

CATALOG OF TROPICAL TIMBER SPECIES OF COMMERCIAL INTEREST IN THE SELVA MAYA



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RAINFOREST ALLIANCE

SECOND EDITION

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PREFACE

The Selva Maya is one of the most extraordinary and diverse regions on earth. Extending through the countries of Mexico, Belize and Guatemala, this vast tropical forest is home to an incredible variety of plant and animal species. Its lush vegetation, vibrant wildlife and rich cultural heritage make it a true treasure of our natural world.

Within the fourteen-million hectare vast extension of the Selva Maya, timber species are of particular importance. They have been an integral part of the region's history and continue to shape and sustain the lives of the diverse cultures that call this place home. Wood from these forests has been used for centuries for construction, furniture making and other uses, attesting to the deep connection that exists between people and nature.

It is in recognition of the traditional richness and productive value of this region's tree species that we have produced this Catalog of Tropical Timber Species in the Selva Maya. It aims to provide a complete and detailed description of the range of timber species that thrive in this region. It is the result of diligent research and collaboration between experts in botany, forestry and conservation. The catalog is intended to be a guide to the diverse range of timber species found in the Selva Maya and includes information about their properties, uses, and conservation status.

The pages of this catalog provide an in-depth look at individual timber species, with detailed descriptions of their attributes, distribution and physical-mechanical properties. Emphasis is placed on their commercial value, industrial uses and

their cultural significance as expressed in the constructions of the Mayan culture. In addition, the current conservation status of each species is provided as a way to raise awareness of the need for responsible and sustainable management practices that will protect and preserve these species and the biodiversity in which they grow.

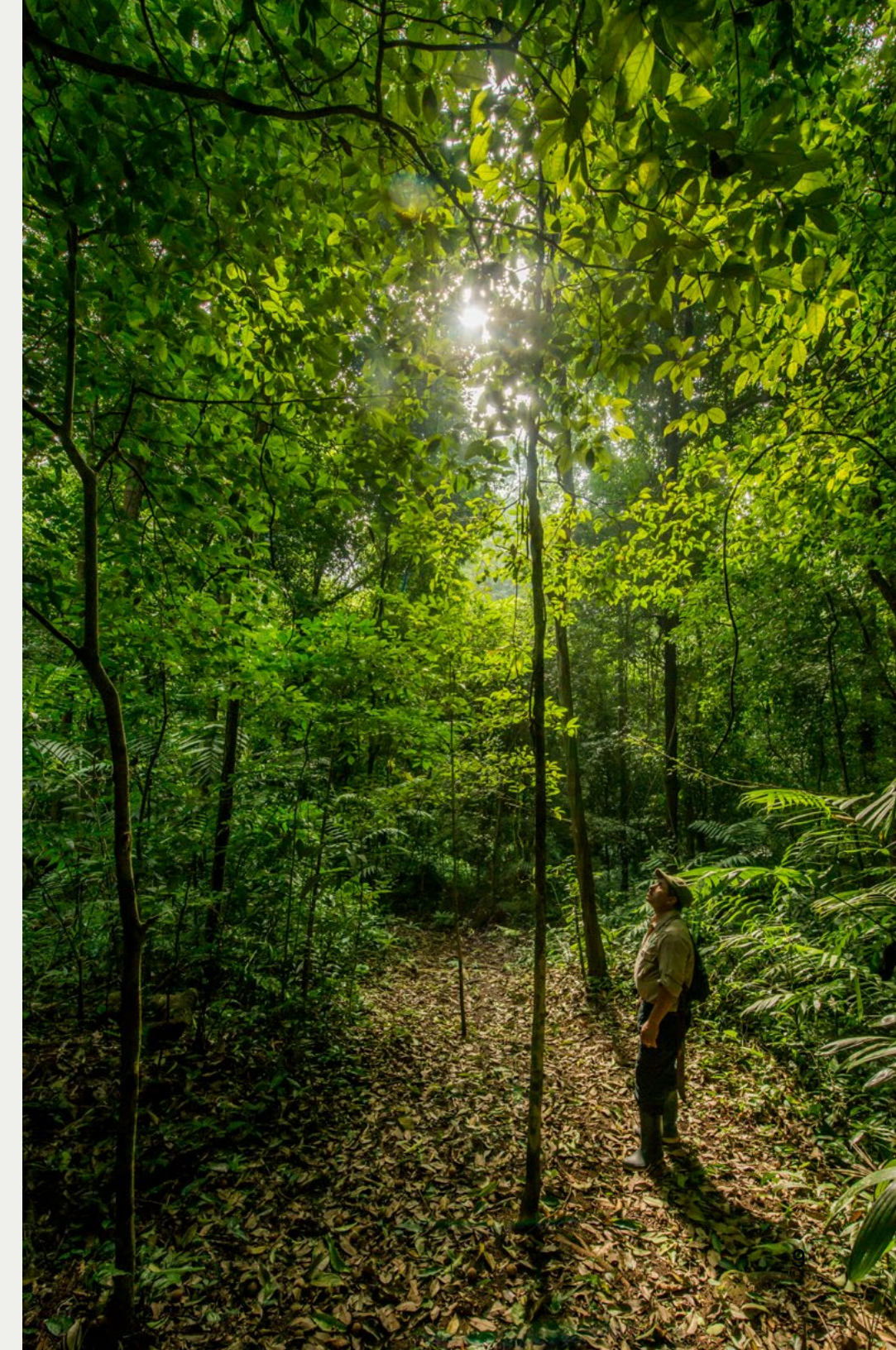
While this catalog serves as a valuable reference for ejidos and forest communities, timber industry buyers, architects, foresters and conservationists, it has also been designed to enhance our knowledge and understanding of these timber resources.

We would like to thank all the individuals, organizations and communities that have contributed to the preparation of this catalog; their passion, dedication and commitment to the preservation of

the Selva Maya's biodiversity are what have made this tropical wood species compilation project possible. Let this catalog serve as a catalyst for a renewed appreciation for tropical timber at the regional and international levels, and thus ensure a prosperous future for the Selva Maya and the people who depend on it.

This work has been funded by the Tinker Foundation and the United States Agency for International Development (USAID) through the project *Institutionalizing Transparency, Governance and Financial Sustainability: a Platform to Consolidate Landscape-Scale Forestry Value Chain Development in South Mexico, as well as by Alianza por los Paisajes Sostenibles y Mercados*, operated by the Rainforest

Alliance, which promote the restoration of productive landscapes at high risk of deforestation, as well as the financial viability of marketing agricultural and forestry products managed under best practices.



An aerial photograph showing ancient stone ruins, possibly Mayan or Aztec, nestled within a dense, lush tropical rainforest. The ruins consist of several large, rectangular stone structures with some openings and staircases. The surrounding forest is thick with various types of trees, including palm trees, and the ground is covered in green vegetation. The overall scene is one of a hidden archaeological site in a remote, natural setting.

**AFTER THE AMAZON,
THE SELVA MAYA IS THE
LARGEST TROPICAL
RAINFOREST IN THE AMERICAS**

WHAT IS THE SELVA MAYA?

The Selva Maya extends through Belize, the north of Guatemala and Mexico's southeast region (Yucatan Peninsula), covering more than 14 million hectares. Of this land mass, the Rainforest Alliance's strategic polygon in the Selva Maya covers some 10 million hectares* (See Figure 1)^{1,2}.

The Selva Maya is named after the region in which the ancient Mayan civilization was born and flourished, extending from Guatemala, Belize and Honduras to the north of the Yucatan Peninsula in Mexico. It is also where pre-Columbian cities such as Tikal, Calakmul, Cobá and Chichén Itzá were founded, and where to this day the vestiges of this ancient civilization can be found throughout the Selva Maya, including impressive

archaeological sites and the remains of Mayan cities of worldwide significance, some of which have been proclaimed UNESCO World Heritage Sites^{3,4}. Being jungle dwellers, the Mayan civilization considered the forest as a key aspect of their origins, and they recognized and revered its vital role in the sustenance, transformation and sustainability of their people and culture. And given the vast natural resources found in the Selva Maya during the time of the Spanish conquest, dye from the famous Campeche logwood *Haematoxylum campechianum* was extracted and thus contributed to the transformation of the economic system of the Old World powers⁵.

Figure 1. Polygon of the Selva Maya strategic

*Source: By Rainforest Alliance

A light green map of Central America and the Caribbean. The Selva Maya region is highlighted in a darker shade of green. Three icons of Mayan pyramids are placed over the highlighted area, with the labels 'MX', 'BZ', and 'GT' below them, indicating the region spans Mexico, Belize, and Guatemala.

region for the Rainforest Alliance
(Source: Rainforest Alliance, 2023).

**THE SELVA MAYA IS IMMENSELY
IMPORTANT ECOLOGICALLY
AND CONSIDERED TO BE ONE
OF THE MOST BIODIVERSE
REGIONS ON EARTH**

COMMUNITIES AND BIODIVERSITY

Besides being home to an extraordinary variety of species, the Selva Maya also provides essential ecosystem services. The tropical forest plays a fundamental role in climate regulation, the maintenance of water cycles and is the habitat of many endemic, migratory and some endangered species. It serves as a vital carbon sink, helping to mitigate the effects of climate change and preserve global biodiversity.

The Selva Maya region is home to many intercultural communities that have depended on the forest for countless generations. Their traditional knowledge and sustainable practices have helped preserve the forest and served as a model for balancing human needs with ecological integrity. Today, these communities continue to play an active role in protecting the forest and advocating for its conservation.

The Selva Maya has a population of more than 600,000 people with a high degree of cultural diversity. The region is inhabited by ethnic groups such as the Choles, Tzeltals, Tzotzils, Mayas, Garifunas and mestizos, to name a few. Some Mayan descendants still preserve the traditions of their ancestors. These traditions include land fertility rituals, as well as agricultural and forestry production practices such as *Ich kool* or *Milpa Maya* that are recognized by FAO (the Food and Agriculture Organization) as important Global Agricultural Heritage Systems (FAO; 2022). Other traditions include the consumption of fruits from trees such as the *ramón* (*Brosimum alicastrum*), which also provide an alternative source of income. Chewing gum can also be made from the bark of the *Manilkara zapota tree*⁶.

The Selva Maya is a mega-biodiverse ecosystem that provides ecosystem services, where species that are in danger of extinction or threatened according to the International Union for Nature Conservation (*IUCN*) can live. These species include large mammals such as the jaguar (*Panthera onca*) and the Baird's tapir (*Tapirus bairdii*), as well as endemic species such as the hickatee (*Dermatemys mawi*), the scarlet macaw (*Ara macao*) and the king vulture (*Sarcoramphus papa*)⁷⁻¹⁰.

The great diversity of flora in the region includes tropical wood species of great commercial importance such as mahogany (*Swietenia macrophylla*), cedar (*Cedrela odorata*), grenadilla (*Dalbergia melanoxylon*), false tamarind (*Lysiloma latisiliquum*), machiche (*Lonchocarpus castilloi*) and the saponilla (*Manilkara zapota*), to mention a few¹¹.



Despite its ecological and cultural importance, the Selva Maya faces numerous challenges, including deforestation, illegal logging and habitat fragmentation. Faced with this problem that threatens the conservation of the Selva Maya and its biodiversity, NGOs and regional governments are working to address these threats and promote sustainable practices to ensure the forest's long-term survival^{2,5}.

The importance of the Selva Maya extends beyond its regional boundaries. It is a world treasure that deserves our attention and protection. By understanding and appreciating the beauty and value of the Selva Maya, we can work together to safeguard this invaluable ecosystem for future generations and preserve its unparalleled biodiversity and cultural heritage^{1,2}.



THE RAINFOREST ALLIANCE'S WORK IN THE SELVA MAYA

The Rainforest Alliance has been working for more than three decades in the Selva Maya in Mexico's Yucatán Peninsula, hand in hand with forest communities known as ejidos, and with community forestry concessions in the Maya Biosphere Reserve (MBR) in Guatemala. Through such work, forests are managed in a comprehensive way to ensure the responsible use of their resources, promote environmental conservation and improve the living conditions of their inhabitants.

Over time, the community forestry groups that the Rainforest Alliance collaborates with have experienced a degree of success in marketing and positioning their tropical timber and high-value non-timber products – including ramón seeds, xate palm leaves and honey – in national and international markets. Today, the renewed global interest in sustainable product sourcing represents a market opportunity for tropical products of high commercial value.





LAND TENURE IN THE SELVA MAYA

Land tenure in the Selva Maya for timber harvesting involves each country's legal frameworks and arrangements that govern ownership, access and rights to land and forest resources. Given the importance of timber harvesting in the Selva Maya, it is important to understand the various forms of land tenure and how they impact the management and sustainable use of timber resources.

1. Government-owned forests in Guatemala: A significant portion of the Selva Maya is classified as government-owned forest, meaning the government has ownership and control of the land and its resources. Timber extraction from these forests is usually regulated through concessions or permits granted by

government agencies that oversee forest management. These concessions grant private entities or individuals the right to harvest timber from within specific areas and timeframes, subject to compliance with environmental standards and sustainable practices¹³.

2. Indigenous and community lands in Mexico: Indigenous communities in the Selva Maya often have customary land rights and may own communal lands within the forest. These lands have cultural and historical significance and provide livelihood resources, including timber. Indigenous communities may have the right to manage and use timber resources using traditional and community forest management practices. In some cases,

partnerships and agreements are entered into with external entities, such as government agencies or private companies, to support sustainable timber harvesting on indigenous lands¹⁴.

3. Ejidos: the ejido system that is prevalent in Mexico also exists in the Selva Maya region. Ejidos are communal lands collectively owned by local communities. Ejidos may enter into agreements with government agencies or private entities to extract timber from their lands. These agreements often involve revenue sharing mechanisms and the implementation of sustainable forest management practices¹⁵.

4. Private property in Guatemala: In certain cases, individuals or private companies may own land within the Selva Maya for timber harvesting purposes. Private landowners are often subject to government regulations and permitting processes for timber extraction. They may be required to draw up forest management plans, follow sustainable practices and comply with environmental regulations¹⁶.

Irrespective of the specific form of land tenure, timber harvesting in the Selva Maya is subject to regulations and sustainability requirements designed to ensure forest and biodiversity conservation. Environmental impact assessments, monitoring programs and compliance with forest management plans are generally implemented to mitigate potential negative impacts of timber harvesting and promote sustainable practices.

It is important to note that land tenure and regulations may vary between countries within the Selva Maya region (Mexico, Belize and Guatemala), as each country has its own legal frameworks and policies relating to land ownership and administration¹⁷.







**WHAT IS A FOREST
EJIDO IN THE YUCATAN
PENINSULA?**

In Mexico, an ejido is a unique and important land tenure system whose roots lie in the history of Mexico's agrarian reform. The term "ejido" refers to lands collectively owned by a local community or village¹⁸. It represents a form of collective land ownership and management that is deeply rooted in the region's social, cultural and economic fabric¹⁸.

The ejido system is characterized by a strong sense of communal identity and cooperation. It promotes a sustainable approach to land use, as decisions are made collectively in a way that considers the long-term needs of the community and the preservation of natural resources. This cooperative approach often extends beyond agriculture to other aspects of community life, such as the development of infrastructure, social programs and cultural activities¹⁹.

A forest ejido refers to an ejido focused specifically on forest management based on sustainable practices. It represents a form of communal land ownership and management based on the conservation, sustainable use and sustainable development of forest resources²⁰.

Forest ejidos in the Yucatan Peninsula play a vital role in the region's forest conservation efforts and the promotion of sustainable livelihoods for local communities. Sustainable timber extraction and the sale of forest products can become a source of income and employment that supports the livelihoods of ejido members. In addition, some ejidos have adopted ecotourism and the promotion of sustainable forestry businesses to diversify their income flows and drive local economic development²¹.

As guardians of the tropical forest, the ejidos also promote the balance of economic development with environmental preservation, along with a recognition of the importance of long-term sustainability and intergenerational equity.

Efforts to strengthen the capacities and governance structures of forest ejidos, as well as initiatives focused on sustainable forest management and market access, are key to promoting the resilience and success of these community forest systems in the Yucatan Peninsula²².



WHAT IS A COMMUNITY FOREST CONCESSION IN GUATEMALA?

A community forest concession in Guatemala refers to a specific type of forest management agreement granted by the government to local communities or indigenous groups for the sustainable use and management of forest resources within a designated area. Community forest concessions aim to empower communities, promote local participation and ensure that the benefits of forest resources remain within the community while promoting sustainable resource management practices¹⁷.

Community forest concessions in Guatemala recognize the importance of local knowledge, customary land rights and traditional forest management practices. They provide an opportunity for communities to participate in decision-making processes, exercise control over their forest resources and earn income for community development²³.

Acquiring a community forest concession entails a participatory approach in which community members are actively involved in the application and planning processes. The collaboration and support of government agencies, non-governmental organizations and technical experts are often required to facilitate capacity building and provide guidance with respect to sustainable forest management practices²³.

When a community forest concession is granted, the community assumes responsibility for managing the designated forest area. This includes activities such as forest inventories, sustainable timber harvesting, reforestation initiatives, forest fire protection and biodiversity preservation. Communities are encouraged to incorporate their traditional knowledge and practices into management strategies in a way that ensures the conservation of cultural heritage and the promotion of sustainable livelihoods²⁴.

Community forest concessions in Guatemala often prioritize social and environmental safeguards. Their aims are to ensure the equitable distribution of benefits within the community, the inclusion of marginalized groups and the protection of biodiversity and ecosystem services. In addition, community forest concessions can support local economic development through job creation, the promotion of sustainable forest businesses and income generation for community projects and social services^{7,25}.

Community forestry concessions in Guatemala are granted in a way that recognizes the rights and aspirations of indigenous peoples and local communities, while also encouraging their active participation in the management and conservation of forest resources. These concessions serve as a model for community management of natural resources, the fostering of social cohesion

as well as environmental empowerment and stewardship²³.

While community forestry concessions have shown promising results, challenges such as limited technical capacity, inadequate access to markets and external pressures related to illegal activities remain as obstacles to their success. Efforts are being made to strengthen community capacities, improve market linkages and improve governance structures to ensure the sustainability and effectiveness of community forest concessions in Guatemala²⁵.





PORTS

The Selva Maya region – which encompasses Mexico, Belize and Guatemala – mainly consists of dense tropical rainforests and has no direct connection to the world’s major shipping ports. Nonetheless, there are nearby ports that serve as gateways for trade and transportation, thus facilitating the import and export of goods to and from the region. Some noteworthy ports in the vicinity of the Selva Maya include:

📍 Belize City, Port of Belize

The Port of Belize, located in Belize City, is the main port facility. While not directly within the Selva Maya, it is a major maritime gateway for the country and handles a range of import and export operations. The port facilitates the transport of agricultural products, construction materials and consumer goods.

📍 Guatemala, Puerto Barrios

Located on Guatemala’s Caribbean coast, Puerto Barrios is the country’s main port for both import and export operations. A vital gateway for trade in the region, it handles a range of commodities including agricultural products, manufactured goods and general cargo. Puerto Barrios is connected to major international shipping routes and offers access to worldwide markets.

📍 Guatemala, Puerto Santo Tomás de Castilla

Located next to Puerto Barrios, Puerto Santo Tomás de Castilla is another important port in Guatemala. It is a key maritime trade facility capable of serving container ships, bulk carriers and general cargo ships. The port handles a variety of goods, including agricultural products, textiles, machinery, and fuel.

📍 Honduras, Puerto Cortés

Although not located inside the Selva Maya region, Puerto Cortés in Honduras is an important port located on the Caribbean coast that serves as a gateway for trade in its immediate area. It is one of the largest ports in Central America and plays a crucial role in strengthening the region’s import and export sector, including goods shipped to the Selva Maya.

📍 Mexico, Puerto de Progreso

Located on the Gulf of Mexico, Puerto de Progreso is the most important port on the Yucatan Peninsula. It is located near the city of Progreso, approximately 36 kilometers north of the Yucatán state capital city of Mérida. The port handles commercial and passenger traffic and is an important hub for imports and exports, particularly agricultural products, manufactured goods and petroleum-related products.

📍 Mexico, Puerto Morelos Port

Located on the Caribbean coast of the Yucatan Peninsula, Port of Puerto Morelos is home to an important seaport in the state of Quintana Roo. It serves as a gateway to the Mexican Caribbean and provides access to the popular tourist destinations of Cancun and Riviera Maya. The port can serve cruise ships, cargo ships and fishing vessels in support of both tourism and commercial operations.

