

Top 26
species for
yachting!

Discover:
Lesser known tropical timber
species for the yachting industry



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The project benefits from the support of Prince Albert II of Monaco Foundation

www.fpa2.org



Introduction

Looking for new timber species to be used in the yachting industry?

Right now many are – and for various reasons like: sourcing issues, price, environmental concerns or aesthetics. In this catalogue we have college suggestion for species worthwhile testing and exploring in the yachting industry.

We have mainly focused on exterior applications such as handrails and deck. But for interior applications the suggested species could replace various mahogany species listed either on CITES or as threatened on IUCN redlist.

The catalogue is drawing on open sources like Cirad and www.lesserknowntimberspecies.com as well as publicly available reports on species used for boat and shipbuilding. The suggestions also come from qualitative interviews across the European sector of FSC™ Timber Importers. Finally, we have gathered publicly available research and case stories of timber species and solution for Yachting.

From the forests to the oceans

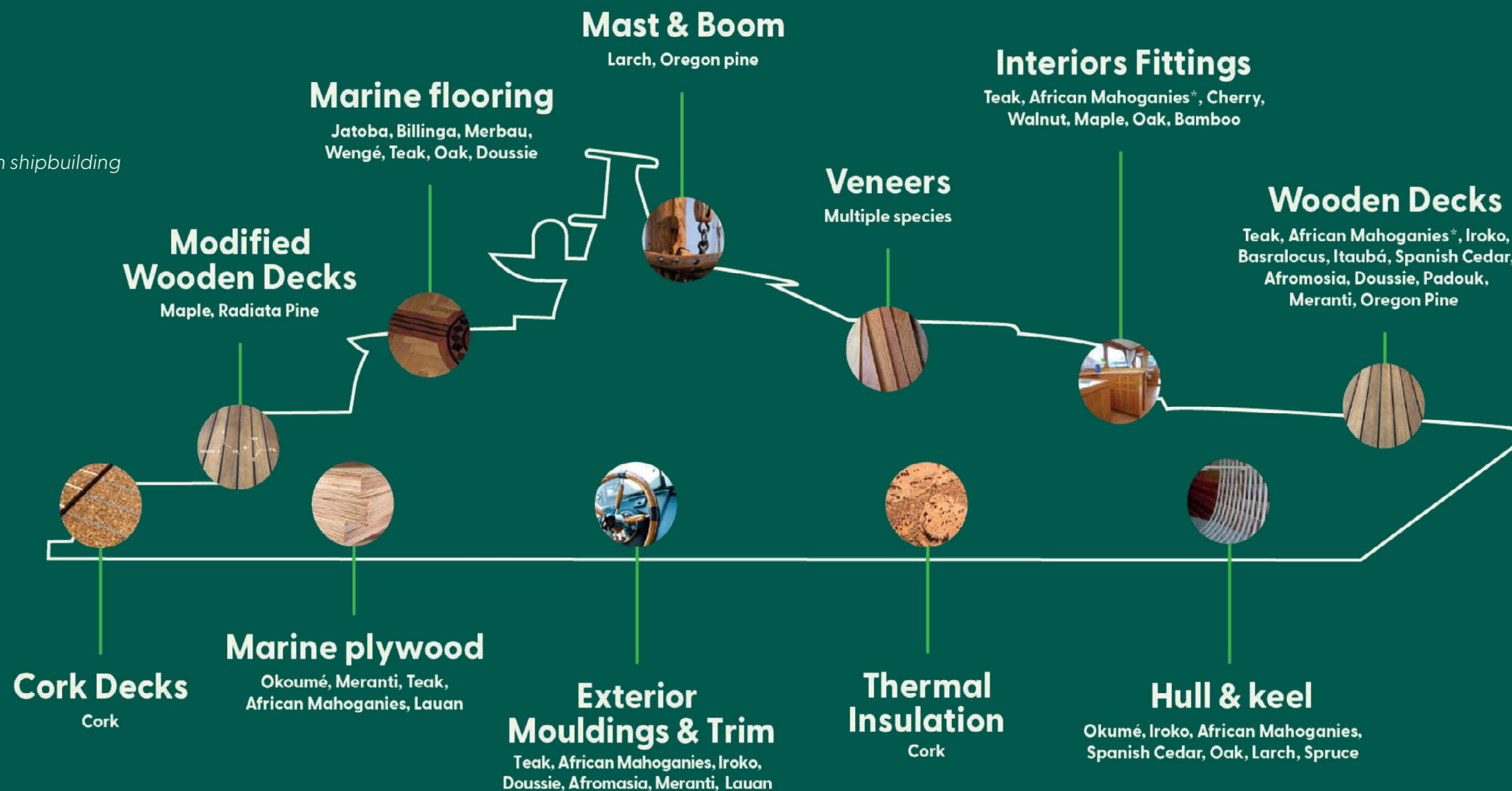
Forest-based products have historically formed a key part of shipbuilding and are still an important part of maritime tradition and yachting design trends. Today, timber and other forest-based products may only make up a small part of a ship, but the impact of these components is nevertheless significant.

Timber in shipbuilding is mostly used in products such as ship decks, interiors, flooring, and various fittings. Timber products in the shipping industry are often made of species from tropical forests.

As precious timber species, such as natural teak and mahogany-like species, form an important part of maritime tradition, the sector has the potential to make a big difference to the worlds forests.

By choosing responsibly sourced forest products the industry can support and promote more sustainable management of forests around the globe.

Figure:
Forest-based products used in shipbuilding



Responsibly sourced timber in the yachting industry

This initiative coordinated by FSC Denmark and supported by the Prince Albert II of Monaco Foundation (FPA2) aims to ensure a higher uptake of timber from responsible sources in the yachting industry.

The project is part of a wider range of activities initiated by Forest Stewardship Council™, FSC, to support the promotion of sustainable forest management through certification and use innovation to strengthen the business case for responsible forest management.

The aim of the project is to investigate the current market situation in the yachting industry, to highlight the solutions available and to initiate development of new procurement policies and efficient strategies to limit negative impact on forests.

Forests for all for ever

Forests are vital to life

Without forests, life on earth would cease to exist. Forests regulate our climate, clean the air we breathe and are the source of much of our drinking water. Around the world, forests support 1.6 billion people and provide habitat for 70% of terrestrial wildlife and plants.

Forests also offer a renewable supply of resources that are essential to our quality of life. Unfortunately, many forests no longer exist. Thirty-million acres of forest are lost each year, the equivalent of 36 football fields every minute. Deforestation is responsible for nearly 20% of all greenhouse gas emissions—more than the entire transportation sector.

Forests are also vital for the livelihood of forest-dependent communities around the world and for providing important resources and income.

If no safeguards are set, your procurement may lead to mismanagement of a forest, often in the form of deforestation and degradation of forest systems. This tends to lead to the loss of important habitats for many forest-related species. It has a negative impact on the climate due to forest fires, resulting in erosion of the forests' carbon stocks combined with changes to the physical conditions that contribute to balancing the weather and climate systems. Soil erosion could lead to floods.

People who work and/or live off the forests may be exposed to horrific and unhealthy working conditions, and it is often the world's poorest people who fall victim to the worst consequences of environmental deterioration.





Tropical production creates value

A new and better story of tropical timber

Tropical timber is nowadays often – by default – presented as a problem. But there is more to the story than meets the eye. The global forest and timber sector is increasingly switching to sustainable timber sourcing and has set targets for becoming more aware of market requirements. Irresponsible or illegal removal of timber from tropical forests is still a huge problem, but conservation efforts are widening their scope to also include natural resources and their sustainable management.

International demand for timber is an incentive for the development of sustainable forestry in tropical forests. Without this demand, there is a risk of certification being abolished, and the area could become vulnerable to illegal logging or other kinds of land use at the expense of forests. It is therefore important to purchase timber from sustainable tropical forestry to support responsible development in the tropical areas while setting aside land for strict conservation.

Gabon takes the lead

The country of Gabon, well known to the shipbuilding industry for production of plywood mainly made of the species Okumé (*Aucoumea klaineana*), has set ambitious standards for its forest commitments and land planning in general, including areas set aside for nature conservation.

Back in September 2018, the President of Gabon Ali Bongo Ondimba – took an important step towards sustainable forest management by declaring that all forest concessions operating in Gabon would have to be certified by FSC. The Gabonese government aims to gain economic benefits from the national forest sector and increase income levels from EUR 500 million to EUR 3000 billion in contribution to GDP by 2025.

Involvement in the forest sectors and local production can help such countries, and responsible procurement requirements can motivate these ambitious policies through business opportunities.

Photo: FSC Denmark

Finding alternatives to teak

3 potential approaches

One of the most prominent and complicated uses of timber for yachting is probably the deck where Burma teak has been used for decades. Its stability, durability, workability and finish made it second to none. Or so it seems. The need for alternatives shows that there are in fact other solutions worth considering for the Yachting Industry.

Naturally durable timber

Select hard but not too heavy species:

Quartersawn and carefully kiln dried. Species like Iroko, Guariuba and Indian Padouk have been or are being tested and looks promising. There may indeed, as this catalogue shows, be other species worth testing for deck and other exterior applications.

Plantation teak

One alternative is of course *Tectona Grandis* from other areas, in this case FSC certified plantation Teak. Over many years plantations have been established across the entire tropical region hoping to produce high value teak. Some failed, but others, especially in Indonesian and central America looks promising.

Plantation teak has often grown too fast, contains knots and too much sapwood. However, as the plantations mature the quality has improved significantly. The FSC certificate database of FM and FM/CoC provides 67 leads for FSC teak logs and sawn wood: <https://search.fsc.org/en/advanced-search/?tab=undefined>

Thermally Modified timber

Lighter species with good working properties and low movement in service but not durable are obvious candidates, if they can achieve the needed durability.

Thermo-modification is already well known and established on a number of species especially for exterior cladding. However, the experience is that most technologies in the market tend to make the timber too brittle for use as ships deck.

One company, Finish AvantWood, using a different technology seems to have the answer. A comparative test of teak and modified ash is a lead worth following and is therefore included as a case where the company present itself and its solution.

Want to learn more?

Here are 3 articles we found interesting

Alternative timber to natural forest teak for shipbuilding

Investigation of alternative timber to natural teak with regard to their applicability in shipbuilding by THÜNEN / Institute of Wood Research

Testing of the suitability of alternative timber (Afzelia, Iroko and Itaúba) under real operating conditions in shipbuilding (especially for a working deck).



<https://www.thuenen.de/en/institutes/wood-research/projects/alternative-timber-to-natural-forest-teak-for-shipbuilding>

What's next? A new wave of deck innovation



Boat International's article on pioneers leading a new wave of deck innovation, alternatives to teak and trends in the sector.

