>
<b><i>Polygalaceae</i></b>	<i>Xanthophyllum excelsum</i>
	<i>Xanthophyllum papuanum</i>
<b><i>Polygonaceae</i></b>	<i>Triplaris weigeltiana</i>
<b><i>Primulaceae</i></b>	<i>Rapanea melanophloeos</i>
<b><i>Proteaceae</i></b>	<i>Cardwellia sublimis</i>
	<i>Grevillea robusta</i>
	<i>Grevillea striata</i>
	<i>Roupala cordifolia</i>
	<i>Roupala montana</i>
	<i>Roupala montana</i> var. <i>paraensis</i>
<b><i>Putranjivaceae</i></b>	<i>Drypetes gossweileri</i>
<b><i>Rhamnaceae</i></b>	<i>Alphitonia philippinensis</i>
	<i>Alphitonia zizyphoides</i>
	<i>Berchemia zeyheri</i>

*Frangula alnus*  
*Frangula purshiana*  
*Krugiodendron ferreum*  
*Maesopsis eminii*  
*Rhamnus cathartica*

***Rhizophoraceae***

*Anopyxis klaineana*  
*Carallia brachiata*  
*Cassipourea gummiflua*  
*Cassipourea malosana*  
*Ceriops tagal*  
*Rhizophora mangle*

***Rosaceae***

*Crataegus azarolus*  
*Crataegus coccinea*  
*Crataegus laevigata*  
*Crataegus monogyna*  
*Crataegus pinnatifida*  
*Malus domestica*  
*Malus pumila*  
*Malus sylvestris*  
*Prunus africana*  
*Prunus avium*  
*Prunus serotina*  
*Prunus turneriana*  
*Pyrus communis*  
*Sorbus aria*  
*Sorbus aucuparia*  
*Sorbus intermedia*  
*Sorbus torminalis*

***Rubiaceae***

*Balmea stormiae*  
*Breonadia salicina*  
*Breonia madagascariensis*  
*Calycophyllum candidissimum*  
*Calycophyllum multiflorum*  
*Calycophyllum spruceanum*  
*Exostema caribaeum*  
*Fleroya ledermannii*  
*Fleroya stipulosa*  
*Genipa americana*  
*Haldina cordifolia*  
*Mitragyna parvifolia*  
*Nauclea diderrichii*  
*Nauclea orientalis*  
*Neolamarckia cadamba*  
*Neonauclea calycina*

*Pertusadina eurhyncha*  
*Simira salvadorensis*

**Rutaceae**

*Balfourodendron riedelianum*  
*Chloroxylon swietenia*  
*Euxylophora paraensis*  
*Fagaropsis angolensis*  
*Flindersia australis*  
*Flindersia brayleyana*  
*Flindersia iffllaiana*  
*Flindersia pimenteliana*  
*Flindersia schottiana*  
*Phellodendron amurense*  
*Ptaeroxylon obliquum*  
*Zanthoxylum caribaeum*  
*Zanthoxylum flavum*  
*Zanthoxylum gilletii*  
*Zanthoxylum heitzii*  
*Zanthoxylum rhetsa*  
*Zanthoxylum riedelianum*

**Salicaceae**

*Casearia battiscombei*  
*Casearia dallachyi*  
*Casearia gossypiosperma*  
*Casearia praecox*  
*Homalium bhamoense*  
*Homalium foetidum*  
*Homalium le-testui*  
*Homalium longifolium*  
*Populus alba*  
*Populus balsamifera*  
*Populus canescens*  
*Populus ciliata*  
*Populus deltoides*  
*Populus grandidentata*  
*Populus heterophylla*  
*Populus nigra*  
*Populus tremula*  
*Populus tremuloides*  
*Populus trichocarpa*  
*Salix alba*  
*Salix babylonica*  
*Salix caprea*  
*Salix cinerea*  
*Salix eleagnos*  
*Salix humboldtiana*

*Salix nigra*  
*Salix purpurea*  
*Salix triandra*  
*Salix viminalis*  
*Salix x fragilis*

***Santalaceae***

*Santalum album*

***Sapindaceae***

*Acer campestre*  
*Acer macrophyllum*  
*Acer negundo*  
*Acer palmatum*  
*Acer pensylvanicum*  
*Acer pictum*  
*Acer platanus*  
*Acer pseudoplatanus*  
*Acer rubrum*  
*Acer saccharinum*  
*Acer saccharum*  
*Acer saccharum* subsp. *nigrum*  
*Aesculus flava*  
*Aesculus glabra*  
*Aesculus hippocastanum*  
*Aesculus turbinata*  
*Allophylus cobbe*  
*Dimocarpus longan*  
*Harpullia arborea*  
*Hypelate trifoliata*  
*Nephelium lappaceum*

***Sapotaceae***

*Autranella congolensis*  
*Baillonella toxisperma*  
*Brevia sericea*  
*Chrysophyllum africanum*  
*Chrysophyllum albidum*  
*Chrysophyllum beguei*  
*Chrysophyllum boivinianum*  
*Chrysophyllum giganteum*  
*Chrysophyllum gonocarpum*  
*Chrysophyllum lacourtianum*  
*Chrysophyllum perpulchrum*  
*Chrysophyllum pomiferum*  
*Chrysophyllum sanguinolentum*  
*Chrysophyllum subnudum*  
*Ecclinusa guianensis*  
*Ecclinusa lanceolata*  
*Letestua durissima*

*Madhuca aspera*  
*Madhuca bejaudii*  
*Madhuca betis*  
*Madhuca lanceolata*  
*Madhuca longifolia* var. *latifolia*  
*Madhuca longifolia*  
*Madhuca malaccensis*  
*Madhuca motleyana*  
*Madhuca neriifolia*  
*Madhuca pasquieri*  
*Madhuca philippinensis*  
*Madhuca pierrei*  
*Madhuca sericera*  
*Madhuca utilis*  
*Manilkara bidentata*  
*Manilkara celebica*  
*Manilkara fasciculata*  
*Manilkara hexandra*  
*Manilkara huberi*  
*Manilkara kanosiensis*  
*Manilkara kauki*  
*Manilkara zapota*  
*Micropholis gardneriana*  
*Micropholis guyanensis*  
*Micropholis melinoniana*  
*Micropholis venulosa*  
*Mimusops elengi*  
*Palaquium ellipticum*  
*Palaquium fidjiense*  
*Palaquium gutta*  
*Palaquium hexandrum*  
*Palaquium hispidum*  
*Palaquium hornei*  
*Palaquium impressionervium*  
*Palaquium maingayi*  
*Palaquium obovatum*  
*Palaquium philippense*  
*Palaquium regina-montium*  
*Palaquium rostratum*  
*Palaquium semaram*  
*Palaquium sumatranum*  
*Palaquium walsurifolium*  
*Payena acuminata*  
*Payena leerii*  
*Payena lucida*  
*Payena maingayi*  
*Payena obscura*

	<i>Planchonella euphlebia</i>
	<i>Pouteria alnifolia</i>
	<i>Pouteria altissima</i>
	<i>Pouteria izabalensis</i>
	<i>Pouteria pierrei</i>
	<i>Pradosia schomburgkiana</i>
	<i>Sideroxylon obtusifolium</i>
	<i>Tieghemella africana</i>
	<i>Tieghemella heckelii</i>
<b><i>Simaroubaceae</i></b>	<i>Ailanthus altissima</i>
	<i>Ailanthus triphysa</i>
	<i>Simarouba amara</i>
<b><i>Staphyleaceae</i></b>	<i>Turpinia ovalifolia</i>
<b><i>Stemonuraceae</i></b>	<i>Cantleya corniculata</i>
<b><i>Symplocaceae</i></b>	<i>Symplocos martinicensis</i>
<b><i>Tapisciaceae</i></b>	<i>Hurtea cubensis</i>
<b><i>Tetramelaceae</i></b>	<i>Octomeles sumatrana</i>
	<i>Tetrameles nudiflora</i>
<b><i>Tetrameristaceae</i></b>	<i>Tetramerista glabra</i>
<b><i>Theaceae</i></b>	<i>Schima crenata</i>
	<i>Schima noronhae</i>
	<i>Schima wallichii</i>
<b><i>Thymelaeaceae</i></b>	<i>Aquilaria malaccensis</i>
	<i>Gonystylus bancanus</i>
	<i>Gonystylus forbesii</i>
	<i>Gonystylus macrophyllus</i>
<b><i>Trochodendraceae</i></b>	<i>Trochodendron aralioides</i>
<b><i>Ulmaceae</i></b>	<i>Holoptelea grandis</i>
	<i>Phyllostylon rhamnoides</i>
	<i>Ulmus alata</i>
	<i>Ulmus americana</i>
	<i>Ulmus campestris</i>
	<i>Ulmus crassifolia</i>
	<i>Ulmus glabra</i>
	<i>Ulmus hollandica</i>
	<i>Ulmus laevis</i>