These ports, located in close proximity to the Selva Maya, provide important logistical connections for trade in the region. They serve as key access points for importing and exporting products such as timber, agricultural commodities and other resources to international markets.

The ports contribute to the Selva Maya's economic development and connectivity, facilitating commercial shipping and supporting regional trade activities.





**LIST OF 35
WOOD SPECIES**

TROPICAL TIMBER SPECIES CONTENTS

<i>Aspidosperma megalocarpon</i> (My Lady)	44	<i>Ceiba aesculifolia</i> (Ceiba)	104	<i>Piscidia piscipula</i> (Florida Fishpoison)	164	<i>Swartzia cubensis</i> (Katalox)	224
<i>Aspidosperma stegomeris</i> (Malerio blanco)	50	<i>Coccoloba barbadensis</i> (Freshwater Grape)	110	<i>Platymiscium dimorphandrum</i> (Hormigo)	170	<i>Sweetia panamensis</i> (Chakté)	230
<i>Astronium graveolens</i> (Kingwood)	56	<i>Cordia dodecandra</i> (Ziricote)	116	<i>Platymiscium yucatanum</i> (Granadillo)	176	<i>Swietenia macrophylla</i> (American mahogany)	236
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<i>Caesalpinia gaumeri</i> (Peccary Wood)	74	<i>Lonchocarpus castilloi</i> (Black Cabbage Bark)	134	<i>Pseudobombax ellipticum</i> (Shaving Brush Tree)	194		
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<i>Calophyllum brasiliense</i> (Brazil Beauty-Leaf)	92	<i>Manilkara zapota</i> (Sapodilla)	152	<i>Simira salvadorensis</i> (Chactekok)	212		
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My Lady (US), Malerio cSCENTado (GT, MX)¹

***Aspidosperma megalocarpon Müll.Arg.*²**

AHZAYOK 'CHE'³

COMMON NAMES

Volador; Sibadanni; Piquia marfim; Pelmax; Ocre; Maparana; Malaria; Malady; Kromanti kopi; Jacamim; Huichichi; Gavetillo; Costillo; Copachi; Chicique; Chichique; Chichica; Chichi; Bois macaque; Bayalte; Ballester; Ararauba da terra firme; Alcarreto; Araracanga (Brazil); My Lady; Hielillo Blanco (USA)⁴.

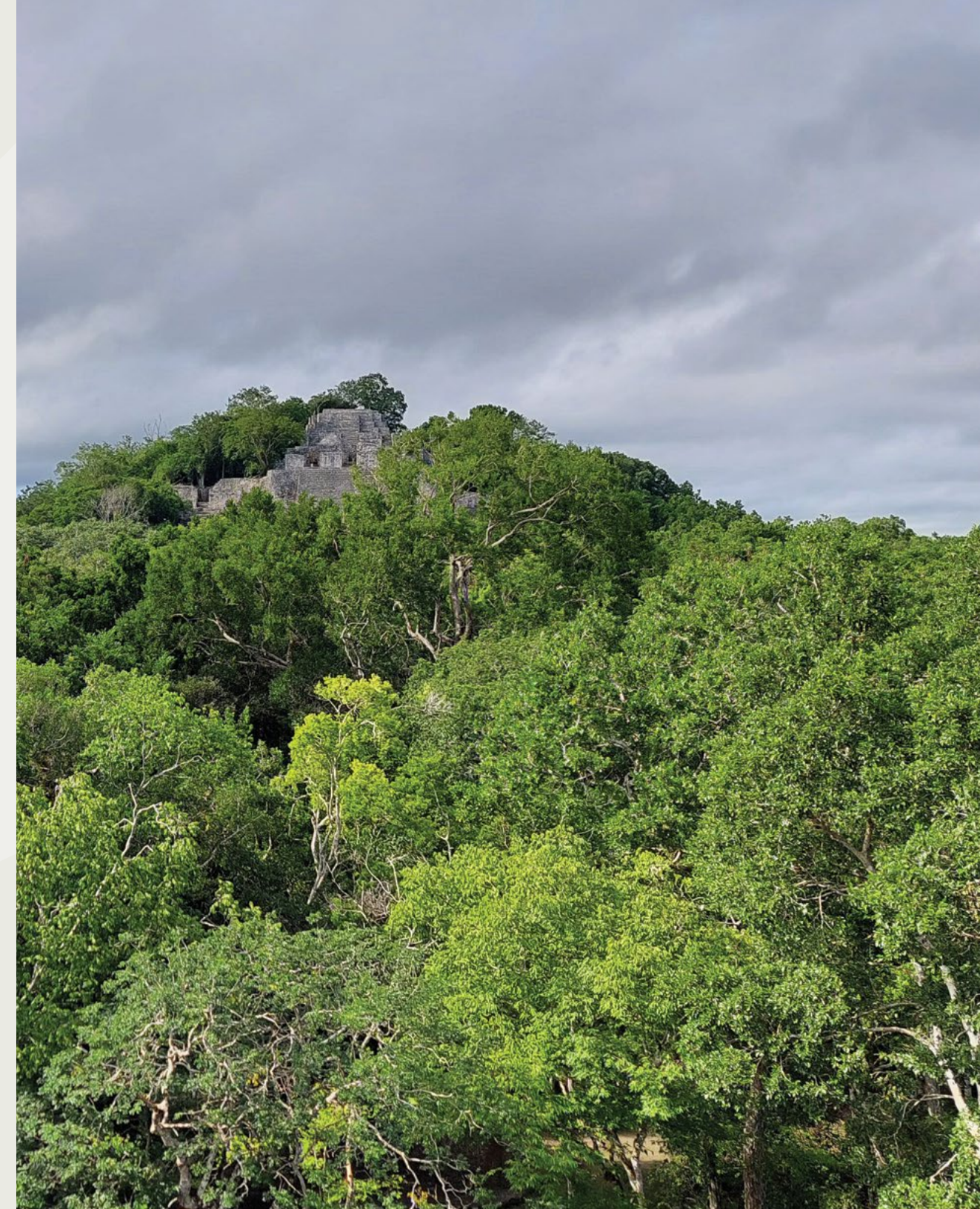
COMMON USES

Rural buildings, beams and rounded sills and roofs. Heavy structures, bridges, flooring, railroad ties, veneer, sawn lumber, house frames, rafters, scaffolding, sills, baseboards and floors (Aguilar Cumes, 1992)⁵. Its wood is used in the making and manufacture of hand tool handles⁵.

OTHER USES

Tree bark is quite bitter and the region's inhabitants have used it as a medicine to treat diabetes². The wood is used as fuel⁷.

*Product image for this species not available.



MAYAN NAME³

MEXICO

ahzayok'che'



*The sample image of the species may vary in terms of cSCENT and beta, as it is a natural product.

GENERAL CHARACTERISTICS



CONSERVATION STATUS⁵

IUCN Red List of Threatened Species Category - Least Concern.
Population - Stable population. CITES status - Not listed¹⁰.



TREE SIZE

From 10 to 30 m tall. Breast height diameter of up to 80 cm⁵.



COLOR - APPEARANCE

Orange-reddish or pinkish in cSCENT when fresh cut, turning yellowish brown when exposed to light to the point of being undistinguishable from heartwood. (Aguilar Cumes, 1992)⁵.



GRAIN - TEXTURE

Straight to interlocked, slightly irregular. Fine, uniform texture⁶.



RESISTANCE TO DEGRADATION

Moderately high resistance to fungal and insect attack
BZ (Aguilar Cumes, 1992)⁵.



ALLERGENICITY - TOXICITY

Freshly cut wood and the sap of Aspidosperma species can cause eye, nose and throat irritation, as well as general malaise. Its sawdust, upon coming in contact with eroded skin, can cause a burning sensation and a vesicular rash along with other symptoms such as muscle weakness, cramping, sweating, dry mouth and fainting. When the wood completely dries out, it loses its toxicity provided that organic solvent stains or polishes have not been used⁷.



WORKABILITY

Easy to saw, plane, turn and sand; moderate nailing, screwing and rebar resistance⁵.



SCENT

No distinctive scent⁵.



NATIVE TO

Belize, North Brazil, Colombia, Costa Rica, El Salvador, French Guiana, Guatemala, Honduras, Central Mexico, Gulf of Mexico, Southeast Mexico, Southwest Mexico, Nicaragua, Panama, Suriname, Venezuela².

SPECIES NATIVE TO THE SELVA MAYA IN:



PHYSICAL-MECHANICAL PROPERTIES⁹

Density	670	kg/m³
MOEFLEX Elastic Modulus	167280	cm³
RLEFLEX Elastic Resistance Limit	628	kg/cm²
RR Flex Rupture Resistance	1144	kg/cm²
MOECom for Elastic Modulus Compression Parallel	132475	kg/cm²
RLECom for Elastic Resistance Limit Compression Parallel	277	kg/cm²
RR Com for Rupture Resistance	451	kg/cm²
RLE Com for Elastic Resistance Limit Perpendicular Compression	451	kg/cm²
RR Shear for Rupture Resistance Parallel Shear	451	kg/cm²
JK Lateral Lateral Face Hardness	476	kg
JK Lateral Transverse Face Hardness	592	kg

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Malerio blanco (GT, MX)¹

Aspidosperma stegomeris (Woodson) Woodson

sin.: Aspidosperma megalocarpon subsp. megalocarpon²

MALERIO BLANCO³

COMMON NAMES

Mylady, Milady, Red Malady, Fustan de Vieja, Chichica (Brazil), Bayo Rojo (Mexico), Chichique, Maleio CSCENTado, Bay (Guatemala)³.

COMMON USES

This wood has a range of applications and is used for heavy bridges, railroad ties, posts for houses, heavy carpentry, industrial paving and freshwater hydraulic works⁴.

OTHER USES

The wood is used as fuel⁴.

Product image for this species not available.





*Imagen de la especie no disponible

GENERAL CHARACTERISTICS



CONSERVATION STATUS

IUCN Red List of Threatened Species - This species is not included in CITES Appendices or on the Red List. Population - This species is not included in the CITES Appendices or in the Red List. CITES status - Not listed⁶.



TREE SIZE

Up to 35 m tall.



COLOR - APPEARANCE

Heartwood is vermilion or deep reddish-brown, sometimes with large pink streaks and comprises about two-thirds of the trunk; it is clearly delimited by the 3 to 8 cm wide band of nearly white to light brown sapwood⁴.



GRAIN - TEXTURE

Medium texture with straight or interlocked fiber⁴.



RESISTANCE TO DEGRADATION

Highly resistant to fungi and dry wood borers, and moderately resistant to termites⁴.



ALLERGENICITY - TOXICITY

Freshly cut wood and the sap of *Aspidosperma* species can cause eye, nose and throat irritation, as well as general malaise. Its sawdust, upon coming in contact with eroded skin, can cause a burning sensation and a vesicular rash along with other symptoms such as muscle weakness, cramping, sweating, dry mouth and fainting. When the wood completely dries out, it loses its toxicity unless organic solvent stains or polishes have been used⁴.



WORKABILITY

It has a rather high dulling effect and is difficult to work with; stellite and tungsten carbide-tipped power tools are recommended; nailing and screwing responses are good, but pre-drilling is required; bonding properties are good only for indoor use⁴.



NATIVE TO

Belize, North Brazil, Colombia, Costa Rica, El Salvador, French Guiana, Guatemala, Honduras, Central Mexico, Gulf of Mexico, Southeast Mexico, Southwest Mexico, Nicaragua, Panama, Suriname, Venezuela².

SPECIES NATIVE TO THE SELVA MAYA IN:



PHYSICAL-MECHANICAL PROPERTIES⁵

Density	670	kg/m³
MOEFLEX Elastic Modulus	167280	cm³
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RLE Com for Elastic Resistance Limit Perpendicular Compression	451	kg/cm²
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JK Lateral Lateral Face Hardness	476	kg
JK Lateral Transverse Face Hardness	592	kg

*These data apply to the *Aspidosperma* genus but not the species.

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Kingwood (US), Jobillo, Jocote frayle (MX, GT)¹

***Astronium graveolens* Jacq.²**

K'ULIM CHÉ, CULINZÍS³

COMMON NAMES

Ron Ron; Palo de Culebra; Palo de Cera; Jobillo; Guarita; Gonçalo Alves; Gateado; Frijolillo; Ciruelillo; Potrico; Zorro; Zebra Wood; Yomato; Vermelh; batin; Tibigaro; Rorón; Quebracho; Quebracha; Hormigo; Locuswood; Jenjiura; Guasango; Urunday; Tiger Wood; Bossona; Bois De Zebre; Urunday-Pará; Mura; Zorrowood; Brazilian Kingwood; Gonçalo Alves Rajado Branco; Guarabu Encirado; Guarabu Bata; Guarabu Rajado; Jejuira; Gusanero; Muiraquatiara (Brazil); Yoke; Kingwood (USA)⁴.

COMMON USES

Heavy outdoor construction, cabinetmaking (fine furniture, luxury cabinetry), flooring (staves, prefabricated parquet, floorboards), tongue and groove joints, staircases, interior finishing, turned items, marquetry, cutlery. The traditional use of kingwood in the Mayan area is to build houses, as well as for the manufacture of posts, beams and frames. The wood's quality and grain make it suitable for use in manufacturing and for the making of decorative sliced veneer and handicrafts¹.

OTHER USES

In some Mayan regions this species' resin is used as a remedy for measles, smallpox and rheumatism. In addition, the essential oils extracted from the leaves, fruits and seeds of *A. graveolens* have natural antioxidant, antitumor, sedative and diaphoretic properties⁵.

*Product image for this species not available.



MAYAN NAME³

MEXICO

**xkukin tsits,
culinzís,
k'ulinché,
k'ulim che**

GUATEMALA

culinzís

BELIZE

kúlim che



*The sample image of the species may vary in terms for cSCENT and beta, as it is a natural product.

GENERAL CHARACTERISTICS



CONSERVATION STATUS⁷

IUCN Red List of Threatened Species Category - Least Concern.
Population - Stable population. CITES status - Not listed⁹.



TREE SIZE

Kingwood trees have either straight or irregular trunks up to 35 m tall and a diameter at breast height of up to 100 cm. Its wood has a great aesthetic and technological potential. However, because of its outstanding characteristics it has been overexploited in some regions of Mexico¹.



COLOR - APPEARANCE

Heartwood cSCENT varies from pinkish brown to reddish with irregular almost black shades and an abrupt transition to grayish white sapwood¹.



GRAIN - TEXTURE

Barely distinguishable growth-ring boundaries marked by thin bands of marginal parenchyma. Beautiful, expressive and prominent veining from dark, irregular longitudinal bands. Medium texture, occasionally wavy interlocked grain³. Grain arrangement is straight⁵.



RESISTANCE TO DEGRADATION

Highly resistant to decay fungi attacks, and moderately resistant to drywood termites¹. Logs with bark can be attacked by a borer worm that digs holes¹.



ALLERGENICITY - TOXICITY

No known toxicity³.



WORKABILITY

Its wood is difficult to work using hand tools and traditional machinery, so it is advisable to use saws with stellite or tungsten carbide teeth and carburized blades. It is quite poor for planing and turning, but excellent for molding, drilling and mortising. Good to excellent for sanding. It is difficult to nail and screw into and therefore requires pre-drilling. In general, excellent finishes are obtained¹.



SCENT

A dry wood with no distinctive scent¹.



NATIVE TO

Belize, Bolivia, North Brazil, Northeast Brazil, South Brazil, Southeast Brazil, West-Central Brazil, Colombia, Costa Rica, Ecuador, El Salvador, Guatemala, Honduras, Gulf of Mexico, Northeast Mexico, Southeast Mexico, Southwest Mexico, Nicaragua, Panama, Paraguay, Peru and Venezuela².

SPECIES NATIVE TO THE SELVA MAYA IN:



PHYSICAL-MECHANICAL PROPERTIES⁸

Density	760	kg/m³
MOEFLEX Elastic Modulus	131070	cm³
RLEFLEX Elastic Resistance Limit	636	kg/cm²
RR Flex Rupture Resistance	935	kg/cm²
MOECom for Elastic Modulus Compression Parallel	131280	kg/cm²
RLECom for Elastic Resistance Limit Compression Parallel	386	kg/cm²
RR Com for Rupture Resistance	492	kg/cm²
RLE Com for Elastic Resistance Limit Perpendicular Compression	508	kg/cm²
RR Shear for Rupture Resistance Parallel Shear	474	kg/cm²
JK Lateral Lateral Face Hardness	640	kg
JK Lateral Transverse Face Hardness	756	kg

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Ramón (US), Blodwood (UK), Ramón (GT, MX)³, Pisba Wainka (HND)³

***Brosimum alicastrum Sw.*²**

OXX³

COMMON NAMES

Apomo, Ash, Juandiego, Nazareno, Ojite, Ojoche Blanco, Ojochillo, Ox, Ramón, Capomo, Ramón Blanco, Ramón CSCENTado, Ojoche (Mexico), Mare, Charo, Sande, Guaimero, Manta, Mondongo, Pasita, Guaimaro (Colombia), Congoña, Machinga, Congona, Urpay Manchinga (Peru), Tillo, Sande (Ecuador), Inharé, Mururé, Muiratinga (Brazil), Berba (Panama), Breadnut (Jamaica, Belize, Honduras), Capomo (Honduras, Belize), Hichoso (Costa Rica, Honduras), Freguo, Lechero, Lechoso, Mastate, Vaco (Costa Rica), Masica, Masicarón, Masiquilla, Ojuste (Honduras), Masico (Guatemala, Honduras), Ojoche (Costa Rica, Nicaragua), Ojushte (El Salvador), Ox (Guatemala), Ramón (Costa Rica, Petén-Guatemala, Honduras), Ramón Blanco (Costa Rica, Petén-Guatemala), Ujushte (El Salvador), Charo Amarillo, Barimiso, Charo, Guaimaro, Sande (Venezuela), Árbol de Leche (Bolivia), Guaimaro, Ramón (Cuba), Moussara (Trinidad y Tobago), Capomo, Ojoche, Ramón (USA); Blodwood (UK)⁵.

COMMON USES

Wood used for general construction and as material for decking, handicrafts, tool handles, the manufacture of turned products and as paper pulp⁵.

OTHER USES

The pulp of the fruit is edible. The roasted and ground seeds are used as a coffee substitute. The seeds contain oil, fat, sugars and a large amount of tryptophan, an amino acid deficient in corn-based diets. The leaves, young stems, fruit and seeds are excellent fodder for cattle, goats, horses and swine. The latex that flows from the trunk is used to adulterate gum. It has medicinal uses, with the latex and leaves in infusion being used as a cough suppressant. It also has balsamic and diaphoretic properties and can be used in the treatment of asthma, diabetes, tuberculosis and bronchitis; the bark infusion is used as a tonic⁶.

*Product image for this species not available.



MAYAN NAME^{3,4}

MEXICO

**oox, ox,
k' an oox**

GUATEMALA

ox, ujushté

BELICE

ujushte



*Image of the species not available

GENERAL CHARACTERISTICS



CONSERVATION STATUS⁹

IUCN Red List of Threatened Species Category – Least Concern.
Population – Stable population. CITES Status – Not listed¹⁰



TREE SIZE

Tree height of 20 to 45 m with a normal diameter of 50 to 150 cm at breast height^{6,7}.



COLOR – APPEARANCE

Heartwood and sapwood are pale yellow to light brown and indistinguishable from each other. Another variety called ramón cSCENTado can have a darker orange-brown false heartwood, often with darker veins. Sapwood is prone to fungal stains if not properly dried⁸.



GRAIN – TEXTURE

Grain is usually straight, or irregular and slightly interlocked, with a medium to fine texture. Moderate to high natural gloss⁸.



RESISTANCE TO ROT

Not durable and presents low resistance to rot or insect attack⁸.



ALLERGENICITY – TOXICITY

Apart from the standard health risks associated with any type of wood dust, no additional health reactions have been associated with this species⁸.



SCENT

It has no distinctive scent⁸.



WORKABILITY

It can be difficult to work using hand tools due to its grain, density and a silica content of 0.68%, which can prematurely dull cutters. Irregular or interlocked grain can present a challenge when machining; otherwise, it has good machinability with straight-grained material. Good response to bonding, staining and finishing⁸.



COMMENTS

Having been found in Mayan temples, it is believed that the seed of this tree, ramón seed, was part of the Mayan civilization's diet. In stark contrast to the much heavier woods of the genus, such as bloodwood and snakewood, the lighter-cSCENTed commercial species of Brosimum are divided into two groups according to density, the lighter useful group and the heavier alicastrum group. This tree represents the heaviest alicastrum group⁸.



NATIVE TO

Belize, Bolivia, North Brazil, Colombia, Costa Rica, Cuba, Ecuador, El Salvador, Guatemala, Guyana, Honduras, Jamaica, Central Mexico, Gulf of Mexico, Northeast Mexico, Northwest Mexico, Southeast Mexico, Southwest Mexico, Nicaragua, Panama, Peru, Venezuela².

SPECIES NATIVE TO THE SELVA MAYA IN:



PHYSICAL-MECHANICAL PROPERTIES

Density	730	kg/m³
MOEFLEX Elastic Modulus	137700	cm³
RLEFLEX Elastic Resistance Limit	639	kg/cm²
RR Flex Rupture Resistance	1193	kg/cm²
MOECom for Elastic Modulus Compression Parallel	146080	kg/cm²
RLECom for Elastic Resistance Limit Compression Parallel	308	kg/cm²
RR Com for Rupture Resistance	515	kg/cm²
RLE Com for Elastic Resistance Limit Perpendicular Compression	515	kg/cm²
RR Shear for Rupture Resistance Parallel Shear	515	kg/cm²
JK Lateral Lateral Face Hardness	790	kg
JK Lateral Transverse Face Hardness	906	kg

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Shady Lady (US), Pucté (GT, MX)¹

Bucida buceras L., sin.: Terminalia buceras (L.) C.Wright^{2,3}

PUKTE¹

COMMON NAMES

Cacho de Toro, Olivo Negro, Pucté (Mexico), Pocte (Guatemala), Mareón (Panama), Búcaro, Júcaro (Venezuela), Júcaro Negro (Cuba), Úcar (Puerto Rico), Bullet Tree (Belize), Gri-Gri (Haiti, Dominican Republic), Bois Gris-Gris, B. Margot, Grignon (France), Black Olive, Gregory Wood, Oxhorn, "Shady Lady" (USA)¹.

COMMON USES

Heavy outdoor construction, posts, piles, bridges, railroad ties, vehicle platforms, ship parts, firewood and coal. In addition, it can be effective for industrial and prefabricated flooring, parquet, stairs, table tops, knife handles and drum sticks⁸.

*Product image for this species not available.



MAYAN NAME⁴

MEXICO

pukté

GUATEMALA

poxté

BELIZE

puk-te



*The sample image of the species may vary in terms of cSCENT and beta, as it is a natural product.

GENERAL CHARACTERISTICS



CONSERVATION STATUS⁹

IUCN Red List of Threatened Species Category – Not in the CITES Appendices nor on the Red List. Population – Not in the CITES Appendices nor on the Red List. CITES Status – Not listed¹¹.



TREE SIZE

From 30 m to 35 m tall, and up to 1.5 m in diameter at chest height⁶.



COLOR - APPEARANCE

Heartwood cSCENT varies depending on the tree, from brown or greenish-gray to dark olive brown, generally different from the light greenish-brown to grayish sapwood⁷.



GRAIN - TEXTURE

Medium texture, interlocked grain⁷.



RESISTANCE TO ROT

Wood resistant to fungal and termite attack; not resistant to attack by marine borers⁷.



ALLERGENICITY - TOXICITY

Data not available.



SCENT

Dry wood with no distinctive scent or taste⁸.



WORKABILITY

Very heavy wood with high resistance to impact; difficult to work using common machines and tools due to its high density and silica content. The use of reinforced tools is recommended for cutting; planing may result in rough surfaces. Smooth and glossy finishes can be obtained. Wood likely difficult to bond; pre-drilling is required prior to nailing and screwing⁸.



COMMENTS

The wood combines an attractive appearance with high mechanical and biological resistance⁷.



NATIVE TO

Bahamas, Belize, Colombia, Costa Rica, Cuba, Dominican Republic, Guatemala, Haiti, Honduras, Jamaica, Leeward Islands, Central Mexico, Gulf of Mexico, Southeast Mexico, Southwest Mexico, Nicaragua, Panama, Puerto Rico, Southwest Caribbean, Turks and Caicos Islands, Venezuelan Antilles, Windward Islands²³.

SPECIES NATIVE TO THE SELVA MAYA IN:



PHYSICAL-MECHANICAL PROPERTIES¹⁰

Density	580	kg/m³
MOEFLEX Elastic Modulus	141000	cm³
RLEFLEX Elastic Resistance Limit	654	kg/cm²
RR Flex Rupture Resistance	1085	kg/cm²
MOECom for Elastic Modulus Compression Parallel	173760	kg/cm²
RLECom for Elastic Resistance Limit Compression Parallel	374	kg/cm²
RR Com for Rupture Resistance	558	kg/cm²
RLE Com for Elastic Resistance Limit Perpendicular Compression	599	kg/cm²
RR Shear for Rupture Resistance Parallel Shear	587	kg/cm²
JK Lateral Lateral Face Hardness	1063	kg
JK Lateral Transverse Face Hardness	952	kg

REFERENCES

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Peccary Wood (BZ), Kitim ché (MX)¹

Caesalpinia gaumeri Greenm., sin.: Cenostigma gaumeri (Greenm.) Gagnon & G.P.Lewis^{2,3}

K 'ITAMCHÉ¹

COMMON NAMES

Peccary Wood, Waree Wood, Basta Logwood, Axe Master, Quebra Hacha, Ruido Hacha, Rudo del Monte (Belize).

COMMON USES

In Mexico's Mayan region it is valued as material for the construction of Mayan-style houses. Used for railway ties, posts, flooring, parquet, tiling, wainscot for the manufacture of furniture, doors, window frames, turned items, interior decoration and handicrafts^{5,6}.

OTHER USES

It is used in beekeeping as a pollen producer^{5,6}.

*Product image for this species not available.



MAYAN NAME⁴

MEXICO

**k'itamché,
citinché,
kitinche', xkitii
ché¹**

BELIZE

citinché



*Image of the species not available

GENERAL CHARACTERISTICS

CONSERVATION STATUS
 IUCN Red List of Threatened Species Category - Least Concern.
 Population - Stable population. CITES status - Not listed⁶.

TREE SIZE
 Height of 10 m⁵.

COLOR - APPEARANCE
 Heartwood cSCENT is dark yellowish-brown and the sapwood is a very pale brown, with prominent veining, medium gloss, interlocked grain⁶.

GRAIN - TEXTURE
 Medium texture and diffuse porosity⁶.

RESISTANCE TO ROT
 The presence of gums in the wood cells strengthens the wood's hardness and durability properties, making it resistant to decay, as these extractives are toxic to decay-causing fungi⁶.

WORKABILITY
 Its use in carpentry and fine work is limited by defects such as interlocked grain and the presence of rhomboidal crystals⁶.

SCENT
 Perceptible and astringent taste⁶.

COMMENTS
 Wood may be susceptible to bowing and warping during drying⁶.

NATIVE TO
 Belize, Cuba, Honduras, Gulf of Mexico, Southeast Mexico, Southwest Mexico^{3,4}.

SPECIES NATIVE TO THE SELVA MAYA IN:



PHYSICAL-MECHANICAL PROPERTIES

Density	.86 a .96	gr/cm³
MOEFLEX Elastic Modulus	DND	cm³
RLEFLEX Elastic Resistance Limit	DND	kg/cm²
RR Flex Rupture Resistance	DND	kg/cm²
MOECom for Elastic Modulus Compression Parallel	DND	kg/cm²
RLECom for Elastic Resistance Limit Compression Parallel	DND	kg/cm²
RR Com for Rupture Resistance	DND	kg/cm²
RLE Com for Elastic Resistance Limit Perpendicular Compression	DND	kg/cm²
RR Shear for Rupture Resistance Parallel Shear	DND	kg/cm²
JK Lateral Lateral Face Hardness	DND	kg
JK Lateral Transverse Face Hardness	DND	kg

*DNA: Data not available

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3. Cenostigma gaumeri (Greenm.) Gagnon & G.P.Lewis | Plants of the World Online | Kew Science. <https://powo.science.kew.org/taxon/urn:lsid:ipni.org:names:77158075-1>.
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8. Species+. <https://www.speciesplus.net/species#/>.



Paela (US), Chakté viga (MX)¹

***Caesalpinia platyloba*, sin.: *Coulteria platyloba*²**

CHAKTE³

COMMON NAMES

Cascalote, Chacteviga, Coral, Frijolillo, Guayabón de Playa, Kiikche, Palo CSCENTado, Teposcuahuitl (Mexico), Paela (USA)⁵.

COMMON USES

Furniture, musical objects and turned items⁶.

*Image of the species not available.



MAYAN NAME³

MEXICO

chakte

*The sample image of the species may vary in terms of cSCENT and beta, as it is a natural product.

GENERAL CHARACTERISTICS



CONSERVATION STATUS

IUCN Red List of Threatened Species - This species is not included in CITES Appendices or on the Red List. Population - This species is not included in the CITES Appendices or in the Red List. CITES status - Not listed⁷.

TREE SIZE



20-30 ft. (6-9 m) tall, 1-2 ft. (0.3-0.6 m) in diameter at chest height⁶.

COLOR - APPEARANCE



Heartwood bright orange to golden brown in cSCENT. Pale white to yellow-cSCENTed sapwood⁶.

GRAIN - TEXTURE



The fiber is usually straight, although sometimes interlocked. It has a fine and uniform texture with an attractive natural sheen⁶.

RESISTANCE TO ROT



Chakte viga has been used as material for fence posts, with reports that it can last up to 100 years in the ground⁶.



ALLERGENICITY - TOXICITY

Although no adverse health effects related to *Chakte viga* have been reported, other species of the *Caesalpinia* have been reported to cause skin irritation. In general, the most common reactions are simple eye and skin irritation⁶.



WORKABILITY

Despite its high density, Chakte viga generally responds well to most machining operations, although its interlocked grain may lead to splitting. It responds well to turning, bonding and finishing operations⁶.



SCENT

It has no distinctive scent⁶.



COMMENTS

Perhaps the closest relative to the more famous brazilwood (used for violin bows), Chakte viga shares many of its excellent acoustic properties. With great cSCENT, smooth texture and a unique iridescent quality that seems to shimmer under the right wood finish, Chakte viga possesses subliminal-like prestige⁶.



NATIVE TO

Costa Rica, Guatemala, Central Mexico, Gulf of Mexico, Northeast Mexico, Northwest Mexico, Southeast Mexico, Southwest Mexico².

SPECIES NATIVE TO THE SELVA MAYA IN:



PHYSICAL-MECHANICAL PROPERTIES

Density	920	kg/m³
MOEFLEX Elastic Modulus	158025	cm³
RLEFLEX Elastic Resistance Limit	DND	kg/cm²
RR Flex Rupture Resistance	DND	kg/cm²
MOECom for Elastic Modulus Compression Parallel	DND	kg/cm²
RLECom for Elastic Resistance Limit Compression Parallel	DND	kg/cm²
RR Com for Rupture Resistance	DND	kg/cm²
RLE Com for Elastic Resistance Limit Perpendicular Compression	DND	kg/cm²
RR Shear for Rupture Resistance Parallel Shear	DND	kg/cm²
JK Lateral Lateral Face Hardness	1835	kg
JK Lateral Transverse Face Hardness	121	kg

*DNA: Data not available

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7. Species+. <https://www.speciesplus.net/species#/>.



Chaltecoc, Chaltecoc (GT)¹, Palo CSCENTado, Chaltecoco (MX)¹

***Caesalpinia velutina* (Britton & Rose) Standl., sin.: *Coulteria velutina*²**

CHALTECO CO¹

COMMON NAMES

Chaltecoc, Aripin (Guatemala)¹.

COMMON USES

Handicrafts, turned items, marquetry, fine furniture applications, engineered flooring, clock cases, urns, decorative veneer cuts³. In Guatemala its use is limited to flooring, molded products and musical items.

OTHER USES

Jewelry.

*Product image for this species not available.





*The sample image of the species may vary in terms of cSCENT and beta, as it is a natural product.

GENERAL CHARACTERISTICS



CONSERVATION STATUS⁵

IUCN Red List of Threatened Species Category - Least Concern.
Population - Stable population. CITES status - Not listed⁷.



TREE SIZE

Medium-sized tree that can reach heights of 15 to 20 m, and can measure 30 cm in diameter at breast height³.



COLOR - APPEARANCE

Heartwood of a golden orange cSCENT, with an abrupt transition to a yellowish cream-cSCENTed sapwood. Heartwood



RESISTANCE

Heartwood highly resistant to rot fungi, suitable for outdoor uses involving contact with the ground. Noted for being termite resistant⁴.



ALLERGENICITY - TOXICITY

No known toxicity.



WORKABILITY

A highly-dense, hard and heavy wood. It is nonetheless good to work with manually and in all machining operations. The use of tungsten carbide or stellite tools is required. Excellent response to mortising, molding and drilling, and difficult to bond using common white glue. Allows for smooth and glossy finishes. Nailing and screwing requires pre-drilling⁴.



SCENT

Dry wood with no distinctive scent⁴.



COMMENTS

The wood of *Caesalpinia velutina* belongs to a group of woods of similar appearance known as "brazilwood", the most noteworthy of which is *Caesalpinia echinata* from northeast Brazil⁴.



NATIVE TO

Belize, El Salvador, Guatemala, Central Mexico, Gulf of Mexico, Northwest Mexico, Southeast Mexico, Southwest Mexico, Nicaragua².

SPECIES NATIVE TO THE SELVA MAYA IN:



PHYSICAL-MECHANICAL PROPERTIES⁶

Density	78	kg/m³
MOEFLEX Elastic Modulus	18167	cm³
RLEFLEX Elastic Resistance Limit	DND	kg/cm²
RR Flex Rupture Resistance	DND	kg/cm²
MOECom for Elastic Modulus Compression Parallel	DND	kg/cm²
PRLECom for Elastic Resistance Limit Compression Parallel	DND	kg/cm²
RR Com for Rupture Resistance	DND	kg/cm²
RLE Com for Elastic Resistance Limit Perpendicular Compression	DND	kg/cm²
RR Shear for Rupture Resistance Parallel Shear	DND	kg/cm²
JK Lateral Lateral Face Hardness	DND	kg
JK Lateral Transverse Face Hardness	121	kg

***DNA:** Data not available

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Brazil Beauty-Leaf (US), Santa María (GT)^{1,2}, Leche María, Barí (MX)^{1,2}

***Calophyllum brasiliense* Cambess²**

LECH, Q'EQCHÍ³

COMMON NAMES

María (Costa Rica); María, Cabala, Santa María (Panama) Santa María, María, Palo De María (Honduras); María, Santa María, Palo María, Krassa (Nicaragua) Palo Azufre, Lagarto Caspi, Alfaro (Peru); Palo María (Bolivia); Aceite, Aceite María (Colombia); María (Ecuador); Capure (Venezuela)³.

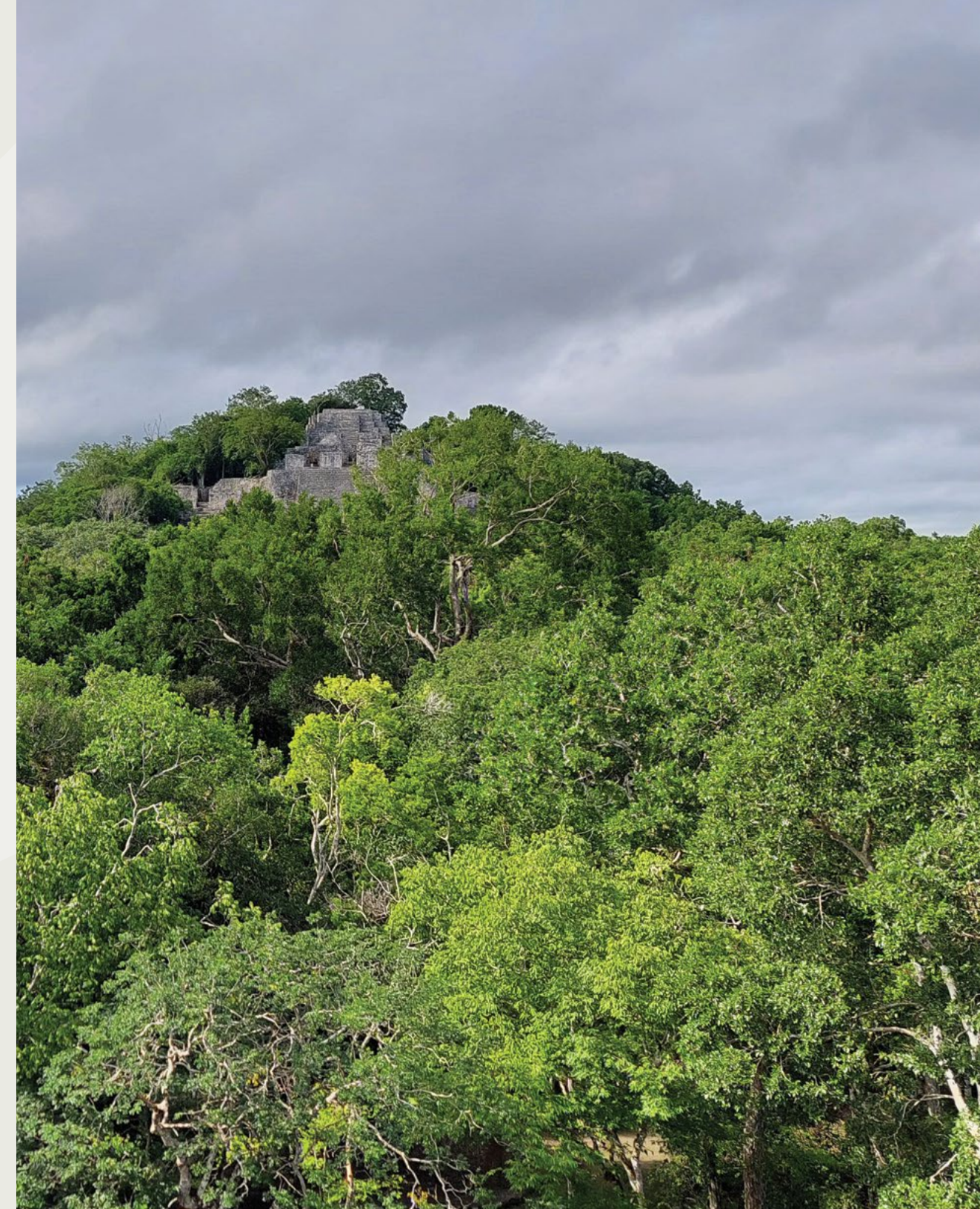
COMMON USES

Medium-sized exterior and interior construction, carpentry, furniture, flooring, boat parts and packaging. Interior and exterior cladding, molded products, slatted panels, prefabricated flooring, laminates for window and door frames³.

OTHER USES

Calophyllum brasiliense serves as a highly valuable phylogenetic and phytochemical resource for Latin American countries, since it biosynthesizes compounds whose diverse pharmacological action stands as an alternative in the development of phytomedicines to address public health problems. Noteworthy among these compounds are the calanolides and inoculum used in the treatment of HIV/AIDS. Their pharmacological and toxicological properties have made them strong candidates for inclusion in the antiretroviral drug regimen. Also noteworthy are the mammea-type coumarins, which have anti-protozoal and anti-tumor properties. These compounds could eventually allow the development of phytopharmaceuticals based on extracts and/or standardized enriched fractions, which would not only offer effectiveness and safety but also reduce the cost of treating HIV/AIDS as well as Leishmaniasis and Chagas disease³.

*Product image for this species not available.



MAYAN NAME²

GUATEMALA

**lech
q'eqchí**



*The sample image of the species may vary in terms of eSCENT and beta, as it is a natural product.

GENERAL CHARACTERISTICS



CONSERVATION STATUS⁵

IUCN Red List of Threatened Species Category - Least Concern.

Population - Stable population.

CITES Status - Listed in Appendix II⁶.

TREE SIZE



It is a tall, glabrous tree that can reach 30 - 40 m in height and whose trunk is often 1 meter in diameter at breast height⁷.

COLOR - APPEARANCE



Sapwood of pinkish-white cSCENT, with soft veining in tangential sections⁸.

