AROEIRA

SCIENTIFIC NAME	Astronium Urundeuva
FAMILY	anacardiaceae
INTERNATIONAL NAME	Aroeira
OTHER NAMES	Urundel (Arg.), Arocirá preta, aroeira do sertao, chibatan, Quiebra hacha
AREA OF OCCURRENCE	Temperate and subtropical dry Forest
REGION AND FREQUENCY	States of Santa Cruz, Chuquisaca and Tarija, Bolivia

AROEIRA IN COMPARISON WITH OTHER SPECIES

	massaranduba	ipe	**aroeira**	cumaru	balau/ bankirai	merbau
Density 12%inkg/m³	900	950	**990**	850	700	730
Density (kg/m3)AD	1360	1150	**1220**	1200	1150	1000
Radial shrinkage(R%)	6.3	3.3	**3.7**	5.0	4.6	3.2
Tangential shrinkage(T%)	9.4	5.6	**7.5**	7.6	10.4	5.4
Modulus of Elasticity at 12%(N/mm2)	24700	22000	**15200**	20800	15900	15300
Janka hardness at12%(kgf)	14200	16700	**14170**	15700	7300	6700
Durability class	II	I	**I**	I	I – II	I – II

More other timber species comparison

DESCRIPTION OF THE TREE

TOP	Narrow and open, dark green foliage, compound alternating leaves
TRUNC	Right cylindrical, slender, something grooved in the base, total height up to 20 m
BARK	Dark gray to brown dark, cracked, rough thick and very hard, with deep fissures

ORGANIC CHARACTERISTIC OF THE WOOD

SAPWOOD COLOR	Yellowish with slight rosy tint
HARDWOOD COLOR	reddish Brown
SMELL	Distinctive and pleasant
FLAVOR	Distinctive and bitter
SHINE	Medium
GRAIN	Intertwined
VEINES	Soft
TEXTURE	Fine

ANATOMICAL DESCRIPTION

RINGS OF GROWTH	
Visibility	Visible visibility at first sight
Average number	40 rings in a radius of 10 cm
PORES	
Visibility	Visible with magnifying glass of 10x
Porosity	Diffuse
Type	Closed Loners Form
PARENQUIMA	
Visibility	Visible with magnifying glass of 10x
Quantity	Scarce
Type	Centric and confluent in form diagonal
RADIUS	
Visibility	Not very visible visibility even with glass magnifying of 10x
Stratification	Present

PHYSICAL PROPERTIES	
CONTENT OF HUMIDITY GREEN	%
BASIC DENSITY	0,99 g/cm³
DENSITY AT 12% HUMIDITY	1,22 g/cm³
RADIAL CONTRACTION	3,7%
TANGENTIAL CONTRACTION	7,5%
VOLUMETRIC CONTRACTION	12,5%
RELATIONSHIP T/R	2

MECHANICAL RESISTANCE	
MODULE OF ELASTICITY	152 x 1000 kg/cm²
ROTATING MODULE	1355 kg/cm²
PARALLEL COMPRESSION	644 kg/cm²
RADIAL CUT	202 kg/cm²
JANKA HARDNESS	1417 kg
TENACITY	kg-m

PROSESSING CONDITIONS	
WORKABILITY	Hard, Wood best to use reinforced edge, excellent finish
PRESERVATION	Waterproof
DURABILITY	Very durable, even under extreme conditions
DRYING	Slow, twists and cracking may occur

USES

Construction, Parquet and floors, Rustic furniture

More on Aroeira, see the higly respective The USDA Forest Service Laboratory research and look under Astronium Urundeuva. We also sell the massive durable barauna specie; The USDA Forest Service Laboratory says: "schinopsis performed almost as well as teak". Test is based on cracking, wrapping, erosion and swelling. See here for the complete research (15 pages)

Most common question from the clients: what the difference between Aroeira and Barauna?

Both Aroeira and Barauna at the time of writing (February 2007) are cheaper then the better known Massaranduba. As a fact, the Aroeira and Barauna are the Bolivian versions of the Massaranduba. However, Barauna has better performances and Aroeira can be compared with Massaranduba, however is does crack much less and twist to a lesser extend and Barauna even lesser (see also the aforementioned USDA Tests. Aroeira is more widely available and therefore easier to supply. Resuming:

If you want first quality and speed: Aroeira
If you want prime quality: Barauna
If you want the name: Massaranduba

Apart from all the other characteristics, the difference in color is 99% the same: