



# Baikiaea plurijuga

## Rhodesian teak

by Jim Flynn

### SCIENTIFIC NAME

*Baikiaea plurijuga*. Derivation: The genus name is in honor of Dr. William Balfour Baikie, a West African traveler and Royal Navy surgeon on the Niger Expedition of 1854 to 1857. The specific epithet is indicative of the many yokes (paired leaflets) in the pinnate leaf.



### FAMILY

Fabaceae or Leguminosae, the legume family; (*Caesalpinaceae*) the cassia group.

### OTHER NAMES

Rhodesiese kiaat, gusi, umkusu, Zambesi redwood, umgusi, mukshi, mukusi.

### DISTRIBUTION

This tree is a pure African species growing in Angola, Botswana, Namibia, Zambia and Zimbabwe. It dominates vast tracts of the Kalahari Desert and is often associated with other leguminous tree species.

### THE TREE

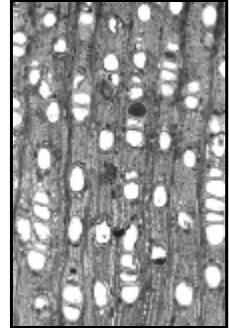
Rhodesian teak is a much-branched tree growing to heights of 50 to 60 feet with clear boles 10 to 15 feet in height and diameters of 30 inches. On young trees, the bark is smooth but later becomes vertically fissured, cracked and brownish in color. The leaves are alternate and compound with four to five pairs of opposite leaflets. The very attractive, large flowers grow on large, strong axillary racemes that are 12 inches long. The fruit is a flattened, woody pod 2 inches wide by 5 inches long. From June to September, the pods split explosively and scatter seeds widely.

### THE TIMBER

The heartwood is an attractive reddish-brown with prominent, irregular black streaks and flecks. The pale pinkish-brown sapwood is sharply demarcated from the heartwood. The texture is fine and even. The grain is straight or slightly interlocked. Luster is low, and the wood is without characteristic odor or taste. Like wood in the *Quercus* genus, Rhodesian teak will stain when moist and in contact with iron because of its tannin content. Average reported specific gravity is 0.73 (ovendry weight/green volume), equivalent to an air-dried weight of 58 pcf.

### SEASONING

Rhodesian teak dries slowly with a good record in terms of degrade. Average reported shrinkage values (green to 12% moisture content) are 1.5% radial and 2.5% tangential. Care in stacking is essential. It is dimensionally stable in service.



### DURABILITY

The durability of Rhodesian teak is excellent. It is moderately resistant to termite attacks. Sapwood is prone to attack by powder post beetles. The heartwood is extremely resistant to preservative treatment. Freshly cut logs must be handled quickly to prevent attack by the forest longhorn beetle. The Zimbabwe Forest Service reports that the wood is unaffected by fungi.

### WORKABILITY

All reports indicate that the wood is difficult to saw. Machinery with adequate power and tungsten-tipped saw teeth is recommended because of the wood's high silica content and gumming of sawteeth when sawn green. Despite the interlocked and variable grain, it planes well to a lustrous, smooth finish. It is an excellent wood for turning. Gluing and finishing are without problems.

### USES

A versatile wood, its uses include furniture, cabinetry, decorative flooring, turnery and carving, decorative veneer and store fittings. The timber is also used as mining timber and in railway sleepers.

### SUPPLIES

The wood is available from commercial sources, and African suppliers state that the wood is in good supply. For members in Great Britain who cannot obtain this species, there is hope. They are advised to be on the alert in the event the flooring of the London Corn Exchange is ever replaced. During the rebuilding in 1952, a special grooved floor was designed to withstand the abrasion from the grain thrown to the floor by the merchants. Rhodesian teak was used for the parquet blocks because of its ability to withstand abrasion without undue wear.