Teak decking has long been regarded a superyacht's crowning glory, but the controversy around "conflict wood" from Myanmar forced the industry to come up with ethical and sustainable alternatives.

<https://www.boatinternational.com/yachts/yacht-design/teak-alternatives-in-yachting>

Traditional wooden boat building in Pará

Traditional wooden boat building in the middle and lower course of Xingu river, Pará, Brazil (2023).

Suggesting Piquia, Itauba and Quaruba-Cedro among other species



<https://www.gvaa.com.br/revista/index.php/RVADS/article/view/9532/11499e>

Case: TMTM technology

AvantWood

Avant Wood is a Finnish technology company established in 2016. However, the company founders started R&D activities and developments in Thermal-Mechanical Timber Modification (TMTM™) in early 2000.

Avant Wood's product is a patented, scalable TMTM™ wood modification unit, which is equipped with a unique AI-assisted control system. The TMTM™ process is a superior solution for more efficient utilization of wood globally.

TMTM™ unit is an all-in-one process, without any extra separate equipment. It can:

- **Dry timber to the desired moisture content,**
- **Densify wood to enhance its strength, hardness, abrasion, and dimensional stability properties, and**
- **Thermally modify timber to attain the preferred color and durability.**

The process generally takes less than 50 hours (depending on wood species, initial moisture content, and thickness) compared to conventional drying kilns, which usually take 5-10x longer process lead time.

The TMTM technology can process and modify various wood species, enhancing the timber properties and making it suitable for the yachting industry.



Photo: Löyly Helsinki, Kuvio.com

Case: The First FSC™ Project

26' FSC YACHT - 'IJSVOGEL'

The sailing yacht Ijsvogel (The Kingfisher) was completed in June 2003 and was exhibited at the HISWA Boat Show 2004 where it was first introduced to the general public.

Behind the yacht was a unique partnership set up to promote FSC-certified wood and new alternative timber species in the yacht building industry. This was the first ever sailing yacht built entirely in FSC-certified wood. The partnership consisted of Stichting Doen, Stichting Ecohout, Nationale Postcode Loterij and Wereld Natuur Fonds (WWF NL). The yacht is designed by Olivier F. van Meer Design and built at Scheepstimmerbedrijf Prins by Johan Prins.

The woods used in the construction were Indian Padauk (Padauk Amboina) for the decking, Louro Vermelho (Wane) for the hull, Sucupira for the keel, Lauan for plating and Oregon pine for the mast. Back in 2004 when the Ijsvogel was built, FSC project certification was not yet available.

This early FSC demonstration project was not just the first yacht made entirely of FSC-certified wood. It was also an early pilot for what would later become project certification.



Photo: Tjapko de Heus

Timber species diversification

Creating awareness

Tropical forests contain a wealth of lesser known timber species. Many of these offer untapped potential to cover our construction and design needs. Did you know that there are more than 70,000 species of trees around the world dominated by the tropical species? Yet only a small proportion of these has been properly tested for specific applications.

Lesser-known timber species are currently underutilised compared to their potential. Bringing them from well-managed forests to the market could relieve pressure on the most popular species and increase the product range of these forests which are currently limited in harvest volumes by principles of low impact logging and single-species considerations.

Tropical timber is characterised by certain natural advantages such as strength, durability, and an incredible variation in look.

With many thousands of timber species available, the potential is worth investigating. Rich opportunity exists for sharing responsibility for our tropical forests. Manufacturers, architects, engineers etc. are able to support product development on behalf of Africa, Latin America and Southeast Asia and contribute to future-proofing forest preservation.



