



Oxydendrum arboreum

Family: Ericaceae

Sourwood

The genus *Oxydendrum* contains only one species native to North America. The word oxydendrum comes from the Greek, meaning sour and tree, from the acid taste of the leaves.

Oxydendrum arboreum- Arrowwood, Elk Tree, Lily of the Valley Tree, Sorrel Gum, Sorrel Tree, Sour Gum, Titi, Titi Tree

Distribution

From Pennsylvania to Ohio and Indiana, south to Kentucky, Tennessee, Mississippi and Louisiana, east to Florida, Georgia, Virginia and Maryland

The Tree

Sourwood is a medium size tree which grows at altitudes up to 3500 feet in well drained gravelly soils. It grows scattered among Oaks, sweetgum, hickories and pines. It produces white flowers which are bell shaped like Lily of the Valley flowers and capsule shaped fruits. Sourwood attains a height of 60 feet and a diameter of 2 feet.

The Wood

General

The sapwood of Sourwood is wide and yellowish brown to light pink brown, while the heartwood is brown tinged with red, dulling with age. It has no characteristic odor or taste and is heavy and hard. It is diffuse porous.

Mechanical Properties (2-inch standard)

| | Specific gravity | MOE x10 ⁶ lbf/in ² | MOR lbf/in ² | Compression | | WML ^a in-lbf/in ³ | Hardness lbf | Shear lbf/in ² |
|-------|------------------|---|----------------------------|---------------------------------|--------------------------------------|--|-----------------|------------------------------|
| | | | | Parallel lbf/in ² | Perpendicular lbf/in ² | | | |
| Green | 0.50 | 1.32 | 7,700 | 3,250 | 680 | 9.8 | 730 | 1,160 |
| Dry | 0.55 | 1.54 | 11,600 | 6,190 | 1,080 | 10.9 | 940 | 1,500 |

^aWML = Work to maximum load.
Reference (59).

Drying and Shrinkage

| Type of shrinkage | Percentage of shrinkage (green to final moisture content) | | |
|-------------------|--|-------|--------|
| | 0% MC | 6% MC | 20% MC |
| Tangential | 8.9 | – | – |
| Radial | 6.3 | – | – |
| Volumetric | 15.2 | – | – |

Sourwood is difficult to season.
Reference (59)

Kiln Drying Schedules

No information available at this time.

Working Properties: Sourwood is difficult to work.

Durability: No information available at this time.

Preservation: No information available at this time.

Uses: Paneling, bearings of machinery, sled runners, fuel wood and tool handles.

Toxicity: No information available at this time.

Additional Reading and References Cited (in parentheses)

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