GRAIN - TEXTURE



Medium texture, non-lustrous surface; dry wood with no distinctive scent or taste⁸.



WORKABILITY

Medium weight wood; moderately difficult to saw but easy to work using tools and machines; however, planing may result in rough surfaces due to the prominent interlocked grain. Good finishing and polishing qualities, but requires the prior application of a sealer. A wood that is easy to lacquer and bond. Pre-drilling is required prior to nailing and screwing⁸.

NATIVE TO



Northeast Argentina, Belize, Bolivia, North Brazil, Northeast Brazil, South Brazil, Southeast Brazil, Central-West Brazil, Colombia, Costa Rica, Dominican Republic, Ecuador, El Salvador, French Guiana, Guatemala, Haiti, Honduras, Jamaica, Leeward Islands, Central Mexico, Gulf of Mexico, Southeast Mexico, Southwest Mexico, Nicaragua, Panama, Paraguay, Peru, Puerto Rico, Southwest Caribbean, Suriname, Venezuela, Windward Islands⁵.

SPECIES NATIVE TO THE SELVA MAYA IN:



PHYSICAL-MECHANICAL PROPERTIES¹⁰

Density	520	kg/m³
MOEFLEX Elastic Modulus	110160	cm³
RLEFLEX Elastic Resistance Limit	350	kg/cm²
RR Flex Rupture Resistance	799	kg/cm²
PMOECom for Elastic Modulus Compression Parallel	99230	kg/cm²
PRLECom for Elastic Resistance Limit Compression Parallel	200	kg/cm²
RR Com for Rupture Resistance	328	kg/cm²
RLE Com for Elastic Resistance Limit Perpendicular Compression	328	kg/cm²
RR Shear for Rupture Resistance Parallel Shear	328	kg/cm²
JK Lateral Lateral Face Hardness	329	kg
JK Lateral Transverse Face Hardness	425	kg

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11. Species+. <https://www.speciesplus.net/species#/>.



Spanish Cedar (US), Cedro (MX, GT)¹

Cedrela odorata²

K³

COMMON NAMES

Cedro-Rosa, Cedro-Vermelho, Cedro-Branco. Cedar, Ceder, Cedro, Cedre Acajou, Redceder, Cedro SCENToso, Cedro Amargo, Acajou Rouge (Brazil); Cedro Blanco, Cedro SCENToso, Cedro Clavel, Cedro Real, Cedro Caquetá, Cedro Cebollo, Cedro Creso, Cedro Amargo, Cedro Caoba (Colombia); Casludra, Cedro Macho, Cedro Hembra (Cuba); Cedro Dulce, Cedro CSCENTado (Ecuador); Cedar, Cedrela Wood (UK); Central American Cedar, Cedar, Spanish Cedar, Cigarbox Cedar (USA); Calicedro, Cedro, Cobano, Kuche, Cuche, Nogal Cimarrón (Mexico); Cedro CSCENTado, Cedro Virgen, Atoccedro, Cedro (Peru); Cedrela (Germany); Ceder, Akkojaorie, Cedre Cedoe, Kurama, Samariehout, Akoejallie (Suriname); Cedro Hembra, Cedro Español (Puerto Rico); Cedro Real, Yalam (Nicaragua); Cedro, Mogno (Bolivia); Cédrat, Cedre Acajou (French Guyana); Red Cedar (Guayana); Cedro, Cedro Amargo (Venezuela); Cedro Amargo, Cedro Dulce, Cedro CSCENTado, Cedro (Panama); Aluk, Cedro Real, Cedro, Cobano, Runkra, Talí, Uruk, Cedro Amargo, Cedro CSCENTado, Cedro Dulce (Costa Rica); Cedro CSCENTado, Igary (Paraguay); Cedro Macho (El Salvador); Cedra (Jamaica)¹.

COMMON USES

Carpentry, joinery, plywood, decorative sliced veneers, panels, carvings, doors and windows, special boxes for packaging and storing cigars, fine packaging, handicrafts and turning work⁴.

*Product image for this species not available.



MAYAN NAME³

MEXICO

**culche, k'uche,
kuyche,
ku'un'che,
k'ulche,
k'uj'che'**

GUATEMALA

culche



*The sample image of the species may vary in terms of cSCENT and beta, as it is a natural product.

GENERAL CHARACTERISTICS



CONSERVATION STATUS⁷

Category in the IUCN Red List of Threatened Species - Vulnerable. Population - Decreasing population.

CITES Status - Listed in Appendix II⁹.



TREE SIZE

Cedar trees have straight or irregular trunks and grow 20 to 35 m tall, with a diameter at breast height of up to 100 cm⁴.



COLOR - APPEARANCE

Sapwood of a light pink or whitish-yellowish cSCENT, progressively changing to a light to dark reddish-brown in heartwood; distinctive growth rings⁴.



GRAIN - TEXTURE

Generally straight and sometimes interlocked grain, medium to coarse texture, medium to accentuated grain.



RESISTENCIA

Heartwood resistant to moderately resistant to fungi and insect attacks (class II-III according to DIN EN 350-2). Low resistance to marine borers, and rarely attacked by termites. The wood is also reported to have excellent weathering properties. Older, slower-growing wild trees tend to produce wood that is more durable than wood from younger, plantation-grown trees⁵.



ALERGIA - TOXICIDAD

Although severe reactions are uncommon, Spanish cedar wood dust has been reported to be a respiratory irritant. For more information, see the articles "Wood Allergies and Toxicity" and "Wood Dust Safety"⁵.



SCENT

Dry wood with a distinctive scent (pleasant aromatic fragrance)⁴.



WORKABILITY

A light wood that is easy to work using hand tools and in all machining operations. Provides a good finish and polish after surface sealing; easy to lacquer and bond; accepts and holds nails and screws well⁴.



COMMENTS

A historically valuable timber, cedar has been exploited in many regions, and the species is now considered vulnerable according to the IUCN. Their inclusion in CITES Appendix III for the countries of Brazil, Bolivia, Colombia, Guatemala and Peru means that these countries have voluntarily chosen to control the export of timber and have sought the cooperation of other countries to help enforce these restrictions⁵.



NATIVE TO

Northeast Argentina, Belize, Bolivia, Brazil, Cayman Islands, Colombia, Costa Rica, Cuba, Dominican Republic, Ecuador, El Salvador, French Guiana, Guatemala, Haiti, Honduras, Jamaica, Leeward Islands, Mexico, Gulf of Mexico, Nicaragua, Panama, Paraguay, Peru, Puerto Rico, Southwest Caribbean, Suriname, Trinidad and Tobago, Venezuela, Windward Islands².

SPECIES NATIVE TO THE SELVA MAYA IN:



PHYSICAL-MECHANICAL PROPERTIES⁸

Density	400	kg/m³
MOEFLEX Elastic Modulus	80000	cm³
RLEFLEX Elastic Resistance Limit	250	kg/cm²
RR Flex Rupture Resistance	500	kg/cm²
PMOECOM for Elastic Modulus Compression Parallel	73580	kg/cm²
PRLECOM for Elastic Resistance Limit Compression Parallel	144	kg/cm²
RR Com for Rupture Resistance	280	kg/cm²
RLE Com for Elastic Resistance Limit Perpendicular Compression	22	kg/cm²
RR Shear for Rupture Resistance Parallel Shear	61	kg/cm²
JK Lateral Lateral Face Hardness	245	kg
JK Lateral Transverse Face Hardness	230	kg

REFERENCES

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Ceiba (GT, MX)¹

***Ceiba aesculifolia (kunth) Britten & Baker f.*²**

YA'AXCHE'

COMMON NAMES

Ceiba, Pochote (Spanish)³.

COMMON USES

Light indoor construction, packaging (cages and crates), sculptures, floats and life preservers, food containers, furniture in general, indoor carpentry work, plywood and plywood core, fiberboard, moldings⁴.

OTHER USES

Toys, chopsticks, matches, canoes, pulp and oak paper⁴.

*Product image for this species not available.



MAYAN NAME'

MEXICO

**ceibo, piim, ya'
axche', ya'ax
che', ya'axche,
yaaxche,
yaxché'**



* Imagen de la especie no disponible

GENERAL CHARACTERISTICS



CONSERVATION STATUS⁷

IUCN Red List of Threatened Species Category - Least Concern.
Population - Population data unknown. CITES status - Not listed⁹



TREE SIZE

Stands 20 to 40 m tall and has a diameter at breast height of up to 3 m⁶.



COLOR - APPEARANCE

Sapwood and heartwood have no noticeable boundary between them. Wood colors range from whitish to light brown, pinkish brown or yellow with some grayish segments⁴.



GRAIN - TEXTURE

Soft, coarse and rough grain texture with patterns ranging from straight to interlocked⁴.



RESISTENCIA A LAPUTREFACCIÓN

Wood with low rot resistance as it is not resistant to decay fungi. Moderately resistant to termites, but highly susceptible to attack by stain fungi⁴.



ALERGIA - TOXICIDAD

Data not available.



SCENT

Non-distinctive dry wood scent⁴.



WORKABILITY

The wood is easy to machine and to work using hand tools. However, the surface quality is not altogether satisfactory due to the “fuzz” left during machining; easy to nail and screw, but poor nail and screw retention. It allows for good bonding and offers consistent finishes⁴.



COMMENTS

The kapok fibers that envelop the seed are valued as thermal and acoustic materials. The bark, stem, exudate and leaves are used in folk medicine, and even its flower is considered honey. Prophylactic treatment is recommended after sawing to prevent attack by fungi and staining insects⁴.



NATIVE TO

Bahamas, Belize, Bolivia, North Brazil, Northeast Brazil, Central-West Central Brazil, Colombia, Costa Rica, Cuba, Dominican Republic, Ecuador, El Salvador, French Guiana, Guatemala, Haiti, Honduras, Jamaica, Leeward Islands, Central Mexico, Gulf of Mexico, Northeast Mexico, Northwest Mexico, Southeast Mexico, Southwest Mexico, Southwest Mexico, Netherlands Antilles, Nicaragua, Panama, Peru, Puerto Rico, Southwest Caribbean, Suriname, Trinidad and Tobago, Venezuela, Venezuelan Antilles, Windward Islands.

SPECIES NATIVE TO THE SELVA MAYA IN:



PHYSICAL-MECHANICAL PROPERTIES⁸

Density	250	kg/m³
MOEFLEX Elastic Modulus	29000	cm³
RLEFLEX Elastic Resistance Limit	99	kg/cm²
RR Flex Rupture Resistance	153	kg/cm²
PMOECOM for Elastic Modulus Compression Parallel	32000	kg/cm²
PRLECOM for Elastic Resistance Limit Compression Parallel	56	kg/cm²
RR Com for Rupture Resistance	75	kg/cm²
RLE Com for Elastic Resistance Limit Perpendicular Compression	7	kg/cm²
RR Shear for Rupture Resistance Parallel Shear	25	kg/cm²
JK Lateral Lateral Face Hardness	98	kg
JK Lateral Transverse Face Hardness	113	kg

REFERENCES

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Freshwater Grape (BZ), Roble de la costa (MX), Papaturro (GT)¹

Coccoloba barbadensis jacq. sin.: Coccoloba petenensis lindell²

BOOB-CHÉ³

COMMON NAMES

Boop, Buen Amigo, Carnero, Carnero Costeño, Carnero de la Costa, Hoja Dura, Palo de Carnero, Roble de la Costa, Tucuy, Uvero. Fresh Water Grape, Wild Grape (Belize).

COMMON USES

It is also used in construction and in the manufacture of tool handles.

OTHER USES

The leaves have medicinal use as an anti-inflammatory agent. In some regions the fruit is edible^{5,6}.

*Product image for this species not available.



MAYAN NAME³

MEXICO

**boob,
boob ché,
boob cheí,
tokoy**



*Imagen de la especie no disponible

GENERAL CHARACTERISTICS



CONSERVATION STATUS⁷

IUCN Red List of Threatened Species Category - Least Concern.

Population - Stable population.

CITES status - Not listed⁹



TREE SIZE

From 4 to 18 m tall^{4,5}.



RESISTENCIA A LA DEGRADACIÓN

Data not available.



ALERGIA - TOXICIDAD

Data not available.



SCENT

Data not available.



WORKABILITY

Data not available.



COMMENTS

Some sources suggest that Coccoloba wood is heavy and hard with a fine, uniform texture, but little quantitative data are available to support these descriptions. It flowers from January to August and is among the vegetation growing in the high and medium sub-evergreen forest and savanna⁵.



NATIVE TO

Belize, El Salvador, Guatemala, Honduras, Central Mexico, Gulf of Mexico, Northeast Mexico, Northwest Mexico, Southeast Mexico, Southwest Mexico².

SPECIES NATIVE TO THE SELVA MAYA IN:



PHYSICAL-MECHANICAL PROPERTIES⁸

Density	67	kg/m³
MOEFLEX Elastic Modulus	DND	cm³
RLEFLEX Elastic Resistance Limit	DND	kg/cm²
RR Flex Rupture Resistance	DND	kg/cm²
PMOECOM for Elastic Modulus Compression Parallel	DND	kg/cm²
PRLECOM for Elastic Resistance Limit Compression Parallel	DND	kg/cm²
RR COM for Rupture Resistance	DND	kg/cm²
RLE COM for Elastic Resistance Limit Perpendicular Compression	DND	kg/cm²
RR Shear for Rupture Resistance Parallel Shear	DND	kg/cm²
JK Lateral Lateral Face Hardness	DND	kg
JK Lateral Transverse Face Hardness	DND	kg

*DNA: Data not available

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8. Sotomayor-Castellanos, J.-R. & Hernández-Maldonado, S.-A. *Características elásticas de maderas mexicanas. vol. 8* (2012).
9. Species+. <https://www.speciesplus.net/species#/>.



Ziricote (BZ), Ciricote (MX, GT)¹

***Cordia dodecandra* A.DC.²**

KOPTÉ³

COMMON NAMES

Bojón, Cericote, Cópite, Cupapé, Nopo, Palisandro, Trompillo (Mexico); Zericote (Belize); Cericote (Guatemala)¹.

COMMON USES

Flooring (staves and parquet), fine furniture and cabinetry, knife handles and tools, carpentry work (indoor and outdoor), paneling, decorative veneers, handicrafts and musical instruments (guitar backs)⁶.

OTHER USES

This species is highly appreciated for having edible fruits, and its scratchy leaves are still used in rural areas to wash dirty kitchen utensils and dishes. Its bark is known to be used to treat coughs, and its striking orange flowers and shade-providing canopy make it popular as an ornamental tree in parks, gardens and green areas of cities and towns⁸.

*Product image for this species not available.



MAYAN NAME⁴

MEXICO

**chakopté,
k'an-k'opté,
kopté, koopte**

GUATEMALA

**sajab-che,
kopté**

BELIZE

chack opté



*The sample image of the species may vary in terms of eSCENT and beta, as it is a natural product.

GENERAL CHARACTERISTICS



CONSERVATION STATUS⁵

IUCN Red List of Threatened Species Category - Least Concern.
Population - Stable population.
CITES status - Not listed¹⁰.



TREE SIZE

Up to 30 m tall and 70 cm in diameter at breast height⁵.



COLOR - APPEARANCE

Heartwood dark brown to yellowish-brown with irregular black streaks; abrupt transition to creamy white sapwood⁶.



GRAIN - TEXTURE

Highly accentuated by fine dark brown to black wavy irregular lines or streaks which, together with a "mirroring" of the high radii, produce a beautiful design. Slightly oily surfaces. Medium to fine texture, somewhat rough; straight to slightly interlocked grain⁶.



RESISTENCIA A LA DEGRADACIÓN

Heartwood is known to be resistant to attack by decay fungi and insects (termites, borers)⁶.



ALERGIA - TOXICIDAD

It has been shown to cause cross-reactions once an allergic sensitivity to certain woods has developed⁷.



SCENT

Non-distinctive dry wood scent⁶.



WORKABILITY

Despite its high density, the wood is easy to work using hand tools and machinery. It allows good quality sawing, planing, turning, shaping and sanding; acceptable resistance to splintering. Probably difficult to bond due to its high density and oily surface. Pre-drilling is required prior to nailing and screwing; enables a good finish⁶.



COMMENTS

Ciricote is a highly versatile tree with multiple uses. Its wood is of high density, and due to its highly particular color and grain it is quite similar to the hardwoods of the *Dalbergia* genus. For this reason it is usually marketed in Germany under the name "Mexiko Palisander" (Mexican rosewood). Its edible fruits are also used for preserves and jams and various parts of the plant are used in traditional medicine. The leaves (due to their filaments) are used for washing dishes or as a substitute for sandpaper. In Mexico, the *ciricote* is considered as a threatened species due to overexploitation for industrial use⁶.



NATIVE TO

Belize, Cuba, Guatemala, Honduras, Central Mexico, Gulf of Mexico, Southeast Mexico, Southwest Mexico².

SPECIES NATIVE TO THE SELVA MAYA IN:



PHYSICAL-MECHANICAL PROPERTIES⁹

Density	780	kg/m³
MOEFLEX Elastic Modulus	98000	cm³
RLEFLEX Elastic Resistance Limit	607	kg/cm²
RR Flex Rupture Resistance	963	kg/cm²
PMOECom for Elastic Modulus Compression Parallel	157540	kg/cm²
PRLECom for Elastic Resistance Limit Compression Parallel	336	kg/cm²
RR Com for Rupture Resistance	496	kg/cm²
RLE Com for Elastic Resistance Limit Perpendicular Compression	528	kg/cm²
RR Shear for Rupture Resistance Parallel Shear	498	kg/cm²
JK Lateral Lateral Face Hardness	1012	kg
JK Lateral Transverse Face Hardness	791	kg

REFERENCES

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8. National Forestry Commission (CONAFOR). *Cordia dodecandra*. <http://www.conafor.gob.mx:8080/documentos/docs/13/906Cordia%20dodecandra.pdf> (2023).
9. Sotomayor-Castellanos, J.-R. & Hernández-Maldonado, S.-A. *Características elásticas de maderas mexicanas*. vol. 8 (2012).
10. Species+. <https://www.speciesplus.net/species#/>.



White gombo limbo (BZ), Mano de León, Chaka blanco (GT, MX)¹

Dendropanax arboreus (L) Decne. & Planch²

SAC-CHACÁH¹

COMMON NAMES

Mano de Danta, Mano de León, Munimento, Palo de Agua (Mexico); Vaquero, Muñequito, Palomo, Jamaico (Panama); Mano de Mico, Cuajada (Honduras); Fosforillo, Guarumo Macho (Costa Rica); Palo de Pollo (Puerto Rico); Ramón de Caballo, Víbona (Cuba); Lengua de Vaca, Palo de Burro (Dominican Republic), Pama (Venezuela); Galipee, Angelica Tree (Japan); Bois Négresse (Haiti); Potato Wood, White Gumbo Limbo (USA); Mano de León, Mano de Mico, Matapalo (Guatemala), White gombo limbo, Potato-Wood, Lion's Hand, Mountain Blossom Berries (Belize)⁵.

COMMON USES

Because of its beautiful appearance, it could be used for plywood veneers, integral kitchens, veneer manufacturing for plywood cores, boxes and packaging, furniture, interior decoration, chopsticks, scientific instrument cases, doors and windows, frames, joinery and general carpentry². It is feasible for use in products that are in contact with food or associated with the sense of taste⁴.

*Product image for this species not available.



MAYAN NAME⁴

MEXICO

**sac-chacáh,
tz'ub, tsiimin
che'**

BELIZE

**sac-chacáh,
tz'ub**



*The sample image of the species may vary in terms of cSCENT and beta, as it is a natural product.

GENERAL CHARACTERISTICS



CONSERVATION STATUS⁹

Category on the IUCN Red List of Threatened Species - No restrictions. Not registered in the IUCN Red List of Threatened Species.

Population - No restrictions. Not registered in the IUCN Red List of Threatened Species.

CITES Status - Not listed¹¹.



TREE SIZE

From 14 to 25-30 m tall⁶.



COLOR - APPEARANCE

Light yellow⁷



GRAIN - TEXTURE

Medium⁷



RESISTENCIA A LA DEGRADACIÓN

It is highly sensitive, degrades with fungi and insect attack, and is also prone to bluing⁸.



ALERGIA - TOXICIDAD

Data not available



SCENT

Odorless⁷.