Photo: FSC Denmark

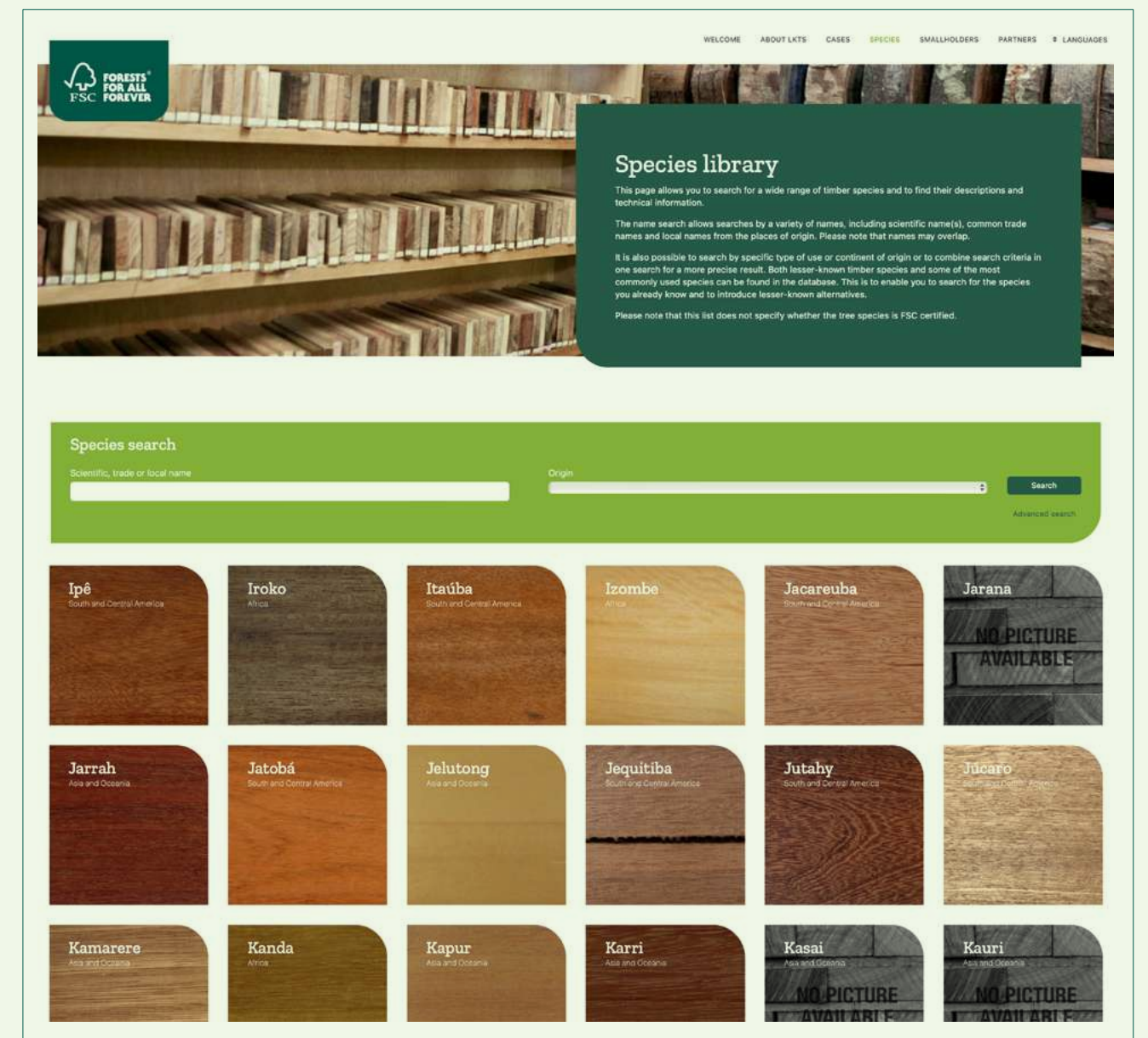
FSC™ species database

The worlds largest database of its kind

FSC Denmark has developed a database for lesser known timber species (LKTS). It includes both specific case studies and technical data. What makes the database unique is the focus on use-scenarios, properties and functions.

New case studies are continuously added. Use the database to search for the type of structure you will be building, the species you usually use and identify alternative timber species as well as examples of buildings and products in which the various species are used.

Find out more at: www.lesserknowntimberspecies.com



www.lesserknowntimberspecies.com

Selected timber species

Suggestions for the yachting industry

On the following pages find a collection of 26 species from the LKTS database worth exploring in the yachting industry.

Name of species	Link to species on www.lesserknowntimberspecies.com
Acajou de Afrique	https://www.lesserknowntimberspecies.com/species/acajou-d-afriquev
Acajou Cailcedrat	https://www.lesserknowntimberspecies.com/species/acajou-cailcedrat
Afrormorsia	https://www.lesserknowntimberspecies.com/species/afrormorsia
Andiroba	https://www.lesserknowntimberspecies.com/species/andiroba
Yellow Balau	https://www.lesserknowntimberspecies.com/species/balau-yellow
Basralocus	https://www.lesserknowntimberspecies.com/species/basralocus
Bilinga	https://www.lesserknowntimberspecies.com/species/bilinga
Cumaru	https://www.lesserknowntimberspecies.com/species/cumaru
Doussié	https://www.lesserknowntimberspecies.com/species/doussie
Freijo	https://www.lesserknowntimberspecies.com/species/freijo
Guariuba	https://www.lesserknowntimberspecies.com/species/quariuba
Ipé	https://www.lesserknowntimberspecies.com/species/ipe
Iroko	https://www.lesserknowntimberspecies.com/species/iroko
Red Lauan	https://www.lesserknowntimberspecies.com/species/lauan-red
Iatandza	https://www.lesserknowntimberspecies.com/species/iatandza
Kauri	https://www.lesserknowntimberspecies.com/species/kauri
Kosipo	https://www.lesserknowntimberspecies.com/species/kosipo
Limba	https://www.lesserknowntimberspecies.com/species/frake-limba
Louro Vermelho	https://www.lesserknowntimberspecies.com/species/louro-vermelho
Merbau	https://www.lesserknowntimberspecies.com/species/merbau
Okoumé	https://www.lesserknowntimberspecies.com/species/okoume
Tatajuba	https://www.lesserknowntimberspecies.com/species/tatajuba
Padouk	https://www.lesserknowntimberspecies.com/species/padouk
Pau Roxo	https://www.lesserknowntimberspecies.com/species/amarante-purpleheart
Sapelli	https://www.lesserknowntimberspecies.com/species/sapelli
Sipo	https://www.lesserknowntimberspecies.com/species/sipo
Plantation Teak	https://www.lesserknowntimberspecies.com/species/teck-teak

Species: Acajou de Afrique

Family: MELIACEAE (angiosperm)

APPEARANCE



PROMINENT USES



GENERAL INFORMATION

Origin	Prominent trade names	Commercial restrictions
Africa	Acajou d'Afrique African Mahogany	No restrictions

SCIENTIFIC DATA AND RISK

Scientific name(s)	CITES	IUCN
Khaya anthotheca	Not listed	VU
Khaya ivorensis / Khaya klainei	Not listed	VU
Khaya grandifoliola	Not listed	VU

PROPERTIES

Crushing strength	Specific gravity	Static bend. strength	Stability
45.3 MPa	0.57 g/cm ³	80.9 MPa	Mod. stable

FURTHER INFORMATION:

For more details on appearance, physical description, typical use and promotion partners go to the species library on: www.lesserknowntimberspecies.com



Species: Acajou Cailcedrat

Family: MELIACEAE (angiosperm)

APPEARANCE



PROMINENT USES



GENERAL INFORMATION

Origin	Prominent trade names	Commercial restrictions
Africa	Acajou Cailcedrat Senegal mahogany	No restrictions

SCIENTIFIC DATA AND RISK

Scientific name(s)	CITES	IUCN
Khaya Senegalensis	Not listed	VU

PROPERTIES

Crushing strength	Specific gravity	Static bend. strength	Stability
54 MPa	0.78 g/cm ³	86 MPa	Stable

FURTHER INFORMATION:

For more details on appearance, physical description, typical use and promotion partners go to the species library on: www.lesserknowtimberspecies.com



Species: Afrormorsia

Family: FABACEAE (angiosperm)

APPEARANCE



PROMINENT USES



GENERAL INFORMATION

Origin	Prominent trade names	Commercial restrictions
Africa	Afrormosia Kokrudua	Protected by CITES

SCIENTIFIC DATA AND RISK

Scientific name(s)	CITES	IUCN
Pericopsis elata / Afrormosia elata	App. II	EN

PROPERTIES

Crushing strength	Specific gravity	Static bend. strength	Stability
64 MPa	0.74 g/cm ³	93 MPa	Mod. stable

FURTHER INFORMATION:

For more details on appearance, physical description, typical use and promotion partners go to the species library on: www.lesserknowtimberspecies.com



Species: Andiroba

Family: MELIACEAE (angiosperm)

APPEARANCE



Photo: FSC Denmark

PROMINENT USES



GENERAL INFORMATION

Origin	Prominent trade names	Commercial restrictions
South and Central America	Andiroba Bastard Mahogany Cedro Macho Carapa	No restrictions

SCIENTIFIC DATA AND RISK

Scientific name(s)	CITES	IUCN
Carapa guianensis / Carpa nicaraguensis	Not listed	LC
Carapa procera	Not listed	LC

PROPERTIES

Crushing strength	Specific gravity	Static bend. strength	Stability
59 MPa	0.67 g/cm ³	102 MPa	Mod. stable

FURTHER INFORMATION:

For more details on appearance, physical description, typical use and promotion partners go to the species library on: www.lesserknowtimberspecies.com



Species: Balau Yellow

Family: DIPTEROCARPACEAE (angiosperm)

APPEARANCE



Photo: FSC Denmark

PROMINENT USES



GENERAL INFORMATION

Origin	Prominent trade names	Commercial restrictions
Asia and Oceania	Balau Yellow Bangkirai Selangan Batu	No restrictions

SCIENTIFIC DATA AND RISK

Scientific name(s)	CITES	IUCN
Shorea spp		
Shorea Glauca	Not listed	EN
Shorea Laevis	Not listed	VU
Shorea superba	Not listed	CR
Shorea maxwelliana	Not listed	EN
Shorea subgen. Eushorea p.p		

PROPERTIES

Crushing strength	Specific gravity	Static bend. strength	Stability
85 MPa	0.91 g/cm ³	150 MPa	Mod. stable

FURTHER INFORMATION:

For more details on appearance, physical description, typical use and promotion partners go to the species library on: www.lesserknowtimberspecies.com



Species: Basralocus

Family: FABACEAE-CAESALPINIOIDEAE (angiosperm)

APPEARANCE



Photo: FSC Denmark

PROMINENT USES



GENERAL INFORMATION

Origin	Prominent trade names	Commercial restrictions
South and Central America	Basralocus Angelique Barakaroeballi	No restrictions

SCIENTIFIC DATA AND RISK

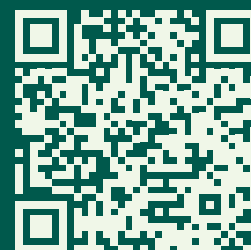
Scientific name(s)	CITES	IUCN
Dicorynia guianensis / Dicorynia paraensis	Not listed	NE

PROPERTIES

Crushing strength	Specific gravity	Static bend. strength	Stability
70 MPa	0.79 g/cm ³	121 MPa	Mod. stable

FURTHER INFORMATION:

For more details on appearance, physical description, typical use and promotion partners go to the species library on: www.lesserknowtimberspecies.com



Species: Bilinga

Family: RUBIACEAE (angiosperm)

APPEARANCE



Photo: Hobbit House Inc.

PROMINENT USES



GENERAL INFORMATION

Origin	Prominent trade names	Commercial restrictions
Africa	Bilinga Aloma Opepe	No restrictions

SCIENTIFIC DATA AND RISK

Scientific name(s)	CITES	IUCN
Nauclea spp. / Sarcocephalus spp.		
Nauclea diderrichii / Sarcocephalus diderrichii / Nauclea trillesii	Not listed	VU
Nauclea gillettii	Not listed	NE
Nauclea xanthoxylon	Not listed	NE

PROPERTIES

Crushing strength	Specific gravity	Static bend. strength	Stability
63 MPa	0.76 g/cm ³	95 MPa	Mod. stable

FURTHER INFORMATION:

For more details on appearance, physical description, typical use and promotion partners go to the species library on: www.lesserknowtimberspecies.com



