

Terminalia sericea

Northern Namibia's hardy pioneer

by
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In the eastern Caprivi, there is a border zone 100 metres wide and 90 kilometres long between Namibia and Zambia. There was warfare in this area during the 1970s, and the zone was kept free of vegetation, mechanically but also with herbicides.

Clearing was stopped in 1978. Since then, *Terminalia sericea* has spread naturally over the area. The soil appears well restored and tree growth is vigorous. In some places, trees are 5 metres high.

Easily established, this aggressive species is recommended for reforestation and agroforestry in Owambo, Kavango and Caprivi Districts to provide fuel, poles and other tree products. Good adaptability to drought and moderate adaptability to saline soils make *Terminalia sericea* a potential candidate for reforestation, erosion control and agroforestry at similar sites in other African countries.

Terminalia sericea Burch. ex DC., or silver terminalia (Palgrave, 1990), is a semi-deciduous tree, 3 to 13 metres tall. It grows abundantly in less populated areas of northern Namibia as well as around the Kalahari desert. As long as it is not subject to heavy competition for light, the species thrives across a range of soil-composition, moisture and drainage conditions.

This aggressive colonizer forms dense pioneer thickets on new alluvial, eroded or deteriorated soils. The trees improve sites by draining waterlogged soils, enriching impoverished soils and shading out weeds, allowing climax species to move in. In the later stages of succession, *Terminalia sericea* is found as individual trees, but it seeds and regenerates readily as open sites become available. Only the densest formations of Zambezi teak (*Baikiaea plurijuga* Harms.) or mopane (*Cochlospermum mopane* J. Kirk ex J. Leonard) can exclude it altogether.



In dry areas or on sites that are badly drained, *Terminalia sericea* has low, spreading habits (above). On more favourable sites, the trees grow taller with cylindrical stems and round, flat-topped crowns (below).

The wood is yellow, grained, hard, heavy and very tough. The heartwood is durable—both termite- and borer-proof. The tree's most common use is for fencing around houses and home compounds. For this purpose, terminalia is as good as the more commonly used mopane. Terminalia is also harvested for its bark, which is used as strips to tie frames together for houses and other construction.

The roots have medicinal properties and the silky, silvery leaf hairs are used by Tswana potters as a glaze. A glucoside—nerifolin—isolated from parts of the plant, affects the heart and pulse rate.

Namibia is fortunate to have this useful indigenous tree for future agroforestry and reforestation programmes. In other African countries, reforestation has often been based on exotic plantation species, such as *Eucalyptus globulus* (Pohjonen and Pukkala, 1990), with mixed results.

The growth potential of *Terminalia sericea* should now be evaluated, along with its ecology and silviculture. Provenance research is also a priority. This

species has potential in other African countries with hot, arid climates and on sites with waterlogged or salty clay soils.

Further reading

Palgrave, K.C. (1990). *Trees of Southern Africa*. Capetown, South Africa: Struik, 959 pp.

Pohjonen, V. and Pukkala, T. (1990). *Eucalyptus globulus* in Ethiopian forestry. *Forest Ecology and Management*. 36:19-31.

Rodin, R.J. (1985). *The ethnobotany of the Kwanyama Ovambos*. Monographs in systematic botany. St. Louis, Missouri, USA: Missouri Botanical Garden, 165 pp.

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