*Ulmus minor*  
*Ulmus pumila*  
*Ulmus rubra*  
*Ulmus thomasii*  
*Zelkova serrata*

***Urticaceae***

*Cecropia peltata*  
*Cecropia sciadophylla*  
*Musanga cecropioides*

***Vochysiaceae***

*Erisma calcaratum*  
*Erisma lanceolatum*  
*Erisma nitidum*  
*Erisma uncinatum*  
*Qualea albiflora*  
*Qualea coerulea*  
*Qualea dinizii*  
*Qualea paraensis*  
*Qualea parviflora*  
*Qualea rosea*  
*Vochysia citrifolia*  
*Vochysia densiflora*  
*Vochysia divergens*  
*Vochysia diversa*  
*Vochysia duquei*  
*Vochysia ferruginea*  
*Vochysia guatemalensis*  
*Vochysia guianensis*  
*Vochysia lanceolata*  
*Vochysia leguiana*  
*Vochysia lehmannii*  
*Vochysia maxima*  
*Vochysia obidensis*  
*Vochysia obscura*  
*Vochysia schomburgkii*  
*Vochysia tetraphylla*  
*Vochysia tomentosa*

***Winteraceae***

*Drimys winteri*

***Zygophyllaceae***

*Bulnesia arborea*  
*Bulnesia carrapo*  
*Bulnesia sarmientoi*  
*Guaiacum coulteri*  
*Guaiacum officinale*  
*Guaiacum sanctum*

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# References

## References - Introduction, Summary, Section 1

<sup>1</sup> Butchart, S. H. M., Walpole, M., Collen, B., van Strien, A., Scharlemann, J. P. W., Almond, R. E. A., Baillie, J. E. M., Bomhard, B., Brown, C., Bruno, J., Carpenter, K. E., Carr, G. M., Chanson, J., Chenery, A. M., Csirke, J., Davidson, N. C., Dentener, F., Foster, M., Galli, A., Galloway, J. N., Genovesi, P., Gregory, R. D., Hockings, M., Kapos, V., Lamarque, J.-F., Leverington, F., Loh, J., McGeoch, M. A., McRae, L., Minasyan, A., Hernández Morcillo, M., Oldfield, T. E. E., Pauly, D., Quader, S., Revenga, C., Sauer, J. R., Skolnik, B., Spear, D., Stanwell-Smith, D., Stuart, S. N., Symes, A., Tierney, M., Tyrrell, T. D., Vié, J.-C. and Watson, R. (2010). Global Biodiversity: Indicators of Recent Declines. *Science*, 328 (5982), p.1164-8.

<sup>2</sup> UNEP (2012). *Global Environment Outlook 5: Summary for policy makers*. Nairobi.

<sup>3</sup> Newton, A., Oldfield, S., Fragoso, G., Mathew, P., Miles, L. and Edwards, M. (2003). *Towards a global tree conservation atlas*. Cambridge, United Kingdom, p.0-18.

<sup>4</sup> UNEP (2005). *Ecosystems and human well-being: a framework for assessment - Executive Summary (Millennium Ecosystem Assessment)*, p.71-84.