WORKABILITY

This wood is easy to work, but during planing the grain tends to warp. A poor wood for screwing. Easy to cut and varnish⁸.



COMMENTS

This wood is easy to treat with a vacuum pressure system to complete the penetration⁸.



NATIVE TO

It extends from Mexico through Central America to Colombia, Venezuela and Bolivia and is present in the Antilles³.

SPECIES NATIVE TO THE SELVA MAYA IN:



PHYSICAL-MECHANICAL PROPERTIES¹⁰

Density	400	kg/m³
MOEFLEX Elastic Modulus	8580	cm³
RLEFLEX Elastic Resistance Limit	261	kg/cm²
RR Flex Rupture Resistance	491	kg/cm²
PMOECOM for Elastic Modulus Compression Parallel	73580	kg/cm²
PRLECOM for Elastic Resistance Limit Compression Parallel	144	kg/cm²
RR COM for Rupture Resistance	211	kg/cm²
RLE COM for Elastic Resistance Limit Perpendicular Compression	211	kg/cm²
RR Shear for Rupture Resistance Parallel Shear	211	kg/cm²
JK Lateral Lateral Face Hardness	226	kg
JK Lateral Transverse Face Hardness	272	kg

REFERENCES

1. Zapotillo (Dendropanax arboreus). <https://enciclovida.mx/especies/162887-dendropanax-arboreus>.
2. Dendropanax arboreus (L.) Decne. & Planch. | Plants of the World Online | Kew Science. <https://powo.science.kew.org/taxon/urn:lsid:ipni.org:names:1133937-2>.
3. Dendropanax arboreus (L.) Decne. & Planch. | Plants of the World Online | Kew Science. <https://powo.science.kew.org/taxon/urn:lsid:ipni.org:names:1133937-2>.
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10. Sotomayor-Castellanos, J.-R. & Hernández-Maldonado, S.-A. *Características elásticas de maderas mexicanas*. vol. 8 (2012).
11. Species+. <https://www.speciesplus.net/species#/>.



Blackwood (US), Tinto (MX, GT)¹

Haematoxylum campechianum^{L.2}

BONCHE¹

COMMON NAMES

Blackwood, Bloodwood Tree, Bluewood, Campeachy Tree, Campeachy Wood, Campeche Logwood, Campeche Wood, Jamaica Wood, Logwood, Logwood Tree (English), Blauholzbaum, Blutholzbaum, Campechebaum (Germany), Bois de Campêche (France)¹.

COMMON USES

Durable for outdoor and ground contact use. It is sometimes used for furniture and luxury items because it can be smoothly finished and is highly polishable⁶. It is used as a fence post for paddocks⁷. As wood, its use is largely limited by the irregularity of the trunk⁵.

*Product image for this species not available.



MAYAN NAME⁴

MEXICO

**ec, ek, kikche,
bonche'**

BELIZE

ek



*Image of the species not available

GENERAL CHARACTERISTICS



CONSERVATION STATUS⁸

IUCN Red List of Threatened Species Category - Least Concern.

Population - Stable population.

CITES status - Not listed⁹.



TREE SIZE

This tree reaches a height of up to 15 m and a diameter of up to 80 cm at breast height⁴.



COLOR - APPEARANCE

The sapwood ring is thin, white or yellowish. Heartwood turns a bright reddish color when exposed to air^{5,6}.



GRAIN - TEXTURE

Grain is interlocked and coarse-textured yet fairly uniform⁶.



RESISTENCIA A LA PUTREFACCIÓN

Heartwood is exceptionally resistant to rot⁴.



COMMENTS

In the past, wood from this species was used to dye fabric and leather, as suggested by its common name. The infusion obtained from the decoction of the wood is used in home medicine as a remedy for diarrhea and dysentery; the bark produces an aromatic resin that is highly valued in the manufacture of varnishes. The stem and bark possess curative properties against depression, kidney disorders, toothache and fever⁴.



NATIVE TO

Belize, Guatemala, Honduras, Gulf of Mexico, Southeast Mexico².

SPECIES NATIVE TO THE SELVA MAYA IN:



PHYSICAL-MECHANICAL PROPERTIES

Density	72	kg/m ³
MOEFLEX Elastic Modulus	DND	cm ³
RLEFLEX Elastic Resistance Limit	DND	kg/cm ²
RR Flex Rupture Resistance	DND	kg/cm ²
PMOECOM for Elastic Modulus Compression Parallel	DND	kg/cm ²
PRLECOM for Elastic Resistance Limit Compression Parallel	DND	kg/cm ²
RR Com for Rupture Resistance	DND	kg/cm ²
RLE Com for Elastic Resistance Limit Perpendicular Compression	DND	kg/cm ²
RR Shear for Rupture Resistance Parallel Shear	DND	kg/cm ²
JK Lateral Lateral Face Hardness	DND	kg
JK Lateral Transverse Face Hardness	DND	kg

*DNA: Data not available

REFERENCES

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2. *Haematoxylum campechianum* L. | Plants of the World Online | Kew Science. <https://powo.science.kew.org/taxon/urn:lsid:ipni.org:names:316401-2>.
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Black Cabbage Bark (BZ), Manchiche (GT), Machiche (MX)¹

Lonchocarpus castilloi Standl.²

BAAL CHÉ³

COMMON NAMES

Balché, Chacté, Chashté, Canazin, Manchiche, Matachiche (Mexico), Black Cabbage Bark, Cabbagebark (Belize), Manchiche, Manchuch, Manchuch (Guatemala)¹.

COMMON USES

The wood is highly valued in Mexico for its use in medium draft boats. Although veneer can be obtained from it, its properties are not suited for this use. It is also used for firewood, fence posts and pickets, general home use, flooring, parquet, furniture and cabinets, fine furniture, boards and veneers, decorative veneer, turning, pallets, packaging, light packaging, musical instruments, handicrafts as well as other uses⁵.

*Product image for this species not available.



MAYAN NAME³

MEXICO

baal che'



*The sample image of the species may vary in terms of cSCENT and beta, as it is a natural product.

GENERAL CHARACTERISTICS



CONSERVATION STATUS⁵

IUCN Red List of Threatened Species Category - Least Concern.
Population - Stable population.
CITES status - Not listed⁷.



TREE SIZE

20-30 m tall, 0.6 - 1 m in diameter at breast height¹.



COLOR - APPEARANCE

Heartwood yellowish to reddish-brown with occasional dark streaks, sharply differentiated from the cream to light-brown sapwood³.



GRAIN - TEXTURE

Grain may be straight, irregular or interlocked with a coarse texture.



RESISTENCIA A LA DEGRADACIÓN

The durability of *machiche* can vary according to the species, but it is generally considered to be highly durable and resistant to insect attack¹.



ALERGIA - TOXICIDAD

Reported to cause skin irritation, but serious reactions are rare¹.



SCENT

A dry wood with no distinctive scent².



WORKABILITY

This heavy and hard wood is somewhat difficult to work manually and in different machining operations, especially given the presence of interlocked and/or highly irregular grain. The use of reinforced edge tools (tungsten carbide) is recommended. It is also important to use proper cutting techniques to obtain high quality surfaces and edges. Responds well to mortising, molding and drilling. It provides an excellent finish and is highly polishable with the previous application of a sealer; good bonding using common white glue. Nailing and screwing requires pre-drilling².



COMMENTS

Commercial *machiche* wood comes mainly from *L. castilloi*. Wood from five other species of the same genus is quite similar but of lesser commercial importance. Despite a significant demand, it is considered to be an underutilized species considering its forestry potential and outstanding physical-mechanical properties⁴.



NATIVE TO

Belize, Guatemala, Southeast Mexico, Southwest Mexico².

SPECIES NATIVE TO THE SELVA MAYA IN:



PHYSICAL-MECHANICAL PROPERTIES⁶

Density	740	kg/m³
MOEFLEX Elastic Modulus	180540	cm³
RLEFLEX Elastic Resistance Limit	641	kg/cm²
RR Flex Rupture Resistance	1195	kg/cm²
PMOECOM for Elastic Modulus Compression Parallel	148370	kg/cm²
PRLECOM for Elastic Resistance Limit Compression Parallel	314	kg/cm²
RR Com for Rupture Resistance	557	kg/cm²
RLE Com for Elastic Resistance Limit Perpendicular Compression	557	kg/cm²
RR Shear for Rupture Resistance Parallel Shear	557	kg/cm²
JK Lateral Lateral Face Hardness	752	kg
JK Lateral Transverse Face Hardness	733	kg

REFERENCES

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2. *Lonchocarpus castilloi* Standl. | Plants of the World Online | Kew Science. <https://powo.science.kew.org/taxon/urn:lsid:ipni.org:names:143244-2>.
3. Peña-Chocarro, M. & Knapp, S. *Árboles del Mundo Maya*. (Universidad del Valle de Guatemala, 2011).
4. National Forestry Commission. *Fichas técnicas sobre características tecnológicas y usos de maderas comercializadas en México*. (2007).
5. *Lonchocarpus castilloi*. <https://www.iucnredlist.org/es/species/62026305/149004327>.
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Palo gusano, Yaxmojren (GT)¹ , Palo gusano (MX)¹

***Lonchocarpus guatemalensis Benth.*²**

KAN-XUU, XBALCHÉ¹

COMMON USES

Its wood is used in construction, carpentry and as firewood⁶.

OTHER USES

The bark is used in the manufacture of insecticides. Melliferous. Useful for recovering degraded land, improves soil fertility⁶.

*Product image for this species not available.



MAYAN NAME¹

MEXICO

**kan-xuu,
kan-xuul,
xa-habin,
xbalché,
xuul,
yax-habin**



*Imagen de la especie no disponible

GENERAL CHARACTERISTICS



CONSERVATION STATUS³

IUCN Red List of Threatened Species Category - Least Concern.

Population - Stable population.

CITES status - Not listed⁸



TREE SIZE

The tree stands 15 to 35 m tall with a breast height diameter of 40 to 100 cm⁴.



COLOR - APPEARANCE

Heartwood varies from light brown to a darker reddish brown. It has fine line patterns and light colors (due to the wide parenchyma bands in the wood structure), somewhat similar to Padauk. The yellow sapwood is easily distinguished from heartwood⁵.



GRAIN - TEXTURE

Grain can be straight, irregular or interlocked, with a coarse texture⁵.



RESISTENCIA A LA DEGRADACIÓN

The durability of *Lonchocarpus* may vary by species, but it is generally considered highly durable and resistant to insect attack⁵.



ALERGIA - TOXICIDAD

Lonchocarpus castilloi Standl (Machiche) has been reported to cause skin irritation, although serious reactions are rare. See the articles Wood Allergies and Toxicity and Wood Dust Safety for more information⁵.



SCENT

No distinctive scent⁵.



WORKABILITY

Despite the high density of *Lonchocarpus*, it is usually easy to work. As in all cases of interlocked or irregular grain, care must be taken to avoid tearing, but machining results are generally good. It turns, bonds and finishes well⁵.



NATIVE TO

Belize, Costa Rica, El Salvador, Guatemala, Honduras, Central Mexico, Gulf of Mexico, Northeast Mexico, Northwest Mexico, Southeast Mexico, Southwest Mexico, Nicaragua, Panama².

SPECIES NATIVE TO THE SELVA MAYA IN:



PHYSICAL-MECHANICAL PROPERTIES⁷

Density	740	kg/m³
MOEFLEX Elastic Modulus	180540	cm³
RLEFLEX Elastic Resistance Limit	641	kg/cm²
RR Flex Rupture Resistance	1195	kg/cm²
PMOECOM for Elastic Modulus Compression Parallel	148370	kg/cm²
PRLECOM for Elastic Resistance Limit Compression Parallel	314	kg/cm²
RR COM for Rupture Resistance	557	kg/cm²
RLE COM for Elastic Resistance Limit Perpendicular Compression	557	kg/cm²
RR Shear for Rupture Resistance Parallel Shear	557	kg/cm²
JK Lateral Lateral Face Hardness	752	kg
JK Lateral Transverse Face Hardness	733	kg

***General information on the genus *Lonchocarpus* spp. is included in the physical-mechanical properties, as it is the only information currently available.**

REFERENCES

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8. Species+. <https://www.speciesplus.net/species#/>.



False Tamarind (US), Tzalam (MX, GT)¹

Lysiloma latisiliquum (L.) Benth., sin.: Lysiloma bahamensis²

TZALAM¹

COMMON NAMES

Tzalan, Tzukté, Zalam, Dzalám (Mexico), Wild Tamarind, Bahamas Tamarind (USA), Salám (Belize), Tzalám (Guatemala), Abey, Sobicú (Cuba), Tavernon (Haiti)¹.

COMMON USES

Prefabricated parquet, sliced decorative veneers, sporting goods, door and window frames, interior and exterior construction, carpentry and fine furniture, molding products, flooring, handicrafts and turned products³.

OTHER USES

It also has a magical ritual value among the Maya because of its use in the preparation of “buried” stews in a cooking process called “pib” in the Mayan language³.

*Product image for this species not available.



MAYAN NAME¹

MEXICO

**bo'ox salam,
dzalam,
tsalam, tzalam,
tzukté, zalam**



*The sample image of the species may vary in terms of eSCENT and beta, as it is a natural product.

GENERAL CHARACTERISTICS



CONSERVATION STATUS⁴

IUCN Red List of Threatened Species Category - Least Concern.
Population - Stable population. CITES status - Not listed⁶.



TREE SIZE

15-20 m tall, with a breast height diameter of 60-70 cm; straight stemmed³.



COLOR - APPEARANCE

Sapwood of creamy yellowish color, clearly differentiated from heartwood of a light to dark brown color with a coppery or purple hue³.



GRAIN - TEXTURE

Medium to coarse texture and slightly shiny surface³.



RESISTENCIA A LA DEGRADACIÓN

Heartwood highly resistant or resistant to decay fungi. Using the wood outdoors in contact with the ground is somewhat risky³.



ALERGIA - TOXICIDAD

Contact with dust generated during machining may cause skin and mucous membrane irritation in susceptible individuals. As a preventive measure, the use of face masks and efficient extractors is recommended in all machining operations³.



SCENT

Dry wood with no distinctive scent or taste³.



WORKABILITY

A medium to high-density wood that is somewhat difficult to work by hand and in different machining operations, especially in the presence of interlocked and/or highly irregular grains. Hard-edge tools (tungsten carbide, stellite) are recommended to achieve high-quality surfaces and edges. Responds well to grooving, molding and drilling. It offers an excellent finish and high gloss; effective bonding using common white glue. Nailing and screwing require pre-drilling³.



COMMENTS

The wood air-dries slowly, taking between 90 and 150 days in the case of 2.5 cm thick boards. The wood has a noteworthy tendency to splinter on the faces and ends, as well as to deform due to residual internal stress³.



NATIVE TO

The Bahamas, Belize, Cuba, Florida, Gulf of Mexico, Southeast Mexico, Southwest Mexico, Turks and Caicos Islands².

SPECIES NATIVE TO THE SELVA MAYA IN:



PHYSICAL-MECHANICAL PROPERTIES⁵

Density	630	kg/m³
MOEFLEX Elastic Modulus	134000	cm³
RLEFLEX Elastic Resistance Limit	574	kg/cm²
RR Flex Rupture Resistance	903	kg/cm²
PMOECom for Elastic Modulus Compression Parallel	123500	kg/cm²
PRLECom for Elastic Resistance Limit Compression Parallel	256	kg/cm²
RR Com for Rupture Resistance	371	kg/cm²
RLE Com for Elastic Resistance Limit Perpendicular Compression	385	kg/cm²
RR Shear for Rupture Resistance Parallel Shear	330	kg/cm²
JK Lateral Lateral Face Hardness	635	kg
JK Lateral Transverse Face Hardness	543	kg

REFERENCES

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3. Tzalam | The Wood Database (Hardwood). <https://www.wood-database.com/tzalam/>.
4. *Lysiloma latisiliquum* (Wild Tamarind). <https://www.iucnredlist.org/es/species/62020988/149016840>.
5. Sotomayor-Castellanos, J.-R. & Hernández-Maldonado, S.-A. *Características elásticas de maderas mexicanas*. vol. 8 (2012).
6. Species+. <https://www.speciesplus.net/species#/>.



Sapodilla (US), Chico zapote, zapote (MX, GT)¹

Manilkara zapota (L.) P. Royen²

CHI' KÉEJ, CHAK YA^{3,4}

COMMON NAMES

Arbol del Chicle, Chapote, Peruétano, Xicotzapotl, Nispero (Costa Rica, Nicaragua, Panama, El Salvador), Sapodilla (Belize), Zapote (El Salvador, Guatemala, Honduras), Zapote de Carne (Colombia), Chicozapote (Guatemala), Nispero Chicle (Talamanca-Costa Rica), Nispero de Castilla (Nicaragua), Zapotillo (Honduras)⁵.

COMMON USES

Marine constructions, tool handles, furniture, parquets, cabinets, turning work, musical instruments. Responds well to indoor and outdoor use⁶.

OTHER USES

The resin from the tree's bark is used to make chewing gum and other candy products⁶.

*Product image for this species not available.



MAYAN NAME^{3,4}

MEXICO

**chak ya',
chi' kéej, ya';
ha'as, sak'ya**



*The sample image of the species may vary in terms of eSCENT and beta, as it is a natural product.

GENERAL CHARACTERISTICS



CONSERVATION STATUS^{8,9}

IUCN Red List of Threatened Species Category - Least Concern.
Population - Decreasing population. CITES Status - Not listed¹⁰.



TREE SIZE

65-100 ft (20-30 m) tall, 2-3 ft (0.6 - 1 m) diameter at breast height⁶.



COLOR - APPEARANCE

The color varies from pink or red to a darker reddish brown. The pale yellowish sapwood progressively changes to heartwood⁶.



GRAIN - TEXTURE

Grain is straight or wavy with a medium to fine uniform texture. The pale yellowish sapwood progressively changes to heartwood⁶.



RESISTENCIA A LA PUTREFACCIÓN

It is reported to have excellent durability and insect resistance (Chico zapote beams have been found intact among the ruins of Mayan temples)⁶.



ALERGIA - TOXICIDAD

Chico zapote has been reported to cause respiratory (nasal) irritation, although serious reactions are uncommon⁶.



SCENT

No distinctive scent⁶.



WORKABILITY

Control is common with this species, and even blanks are sometimes sold dry rather than green. Its density can make it difficult to work, but it generally yields good results. Moderate dulling effect on cutters. Turns and finishes well. This wood features excellent workability in all machining operations using tools equipped with tungsten carbide or stellite reinforced cutting edges⁷.



COMMENTS

Practically impermeable wood that air-dries quite slowly with few defects. It also dries free of residual stress⁷.



NATIVE TO

Bahamas, Bangladesh, Cayman Islands, Cuba, Dominican Republic, Florida, Gulf of Guinea Islands, Haiti, Jamaica, Leeward Islands, Puerto Rico, Society Islands, Southwest Caribbean, Trinidad and Tobago, Vanuatu, Venezuela, Venezuelan Antilles².

SPECIES NATIVE TO THE SELVA MAYA IN:



PHYSICAL-MECHANICAL PROPERTIES¹⁰

Density	900	kg/m³
MOEFLEX Elastic Modulus	163200	cm³
RLEFLEX Elastic Resistance Limit	732	kg/cm²
RR Flex Rupture Resistance	1317	kg/cm²
PMOECom for Elastic Modulus Compression Parallel	185460	kg/cm²
PRLECom for Elastic Resistance Limit Compression Parallel	402	kg/cm²
RR Com for Rupture Resistance	667	kg/cm²
RLE Com for Elastic Resistance Limit Perpendicular Compression	667	kg/cm²
RR Shear for Rupture Resistance Parallel Shear	667	kg/cm²
JK Lateral Lateral Face Hardness	923	kg
JK Lateral Transverse Face Hardness	887	kg

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White Gumbo Limbo (US), Chechén, chechén negro (MX, GT)¹

***Metopium brownei* (Jacq.) Urb²**

BO OX CHEECHEM¹

COMMON NAMES

Chechén Negro; Boxcheché, Kabal-Chechen (Mexico); Chechén, Palo de Rosa (Honduras); Fosforillo, Guarumo Macho (Costa Rica); Palo de Pollo (Puerto Rico); Ramón de Caballo, Víbona (Cuba); Lengua de Vaca, Palo de Burro (Dominican Republic), Pama (Venezuela); Galípee, Angelica Tree (Jamaica); Bois Nègresse (Haiti); Potato Wood, White Gumbo Limbo (USA)³.

