



Vegetation



KAREE

BOTANICAL NAME **RHUS LANCEA**
MANGO FAMILY **(ANACARDIACEAE)**

Description

An evergreen tree with a loose, rounded crown up to 9 m tall. **Bark** on young branches smooth and reddish brown but rough and dark brown on older branches and stems. **Leaves** drooping, with three leathery, glossy and dark green leaflets up to 150 mm long, middle leaflet the longest, leaf stalk up to 50 mm long. **A flower small, up to 3 mm in diameter, yellow-green, in much-branched sprays at ends of branch lets**, with male and female flowers on different trees. **Fruit** round and slightly flattened, up to 5 mm in diameter, with a thin layer of flesh, glossy brown when ripe. **Wood** reddish brown, hard, tough, close-grained and heavy (air-dry 1 040 kg/m³).

Diagnostic features

Bark rough and dark brown; leaves leathery, with three glossy leaflets up to 150 mm long; small greenish yellow flowers, male and female flowers on different trees; fruit round and slightly flattened.

Habitat

Mostly in woodland or along drainage lines. Grows in practically any soil type. Thrives in poorly drained soils, i.e. black cotton soil.

Cultivation

Grows easily from seed, cuttings or layers. There are approximately 30 000 seed per kilogram. Sow ripe seed in flat seedling trays in a mixture of river sand and compost (8:1). Cover seed with a 5 mm layer of pure river sand. Seedlings can be planted out into black plastic nursery bags when they have reached the 2-leaf stage. Transplant into the veldt or garden when ± 300 mm tall. Cuttings must be made from young branches from September to October. Transplant as for seedlings from December to January. Can be grown from truncheons but they do not strike easily. Fairly fast growing, up to 800 mm per year. The karee is drought and frost-resistant.

A protected tree in the Northern Cape and the Jacobsdal district in the Free State.



Fig a20



Fig a21



Fig a22



Fig a23



Fig a24

FEVER TREE

BOTANICAL NAME **ACACIA XANTHOPHLOEA**
FAMILY **POD-BEARING FAMILY**
(FABACEAE)

Description

A semi-deciduous to deciduous tree up to 30 m tall with an open, rounded to spreading crown. **Bark** lemon- to greenish yellow, becoming powdery. **Stipules** spinescent and in pairs, white and straight, 1085 mm long. **Leaves** twice compound, with 37 pairs of pinnae each with 820 pairs of leaflets, glands present at bases of upper pinnae pairs. **Inflorescence** round, bright yellow and sweetly scented, borne on shortened side shoots represented by clustered scales. **Fruit** a thin non-splitting yellowish brown-to-brown pod slightly constricted between the seeds, breaking transversely into segments. **Wood** pale brown with a reddish tinge, hard and heavy (air-dry 910 kg/m³).

Habitat

The fever tree occurs in low-lying swampy areas, margins of lakes and pans and along riverbanks. Often form dense stands in seasonally flooded areas.

Cultivation

Easily grown from seed. Despite the production of a large number of flowers, often only a few pods develop. Seeds are therefore generally not easy to come by. Soak seeds in hot water, leave overnight and sow the next morning in seedling trays filled with a mixture of river sand and compost (3:1). Cover the seeds with a thin layer of sand and keep moist. Transplant the seedlings into nursery bags filled with a mixture of river sand and compost (5:1) when they reach the 2-leaf stage. Be careful not to damage the long taproot in the process of transplanting. Seedlings and young trees transplant well. One of the fastest growing thorn tree species in southern Africa with a growth rate of 11.5 m per year. It can withstand cold but no cold winds or frost.



Fig a25



Fig a26



Fig a27



Fig a29



Fig a28

MOUNTAIN KAREE

BOTANICAL NAME
FAMILY
(ANACARDIACEAE)

Rhus leptodictya
MANGO FAMILY

Description

An evergreen tree with drooping branches, up to 8 m tall, with a dense crown. **Bark** on young branches reddish brown, but dark brown and rough on older branches and stems. **Leaves** with three dull green sessile leaflets, the middle leaflet the longest, up to 95 x 25 mm, midrib prominent above and below, margin mostly toothed. Leaf stalk up to 50 mm long. **Flowers** in many-branched sprays at tips of branches, flowers small and light yellow, male and female flowers on separate trees. **Fruit** flattened, glossy, light yellowish brown, up to 6 mm in diameter. **Wood** reddish brown, hard and heavy (air-dry 1 010 kg/m³).

Diagnostic features

Branches drooping; bark rough and dark brown, with reddish brown young branches; leaves with three leaflets, leaf margin mostly toothed, leaf stalk up to 50 mm long; flowers in sprays at tips of branches; male and female trees; fruit flattened.

Habitat

Occupies most habitat types but shows a preference for rocky slopes.

Cultivation

Sow seed during December to March in seedling trays filled with river sand. Soak the seed overnight in water for the best results. Cover the seed only slightly with sand and keep moist. Germination is relatively quick, 68 days with a 80100% success. Seedlings can be transplanted into nursery bags when they reach the 2-leaf stage. The mountain karee is frost- (up to -7°C) and drought-resistant and grows in any type of soil. It grows best in full sun but also does well in light shade. The growth rate is fast, up to 1 m per year. Young plants should be pruned to form a single-stemmed tree.



Fig a30



Fig a31



Fig a32

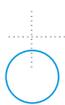


Fig a33



Fig a34

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SWEET THORN

BOTANICAL NAME
FAMILY
(FABACEAE)

ACACIA KAROO
POD-BEARING FAMILY

Description

An evergreen tree up to 20 m. **Bark** rough and fissured on older branches and stems. **Thorns** elongated and abundant on young trees, 30250 mm long. **Leaves** in axils of thorns, twice compound with 26 pairs of pinnae each with 527 pairs of leaflets. **Flowers** sweetly scented, 1013 mm in diameter. **Fruit** a brown sickle-shaped splitting pod up to 160 x 10 mm. **Wood** with a light brown to yellowish sapwood with prominent annual rings and a reddish brown hard and moderately heavy (air-dry 800 kg/m³) heartwood.

Diagnostic features

Young branches reddish brown; thorns in pairs and straight; gland on leaf stalk large; flowers deep yellow and in round inflorescences grouped towards tips of branches; splitting sickle-shaped pod.

Habitat

Occupy most habitat types. Adapted to various climatic and moisture regimes. Most frequently in wooded grassland and on the margins of marshy areas. Not restricted to any specific soil type.

Cultivation

Grows easily from seed. Seed must be soaked in hot water, left overnight and then sown the next morning. Plant seed either directly into small black nursery bags or in flat seedling trays filled with seedling mix obtainable at any nursery. Cover the seed lightly with sand and keep moist. Seeds usually germinate 312 days after being sown. Transplant from the trays when the seedlings unfold their second leaves. In spite of the long taproot, seedlings transplant well. The sweet thorn is frost- and drought-resistant, with a fast growth rate, up to 1 m or more per year being normal. A protected tree in the Northern Cape and Free State.



Fig a35.



Fig a36.



Fig a37

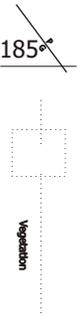


Fig a38



Fig a39



Fig a40



WHITE STINKWOOD

BOTANICAL NAME
FAMILY
(ULMACEAE)

CELTIS AFRICANA
E L M F A M I L Y

Description

A large deciduous (semi-deciduous in forests) tree up to 40 m tall. **Bark** on young branches hairy but smooth, pale grey, sometimes with horizontal ridges on older branches and stems. **Leaves** alternate, simple and light green when young but dark green when mature, with a drip-tip, margin toothed for upper two-thirds, Leaf stalk up to 35 mm long. **Flowers** appearing at the same time as leaves, yellowish green, male flowers sessile and in dense bundles at base of new branchlets and female flowers single or a few together, on long flower stalks. **Fruit** a small yellowish drupe on 2025 mm long fruit stalk. **Wood** moderately hard and moderately heavy (air-dry 750 kg/m³), very flexible, pale lemon yellow with nearly no distinction between sapwood and heartwood.

Diagnostic features

Bark smooth and grey; leaves with three main veins from the leaf base, base asymmetrical; male flowers sessile and in bundles, female flowers on long flower stalks, single or a few together.

Habitat

In high rainfall areas in forests and along streams but in the lower rainfall areas in woodland or wooded grassland, on termite mounds or on rock outcrops. Not restricted to a specific type of soil.

Cultivation

Fresh seed must be collected on the tree as insects invariably infest seeds lying on the ground. Approximately 10 000 seeds weigh 1 kg. Seed collected from frost-hardy trees should be sown if the seedlings are to be planted in areas that experience frost as trees from such areas are genetically adapted to the cold conditions. Sow seed in seedling trays filled with river sand and compost (5:1). Cover the seed with a thin layer of river sand and keep moist. Germination usually takes place within 830 days if the trays are kept in a hot but shady area. The germination percentage is usually 5070%. A fast growing species, usually 2 m per year if planted in deep soil and given enough water. The white stinkwood is drought and frost-resistant. A protected tree in South Africa.



Fig a41



Fig a42



Fig a43

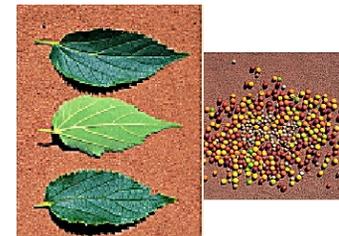


Fig a44



Fig a45