<sup>5</sup> [Millennium Ecosystem Assessment. \(2005\). Ecosystems and Human Well-being: Synthesis \(Millennium Ecosystem Assessment\). \*Ecosystems\*, 5 \(281\), Washington, D.C.: World Resources Institute, p.1-100.](#)

<sup>6</sup> FAO. (2012). *State of the World's Forests 2012*. 10th ed. Shaw, J. (ed.). Rome: Food and Agriculture Organization of the United Nations, p.pp 48.

<sup>7</sup> The World Bank. (2004). *Sustaining Forests: A Development Strategy*. Washington D.C.: The International Bank for Reconstruction and Development/The World Bank.

<sup>8</sup> [Hansen, M. C., Stehman, S. V and Potapov, P. V. \(2010\). Quantification of global gross forest cover loss. \*Proceedings of the National Academy of Sciences of the United States of America\*, 107 \(19\), p.8650-55.](#)

<sup>9</sup> CBD. (2012). *Global Strategy for Plant Conservation: 2011-2020*. Richmond, United Kingdom: Botanic Gardens Conservation International.

<sup>10</sup> IUCN Red List of Threatened Species Version 2013.2 [online]: [www.iucnredlist.org](http://www.iucnredlist.org)

<sup>11</sup> Sharrock, S. (2012). *A Guide to the GSPC*. Richmond, UK: Botanic Gardens Conservation International. p. 7-8.

<sup>12</sup> The World Bank. (2004). *Sustaining Forests: A Development Strategy*. Washington D.C.: The International Bank for Reconstruction and Development/The World Bank.

<sup>13</sup> Convention on International Trade in Endangered Species of Wild Fauna and Flora [online]: [www.cites.org](http://www.cites.org)

<sup>14</sup> Oldfield, S., Lusty, C. and MacKinven, A. (1998). *The World List of Threatened Trees*. Cambridge: WCMC, IUCN.

<sup>15</sup> Oldfield, T., and Osborn, T., 2014, pers comm., January.

- <sup>16</sup> Goettsch, B., and Hilton-Taylor, C., 2014, pers comm., January.
- <sup>17</sup> Microsoft. (2010). Microsoft Excel. Redmond, Washington: Microsoft.
- <sup>18</sup> The Plant List [online]: <http://www.theplantlist.org/>
- <sup>19</sup> The Gymnosperm Database [online]: <http://www.conifers.org/>

## References - Section 2

CITES (2013). CITES Appendices I, II and III. [Online] Available at: <http://www.cites.org/eng/app/appendices.php> [Accessed: February 2014]

Greenpeace (2004). *Good Wood Guide*. [Online]. Available at: <http://www.greenpeace.org.uk/MultimediaFiles/Live/FullReport/6759.pdf>. [Accessed: March 2014]

Forest Stewardship Council A.C (2007). *FSC Species Terminology, FSC-STD-40-004b (Version 1-0)*. EN. Bonn, Germany. p.4-25.

Friends of the Earth & Fauna and Flora International (Date?). *Good Wood Guide Checklist*. [Online]. Available at: [http://www.foe.co.uk/campaigns/biodiversity/resource/good\\_wood\\_guide/wood\\_timber\\_types\\_a\\_to\\_g.html#a](http://www.foe.co.uk/campaigns/biodiversity/resource/good_wood_guide/wood_timber_types_a_to_g.html#a). [Accessed: February 2014]

Hewitt, J. (2007). *An assessment of tree species which warrant listing in CITES*. Report prepared for Milieudéfensie (Friends of the Earth, Netherlands).

International Tropical Timber Organization (2012). *Annual review and assessment of the world timber situation - Appendix 3: Major tropical species traded in 2010 and 2011*. Yokohama, Japan.

L'Association Technique Internationale des Bois Tropicaux (2013). *Nomenclature générale des bois tropicaux*. p.2-40.

