Sapele
(Entandrophragma cylindricum)

Common Names:
Aboudikroe, Penkwa, Assi, Sapele, Assie sapelli, Sapele mahogany, Lifari, Sapeli

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Environmental Profile
The species is reported to be relatively secure within parts of its range but it is known to be Vulnerable in Cameroon and the Ivory Coast. It is considered as a Candidate for an environmental status assessment in Ghana and Uganda because it is suspected to be either Extinct, Endangered, Rare, or Vulnerable in those areas (Source - World Conservation Monitoring Center -1992 ).

Distribution
The geographical range of Sapele is reported to extend from the Ivory Coast to the Cameroon, eastward through Zaire to Uganda. It is reported to be found in different forest types, including deciduous, evergreen, and transitional zones.

Product Sources
Some lumber from this species is reported to be obtainable from sustainably managed or other environmentally responsible sources. The International Tropical Timber Organization (ITTO) reports that the species is an important source of timber and is exported regularly. Sapele is reported to be readily available as either veneer or lumber, with prices ranging from average to valuable.

Tree Data
Sapele is a large rain forest tree from Africa. It is reported to grow to heights of 150 feet (45 m), with trunk diameters of 48 to 72 inches (120 to 180 cm). Boles are usually clear and cylindrical to heights of 80 to 100 feet (24 to 30 m). Gum canals are reported to be a natural feature in Sapele.

Sapwood Color
The sapwood is gray-pink or cream in color.

Heartwood Color
The heartwood is pink when freshly cut, but it matures to a red-brown or purple-brown color.

Grain
The grain is moderately interlocked or wavy. Quarter cut Sapele is reported to yield a ribbon, regular stripe or bee's wing. Other cuts feature various desirable patterns, including fiddlebacks, roe or a mottled design, especially in wood containing wavy grain.

Texture
Texture is typically moderately fine.

Odor
The wood has a cedar-like scent that remains even after long exposure.
Ease of Drying
Considerable variations in the seasoning properties of the species have been reported. It is reported to season fairly rapidly, in general, with quartered material seasoning the best.

Drying Defects
Sapele is reported to be prone to distort during drying. Moderate temperatures are recommended especially during the early stages of drying. Slight checking may occur during drying, but the species is generally free from the cross-breaks which occur in African mahogany.

Movement in Service
The timber is reported to have moderate dimensional stability after seasoning, and shows medium movement in use.

Natural Durability
The wood is reported to be susceptible to pinhole borer, and marine borer attack. The sapwood is reported to be readily attacked by powder post beetle, but it is moderately resistant to African termites.

Resistance to Impregnation
The heartwood is nearly untreated, while the sapwood is moderately resistant to preservatives.

Veneering
Sapele is reported to be available at moderate prices as veneer. Sapele pommeleis reported to be a popular veneer for designers in architectural interiors, table tops, and wall paneling. The material is quartered to yield a straight grain appearance, and is usually flat cut for cathedrals.

Blunting
Bunting effect on cutters is rated as rather slight.

Resistance to Cutting
The wood has a low resistance to sawing.

Planning
The material is reported to be generally easy to plane, but interlocked material has a tendency to tear.

Turning
This wood is reported to respond fairly well to turning operations, and works to yield relatively smooth surfaces.

Boring
Boring properties are reported to be good.

Routing and Recessing
The material is reported to be easy to rout.

Mortising
The timber is reported to respond to mortising operations, with only slight dulling effect on cutting edges.

Moulding
Interlocked grain may cause tearing in moulding. A reduced cutting angle is suggested for best results.

Carving
The wood is reported to carve easily.

Gluing
The wood glues fairly well.

Nailing
Nailing and nail holding characteristics are reported to be good.

Screwing
The wood has good screwing and screw-holding properties.

Sanding
Sanding characteristics are rated as very good.

Polishing
Polishing characteristics are reported to be excellent.

Staining
The wood is reported to stain well, but requires some care.

Painting
Painting properties are rated as good.

Steam Bending
Steam bending properties are reported to be rather poor.

Response to Hand Tools
Response to hand tools is reported to be generally good.

Strength Properties
Sapele is reported to be comparable to Oak in strength properties, and is stronger than either African (Khaya) or American mahogany (Swietenia).