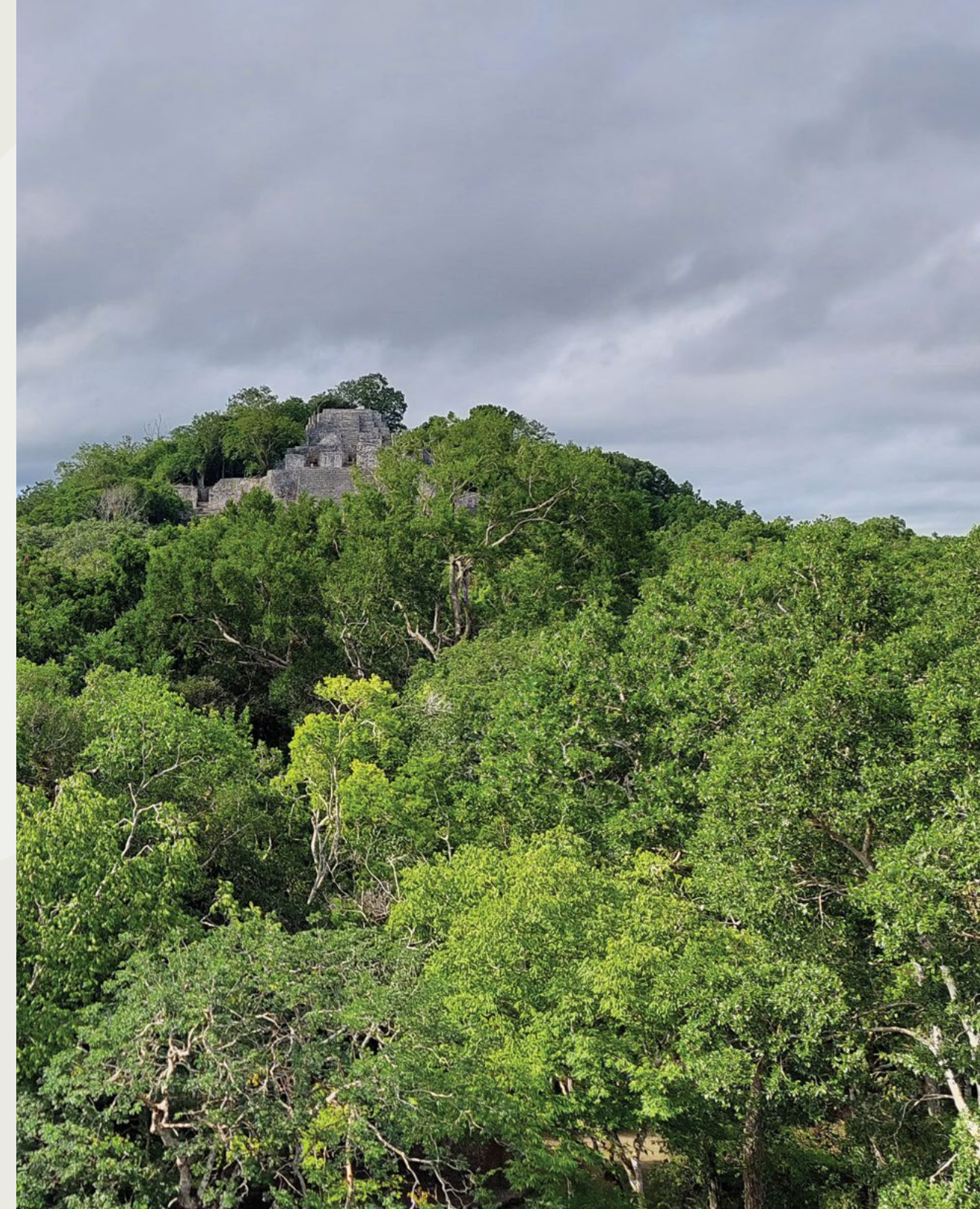
COMMON USES

Timber species with commercial potential. Excellent quality and exotic grain. Durable and extremely resistant. It is used in fine furniture, cabinetry, general carpentry and joinery, flooring, planks, planks, wainscot, bridge planks, piles, decorative plywood veneers, plywood, millwork, telephone poles and fences, doors and windows. It is also used in the manufacture of handicrafts, turned and sculpted items and musical instruments⁵.

OTHER USES

They contain insecticidal properties against fall armyworm (*Spodoptera frugiperda*). It is a melliferous species⁵.

*Product image for this species not available.



MAYAN NAME⁴

MEXICO

**boox cheechem,
box cheechem,
boxcheché,
cheechem,
kabal'chechem,
kabal-chechen**



*The sample image of the species may vary in terms of eSCENT and beta, as it is a natural product.

GENERAL CHARACTERISTICS



CONSERVATION STATUS⁷

IUCN Red List of Threatened Species Category - Least Concern.
Population - Stable population.
CITES Status - Not listed⁹



TREE SIZE

12 to 25 m tall with a diameter at breast height of up to 60 cm⁵.



COLOR - APPEARANCE

Heartwood color is highly varied with brown, reddish, orange and yellow tones. Prominent dark brown to almost black streaks, and a creamy pinkish-brown sapwood⁵.



GRAIN - TEXTURE

Clayey⁵.



RESISTENCIA A LA DEGRADACIÓN

Macroscopically distinct growth ring boundaries marked by thin bands of marginal parenchyma. Highly attractive accentuated grain, fine to medium texture, straight to interlocked grain⁵.



ALERGIA - TOXICIDAD

The main limitation for the use of wood from this species are the skin diseases that its caustic resin can cause in sensitive people, as well as the sawdust that can result in severe skin allergies and digestive tract disorders. In addition, the catechols and flavonoids in the leaves and bark of these trees can have phytotoxic effects⁵.



SCENT

Dry wood with no distinctive scent⁵.



TESTA

Macroscopically distinct growth ring boundaries marked by thin bands of marginal parenchyma. Highly attractive accentuated grain, fine to medium texture, straight to interlocked grain⁵.



WORKABILITY

Hard and heavy wood, somewhat difficult to work by hand but easy to use in certain machining operations. The use of tungsten carbide or stellite tools is recommended. Finishes well. Good response to grooving, shaping and drilling; in regards to longitudinal cutting, a circular saw will leave minor surface defects due to friction burns caused by residual internal stress; bonds well with ordinary white glue. Nailing and screwing require pre-drilling⁵.



COMMENTS

This wood's quite low permeability results in considerably long air-drying times (6 months) and maintaining high moisture levels (close to the fiber saturation point)⁵.



NATIVE TO

Belize, Cuba, Dominican Republic, Guatemala, Haiti, Honduras, Jamaica, Gulf of Mexico, Southeast Mexico, Dutch Antilles, Southwest Caribbean².

SPECIES NATIVE TO THE SELVA MAYA IN:



PHYSICAL-MECHANICAL PROPERTIES⁸

Density	370	kg/m³
MOEFLEX Elastic Modulus	69690	cm³
RLEFLEX Elastic Resistance Limit	245	kg/cm²
RR Flex Rupture Resistance	426	kg/cm²
PMOECom for Elastic Modulus Compression Parallel	67320	kg/cm²
PRLECom for Elastic Resistance Limit Compression Parallel	130	kg/cm²
RR Com for Rupture Resistance	180	kg/cm²
RLE Com for Elastic Resistance Limit Perpendicular Compression	175	kg/cm²
RR Shear for Rupture Resistance Parallel Shear	119	kg/cm²
JK Lateral Lateral Face Hardness	181	kg
JK Lateral Transverse Face Hardness	213	kg

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Boxcheché, Kabal-Chechen



Florida Fishpoison (US), Jabín (MX, GT)¹

Piscidia piscipula (L) Sarg.²

JA'ABIN³

COMMON NAMES

Barbasco, Chijol, Flor de Papagallo, Haabi, Ha'Abim, Jabi, Matapiojo (Mexico), Florida Fishpoison (USA), Fishfuddle, Jamaica Dogwood (Jamaica), Guamá (Cuba)⁴.

COMMON USES

Rural construction (exterior), staves, parquet, engineered flooring, decorative veneered panels, garden furniture, stairs (steps and handrails), cutlery handles, watch cases, interior decoration⁴.

*Product image for this species not available.



MAYAN NAME³

MEXICO

**haabí, haabín,
habí, habín,
ja' abim,
ja' abin, jabí,
jabín, ja' abin,
ya'ax ha'abin,
yaxmojan**



*The sample image of the species may vary in terms of CSCENT and beta, as it is a natural product.

GENERAL CHARACTERISTICS



CONSERVATION STATUS⁵

IUCN Red List of Threatened Species Category - Least Concern.
Population - Stable population.
CITES status - Not listed⁹.



TREE SIZE

20 m tall and 50 cm in diameter at chest height⁴.



COLOR - APPEARANCE

The thin bark has olive gray colors, while heartwood color ranges from light brown to brownish-orange⁴.



GRAIN - TEXTURE

Coarse texture, interlocked grain, often spotted. Macroscopically distinct growth ring boundaries marked by considerably distinct bands, thin marginal parenchyma⁴.



RESISTENCIA

Mature soapberry trees have an extremely high drought tolerance and are highly resistant to decay⁴.



ALERGIA - TOXICIDAD

Green wood exudes a crystalline organic substance (whitish powder), which during machining can cause discomfort to the skin, hands and mucus membranes in susceptible people⁴.



SCENT

Dry wood with no distinctive scent⁴.



WORKABILITY

Most machining operations report good machining response. It spins, bonds and finishes well; however, care should be taken with respect to interlocked grain patterns. Splintering can occur if care is not taken⁴.



COMMENTS

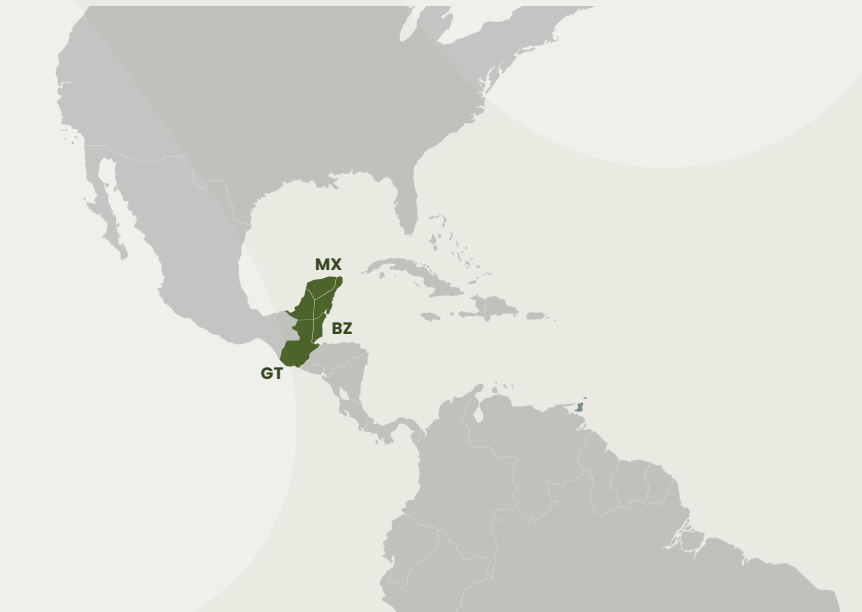
This hardwood from the Yucatán Peninsula is prized for its beautiful patterns and strength⁴.



NATIVE TO

Bahamas, Belize, Cayman Islands, Cuba, Dominican Republic, Florida, Guatemala, Honduras, Jamaica, Central Mexico, Gulf of Mexico, Northeast Mexico, Southeast Mexico, Southwest Mexico, Southwest Mexico, Panama, Southwest Caribbean, Venezuelan Antilles².

SPECIES NATIVE TO THE SELVA MAYA IN:



PHYSICAL-MECHANICAL PROPERTIES

Density	700	kg/m³
MOEFLEX Elastic Modulus	128000	cm³
RLEFLEX Elastic Resistance Limit	565	kg/cm²
RR Flex Rupture Resistance	1311	kg/cm²
MOECom for Elastic Modulus Compression Parallel	139260	kg/cm²
PRLECom for Elastic Resistance Limit Compression Parallel	292	kg/cm²
RR Com for Rupture Resistance	428	kg/cm²
RLE Com for Elastic Resistance Limit Perpendicular Compression	449	kg/cm²
RR Shear for Rupture Resistance Parallel Shear	404	kg/cm²
JK Lateral Lateral Face Hardness	842	kg
JK Lateral Transverse Face Hardness	654	kg

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Hormigo (GT, MX)¹

***Platymiscium dimorphandrum* Donn. Sm.²**

SUBINCHÉ¹

COMMON NAMES

Granadillo, Hormigo, Hormiguero, Hormiguillo, Palo de Hormiga, Palo de Marimba, Palo Marimba, Rosadillo¹.

COMMON USES

Used in the manufacture of musical instruments, furniture, ornaments, doors, floors and joinery in general. In addition, it has been one of the most used woods for marimba claves played by indigenous groups in southern Mexico and Central America, owing to its characteristic sound⁴.

OTHER USES

It has been used for medicinal purposes in tests to denature snake venoms such as that of the yellow beard⁴.

*Product image for this species not available.



MAYAN NAME¹

MEXICO

subinché



*The sample image of the species may vary in terms of eSCENT and beta, as it is a natural product.

GENERAL CHARACTERISTICS



CONSERVATION STATUS⁵

IUCN Red List of Threatened Species Category - Least Concern.
Population - Stable population.
CITES status - Not listed⁷.



TREE SIZE

The tree can reach heights of 40 m and measure 80 to 90 cm in diameter at breast height. Its crown is umbellate or rounded, and its foliage is dark green and dense with large and obliquely ascending branches. Its trunk is straight, cylindrical, with an elongated base or concave shanks⁴.



COLOR - APPEARANCE

Heartwood is bright red, reddish or purplish-brown, somewhat striped and in darker woods it has a waxy appearance⁴.



GRAIN - TEXTURE

It has straight to interlocked grain with a medium texture and gloss⁴.



RESISTENCIA A LA DEGRADACIÓN

Heartwood is highly resistant to fungi attacks that cause brown and white rot, as well as drywood termites⁴.



ALERGIA - TOXICIDAD

Data not available.



SCENT

When dry, the wood has no distinctive scent or taste⁴.



WORKABILITY

The wood is not difficult to work and achieves an excellent finish with smooth and highly polishable surfaces⁴.



COMMENTS

The wood varies from dark brown to reddish-brown with a grain that gives it a unique beauty⁴.



NATIVE TO

Belize, Costa Rica, Guatemala, Honduras, Gulf of Mexico, Northeast Mexico, Southeast Mexico, Southwest Mexico, Nicaragua².

SPECIES NATIVE TO THE SELVA MAYA IN:



PHYSICAL-MECHANICAL PROPERTIES⁶

Density	660	kg/m³
MOEFLEX Elastic Modulus	126480	cm³
RLEFLEX Elastic Resistance Limit	640	kg/cm²
RR Flex Rupture Resistance	997	kg/cm²
PMOECom for Elastic Modulus Compression Parallel	130225	kg/cm²
PRLECom for Elastic Resistance Limit Compression Parallel	271	kg/cm²
RR Com for Rupture Resistance	528	kg/cm²
RLE Com for Elastic Resistance Limit Perpendicular Compression	528	kg/cm²
RR Shear for Rupture Resistance Parallel Shear	528	kg/cm²
JK Lateral Lateral Face Hardness	566	kg
JK Lateral Transverse Face Hardness	635	kg

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7. Species+. <https://www.speciesplus.net/species#/>.



Granadillo (MX, GT)^{1,2}

***Platymiscium yucatanum* Standl.³**

SUKIM CHE', TASIN CHE'⁴

COMMON NAMES

Bejuco Prieto, Granadillo, Hormiguillo, Hormigo, Chagame, Candona (Mexico). Aceituno Montes (El Salvador). Palo Marimbo, Toncontin, Trébol (Honduras). Cachimbo, Cristóbal (Costa Rica). Quira (Panama)⁵.

COMMON USES

Wood is widely used for the manufacture of stave, wainscot, parquet and veneer; locally it is widely used in the manufacture of high-quality handicrafts and marimbas⁶.

OTHER USES

It is a melliferous species¹¹.

*Product image for this species not available.



MAYAN NAME⁴

MEXICO

**chak subinche,
subin che',
subinché,
sukim che',
tasin che'**



*The sample image of the species may vary in terms of cSCENT and beta, as it is a natural product.

GENERAL CHARACTERISTICS



CONSERVATION STATUS¹²

IUCN Red List of Threatened Species Category - Near threatened.
Population - Decreasing population.
CITES status - Not listed¹⁴.



TREE SIZE

Tree up to 35 m tall and 80 cm in diameter at breast height⁶.



COLOR - APPEARANCE

Heartwood is purplish-brown, with prominent streaks; creamy-white sapwood^{7,8}.



GRAIN - TEXTURE

Grain is straight to interlocked, with a medium to fine texture. Natural high-gloss finish⁹.



RESISTENCIA A LA PUTREFACCIÓN

Heartwood highly resistant to rot fungi, suitable for outdoor uses involving contact with the ground. Also known for being termite resistant⁸.



ALERGIA - TOXICIDAD

Apart from the standard health risks associated with any type of wood dust, no other health reactions have been linked to this wood⁹.



SCENT

No distinctive scent⁹.



WORKABILITY

Due to its highly dense composition, it is difficult to work using hand tools. However, it has excellent workability in all machining operations with tools equipped with tungsten carbide or stellite reinforced cutting edges. Excellent response to mortising and molding; when planed it may present minimal defects due to the interlocked grain, this problem being more accentuated in areas with knots; responds well to drilling and can be bonded with common white glue. It must be pre-drilled before screwing⁸.



COMMENTS

Low-permeability wood that can be slowly air-dried with few noticeable defects such as warping, splintering (ends) and buckling, practically free of residual internal stresses after drying.



NATIVE TO

Gulf of Mexico, Southeast Mexico, Southwest Mexico³.

SPECIES NATIVE TO THE SELVA MAYA IN:



PHYSICAL-MECHANICAL PROPERTIES¹³

Density	660	kg/m³
MOEFLEX Elastic Modulus	126480	cm³
RLEFLEX Elastic Resistance Limit	604	kg/cm²
RR Flex Rupture Resistance	997	kg/cm²
PMOECom for Elastic Modulus Compression Parallel	130225	kg/cm²
PRLECom for Elastic Resistance Limit Compression Parallel	271	kg/cm²
RR Com for Rupture Resistance	528	kg/cm²
RLE Com for Elastic Resistance Limit Perpendicular Compression	528	kg/cm²
RR Shear for Rupture Resistance Parallel Shear	528	kg/cm²
JK Lateral Lateral Face Hardness	566	kg
JK Lateral Transverse Face Hardness	635	kg

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Canistel (US), Sillón (GT, MX)¹, Zapote amarillo (MX)¹

Pouteria campechiana (Kunth) Baehni², sin.: Lucuma salicifolia Kunth³

CHI'KÉEJ⁴

COMMON NAMES

Canistel (English), Canistel (France), Sawo Mentega (Indonesia)⁵.

COMMON USES

It has environmental, medicinal and food uses¹. Its wood is used to make boards and beams for construction, and it is also used in carpentry²; it has potential as material for the manufacture of parquet and staves³.

OTHER USES

Canistel fruit is mainly eaten fresh, and its taste can be enhanced by adding butter or lemon juice. Also used to make cakes, milkshakes and ice cream⁶.

*Product image for this species not available.



MAYAN NAME⁴

MEXICO

**ja'as che',
chi' kéej,
k'anis te'**



*Imagen de la especie no disponible

GENERAL CHARACTERISTICS



CONSERVATION STATUS⁶

IUCN Red List of Threatened Species Category - Least Concern.

Population - Stable population.

CITES status - Not listed¹⁵.



TREE SIZE

Tree up to 25 m high^{7,8}.



COLOR - APPEARANCE

Sapwood and heartwood have a yellow color. The transition between the two woods is not clear; growth areas are not distinctly defined⁹.



GRAIN - TEXTURE

Medium texture and interlocked grain⁹.



RESISTENCIA A LA DEGRADACIÓN

Both the sapwood and heartwood are classified as being highly resistant to attack by *Polyporus sanguineus* and *Stereum sanguinolentum* (fungi)⁹.



ALERGIA - TOXICIDAD

Data not available.



SCENT

It has no distinctive scent or taste⁹.



WORKABILITY

Excellent planing results with cutting angles of 30°, 25° and 20°. It is also excellently suited to sanding with 60, 80 and 100 grit sandpaper¹⁰.



COMMENTS

The tree grows mainly in humid tropical biomes¹¹. It is considered as a conservation indicator flora in medium and high forests, and it can be used as an estimator of the attributes or status of other species or environmental conditions of interest including *Aechmea bracteata* (Bromelias de tanque), *Hyla microcephala*, *H. picta* and *Scinax staufferi* (frog species); as well as *Micrastor ruficollis* (jungle hawk), in addition to others¹³.



NATIVE TO

Belize, Costa Rica, El Salvador, Guatemala, Honduras, Central Mexico, Gulf of Mexico, Northeast Mexico, Northwest Mexico, Southeast Mexico, Southwest Mexico, Nicaragua, Panama².

SPECIES NATIVE TO THE SELVA MAYA IN:



PHYSICAL-MECHANICAL PROPERTIES¹⁴

Density	730	kg/m³
MOEFLEX Elastic Modulus	157000	cm³
RLEFLEX Elastic Resistance Limit	726	kg/cm²
RR Flex Rupture Resistance	1353	kg/cm²
PMOECom for Elastic Modulus Compression Parallel	146080	kg/cm²
PRLECom for Elastic Resistance Limit Compression Parallel	308	kg/cm²
RR Com for Rupture Resistance	454	kg/cm²
RLE Com for Elastic Resistance Limit Perpendicular Compression	478	kg/cm²
RR Shear for Rupture Resistance Parallel Shear	438	kg/cm²
JK Lateral Lateral Face Hardness	1015	kg
JK Lateral Transverse Face Hardness	704	kg

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Zapotillo, Sapotillo (GT, MX)¹

Pouteria reticulata (Engl.) Eymai²

CH'IIH' YA'

COMMON NAMES

Punte amarillo; Piaste caimito (Colombia); Guapéva; Guapeva; Abiu; Cutitiribá (Brazil); Tushmo Amarillo; Quinilla de Fruto Negro; Quinilla Blanca; Quina Quina; Caimitillo (Peru); Nisperito; Anumu; Chupón; Chupón Rosado (Venezuela); Wapi (Guyana); Zapote Macho (Colombia)³.

COMMON USES

Hard and heavy wood suitable for beams or fencing⁷. It is also suitable for construction, structures, tongue and groove joints, flooring, interior and exterior carpentry, railroad ties, crossheads and posts⁶.

OTHER USES

Fruits are sweet and fleshy⁶.

*Product image for this species not available.



MAYAN NAME'

MEXICO

**ch'iich'ya,
ts'um ya'**



*Imagen de la especie no disponible

GENERAL CHARACTERISTICS



CONSERVATION STATUS⁴

IUCN Red List of Threatened Species Category - Least Concern.

Population - Stable population.

CITES status - Not listed⁹.



TREE SIZE

It grows to 25 to 35 m, and has a breast height diameter of 40 to 80 cm⁵.



COLOR - APPEARANCE

The freshly cut log's outer layers (sapwood) have a pinkish-brown to light reddish-brown color, while the inner layers (heartwood) are dark brown with an abrupt contrast between the two layers. When air-dried, the sapwood turns a light reddish-brown (HUE 6/3 5YR), and the heartwood becomes reddish-brown (HUE 5/4 5YR)⁶.



GRAIN - TEXTURE

Fine⁶.



RESISTENCIA A LA DEGRADACIÓN

Data not available.



SCENT

Non-distinctive⁶.



WORKABILITY

It is an abrasive wood whose silica content makes it difficult to process; saws must be reinforced with stellite⁶.



COMMENTS

Trunks are straight and cylindrical, measuring up to 18 m in length. The buttresses are medium-sized to well developed. It presents an abundant white latex⁵.



NATIVE TO

Belize, Bolivia, Northern Brazil, Northeast Brazil, Southeast Brazil, Central-Western Brazil, Colombia, Costa Rica, Ecuador, French Guiana, Guatemala, Guyana, Honduras, Gulf of Mexico, Southeast Mexico, Southwest Mexico, Nicaragua, Panama, Peru, Suriname, Venezuela².

SPECIES NATIVE TO THE SELVA MAYA IN:



PHYSICAL-MECHANICAL PROPERTIES⁸

Density	730	kg/m³
MOEFLEX Elastic Modulus	157000	cm³
RLEFLEX Elastic Resistance Limit	726	kg/cm²
RR Flex Rupture Resistance	1353	kg/cm²
PMOECOM for Elastic Modulus Compression Parallel	146080	kg/cm²
PRLECOM for Elastic Resistance Limit Compression Parallel	308	kg/cm²
RR COM for Rupture Resistance	454	kg/cm²
RLE COM for Elastic Resistance Limit Perpendicular Compression	478	kg/cm²
RR Shear for Rupture Resistance Parallel Shear	438	kg/cm²
JK Lateral Lateral Face Hardness	1015	kg
JK Lateral Transverse Face Hardness	704	kg

REFERENCES

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9. Species+. <https://www.speciesplus.net/species#/>.



Shaving Brush Tree (US), Amapola (GT, MX)¹

Pseudobombax ellipticum (Kunth) Dugand²

K'UX CHÉ³

COMMON NAMES

Shaving Brush Tree (English), Pseudobombax mexický (Czech Republic)¹.

COMMON USES

Its wood is soft and of excellent quality for the manufacture of veneer and used by the indigenous people for the construction of canoes⁴.

OTHER USES

Packing boxes, floating balls for fishing nets, fruit is rich in fiber⁵.

*Product image for this species not available.



MAYAN NAME³

MEXICO

**chack-k'uyché,
chack k'ux che',
chucté, k'uj
che', xk'uwal
che', xk'ux che',
chulté, k'ux ché**

GUATEMALA

xk' unche'

BELIZE

kuyche



*The sample image of the species may vary in terms of cSCENT and beta, as it is a natural product.

GENERAL CHARACTERISTICS



CONSERVATION STATUS⁷

IUCN Red List of Threatened Species Category - Least Concern.

Population - Stable population.

CITES status - Not listed⁹.



TREE SIZE

15-20 m tall, and 1.5 m in diameter at breast height⁴.



COLOR - APPEARANCE

Whitish or white color in peripheral sections, glossy and grayish-brown towards the interior. Pale reddish-brown vein pattern⁵.



GRAIN - TEXTURE

Texture fine to medium grain, straight to



RESISTENCIA A LA DEGRADACIÓN

No resistance to attack by fungi and boring insects. Needs treatment to prevent attack by wood fungi².



ALERGIA - TOXICIDAD

Data not available.



SCENT

No distinctive scent⁶.



WORKABILITY

Easy and acceptable sawing. Easy and excellent planing. Easy and acceptable turning. Easy and good sanding. Easy and good for nailing and screwing; splinter-resistant⁵



NATIVE TO

Belize, Cuba, Dominican Republic, El Salvador, Guatemala, Haiti, Honduras, Central Mexico, Gulf of Mexico, Northeast Mexico, Northwest Mexico, Southeast Mexico, Southwest Mexico, Nicaragua².

SPECIES NATIVE TO THE SELVA MAYA IN:



PHYSICAL-MECHANICAL PROPERTIES⁸

Density	440	kg/m³
MOEFLEX Elastic Modulus	70380	cm³
RLEFLEX Elastic Resistance Limit	182	kg/cm²
RR Flex Rupture Resistance	501	kg/cm²
PMOECOM for Elastic Modulus Compression Parallel	82025	kg/cm²
PRLECOM for Elastic Resistance Limit Compression Parallel	162	kg/cm²
RR Com for Rupture Resistance	203	kg/cm²
RLE Com for Elastic Resistance Limit Perpendicular Compression	203	kg/cm²
RR Shear for Rupture Resistance Parallel Shear	203	kg/cm²
JK Lateral Lateral Face Hardness	208	kg
JK Lateral Transverse Face Hardness	230	kg

REFERENCES

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5. FORESCOM. Recopilación bibliográfica: Especificaciones técnicas de 19 especies maderables tropicales en Peten, Guatemala. https://www.itto.int/files/itto_project_db_input/2565/Technical/Propiedades%20fisico-mecanicas%20de%20especies%20forestales.pdf (2007).
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Stavewood (US), Aceitunillo (GT)¹, Pasa-ak (MX)¹

***Simarouba amara Aubl*²**

PAJ SAK IIL³

COMMON NAMES

Stavewood; Simarruba; Roba; Pitomba; Pau parahyba; Pasa-ak; Paradise tree; Pao pomba; Mountain damson; Marupauba; Marouba; Malacacheta; Cuna; Bois de cayan; Bois blanc; Bitteresche; Bitterash; Assoumaripa; Adonichi; Simarupa; Simarouba (Guyana); Marupa; Simaruba; Palo Blanco (Colombia); Chiriguamo; Amargo (Bolivia); Marupa (Peru); Soemaroeba; Simaruba; Chiriwana; Cedro Blanco (Venezuela); Paraiba; Parahyba; Olivo; Negrito; Megrilo; Maruba; Guitarro; Cuña; Capulli; Cedro Amargo (Ecuador); Aceituno (Guatemala); Caixeta; Simarupa; Adoosidero; Walkara; Soemaroepa; Marupá; Xpasak; Tamanqueira (Brazil); Brazilian White Pine; Bitterwood; Acajou Blanc; Aruba⁴.

COMMON USES

General housing, floorboards, frames, paneling, ironwork, furniture and cabinets, common furniture, plywood and veneers, faces, decorative veneers, turning, tools, tool handles, packaging, light packaging, musical instruments, handicrafts, shoes, matches, door cores and moldings⁵.

*Product image for this species not available.



MAYAN NAME³

MEXICO

paj sak iil



*Imagen de la especie no disponible

GENERAL CHARACTERISTICS



CONSERVATION STATUS⁵

IUCN Red List of Threatened Species Category - Least Concern.
Population - Stable population.
CITES status - Not listed⁹.



TREE SIZE

From 15 to 25 m tall, diameter at breast height of 50 to 80 cm⁶.



COLOR - APPEARANCE

Sapwood is undifferentiated. Heartwood is whitish or straw-colored⁶.



GRAIN - TEXTURE

Straight grained, medium to thick and homogeneous texture⁶.



RESISTENCIA A LA DEGRADACIÓN

Quite limited resistance to attacks by fibrous rot fungi (*Coriolus versicolor*, *Pycnoporus sanguineus*, *Lentinus squarrosulus*) and cube rot fungi (*Antrodia* sp.). Susceptible to attack by chromogenic fungi (blue stain); staining was observed on wet packaged shingles that were not immediately conditioned with separators⁷.



SCENT

Indistinct scent, bitter taste when fresh⁶.



WORKABILITY

Good impregnability, and easy to preserve using hot-cold bath and vacuum-pressure systems with pentachlorophenol. Good at absorbing the preservative (salts) under pressure and can achieve regular total penetration, with retentions higher than 200 kg/m³. It has a natural life in outdoor use of less than one year⁷.



COMMENTS

It is easy to preserve using hot-cold bath and vacuum-pressure systems with pentachlorophenol⁷.



NATIVE TO

Belize, Bolivia, Northern Brazil, Northeast Brazil, Southeast Brazil, Central and Western Brazil, Colombia, Costa Rica, Ecuador, El Salvador, French Guiana, Guatemala, Honduras, Central Mexico, Gulf of Mexico, Southeast Mexico, Southwest Mexico, Nicaragua, Panama, Peru, Southwest Caribbean, Trinidad and Tobago, Venezuela².

SPECIES NATIVE TO THE SELVA MAYA IN:



PHYSICAL-MECHANICAL PROPERTIES⁸

Density	460	kg/m³
MOEFLEX Elastic Modulus	79560	cm³
RLEFLEX Elastic Resistance Limit	246	kg/cm²
RR Flex Rupture Resistance	506	kg/cm²
PMOECOM for Elastic Modulus Compression Parallel	86290	kg/cm²
PRLECOM for Elastic Resistance Limit Compression Parallel	172	kg/cm²
RR Com for Rupture Resistance	209	kg/cm²
RLE Com for Elastic Resistance Limit Perpendicular Compression	209	kg/cm²
RR Shear for Rupture Resistance Parallel Shear	209	kg/cm²
JK Lateral Lateral Face Hardness	232	kg
JK Lateral Transverse Face Hardness	251	kg

*These data apply to the genus *Simarouba* but not to the species in particular.

REFERENCES

1. Aceituno (*Simarouba amara*). <https://enciclovida.mx/especies/193047>.
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Paradise Tree (US), Pasaque hembra (GT)¹, Negrito (MX)¹

***Simarouba glauca* CD.²**

PA'SAK CHE'¹

COMMON NAMES

Aceituna, Aceituno, Aceituno Negrito, Gusano, Negrito, Palo Gusano, Rabo de Lagarto Blanco, Zapatero (Mexico); Paradise Tree (USA)¹.

COMMON USES

Furniture, stave, wainscot, women's shoe heels, interior construction and finishing, matches, piano keys, toys, veneer for plywood cores and smooth sides, and root planer backs. It is recommended for structural frames, turned veneer, packaging wood, chipboard, musical instruments, windows and doors, picture frames and children's furniture⁵. Its soft, creamy and light wood can be used like ocote wood for packing boxes, matchsticks, veneer, posts, plywood cores, cabinets, light carpentry and joinery⁵.

*Product image for this species not available.



MAYAN NAME³

MEXICO

**pa'sak che',
pa-sak,
papa'ak,
pasaak, pasak',
pistache,
x-pasak'il,
xpa'sakil,
xpaxakil**



*Imagen de la especie no disponible

GENERAL CHARACTERISTICS



CONSERVATION STATUS⁶

IUCN Red List of Threatened Species Category - Least Concern.

Population - Stable population.

CITES status - Not listed⁸.



TREE SIZE

From 20 to 30 meters tall, with a breast height diameter of 50-80 cm⁴.



COLOR - APPEARANCE

Creamy yellow color⁵.



GRAIN - TEXTURE

The fibers are of the libriform and tracheid type, and of medium length⁵.



RESISTENCIA A LA DEGRADACIÓN

Moderately resistant to attack by the *Polystictus versicolor* fungus, and either slightly or non-resistant to attack by the *Lenzites trabea* fungus⁵.



ALERGIA - TOXICIDAD

Data not available.



SCENT

No distinctive scent and bitter in taste⁵.



WORKABILITY

Heartwood and sapwood have good absorption properties and are permeable for impregnation processes and preservation treatments. Easy to saw, although certain internal stresses in the tree can cause splintering during the process, and moderate blunting can occur during sawing and machining. Acceptable response to nailing and screwing, with previous pre-drilling being recommended⁵.



COMMENTS

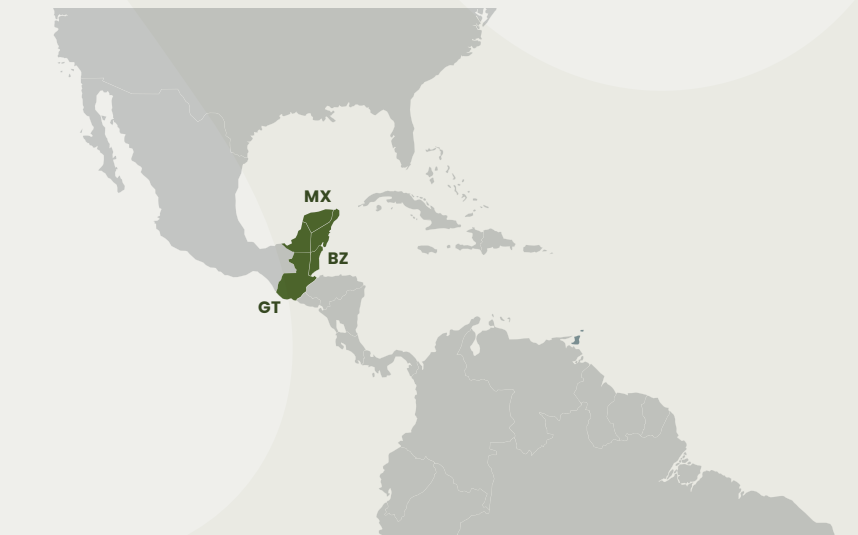
Timber species with commercial potential. The wood does not present sawing or drying problems.



NATIVE TO

Bahamas, Belize, Costa Rica, Cuba, Dominican Republic, El Salvador, Florida, Guatemala, Haiti, Honduras, Jamaica, Central Mexico, Gulf of Mexico, Southeast Mexico, Southwest Mexico, Nicaragua².

SPECIES NATIVE TO THE SELVA MAYA IN:



PHYSICAL-MECHANICAL PROPERTIES⁷

Density	460	kg/m³
MOEFLEX Elastic Modulus	79560	cm³
RLEFLEX Elastic Resistance Limit	246	kg/cm²
RR Flex Rupture Resistance	506	kg/cm²
PMOECOM for Elastic Modulus Compression Parallel	86290	kg/cm²
PRLECOM for Elastic Resistance Limit Compression Parallel	172	kg/cm²
RR COM for Rupture Resistance	209	kg/cm²
RLE COM for Elastic Resistance Limit Perpendicular Compression	209	kg/cm²
RR Shear for Rupture Resistance Parallel Shear	209	kg/cm²
JK Lateral Lateral Face Hardness	232	kg
JK Lateral Transverse Face Hardness	251	kg

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Chactekok (MX)¹, Saltemuche (GT)¹

***Simira salvadorensis*, sin.: *Sickingia salvadorensis*²**

CHACTE-KOK¹

COMMON NAMES

Cacahuate, Colorado, Nazareno, Nazareno Rojo, Palo Colorado, Palo de Rosa, Palo Rojo, Sangre de Perro (Mexico)¹.

COMMON USES

The wood is used in rural construction and in the manufacture of railroad ties and turned items⁵.

OTHER USES

Its leaves are sold in rolls for the construction of rural housing because roofs made with these leaves will last 8-10 years. Tender leaves are used for the manufacture of hats, brooms, fans and baskets. Marketed as an ornamental plant⁵.

*Product image for this species not available.



MAYAN NAME¹

MEXICO

**chakte-kok,
chakté-kok**



*The sample image of the species may vary in terms of eSCENT and beta, as it is a natural product.

GENERAL CHARACTERISTICS



CONSERVATION STATUS⁶

IUCN Red List of Threatened Species Category - Least Concern.
Population - Population data unknown. CITES status - Not listed⁷.



TREE SIZE

Up to 30 m tall and up to 40 cm in diameter at breast height⁴.



COLOR - APPEARANCE

Chactekok wood can be a very bright watermelon red, although the color can vary in intensity and tone depending on the board: from a light orange/pink, to a darker brown. The vibrant color of chactekok quickly fades to a reddish-brown under direct sunlight, although this color change can be slowed (but usually does not stop completely) by using a finish with UV inhibitors and keeping the wood away from bright light³.



GRAIN - TEXTURE

Grain is usually straight or irregular, with a fine and uniform texture. Low to medium natural gloss³.



RESISTENCIA

Laboratory tests have shown chactekok to be moderately resistant to attack by decay fungi³.



ALERGIA - TOXICIDAD

Other than the standard health risks associated with any type of wood dust, no other health reactions have been linked to this species³.



SCENT

Chactekok may have a distinctive rubbery scent when worked, depending on the species³.



WORKABILITY

It has good working properties. Turns, bonds and finishes well, although a brown color change can be expected³.



NATIVE TO

Belize, El Salvador, Guatemala, Honduras, Gulf of Mexico, Southeast Mexico, Southwest Mexico².

