

Scientific Name: Vachellia erioloba Synonyms: Acacia erioloba Botanical Family: Fabaceae

Common Names: camel thorn, giraffe thorn, mokala tree, or Kameeldoring

Characteristics:

Acacia erioloba is an evergreen tree that ranges in size from a 2 m (6 foot) tall spiny shrub to a 16 m (~50 foot) tall but generally growing to 8 m (20 feet) tall (3, 4). The branches are a shiny reddish-brown when in adolescence but mature to form a grey to blackish-brown and deeply furrowed bark (2, 3). The branches are heavily protected by 60 mm long (~3 inch) straight, white-brown spines with bulbous bases which appear in pairs at the stem nodes (1, 3, 4). The leaves are twice divided (ie. bipinnately compound) with two to five pairs of pinnae per leaf (3, 4). Leaf surfaces are hairless and

have a prominent underside vein on the undersurface (3, 4). The leaves have 8-18 leaflets on each pinnae (3, 4). After ten years of growth, the tree will produce brilliant yellow, puff-ball shaped, sweetly fragranced flowers in the winter (1). They are in bloom through spring and summer. The fruit is a legume pod approximately 130 mm (5 inches) long by 50 mm (2 inches) wide and 30 mm (1 inch) thick (4). They are externally woody and internally spongy, with varying shapes from cylindrical to flat, thick, semicircular or half-moon shaped (3). Current season's pods are externally grey and velutinous and will persist on the tree with the more darkly colored older pods from the previous years (4). Further, the pods do not open until they fall to the ground in winter. Once opened, the pods reveal the thick, tough, 14mm x 10mm lens-shaped seeds embedded in the pod wall (3).

Natural History:

The giraffe thorn is native to Southern Africa. The distribution of this plant is largely inland in the western half of Africa, from Northern Cape to Limpopo Province. This species also extends south into Namibia, Botswana, Zimbabwe and central Africa (3). This is a protected tree in South Africa (3). This species is highly competitive, and especially where it has been introduced has the potential to displace other species. As such, it has been determined in Australia to have the potential to be highly invasive in Australia (3). Further, as climate changes may favor this species, it could occupy large inland areas of northern Australia if allowed to spread (3).

Cultivation Notes:

This tree can be easily propagated by seed. Seeds can scarified, either by digestion, or after being scrapped, boiled and soaked to weaken the protective waterproof seed coating (3). Seeds may then be sown in a potting mix with both high water holding capacity and good drainage and kept in a warm and moist positon (3). Germination can take up to six weeks from seed (3). It is also possible to propagate using semi-hardwood cuttings (3).

It requires a lot of space and prefers full sun (1). This species is slow growing but able to tolerate very poor soils, hot summer temperatures and severe frosts (3). It grows in areas with annual precipitation between 40 mm to 900 mm (4-35 inches) (3). Where underground water is present, it is believed to put down a taproot that descends to 60 m (180 feet) to access ground water (3). When deprived of water, it develops a more spreading, drooping appearance, and may also become drop its leaves (3). Trees start to flower when about 10 years old (3).

Ethnobotany:

This plant is utilized by people for mostly for its medicinal and material value, but not commonly for landscaping. The dried powder pods can be used to treat ear infections (3). The gum is used to treat gonorrhea and by pulverizing the burned bark it can be used to treat headaches (3). The roots can treat tooth aches. Lastly, to treat tuberculosis the root is boiled and the infusion is gargled by the patient (3). Other ways the plant is useful to humans include use of the root bark by bush men to make quivers, use of the roasted seeds as a substitute for coffee and use of the strong timber as a building material or as firewood (3). The gum is also eaten by both humans and animals (3). The pods are useful fodder for cattle and in Africa, their shade and nutrient rich pods attract wild animals, especially elephants who chew the pods (3).

Height: 20 - 50 feet

Width: 50 - 100 feet Growth Rate: Moderate Growing Grow Season: Spring Flower Season: Winter Color: Yellow Function: Shade Spread: Spreading Allergen: Non-allergenic Invasive: Benign Toxicity: Benign Hardy: Hardy Water Use: Low water Use

Resources:

- 1. Timberlake, Jonathan, et al. *Field Guide to the Acacias of Zimbabwe*. CBC Publishing, 1999.
- 2. Johnson, Matthew. Desert Legume Program. Personal Communication Feb. 19, 2019.
- 3. pza.sanbi.org. Retrieved June 14, 2024
- 4. TreeSA <u>http://treesa.org/acacia-erioloba/</u> Retrieved June 14, 2024.