NEPCon LegalSource™ Due Diligence System (2013). [Online] Available at: [http://www.nepcon.net/5174/English/Certification/Timber\\_legality\\_services/Due\\_diligence\\_system/](http://www.nepcon.net/5174/English/Certification/Timber_legality_services/Due_diligence_system/) [Accessed: February 2014]

Richter, H.G. and Dallwitz, M.J. (2000 onwards). Commercial timbers: descriptions, illustrations, identification and information retrieval. Version: 25th June 2009. [Online] Available at: <http://delta-intkey.com> [Accessed: March 2014]

The Timber Research and Development Association (2002-14). *Wood Species Database*. [Online]. Available at: <http://www.trada.co.uk/techinfo/tsg> [Accessed: February 2014]

The Wood Database (2014). [Online]. Available at: <http://www.wood-database.com/wood-identification/by-scientific-name/>. [Accessed: January 2014]

Timber Trade Federation (2009). Timber species imported into the UK. [Online] Available at: <http://www.ttf.co.uk/Article/Detail.aspx?ArticleUid=ee39cec8-21b6-4be4-9361-6001612c7190>. [Accessed: 12<sup>th</sup> February 2014]

TRAFFIC (2012). *Precious woods: Exploitation of the finest timber*. (Background Paper 1 for Chatham House 2012 workshop 'Tackling the trade in illegal precious woods'). p.36-45.

USDA Forest Products Laboratory. (Publication date unknown). Wood Properties (Techsheets) - Lesser Known Wood. [Online]. Available at: [http://www.fpl.fs.fed.us/research/centers/woodanatomy/techsheets\\_display.php?geo\\_category\\_id=1&genus\\_commonname\\_criteria=c&sorting\\_rule=1a](http://www.fpl.fs.fed.us/research/centers/woodanatomy/techsheets_display.php?geo_category_id=1&genus_commonname_criteria=c&sorting_rule=1a). [Accessed: 13th February 2014]

USDA Forest Products Laboratory (Publication date unknown). Wood Properties (Techsheets) - North American Hardwoods. [Online]. Available at: [http://www.fpl.fs.fed.us/research/centers/woodanatomy/techsheets\\_display.php?geo\\_category\\_id=2&genus\\_commonname\\_criteria=c&sorting\\_rule=1a](http://www.fpl.fs.fed.us/research/centers/woodanatomy/techsheets_display.php?geo_category_id=2&genus_commonname_criteria=c&sorting_rule=1a). [Accessed: 13th February 2014]

USDA Forest Products Laboratory (Publication date unknown). Wood Properties (Techsheets) - North American Softwoods. [Online]. Available at: [http://www.fpl.fs.fed.us/research/centers/woodanatomy/techsheets\\_display.php?geo\\_category\\_id=3&genus\\_commonname\\_criteria=c&sorting\\_rule=1a](http://www.fpl.fs.fed.us/research/centers/woodanatomy/techsheets_display.php?geo_category_id=3&genus_commonname_criteria=c&sorting_rule=1a). [Accessed: 13th February 2014]

USDA Forest Products Laboratory (Publication date unknown). Wood Properties (Techsheets) - Tropical Hardwoods. [Online]. Available at: [http://www.fpl.fs.fed.us/research/centers/woodanatomy/techsheets\\_display.php?geo\\_category\\_id=4&genus\\_commonname\\_criteria=c&sorting\\_rule=1a](http://www.fpl.fs.fed.us/research/centers/woodanatomy/techsheets_display.php?geo_category_id=4&genus_commonname_criteria=c&sorting_rule=1a). [Accessed: 13th February 2014]

The Wood Explorer (2014). [Online] Available at: <http://www.thewoodexplorer.com/species.html> [Accessed: January 2014]

Woodworkers Source (2008). *Wood Library*. [Online]. Available at: [http://www.woodworkerssource.com/letter1.php?common\\_name=no&letter=A&viewing=0](http://www.woodworkerssource.com/letter1.php?common_name=no&letter=A&viewing=0). [Accessed: March 2014]

WWF/GTFN (2013). *A guide to lesser-known tropical timber species*. Gland, Switzerland. p.4-86.

## Appendix I: List of gymnosperms traded for timber

The following is a list of gymnosperm tree taxa that were featured in two or more of the source lists described in Section 2 above. Gymnosperms were separated from the rest of the Working List tree taxa using *The Gymnosperm Database* and *The Plant List* for taxonomic reference.