Species: **Cumaru**

Family: FABACEAE (angiosperm)

APPEARANCE



PROMINENT USES



GENERAL INFORMATION

Origin	Prominent trade names	Commercial restrictions
South and Central America	Cumaru Tonka	No restrictions

SCIENTIFIC DATA AND RISK

Scientific name(s)	CITES	IUCN
Dipteryx spp. / Coumarouna spp.		
Dipteryx alata	Not listed	NE
Dipteryx odorata / Coumarouna odorata	Not listed	DD
Dipteryx micrantha	Not listed	DD
Dipteryx polyphylla	Not listed	NE

PROPERTIES

Crushing strength	Specific gravity	Static bend. strength	Stability
103 MPa	1.07 g/cm ³	170 MPa	Mod. stable / stable

FURTHER INFORMATION:

For more details on appearance, physical description, typical use and promotion partners go to the species library on: www.lesserknowtimberspecies.com



Species: **Doussié**

Family: FABACEAE-CAESALPINIOIDEAE (angiosperm)

APPEARANCE



PROMINENT USES



GENERAL INFORMATION

Origin	Prominent trade names	Commercial restrictions
Africa	Doussié Papao Afzelia	No restrictions

SCIENTIFIC DATA AND RISK

Scientific name(s)	CITES	IUCN
Afzelia africana	Not listed	VU
Afzelia bipindensis / Afzelia bella	Not listed	NE
Afzelia pachyloba	Not listed	VU
Afzelia quanzensis	Not listed	NE

PROPERTIES

Crushing strength	Specific gravity	Static bend. strength	Stability
74 MPa	0.8 g/cm ³	124 MPa	Stable

FURTHER INFORMATION:

For more details on appearance, physical description, typical use and promotion partners go to the species library on: www.lesserknowtimberspecies.com



Species: Freijo

Family: BORAGINACEAE (angiosperm)

APPEARANCE



Photo: www.wood-database.com

PROMINENT USES



GENERAL INFORMATION

Origin	Prominent trade names	Commercial restrictions
South and Central America	Freijo Jenny Wood Louro amarelo	No restrictions

SCIENTIFIC DATA AND RISK

Scientific name(s)	CITES	IUCN
<i>Cordia goeldiana</i>	Not listed	NE

PROPERTIES

Crushing strength	Specific gravity	Static bend. strength	Stability
48 MPa	0.58 g/cm ³	86 MPa	Mod. stable

FURTHER INFORMATION:

For more details on appearance, physical description, typical use and promotion partners go to the species library on: www.lesserknowtimberspecies.com



Species: Guariuba

Family: MORACEAE (angiosperm)

APPEARANCE



Photo: FSC Denmark

PROMINENT USES



GENERAL INFORMATION

Origin	Prominent trade names	Commercial restrictions
South and Central America	Guariúba Moral Tulpay	No restrictions

SCIENTIFIC DATA AND RISK

Scientific name(s)	CITES	IUCN
<i>Clarisia racemosa</i>	Not listed	NE
<i>Clarisia nitida</i> , <i>Soaresia nitida</i> Allemao, <i>Sorocea nitida</i> Warb		

PROPERTIES

Crushing strength	Specific gravity	Static bend. strength	Stability
68 MPa	0.69 g/cm ³	105 MPa	Mod. stable / stable

FURTHER INFORMATION:

For more details on appearance, physical description, typical use and promotion partners go to the species library on: www.lesserknowtimberspecies.com



Species: Ipé

Family: BIGNONIACEAE (angiosperm)

APPEARANCE



PROMINENT USES



GENERAL INFORMATION

Origin	Prominent trade names	Commercial restrictions
South and Central America	Ipê Lapacho Ironwood	No restrictions

SCIENTIFIC DATA AND RISK

Scientific name(s)	CITES	IUCN
Handroanthus spp. / Tabebuia spp.		
Handroanthus serratifolius / Tabebuia serratifolia	Not listed	NE
Handroanthus heptaphylla / Tabebuia heptaphylla	Not listed	LC
Handroanthus impetiginosa / Tabebuia impetiginosa	Not listed	LC

PROPERTIES

Crushing strength	Specific gravity	Static bend. strength	Stability
93.8 MPa	91 g/cm ³	177 MPa	-

FURTHER INFORMATION:

For more details on appearance, physical description, typical use and promotion partners go to the species library on: www.lesserknowtimberspecies.com



Species: Iroko

Family: MORACEAE (angiosperm)

APPEARANCE



PROMINENT USES



GENERAL INFORMATION

Origin	Prominent trade names	Commercial restrictions
Africa	Iroko Kambala	No restrictions

SCIENTIFIC DATA AND RISK

Scientific name(s)	CITES	IUCN
Milicia excelsa / Chlorophora excelsa	Not listed	NT
Milicia regia / Chlorophora regia	Not listed	VU

PROPERTIES

Crushing strength	Specific gravity	Static bend. strength	Stability
53 MPa	0.64 g/cm ³	87 MPa	Mod. stable

FURTHER INFORMATION:

For more details on appearance, physical description, typical use and promotion partners go to the species library on: www.lesserknowtimberspecies.com



Species: Lauan Red

Family: DIPTEROCARPACEAE (angiosperm)

APPEARANCE



PROMINENT USES



GENERAL INFORMATION

Origin	Prominent trade names	Commercial restrictions
Asia and Oceania	Lauan Red	No restrictions

