

82. <i>Protium decandrum</i> (Aubl.) Marchal	- tingimoni
82a. <i>Protium guianense</i> (Aubl.) Marchal	- eigrontingimoni
82b. <i>Protium heptaphyllum</i> ssp. <i>heptaphyllum</i> Marchand	
82c. <i>Protium tenuifolium</i> (Engl.) Engl. /	
82d. <i>Protium polybotryum</i> (Turcz.) Engl.	
82e. <i>Protium sagotianum</i> Marchal	

Synonym (82c) : *Protium neglectum* Swart.

Family : Burseraceae

Vernacular names

Suriname	: Grootbladige tingimoni (<i>P. neglectum</i>) / Rode bast tingimoni (<i>P. polybotryum</i>) / Kleinbladige tingimoni (<i>P. heptaphyllum</i>) / Kurokai / Ulu
Guyana	: Common kurokai / Kurokai / Maruwa (<i>P. decandrum</i>)
French Guiana	: Encens gris / Tinguimoni
Brazil	: Almesca / Breu-preto / Breu-branco / Almecegueira (<i>P. heptaphyllum</i>)
Venezuela	: Curacai / Tacamahaco

International trade name : Almesca, Curacai, Mesclão

Occurrence : Suriname, Guianas, Brazil, Central America

Tree description

Bole lenght	: bole 15 -20 m; tree height 15 -30 m
Diameter	: 0.35 - 0.75 m
Log shape	: straight, sometimes fluted; tree base with flat buttresses

Wood description

Sapwood	: not clearly distinct, pale buff to pinkish
Heartwood	: brown or reddish brown with irregularly spaced darker brown streaks
Grain	: straight to very irregular and interlocked
Texture	: rather fine to fairly coarse

Technological characteristics

Physical properties (82, 82b)

	<i>P. decandrum</i>	<i>P. heptaphyllum</i>
Green density	(g/cm ³): 0.90	0.98
Air dry density at 12% MC	(g/cm ³): 0.64	0.72
Tot. tangential shrinkage	(%) : 5.8	6.8
Tot. radial shrinkage	(%) : 3.5	4.2
Tot. volumetric shrinkage	(%) : 9.4	10.7

Mechanical properties (82, 82b)

	<i>P. decandrum</i>	<i>P. heptaphyllum</i>
Bending strenght at 12% MC	(N/mm ²): 108	110
Modulus of elasticity (MOE) at 12% MC	(N/mm ²): 12836	12890
Crushing strenght at 12% MC	(N/mm ²): 61	59

Processing

Sawing	: rather difficult, power required, resin may clog sawteeth; blunting effect: moderate
Drying	: moderately difficult, risk of distortion and checking
Machining	: easy
Gluing	: variable, special care recommended
Nailing	: pre-boring necessary
Finishing	: filler required
Veneering	: peels well

Natural durability

Decay fungi	: poor
Termites	: poor
Marine borers	: poor

Treatability (heartwood) : poor

End uses : interior joinery, framing, light carpentry, furniture, veneer.



Log shape

Tingimoni - *Protium decandrum* (Aubl.) Marchal