<b>Family:</b>	<b>Scientific name:</b>	<b>Number of sources:</b>
<b><i>Araucariaceae</i></b>	<i>Agathis alba</i>	2
	<i>Agathis australis</i>	2
	<i>Agathis borneensis</i>	2
	<i>Agathis dammara</i>	2
	<i>Agathis macrophylla</i>	5
	<i>Agathis moorei</i>	2
	<i>Agathis philippinensis</i>	2
	<i>Agathis robusta</i>	3
	<i>Araucaria angustifolia</i>	9
	<i>Araucaria araucana</i>	5
	<i>Araucaria bidwillii</i>	2
	<i>Araucaria columnaris</i>	4
	<i>Araucaria cunninghamii</i>	3
	<i>Araucaria hunsteinii</i>	5
	<b><i>Cupressaceae</i></b>	<i>Callitris columellaris</i>
<i>Callitris endlicheri</i>		2
<i>Calocedrus decurrens</i>		5
<i>Chamaecyparis lawsoniana</i>		4
<i>Chamaecyparis thyoides</i>		4
<i>Cryptomeria japonica</i>		3
<i>Cunninghamia lanceolata</i>		2
<i>Cupressus lusitanica</i>		5
<i>Cupressus macnabiana</i>		2
<i>Cupressus macrocarpa</i>		3
<i>Cupressus nootkatensis</i>		4
<i>Cupressus sempervirens</i>		4
<i>Cupressus torulosa</i>		2
<i>Fitzroya cupressoides</i>		5
<i>Juniperus depeana</i>		3
<i>Juniperus occidentalis</i>		2
<i>Juniperus oxycedrus</i>		2
<i>Juniperus procera</i>		6
<i>Juniperus virginiana</i>		7
<i>Pilgerodendron uviferum</i>		2

	<i>Platycladus orientalis</i>	2
	<i>Sequoia sempervirens</i>	5
	<i>Sequoiadendron giganteum</i>	2
	<i>Taxodium distichum</i>	5
	<i>Tetraclinis articulata</i>	3
	<i>Thuja occidentalis</i>	4
	<i>Thuja plicata</i>	8
	<i>Widdringtonia whytei</i>	4
<b>Pinaceae</b>		
	<i>Abies alba</i>	7
	<i>Abies amabilis</i>	4
	<i>Abies balsamea</i>	4
	<i>Abies bracteata</i>	2
	<i>Abies concolor</i>	4
	<i>Abies grandis</i>	5
	<i>Abies guatemalensis</i>	3
	<i>Abies lasiocarpa</i>	6
	<i>Abies magnifica</i>	4
	<i>Abies procera</i>	4
	<i>Abies sibirica</i>	2
	<i>Abies spectabilis</i>	2
	<i>Cedrus atlantica</i>	2
	<i>Cedrus deodara</i>	2
	<i>Cedrus libani</i>	5
	<i>Larix decidua</i>	9
	<i>Larix gmelinii</i>	3
	<i>Larix kaempferi</i>	5
	<i>Larix laricina</i>	8
	<i>Larix occidentalis</i>	4
	<i>Larix sibirica</i>	3
	<i>Picea abies</i>	8
	<i>Picea engelmannii</i>	6
	<i>Picea glauca</i>	5
	<i>Picea jezoensis</i>	3
	<i>Picea mariana</i>	6
	<i>Picea omorika</i>	2
	<i>Picea rubens</i>	5
	<i>Picea sitchensis</i>	7
	<i>Pinus ayacahuite</i>	2
	<i>Pinus banksiana</i>	5
	<i>Pinus caribaea</i>	7
	<i>Pinus clausa</i>	4
	<i>Pinus contorta</i>	6
	<i>Pinus devoniana</i>	2
	<i>Pinus echinata</i>	5
	<i>Pinus edulis</i>	3
	<i>Pinus elliottii</i>	8