SCIENTIFIC DATA AND RISK

Scientific name(s)	CITES	IUCN
Shorea p.p. subgen. Rubroshorea		
Shorea Negrosensis	Not listed	LC
Shorea Polysperma	Not listed	LC
Shorea ovata / Shorea agsaboensis	Not listed	NE

PROPERTIES

Crushing strength	Specific gravity	Static bend. strength	Stability
50 MPa	0.65 g/cm ³	90 MPa	Mod. stable

FURTHER INFORMATION:

For more details on appearance, physical description, typical use and promotion partners go to the species library on: www.lesserknowtimberspecies.com



Species: latandza

Family: FABACEAE-MIMOSOIDEAE (angiosperm)

APPEARANCE



PROMINENT USES



GENERAL INFORMATION

Origin	Prominent trade names	Commercial restrictions
Africa	latandza Tanga-tanga West African Albizia	No restrictions

SCIENTIFIC DATA AND RISK

Scientific name(s)	CITES	IUCN
Albizia p.p.		
Albizia angolensis	Not listed	NE
Albizia antunesiana	Not listed	LC
Albizia ferruginea	Not listed	VU
Albizia glaberrima / Albizia rhombifolia	Not listed	LC
Albizia versicolor	Not listed	LC

PROPERTIES

Crushing strength	Specific gravity	Static bend. strength	Stability
50 MPa	0.6 g/cm ³	81 MPa	Stable

FURTHER INFORMATION:

For more details on appearance, physical description, typical use and promotion partners go to the species library on: www.lesserknowtimberspecies.com



Species: Kauri

Family: ARAUCARIACEAE (gymnosperm)

APPEARANCE



Photo: www.wood-database.com

PROMINENT USES



GENERAL INFORMATION

Origin	Prominent trade names	Commercial restrictions
Asia and Oceania	Kauri Agathis	No restrictions

SCIENTIFIC DATA AND RISK

Scientific name(s)	CITES	IUCN
Agathis spp.		
Agathis Dammara / Agathis Alba	Not listed	VU
Agathis Lanceolata	Not listed	VU
Agathis Moorei	Not listed	VU
Agathis macrophylla / Agathis Obtusa	Not listed	NE

PROPERTIES

Crushing strength	Specific gravity	Static bend. strength	Stability
43 MPa	0.53 g/cm ³	76 MPa	Stable

FURTHER INFORMATION:

For more details on appearance, physical description, typical use and promotion partners go to the species library on: www.lesserknowtimberspecies.com



Species: Kosipo

Family: MELIACEAE (angiosperm)

APPEARANCE



Photo: www.wood-database.com

PROMINENT USES



GENERAL INFORMATION

Origin	Prominent trade names	Commercial restrictions
Africa	Kosipo Heavy Sapele Kosipo-Mahogany	No restrictions

SCIENTIFIC DATA AND RISK

Scientific name(s)	CITES	IUCN
Entandrophragma candollei	Not listed	VU

PROPERTIES

Crushing strength	Specific gravity	Static bend. strength	Stability
53 MPa	0.69 g/cm ³	87 MPa	Stable

FURTHER INFORMATION:

For more details on appearance, physical description, typical use and promotion partners go to the species library on: www.lesserknowtimberspecies.com



Species: Limba

Family: COMBRETACEAE (angiosperm)

APPEARANCE



PROMINENT USES



GENERAL INFORMATION

Origin	Prominent trade names	Commercial restrictions
Africa	Limba Fraké Akom	No restrictions

SCIENTIFIC DATA AND RISK

Scientific name(s)	CITES	IUCN
Terminalia superba / Terminalia altissima	Not listed	NE

PROPERTIES

Crushing strength	Specific gravity	Static bend. strength	Stability
47 MPa	0.54 g/cm ³	80 MPa	Mod. stable

FURTHER INFORMATION:

For more details on appearance, physical description, typical use and promotion partners go to the species library on: www.lesserknowtimberspecies.com



Species: Louro Vermelho

Family: LAURACEAE (angiosperm)

APPEARANCE



PROMINENT USES



GENERAL INFORMATION

Origin	Prominent trade names	Commercial restrictions
South and Central America	Louro Vermelho Louro Gamela Red Louro Wana	No restrictions

SCIENTIFIC DATA AND RISK

Scientific name(s)	CITES	IUCN
Sextonia rubra / Ocotea rubra, Nectandra rubra	Not listed	NE

PROPERTIES

Crushing strength	Specific gravity	Static bend. strength	Stability
51 MPa	0.66 g/cm ³	81 MPa	Mod. stable

FURTHER INFORMATION:

For more details on appearance, physical description, typical use and promotion partners go to the species library on: www.lesserknowtimberspecies.com



Species: Merbau

Family: FABACEAE-CAESALPINIOIDEAE (angiosperm)

APPEARANCE



PROMINENT USES



GENERAL INFORMATION

Origin	Prominent trade names	Commercial restrictions
Asia and Oceania	Merbau Kalabau	No restrictions

SCIENTIFIC DATA AND RISK

Scientific name(s)	CITES	IUCN
Intsia spp		
Intsia bijuga / Afzelia bijuga, Intsia amboinensis, Intsia retusa	Not listed	VU
Intsia palembanica / Intsia backeri	Not listed	NE

PROPERTIES

Crushing strength	Specific gravity	Static bend. strength	Stability
74 MPa	0.83 g/cm ³	115 MPa	Stable

FURTHER INFORMATION:

For more details on appearance, physical description, typical use and promotion partners go to the species library on: www.lesserknowtimberspecies.com



Species: Okoumé

Family: BURSERACEAE (angiosperm)

APPEARANCE



PROMINENT USES



GENERAL INFORMATION

Origin	Prominent trade names	Commercial restrictions
Africa	Okoumé Gaboon	No restrictions

SCIENTIFIC DATA AND RISK

Scientific name(s)	CITES	IUCN
Aucoumea klaineana	Not listed	VU

PROPERTIES

Crushing strength	Specific gravity	Static bend. strength	Stability
36 MPa	0.44 g/cm ³	62 MPa	Mod. stable / poorly stable

FURTHER INFORMATION:

For more details on appearance, physical description, typical use and promotion partners go to the species library on: www.lesserknowtimberspecies.com



Species: **Tatajuba**

Family: MORACEAE (angiosperm)

APPEARANCE



PROMINENT USES



GENERAL INFORMATION

Origin	Prominent trade names	Commercial restrictions
South and Central America	Tatajuba Bagasse Kaw-Oedoe	No restrictions

SCIENTIFIC DATA AND RISK

Scientific name(s)	CITES	IUCN
Bagassa guianensis / Bagassa tiliaefolia	Not listed	NE

PROPERTIES

Crushing strength	Specific gravity	Static bend. strength	Stability
78 MPa	0.8 g/cm ³	109 MPa	Stable

FURTHER INFORMATION:

For more details on appearance, physical description, typical use and promotion partners go to the species library on: www.lesserknowtimberspecies.com



Species: **Padouk**

Family: FABACEAE (angiosperm)

APPEARANCE



PROMINENT USES



GENERAL INFORMATION

Origin	Prominent trade names	Commercial restrictions
Africa	Padouk d'Afrique Corail Padouk	No restrictions

SCIENTIFIC DATA AND RISK

Scientific name(s)	CITES	IUCN
Pterocarpus soyauxii	Not listed	NE
Pterocarpus osun	Not listed	NE
Pterocarpus tinctorius	Not listed	NE

PROPERTIES

Crushing strength	Specific gravity	Static bend. strength	Stability
65 MPa	0.79 g/cm ³	116 MPa	Stable

FURTHER INFORMATION:

For more details on appearance, physical description, typical use and promotion partners go to the species library on: www.lesserknowtimberspecies.com



Species: Pau Roxo

Family: FABACEAE-CAESALPINIOIDEAE (angiosperm)

APPEARANCE



PROMINENT USES



GENERAL INFORMATION

Origin	Prominent trade names	Commercial restrictions
South and Central America	Pau Roxo Amarante Purpleheart	No restrictions

SCIENTIFIC DATA AND RISK

Scientific name(s)	CITES	IUCN
Peltogyne spp.		
Peltogyne cattingae, Peltogyne confertiflora	Not listed	NE
Peltogyne lecointei, Peltogyne maranhensis	Not listed	NE
Peltogyne paniculata / Peltogyne pubescens	Not listed	NE
Peltogyne porphyrocardia, Peltogyne venosa	Not listed	NE

PROPERTIES

Crushing strength	Specific gravity	Static bend. strength	Stability
80 MPa	0.87 g/cm ³	141 MPa	Mod. stable

FURTHER INFORMATION:

For more details on appearance, physical description, typical use and promotion partners go to the species library on: www.lesserknowtimberspecies.com



Species: Sapelli

Family: MELIACEAE (angiosperm)

APPEARANCE



PROMINENT USES



GENERAL INFORMATION

Origin	Prominent trade names	Commercial restrictions
Africa	Sapelli Undianuno Sapelli-mahogany	No restrictions

SCIENTIFIC DATA AND RISK

Scientific name(s)	CITES	IUCN
Entandrophragma cylindricum	Not listed	VU

PROPERTIES

Crushing strength	Specific gravity	Static bend. strength	Stability
62 MPa	0.69 g/cm ³	102 MPa	Mod. stable

FURTHER INFORMATION:

For more details on appearance, physical description, typical use and promotion partners go to the species library on: www.lesserknowtimberspecies.com



Species: Sipo

Family: MELIACEAE (angiosperm)

APPEARANCE



PROMINENT USES



GENERAL INFORMATION

Origin	Prominent trade names	Commercial restrictions
Africa	Sipo Utilé Sipo-Mahogany	No restrictions

SCIENTIFIC DATA AND RISK

Scientific name(s)	CITES	IUCN
Entandrophragma utile	Not listed	VU

PROPERTIES

Crushing strength	Specific gravity	Static bend. strength	Stability
56 MPa	0.62 g/cm ³	91 MPa	Mod. stable / stable

FURTHER INFORMATION:

For more details on appearance, physical description, typical use and promotion partners go to the species library on: www.lesserknowtimberspecies.com



Species: Plantation Teak

Family: LAMIACEAE (angiosperm)

APPEARANCE



PROMINENT USES



GENERAL INFORMATION

Origin	Prominent trade names	Commercial restrictions
Asia and Oceania	Teck / Teak	No restrictions

SCIENTIFIC DATA AND RISK

Scientific name(s)	CITES	IUCN
Tectona grandis	-	-

PROPERTIES

Crushing strength	Specific gravity	Static bend. strength	Stability
NaN MPa	NaN g/cm ³	NaN MPa	-

FURTHER INFORMATION:

For more details on appearance, physical description, typical use and promotion partners go to the species library on: www.lesserknowtimberspecies.com





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