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South African National Biodiversity Institute

2020 trees of the year



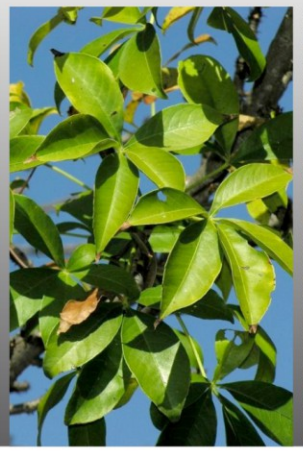
Adansonia digitata

Family: Malvaceae
Common name: baobab



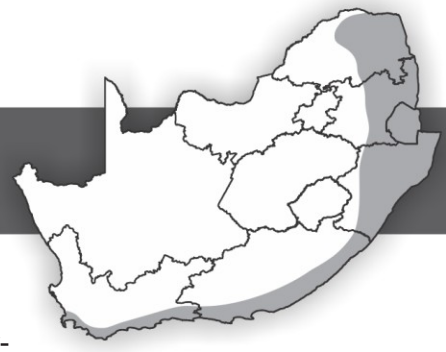
Large, deciduous tree, up to 28 m tall, with a rounded or spreading crown. Stems are large, up to 28 m in diameter. Bark is smooth, grey to reddish-brown, sometimes heavily folded. Leaves grow at the ends of branches, compound with 3–9 leaflets, elliptic to widely lanceolate, dark green. Flowers are solitary, ±150 mm in girth, white with numerous stamens in a tube. They hang upside down and produce an unpleasant smell; petals bruise easily. Flowers open after sunset and remain open until the next morning. Flowering time is from October to December. Fruits are indehiscent, egg-shaped to oblong, 120 mm or longer, with woody shells covered with velvety hairs. Seeds are numerous, dark brown, kidney-shaped, coated with creamy-white powdery pulp. Fruits mature from 5–6 months after pollination, from April or May onwards.








Ekebergia capensis



Family: Meliaceae
Common names: Cape-ash

Evergreen or semi-deciduous, medium to large tree, up to 30 m high, with a rounded crown. Bark is grey-brown and smooth; later rough, peeling off in thick flakes. Trunks are seldom fluted at their bases, young branchlets are slender, usually less than 6 mm in diameter with white lenticels. Leaves are large, dark green with wavy margins; turn yellow and red in drier areas in autumn. Flowers are small, greenish to pinkish-white or cream, sweetly scented in loose sprays. They appear from August to December and ripen to fleshy drupes, hanging in bunches. Fruits are smooth, shiny, round, red to deep red or black when ripe, ±20 mm in diameter, each with up to four seeds. Fruiting time is from November to July.






environment, forestry & fisheries
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Environment, Forestry and Fisheries
REPUBLIC OF SOUTH AFRICA

Attracts birds
Attracts insects
Requires full sun
Protected
Edible
Drought-resistant
Moderate water
Requires lots of water
Useful wood
Medicinal use
Frost tender
Frost-resistant
Evergreen
Deciduous

2030 NDP

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2020 trees of the year

Adansonia digitata L.

Family: Malvaceae
National tree number: 467
Common names: baobab; *kremetart* (Afrikaans); *seboi*, *mohlapu* (Sepedi); *ximuvu* (Xitsonga); *movana* (Setswana); *muvhuyu* (Tshivenda); *isimuku*, *umShimulu*, *isiMuhu* (isiZulu).



General appearance

A massive, deciduous tree, up to 28 m tall, with a rounded or spreading crown. The stem is large, ±15 m in girth or more and up to 28 m for very old individuals. Bark is smooth, grey to reddish-brown and sometimes heavily folded. Leaves grow at the ends of branches, they are compound with 3–9 leaflets; leaflets are 50–150 mm long, elliptic to widely lanceolate, somewhat acuminate, smooth and dark green when mature. Trees remain leafless for 6 months of the year. Flowers are solitary and hang upside down. They are large, ±150 mm in diameter, heavy, waxy white, with silky white hairs inside. They produce an unpleasant smell and petals bruise easily and become brown. Stamens are fused at the base to form a prominent tube. Flowers are fully open soon after sunset and remain open until the next morning, after which they will wilt and fall, usually within 24 hours of opening. Flowering time is in summer, from October to December. Fruits mature from 5–6 months after pollination. They are indehiscent, egg-shaped to oblong, 120 mm or longer, with a woody shell covered with yellow-grey velvety hairs, and contain numerous dark brown, kidney-shaped seeds that are coated with a creamy-white powdery pulp known as cream of tartar.

Distribution and habitat

Baobabs are typically found in dry, hot savanna and at low altitudes in hot, dry, open woodland, often in alluvial soils along rivers and in floodplains, and sometimes on coral rag next to the sea. It occurs in the northern part of South Africa (Limpopo Province), Namibia, Botswana, Zimbabwe, Mozambique and throughout tropical Africa where there is suitable habitat. It is also found in Madagascar, but was probably introduced there.

Meaning of name

The name *Adansonia* commemorates the French surgeon, Michel Adanson (1727–1806); the species name, *digitata*, means 'hand-like', in reference to the shape of the leaves.

Ecology and uses

- Bark is used to make rope, nets and mats, and used medicinally to treat fever.
- The hollow stems have a variety of uses, mainly for shelter by animals such as bats, bees and birds, but in some regions they have also been used as water reservoirs, houses, prisons, storage barns and shelters.
- Leaves are eaten as a vegetable.
- Fruits contains tartaric acid, a source of vitamin C and mineral content, and it has thickening properties. The white pulp in fruits is used to make drinks and as an ingredient in a variety of foods, beverages, confections, sauces and sorbet ice cream.
- Seeds are used to treat diarrhoea, fever and haemoptysis complaints. They are often chewed or can be toasted and used as a substitute for coffee.