<i>Pinus englemannii</i>	2
<i>Pinus flexilis</i>	3
<i>Pinus glabra</i>	4
<i>Pinus heldreichii</i>	2
<i>Pinus jeffreyi</i>	3
<i>Pinus kesiya</i>	5
<i>Pinus kesiya</i> var. <i>langbianensis</i>	3
<i>Pinus koraiensis</i>	4
<i>Pinus lambertiana</i>	3
<i>Pinus merkusii</i>	4
<i>Pinus montezumae</i>	3
<i>Pinus monticola</i>	3
<i>Pinus mugo</i>	2
<i>Pinus nigra</i>	2
<i>Pinus oocarpa</i>	3
<i>Pinus palustris</i>	6
<i>Pinus patula</i>	2
<i>Pinus pinaster</i>	3
<i>Pinus ponderosa</i>	4
<i>Pinus pringlei</i>	2
<i>Pinus pseudostrobus</i>	2
<i>Pinus pungens</i>	2
<i>Pinus radiata</i>	5
<i>Pinus resinosa</i>	5
<i>Pinus rigida</i>	3
<i>Pinus serotina</i>	3
<i>Pinus strobus</i>	5
<i>Pinus sylvestris</i>	5
<i>Pinus taeda</i>	4
<i>Pinus taiwanensis</i>	2
<i>Pinus virginiana</i>	4
<i>Pinus wallichiana</i>	2
<i>Pseudotsuga menziesii</i>	12
<i>Tsuga canadensis</i>	3
<i>Tsuga heterophylla</i>	9
<i>Tsuga mertensiana</i>	2
<b>Podocarpaceae</b>	
<i>Afrocarpus falcatus</i>	2
<i>Afrocarpus gracilior</i>	2
<i>Dacrycarpus dacrydiodes</i>	2
<i>Dacrycarpus imbricatus</i>	4
<i>Dacrydium beccarii</i>	2
<i>Dacrydium cupressinum</i>	4
<i>Dacrydium elatum</i>	2
<i>Dacrydium nidulum</i>	3
<i>Lagarostrobos franklinii</i>	2
<i>Nageia wallichiana</i>	2

	<i>Phyllocladus aspleniifolius</i>	3
	<i>Podocarpus guatemalensis</i>	2
	<i>Podocarpus neriifolius</i>	4
	<i>Podocarpus rumphii</i>	2
	<i>Prumnopitys ferruginea</i>	2
<b>Taxaceae</b>		
	<i>Taxus baccata</i>	6
	<i>Taxus brevifolia</i>	4
	<i>Taxus cuspidata</i>	2
	<i>Taxus fuana</i>	2
	<i>Taxus sumatrana</i>	2
	<i>Taxus wallichiana</i>	2
	<i>Taxus wallichiana</i> var. <i>chinensis</i>	2
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## Appendix II: Breakdown of taxa by source list

Appendix II is provided to explain the origins of the Working List. For the full ranked working list of (non-gymnosperm) timber taxa, please refer to the attached Microsoft Excel spreadsheet. Each of the seventeen resources, or source lists, (described in Table 1 of this document) has been assigned a letter A-Q. Taxa are listed by scientific name along the spreadsheet's vertical axis, with the resource letters (A-Q) as the column headers. Each 'y' symbol alongside a scientific name indicates that this name was found in the resource at the top of the column in question.

### Key to source lists:

- A - Commercial timbers: descriptions, illustrations, identification and information retrieval (Delta-Intkey)
- B - Nomenclature générale des bois tropicaux (ATIBT)
- C - Wood Species Database (TRADA)
- D - Woodworkers Source Wood Library
- E - Annual review and assessment of the world timber situation - Appendix 3: Major tropical species traded in 2010 and 2011 (ITTO)
- F - Good Wood Guide (Greenpeace)
- G - Good Wood Guide Checklist (Friends of the Earth; Fauna and Flora International)
- H - FSC Species Terminology (Forest Stewardship Council)
- I - Wood Properties Techsheets (US Department of Agriculture)
- J - The Wood Database (Meier, E)
- K - Guide to lesser-known tropical timber species (World Wildlife Fund)
- L - Timber species imported into the UK, 2009 (Timber Trade Federation, UK)
- M - Report: Precious woods: Exploitation of the finest timber (TRAFFIC)
- N - Report: An assessment of tree species which warrant listing in CITES (Hewitt, J)
- O - CITES Appendices I, II, III
- P - The Wood Explorer, Inc.
- Q - NEPCon LegalSource™ Due Diligence System