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INFORMATION LEAFLET
FOREIGN WOODS

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BANAK

Virola spp.
(Myristicaceae, Nutmeg Family)

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Banak wood, because of its characteristics and availability, has aroused considerable interest in the United States as a source of useful material. It comes from a tropical genus known as Virola, which has a considerable number of species. The woods, as far as present knowledge goes, are considered to be much alike (4).²

Common Names

The following names are applied to the trees and woods of the genus Virola in the various countries as indicated:

Acajou - Trinidad
Arbre a suif - Guianas

Anakin - Trinidad
Arvore de sebo - Brazil

Baboen - Guianas
Baboenhout - Guianas
Babun-hudu - Guianas
Banak - U. S. Trade Brit. Hond.
Bastard Banak - Brit. Hond.
Bicuiba - Brazil

Baboenhoedoe - Guianas
Baboentri - Guianas
Bali - Guianas
Banak cedar - Brit. Hond.
Becuiba - Brazil
Bicuiba assu - Brazil

¹Maintained at Madison, Wis., in cooperation with the University of Wisconsin.

²Underlined numbers in parenthesis refer to the list of numbered references at the end of the report.

Bicuiba branca - Brazil
Bicuiba m̃irim - Brazil
Bicuhya - Brazil
Bogamani - Panama

Cacao de monte - Ec.
Camaticaro - Venezuela
Camaticaro rojo - Venezuela
Cajuco - Trinidad
Copidijo - Panama
Cumala - Peru
Cumala caspi - Peru

Dalli - Guianas
Dayapa - Guianas

Frutadorado - Costa Rica, Panama

Gorgorán - Panama
Guinguamadou - Guianas

Hill dalli - Guianas

Jea - Guianas

Kilikowa - Guianas

Mahban - U. S. Trade
Mattoe moenba - Guianas
Mouchigo - Guianas
Moussigo - Guianas
Muscadier fou - Guatemala

Ouarouchi - Guianas

Palo de sangre - Guat.; Hond., Nic.
Pintrie - Guianas

Saint Jean rouge - Guianas
Sangredrigo - Nic.

Tabegua - Panama

Ucufo-ey - Peru
Ucuuba - Brazil
Ucuuba vermelha - Brazil

Virola - Guianas

Wallololo - Guianas
Waroesierjan - Guianas
Warokotie - Guianas

Yayamadou - Guianas

Bicuiba cheiros - Brazil
Bicuiba vermelha - Brazil
Bogabani - Panama

Cajuco - Trinidad
Camaticaro blanco - Venezuela
Caupuri - Peru
Cedrillo - Venezuela
Cuajo - Venezuela
Cumala blanca - Peru
Cumula - Peru

Dari - Guianas

Guiagua - Guianas
Guinguamadou de monte - Guianas

Ira rosa - Costa Rica

Jeamadon - Guianas

Kwatta - Lesser Antilles; Trinidad;
Guianas; S. Ven.; N. Brazil

Malagueta de montana - Panama

Moonba - Guianas
Mouchigo rouge - Guianas
Mucuhya - Brazil
Muscadier a suif - Guianas

Parica - Brazil
Piquibucu - Brazil

Sangre - Guat., Hond., Nic.

Tarosiepjo - Guianas

Ucuhuba - Brazil
Ucuuba branca - Brazil

Voirouche - Guianas

Waroesie - Guianas
Warokoroballi - Guianas
Wild nutmeg - Trinidad

Distribution and Habitat

The 38 or more species³ of the genus Virola are found in tropical Central and South America, throughout the range of the family Myristicaceae, except in Mexico. They rarely occur at the higher elevations in the Andes, flourishing primarily in the mixed hardwood forests of the lowlands. Their distribution includes some of the Lesser Antilles, Trinidad, the Guianas, Southern Venezuela, Northern Brazil in the states of Amazonas, coastal Pará, especially the Amazon estuary (which is inundated by the Atlantic tides), Maranhão, Northeastern Ceará, Pará, Matto Grosso, Goyaz, and the Northern half of São Paulo. Some species grow in the rather dry woods of the "Campos" regions. In Central America the range is from British Honduras and Guatemala to Panama.

The Tree

Size

The genus Virola includes small, medium-sized, and large type species.

Bark

The bark of some species of this genus (Virola) is tapped for an astringent sap, one of the commercial kinos. This is bright yellow at first but turns red as it hardens.

Flowers and Fruit (Nuts)

The seeds of Virola are rich in oil (4, 7) and are used for making candles and soap. They present an attractive appearance because of their shining brown surface and the white, pink, or red lace-like aril (appendage or covering).

The fruits of the related species (Myristica fragrans Houtt.) of the Moluccas and Grenada (Windward Islands) (introduced) are the source of the spices nutmeg and mace (8).

³The most widely distributed species is Virola surinamensis (Rol.) Warb. (Kwatta). Other well known species are V. sebifera Aubl., V. koschnyi Warb. = V. merendonis Pittier.

The Wood

Color

The color of the wood of the Virolas varies from pale brown when fresh to pinkish or deep reddish brown, often with a purplish hue. It somewhat resembles Spanish cedar (5). The sapwood is lighter in color than the heartwood and may or may not be sharply demarcated from it.

Weight

The wood is mostly of moderate density. The specific gravity ranges from 0.60 to 0.75, and the weight from about 27 to 47 pounds per cubic foot when air dry.

Texture, Grain, and Figure

The wood has a medium texture; pores on the longitudinal surfaces are visible as fine grooves without magnification.

The wood is ordinarily straight grained.

Luster

"A plain wood."

Mechanical Properties

Some tests of banak⁴ from British Honduras were made in 1923 on a log 18 inches in diameter and 9 feet long at the Imperial Institute in London (2). These indicated that the strength values for air-dry material (about 12 percent moisture content) compare favorably with United States basswood, a species of much lower density.

Durability

The wood is very subject to attacks by borers if it is allowed to remain in the forest after it is felled. It is probably not resistant to decay by wood-destroying fungi.

⁴This material was described as a species of Myristica, a genus close to Virola with wood described as very similar and admittedly somewhat decayed and not positively identified in the forest.

Seasoning

Banak is said to dry without serious warping or checking, and holds its shape well.

Working Qualities

"It cuts easily with hand and power saws and a good surface is obtainable with jack and smoothing planes, both along and across the grain. Good clear holes are readily obtained with bradawl, gimlet, center bit, and twist drill, without tendency to split. Nails and screws can be driven into the wood easily without splitting it and hold fairly well. It cuts with facility in a mortising machine and works easily with gouge and chisel. The wood turns satisfactorily, though the fibers tear slightly, and a good finish is obtainable. It absorbs glue well, can be stained without difficulty to resemble mahogany fairly well and gives satisfactory results in polishing and varnishing. It holds its place when manufactured, does not warp or check, and is very free from many knots and other defects" (2, 4).

Uses

Both veneers and solid lumber have proved satisfactory for general utility purposes. One use is for drawer bottoms (5).

Marketing Information

The early attempts at marketing the Virolas were not highly successful. One of the difficulties came from "pin worm" damage from boring beetles going deeply into the wood soon after it was cut. Quick removal from the forest after felling appears to be essential. The dry wood was not found to be attacked by the borers.

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