SPECIES NATIVE TO THE SELVA MAYA IN:



PHYSICAL-MECHANICAL PROPERTIES

Density	660	kg/m³
MOEFLEX Elastic Modulus	121380	cm³
RLEFLEX Elastic Resistance Limit	405	kg/cm²
RR Flex Rupture Resistance	840	kg/cm²
PMOECom for Elastic Modulus Compression Parallel	130225	kg/cm²
PRLECom for Elastic Resistance Limit Compression Parallel	271	kg/cm²
RR Com for Rupture Resistance	443	kg/cm²
RLE Com for Elastic Resistance Limit Perpendicular Compression	439	kg/cm²
RR Shear for Rupture Resistance Parallel Shear	443	kg/cm²
JK Lateral Lateral Face Hardness	555	kg
JK Lateral Transverse Face Hardness	650	kg

REFERENCES

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Yellow Mombin (US), Jobo (GT, MX)¹

***Spondias mombin* L.²**

KAN-ABAL³

COMMON NAMES

Hogplum; Hobo Colorado; Jobo Macho; Jobo (Colombia); Itahuba; Cedrillo; Uvos; Ubos (Bolivia); Jobo; Ajuelo (Ecuador); Ushun; Shungu; Ubos; Yellow Mom; Wild Plum; Uvos (Peru); Coropa; Ciruelo de Hueso (Venezuela); Jocote (Costa Rica); Pok (Guatemala); Monbín (Haiti); Jobobán (Dominican Republic.); Mope; Mombin; Jobo Blanco; Jobito (Cuba); Hog Plum; Hoeboe; Hobu; Hobo (Ecuador); Ciruela de Job; Ciruela Amarilla; Ciruela; Caja Seira; Taperiba; Ubo; Pau Da Tapera; Caja Mirim; Bala; Acaiba (Brazil); Yellow Mombin; Jobo Corronchoso (Venezuela); Jobo (Mexico)¹.

COMMON USES

Framing of homes, shutters, furniture and cabinets, plywood and veneers. Light packaging, musical instruments, handicrafts and mock-ups⁴. The wood can be easily worked and generally takes on a uniform finish, although some operations may result in a fuzz in the grain³.

OTHER USES

It produces a sour yellow fruit that is eaten by people and many animals⁵. It is useful for erosion control, soil conservation, as a windbreak and as an ornamental item³.

*Product image for this species not available.



MAYAN NAME¹

MEXICO

**abalil k'aax,
huhub, jujuub,
k'ank'an-abal,
k'inil, k'inim,
k'inin,
kan-abal,
poom,
kinin-hobó**



*Imagen de la especie no disponible

GENERAL CHARACTERISTICS



CONSERVATION STATUS⁶

IUCN Red List of Threatened Species Category - Least Concern.

Population - Stable population.

CITES status - Not listed⁸.



TREE SIZE

Trees grow up to 40 m tall⁴.



COLOR - APPEARANCE

Sapwood is indistinguishable from heartwood. Heartwood color is pale yellow⁴.



GRAIN - TEXTURE

Grain is straight to slightly interlocked⁴.



RESISTENCIA A LA DEGRADACIÓN

Susceptible to attack by fungi, termites and marine borers. Logs should be processed as soon as possible after harvesting⁴



SCENT

Scent and taste are indistinct⁴.



WORKABILITY

Shear strength is generally low; responds well to machining operations, but fuzzy surfaces have been reported; responds well to planing, and can generally finish with a smooth, clean surface: responds well to molding operations⁴.



NATIVE TO

Aruba, Belize, Bolivia, Northern Brazil, Northeast Brazil, Southeast Brazil, Central-Western Brazil, Cayman Islands, Colombia, Costa Rica, Cuba, Dominican Republic, Ecuador, El Salvador, French Guiana, Guatemala, Guyana, Haiti, Honduras, Jamaica, Leeward Islands, Central Mexico, Gulf of Mexico, Northeast Mexico, Northwest Mexico, Northwest Mexico, Southeast Mexico, Southwest Mexico, Netherlands Antilles, Nicaragua, Panama, Peru, Puerto Rico, Southwest Caribbean, Suriname, Trinidad and Tobago, Venezuela, Venezuelan Antilles².

SPECIES NATIVE TO THE SELVA MAYA IN:



PHYSICAL-MECHANICAL PROPERTIES⁷

Density	450	kg/m³
MOEFLEX Elastic Modulus	63240	cm³
RLEFLEX Elastic Resistance Limit	147	kg/cm²
RR Flex Rupture Resistance	351	kg/cm²
PMOECom for Elastic Modulus Compression Parallel	84150	kg/cm²
PRLECom for Elastic Resistance Limit Compression Parallel	167	kg/cm²
RR Com for Rupture Resistance	183	kg/cm²
RLE Com for Elastic Resistance Limit Perpendicular Compression	183	kg/cm²
RR Shear for Rupture Resistance Parallel Shear	183	kg/cm²
JK Lateral Lateral Face Hardness	344	kg
JK Lateral Transverse Face Hardness	222	kg

REFERENCES

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8. Species+. <https://www.speciesplus.net/species#/>.



Katalox (MX, GT)¹

***Swartzia cubensis* (Britton & P. Wilson) Standl²**

K 'ATAL'O OX'

COMMON USES

Cabinetmaking and fine furniture, molded items, cutlery, handicrafts and turned items. Has potential for manufacturing parquet of the mosaic type, and prefabricated (laminated) and decorative sliced sheets⁴.

*Product image for this species not available.



MAYAN NAME'

MEXICO

**cattox,
k'atal'oox**



*The sample image of the species may vary in terms of eSCENT and beta, as it is a natural product.

GENERAL CHARACTERISTICS



CONSERVATION STATUS^{4,5}

IUCN Red List of Threatened Species - This species is not included in CITES Appendices or on the Red List. Population - This species is not included in the CITES Appendices or in the Red List.
CITES status - Not listed⁷.



TREE SIZE

It can grow to 15 - 25 m tall with breast height diameters from 40 to 70 cm⁴.



COLOR - APPEARANCE

Heartwood when green has a dark reddish brown color with a purplish tinge, darkening to almost purplish-black under exposure; abrupt transition to a creamy yellow sapwood. Limits indistinct growth rings. It has attractive, highly enhanced veining that alternates interlocked layers of different colors⁴.



GRAIN - TEXTURE

Medium to fine texture, slightly to moderately interlocked grain⁴.



RESISTENCIA A LA DEGRADACIÓN

Heartwood highly resistant to fungal and termite decay, and also susceptible to attack by sea borers⁴.



ALERGIA - TOXICIDAD

Contact with sawdust and dust from sanding can cause skin and mucus membrane irritation. As a preventive measure, the use of efficient extractors in all machining operations is recommended⁴.



SCENT

Indistinct dry wood scent, and the presence of a slight scent when being worked⁴.



WORKABILITY

In spite of its highly dense composition, the wood responds excellently to planing, molding and turning. Difficult to nail and screw, so it is essential to drill the wood before joining. Probably difficult to bond. Provides an excellent finish and is highly polishable⁴.



COMMENTS

Depending on environmental conditions, the wood's service life could be as follows: 38 years outdoors at a relative humidity of 50 to 100% and a temperature between 25 and 30 degrees Celsius; 115 years in the shade indoors at a humidity of 50 to 100% and temperature between 25 and 30 degrees Celsius; 27 years outdoors at a humidity of 0 to 50% and temperatures from 25 to 40 degrees Celsius; 180 years in the shade at a humidity from 0 to 50% and temperatures from 0 to 20 degrees⁴.



NATIVE TO

Belize, Cuba, Guatemala, Honduras, Gulf of Mexico, Southeast Mexico².

SPECIES NATIVE TO THE SELVA MAYA IN:



PHYSICAL-MECHANICAL PROPERTIES⁶

Density	830	kg/m³
MOEFLEX Elastic Modulus	183600	cm³
RLEFLEX Elastic Resistance Limit	700	kg/cm²
RR Flex Rupture Resistance	1349	kg/cm²
PMOECom for Elastic Modulus Compression Parallel	169110	kg/cm²
PRLECom for Elastic Resistance Limit Compression Parallel	363	kg/cm²
RR Com for Rupture Resistance	602	kg/cm²
RLE Com for Elastic Resistance Limit Perpendicular Compression	557	kg/cm²
RR Shear for Rupture Resistance Parallel Shear	602	kg/cm²
JK Lateral Lateral Face Hardness	844	kg
JK Lateral Transverse Face Hardness	947	kg

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Chichipate, Chaté (GT)¹, Chichipate (MX)¹

***Sweetia panamensis* Benth, sin.: *Leptolobium panamense* (Benth.) Sch.Rodr. & A.M.G. Azevedo^{2,3}**

CHAKTÉ⁴

COMMON NAMES

Chakté (Mexico), Bálsamo Amarillo, Bálsamo Oloroso, Cencerro, Chile, Corteza de Honduras, Guayacán, Huesillo, Huesito, Palo Amargo⁴.

COMMON USES

Wood used for the manufacture of veneer for plywood cores and visible layers; it has also been used to manufacture parquet, wainscot and staves; it can be used to make high-quality railroad ties and in construction. Locally it is used for posts and rural constructions¹.

*Product image for this species not available.



MAYAN NAME⁴

MEXICO
chakté



*Imagen de la especie no disponible

GENERAL CHARACTERISTICS



CONSERVATION STATUS⁷

IUCN Red List of Threatened Species Category - Least Concern.

Population - Stable population.

CITES status - Not listed⁹.



TREE SIZE

Trees grow from 12 to 40 m tall⁵.



COLOR - APPEARANCE

Heartwood is brown or olive green, and sapwood is well defined with a yellowish cream with a gold-like shimmer⁶.



GRAIN - TEXTURE

Grain is straight¹.



RESISTENCIA A LA PUTREFACCIÓN

The wood's hardness makes it resistant to insects and fungi.



ALERGIA - TOXICIDAD

Data not available.



SCENT

It has a strong and unpleasant scent, and a bitter taste¹



WORKABILITY

A highly dense wood, moderately difficult to work⁶.



NATIVE TO

Belize, Guatemala, Central Mexico, Southeast Mexico, Southwest Mexico³.

SPECIES NATIVE TO THE SELVA MAYA IN:



PHYSICAL-MECHANICAL PROPERTIES⁸

Density	800	kg/m³
MOEFLEX Elastic Modulus	182580	cm³
RLEFLEX Elastic Resistance Limit	839	kg/cm²
RR Flex Rupture Resistance	1541	kg/cm²
PMOECom for Elastic Modulus Compression Parallel	162160	kg/cm²
PRLECom for Elastic Resistance Limit Compression Parallel	346	kg/cm²
RR Com for Rupture Resistance	698	kg/cm²
RLE Com for Elastic Resistance Limit Perpendicular Compression	697	kg/cm²
RR Shear for Rupture Resistance Parallel Shear	697	kg/cm²
JK Lateral Lateral Face Hardness	1067	kg
JK Lateral Transverse Face Hardness	1165	kg

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American Mahogany (US), Caoba (MX, GT)¹

***Swietenia macrophylla* King²**

KANAK-CHÉ³

COMMON NAMES

Zopilozontecomacuahuitl; Zopilote; Zopilocuahuitl; Venezuela Mahogany; Tzutzul; Tabasco Mahogany; Sisam; Resadillo; Red Wood; Red Cedar; Punab; Palo Xopilote; Mogno Do Rio Jurupari; Madeira; Guatemala Mahogany; Flor De Veradillo; Costa Rica Mahogany; Chacalte; Central American Mahogany; Cedro-Rana; Broad-Leaved Mahogany; Brazilian Mahogany; Big-Leafed Mahogany; Bay-Mahogany; Bastard Lime; Aquano De Tabasco; Peruvian Mahogany; Grootblad Mahogany; Large Leaved Mahogany; Bay Mahogany; Tzopilote; Mahonie; Granadillo; Gateado; Flor de Venadillo; Crura; Cuban Mahogany; Central America Mahogany; Chiculti; Cedro Espinoso; Cedro Cebollo; Cedro Carmesi; Caoba Roja; Caoba Americana; Caoba Mahogany; Cabano; Acajou D`Amerique; (Mexico); Acajou Du Honduras; Caoba (Peru); Palo Zopilote; Orura; Mara (Bolivia); Mahogany; (Honduras); Cobano; Chiculte; Caobilla; Caoba de Atlántico; Caguano; Bigleaf Mahogany; Big Leafed Mahogany (Belize); Mahogany; Aguano; Acajou Amerique; Acajou; Mogno; Baywood; Araputanga (Brazil); Acajou Blanc; American Mahogany (USA)¹.

COMMON USES

Multipurpose wood for both exterior and interior use. It is mainly used for fine finishing, carpentry and artistic furniture, paneling, cladding, components of musical instruments such as pianos, organs and guitars, as well as for handicrafts. In Europe and the United States it was among the most popular woods for door and window frames⁵.

*Product image for this species not available.



MAYAN NAME⁴

MEXICO

punab



*The sample image of the species may vary in terms of cSCENT and beta, as it is a natural product.

GENERAL CHARACTERISTICS



CONSERVATION STATUS⁷

Category in the IUCN Red List of Threatened Species - Vulnerable. Population - Unspecified.

CITES Status - Listed in Appendix II⁹.



TREE SIZE

From 35 m to 50-70 m tall and with a breast height diameter of 1 m to 1.8-3.5 m⁵.



COLOR - APPEARANCE

Heartwood varies in color from pink to dark reddish brown, with golden hues and a bright gloss; sapwood progressively transitions to a pinkish or yellowish color⁶.



GRAIN - TEXTURE

The fiber is usually straight, although sometimes interlocked. It has a fine, uniform texture with an attractive natural sheen⁵.



RESISTENCIA A LA DEGRADACIÓN

Wood somewhat to moderately resistant to attack by rot fungi; moderately resistant to attack by termites. It is not resistant to marine borers⁵.



SCENT

A distinctive odorless dry wood⁵.



WORKABILITY

Easy to work using hand tools and in all machining operations, yielding smooth surfaces and edges. It can be nailed, screwed, bonded and lacquered without difficulties. It provides an excellent finish for all natural and synthetic products. Slicing and uncoiling processes produce decorative veneers of excellent quality⁵.



COMMENTS

Mahogany is one of the best known and most appreciated woods in the world owing to its aesthetic qualities, technological properties and natural durability, which have made possible a wide range of uses and its commercialization since the 16th century. Only the wood from *S. macrophylla* is traded in significant quantities in national and international markets. The forests of the other two species, *S. mahagoni* (Caribbean region) and *S. humilis* (Pacific slope from Mexico to Costa Rica) are rare and therefore only of local importance⁵.



NATIVE TO

Belize, Bolivia, Northern Brazil, Northeast Brazil, Central-Western Brazil, Colombia, Costa Rica, Ecuador, Guatemala, Honduras, Central Mexico, Gulf of Mexico, Northeast Mexico, Northwest Mexico, Southeast Mexico, Southwest Mexico, Nicaragua, Panama, Peru².

SPECIES NATIVE TO THE SELVA MAYA IN:



PHYSICAL-MECHANICAL PROPERTIES⁸

Density	420	kg/m³
MOEFLEX Elastic Modulus	95880	cm³
RLEFLEX Elastic Resistance Limit	218	kg/cm²
RR Flex Rupture Resistance	537	kg/cm²
PMOECOM for Elastic Modulus Compression Parallel	77790	kg/cm²
PRLECOM for Elastic Resistance Limit Compression Parallel	153	kg/cm²
RR COM for Rupture Resistance	228	kg/cm²
RLE COM for Elastic Resistance Limit Perpendicular Compression	228	kg/cm²
RR Shear for Rupture Resistance Parallel Shear	228	kg/cm²
JK Lateral Lateral Face Hardness	195	kg
JK Lateral Transverse Face Hardness	214	kg

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Angelim Bitterwood (US), Danto (GT)¹, Amargoso (MX)¹

***Vatairea lundellii* (Standl.) Killip²**

CANYUTILÉ²

COMMON NAMES

Picho, Sacacera, Tinco (Mexico); Bitter Angelim (Nicaragua); Coralillo, Bitterwood, Amargo (Panama); Danto, Frijolillo, Medallo, Palo Overo, Palo de Zope (Guatemala); Amargoso Cucaracho (Honduras); Amargo, Cocobolo de San Carlos, Guayabón (Costa Rica); Faveira Amargosa, Amargo (Brazil)².

COMMON USES

Structural components (interior and exterior) for medium to heavy loads, door and window frames, flooring (staves and parquet), decking, exterior cladding, general carpentry, elements for fine furniture and cabinets, decorative veneer².

OTHER USES

The bitter active principle found in the bark and wood is used in home medical remedies².

*Product image for this species not available.





* Imagen de la especie no disponible

GENERAL CHARACTERISTICS



CONSERVATION STATUS

Category in the IUCN Red List of Threatened Species - Vulnerable.
Population - Decreasing population.
CITES status - Not listed⁵.



TREE SIZE

The bitterroot is the only one of approximately eight species of the genus *Vatairea* that exist in Mexico. These trees have straight and slender trunks that reach heights of 30 to 40 m and have breast-height diameters of up to 100 cm².



COLOR - APPEARANCE

Freshly cut, the heartwood has a bright yellow color that on exposure darkens to a medium brown to somewhat orange or olive color with white marbling; sapwood is significantly differentiated ranging from the light brown to yellowish².



GRAIN - TEXTURE

Poorly marked to indistinct growth ring boundaries. Prominent veining, coarse texture. Interlocked grain².



RESISTENCIA A LA DEGRADACIÓN

Wood resistant to moderately resistant to rot fungi. Moderately resistant to termite attack, and susceptible to marine borers².



ALERGIA - TOXICIDAD

Dust produced when the wood is worked can irritate the skin and mucus membranes of susceptible people, which is why it is necessary to use protective equipment (extractor, facemask)².



SCENT

Indistinct scent, strongly bitter taste².



WORKABILITY

Moderate to poor wood for planing and turning. Easy to bore, good for molding and excellent for mortising, although the blunting effect is moderately high. It accepts and holds nails and screws well, although drilling is recommended before nailing or screwing. Responds well to bonding and the use of fasteners. Allows for an excellent finish, preferably with transparent lacquers to preserve the natural grain and color².



COMMENTS

Despite its outstanding biological, aesthetic and technological properties, this wood is not highly known in national and international markets².



NATIVE TO

Belize, El Salvador, Guatemala, Honduras, Gulf of Mexico, Southeast Mexico, Southwest Mexico, Nicaragua, Panama³.

SPECIES NATIVE TO THE SELVA MAYA IN:



PHYSICAL-MECHANICAL PROPERTIES⁴

Density	660	kg/m³
MOEFLEX Elastic Modulus	125460	cm³
RLEFLEX Elastic Resistance Limit	438	kg/cm²
RR Flex Rupture Resistance	787	kg/cm²
PMOECom for Elastic Modulus Compression Parallel	130225	kg/cm²
PRLECom for Elastic Resistance Limit Compression Parallel	271	kg/cm²
RR Com for Rupture Resistance	385	kg/cm²
RLE Com for Elastic Resistance Limit Perpendicular Compression	384	kg/cm²
RR Shear for Rupture Resistance Parallel Shear	384	kg/cm²
JK Lateral Lateral Face Hardness	472	kg
JK Lateral Transverse Face Hardness	486	kg

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Fiddlewood (US), Yaxnik (GT)³, Ya'axnik (MX)¹

***Vitex gaumeri* Greenm.²**

YA'AXNIK³

COMMON NAMES

Spanish: Canelillo, Carrete, Papelillo³.

COMMON USES

Used for furniture construction, general carpentry, veneer and plywood, tool handles and handicrafts³.

*Product image for this species not available.



MAYAN NAME¹

MEXICO

**xaax nik,
ya' axnik,
ya'axnik,
yashnik,
yaxnik, yuy**



*Imagen de la especie no disponible

GENERAL CHARACTERISTICS



CONSERVATION STATUS⁴

IUCN Red List of Threatened Species Category - Least Concern.

Population - Population data unknown.

CITES status - Not listed⁶.



TREE SIZE

Average height of 25 meters³.



NATIVE TO

Belize, El Salvador, Guatemala, Honduras, Southeast Mexico, Southwest Mexico, Nicaragua, Caribbean Southwest².

SPECIES NATIVE TO THE SELVA MAYA IN:



PHYSICAL-MECHANICAL PROPERTIES⁵

Density	670	kg/m³
MOEFLEX Elastic Modulus	126480	cm³
RLEFLEX Elastic Resistance Limit	447	kg/cm²
RR Flex Rupture Resistance	883	kg/cm²
PMOECom for Elastic Modulus Compression Parallel	132475	kg/cm²
PRLECom for Elastic Resistance Limit Compression Parallel	277	kg/cm²
RR Com for Rupture Resistance	420	kg/cm²
RLE Com for Elastic Resistance Limit Perpendicular Compression	420	kg/cm²
RR Shear for Rupture Resistance Parallel Shear	420	kg/cm²
JK Lateral Lateral Face Hardness	512	kg
JK Lateral Transverse Face Hardness	579	kg

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