Cultivating your own baobab

Baobabs are easily cultivated from seeds, or can be propagated through stem cutting and grafting. Collect fruits from the crown of a standing tree and hit them against a hard surface to break them open. Soak the mixture of pulp and seeds in water and remove the pulp by gently squashing and floating it in water. Dry seeds in the sun for two days and sow in beds or containers. Germination takes place after 15–40 days. Transplant seedlings after 3–4 months. Trees are slow-growing, not frost-resistant and usually only flower after 12–23 years.

Interesting facts

There is a wealth of legend and superstition around these trees. One tale tells of God planting the tree upside down, hence its appearance – from afar the branches look like roots sticking out of the ground. Legend has it that a lion will devour anyone who picks the flowers from a baobab tree, for the blossoms are believed to be inhabited by spirits. It is said that water in which the seeds have been soaked and stirred will act as protection against crocodile attacks, whilst sucking or eating the seeds will attract crocodiles. It is also believed that a man who drinks water infused with the bark will be strong and a baby boy should be washed therein for the first three months, but not for too long or else he'll become obese.

Elephants are known to demolish young trees for water in times of drought. Recent work, using a technique known as carbon dating, and examination of core samples from stems indicate annular rings of a sort, and trees with a diameter of 10 m may be more than 2000 years old. It is, therefore, estimated that large trees may be up to 4000 years old. When trees die, they simply collapse into a huge fibrous mass, however, when interiors of trees are damaged, they may continue to flourish. Bark is often completely stripped from lower trunks, but trees survive, as they are able to regenerate new bark.

Ekebergia capensis Sparrm.

Family: Meliaceae
National tree number: 298
Common names: Cape-ash, dogplum, large-leaved Cape-ash, mountain-ash; *essenhout*, *essenboom*, *Kaapse essenhout*, *transvaalessenhout*, *vaalessenhout* (Afrikaans); *mmidibidi* (Sepedi); *umhomuhomu*, *umnyamatsi* (siSwati); *nyamarhu*, *nyamarhu* (Xitsonga); *motšhai* (Setswana); *muṱovuma*, *muḓouma* (Tshivenda); *umnyamathi*, *umathunzini-wezintaba*, *ungwenya wenzinja*, *umthoma*, *uvungu* (isiZulu).



General appearance

Evergreen or sometimes semi-deciduous, medium to large tree, up to 30 m high, with a rounded crown. Bark is grey-brown, smooth, becoming rough and peeling off in thick flakes with age. Trunks are seldom fluted at their bases, second-year branchlets are slender, usually less than 6 mm in diameter, conspicuously dotted with white lenticels. Leaves are large, up to 500 mm long, compound, with 4–6 leaflet pairs. Leaflets are dark green with wavy margins and in autumn they turn yellow and red in drier areas. Flowers are small, greenish to pinkish-white or cream, sweetly scented, in loose sprays among leaves. They are borne from August to December and ripen into fleshy drupes that hang in bunches. Fruits are smooth, shiny, round, ±20 mm in diameter, red to deep red or black when ripe, each containing up to four seeds. Fruiting time is from November to July.

Distribution and habitat

The Cape-ash occurs in a variety of habitats, from high altitude evergreen forest, to riverine forest along the coastal regions, to savanna woodland and wooded grassland; from sea level to an altitude of about 1 500 m. The Cape-ash is widely distributed in the eastern parts of South Africa, growing from the Western Cape along the coast through to the Eastern Cape, from where its distribution range extends inland and northwards through KwaZulu-Natal, Mpumalanga and Limpopo provinces in South Africa, extending to Eswatini, southern Mozambique, into Zimbabwe and in Botswana. It is also found further north as far as Uganda, Ethiopia and the Democratic Republic of the Congo.

Meaning of name

The genus *Ekebergia* was named after Captain C.G. Ekeberg, whose sponsorship in the 18th century, made it possible for Anders Sparrman (the author of the tree species) to visit Africa. The specific name *capensis* means 'from the Cape' and is used in reference to southern Africa.

Ecology and uses

- Roots are used medicinally to treat chronic coughs, dysentery, gastritis, headache and scabies.
- Bark is used medicinally as an emetic for dysentery and heartburn, whereas an infusion of powdered bark, sometimes mixed with flour, is applied externally to abscesses, boils and acne.
- The wood is soft and used to make furniture.
- Leaves are browsed by antelope and used for fodder during droughts. Leaves are also used as a remedy for intestinal worms.
- The Cape-ash is a food host plant for *Bunaea alcinoe* moth larvae, known as *amacimbi* caterpillars – these are sometimes collected and eaten by local people.
- Flowers are pollinated by bees and ants.
- Fruits are eaten by birds and mammals.

Cultivating your own Cape-ash

Fresh seeds germinate readily under favourable conditions and, with a growth rate of up to 1 m per year, they are reasonably fast growing. Soak seeds in water for a day and sow in trays filled with river sand or normal potting soil, covering them with a thin layer of soil (up to 5 mm). Germination takes place after 4–9 weeks. Trees can also be propagated from cuttings planted in trays filled with river sand, or directly into the soil; they prefer deep sandy soils. After planting, young trees should be watered regularly. They make good shade trees, but are sensitive to severe frost.

Interesting facts

The Cape-ash is often confused with the wild plum (*Harpephyllum caffrum*), which has stiff (not drooping) sickle-shaped leaves. *Ekebergia capensis* is not threatened.

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