

Uses

Vachellia xanthophloea is a multipurpose tree that is important for people as a source of timber, firewood, fodder and medicine. Its cultivation and sustainable harvesting is therefore promoted.

- The wood is hard, heavy and a suitable general purpose timber but it should be seasoned before use otherwise it is likely to crack.
- The main stems and larger branches are used as a live fence in farming communities
- Medicinally the bark is used for treating fevers and eye complaints.
- The fever tree is an exceptionally attractive tree and is often used to decorate gardens and urban landscapes. Its contrasting bark, feathery foliage, and architectural attributes and its fast growth rate makes it suitable for landscaping
- This plant has root nodules containing nitrogen fixing bacteria which play an important role in soil enrichment
- It also works well as a shade tree.
- With its open crown, *Acacia xanthophloea* is a promising plantation tree in agroforestry systems, and its popularity as an ornamental tree is also increasing. This is currently the species of choice in the 'Beautification of Towns and Cities' Program running in Zimbabwe.



FORESTRY COMMISSION



Tree of the Year 2023

Botanical Name: *Vachellia xanthophloea*
Common English Name: Fever Acacia/Fever Tree
Shona Names: Muunga
Ndebele: Umkhanayakude

*Trees and Forests for Ecosystem
Restoration and Improved Livelihoods!*

Contact Details

No.1 Orange Grove Drive, Highlands, Harare
(0242)-498436-9 +263 782 719-997/999

www.forestry.co.zw

<https://www.facebook.com/forestrycommission.zw#>

@forestrycom/@ZimForest/@fitczcf



Derivation of Name

Previously called *Acacia xanthophloea*. *Vachellia xanthophloea* belongs to the pod bearing family. The genus name *Vachellia* is named after George Harvey Vachell (1789 – 1839), who was a collector of plants in China. The species name *xanthophloea* is derived from the Greek words *xanthos* meaning yellow and *phlois* meaning bark. Early pioneers thought that this tree caused a fever since people travelling or living in the areas where it grew contracted a bad fever. They therefore associated the fever with the tree. This however was not true as the swampy places where fever trees grow are also ideal breeding grounds for mosquitoes, which carry malaria but through these early settlers the myth was born and the plant acquired its name as the ‘fever tree.’

Description

Vachellia xanthophloea is a medium-sized tree which grows up to 25 m tall; bole straight, with an up to 60 cm diameter. It has a smooth bark which is powdery, lemon yellow to greenish yellow in colour. Its crown is open, with spreading branches. Young branches are first purple then yellowish in colour, with paired, straight stipular spines up to 7cm long.’

Bark: The characteristic, almost luminous, lime green to greenish-yellow bark is smooth, slightly flaking, and coated in a yellow powdery substance described by some as sulphurous. If the powdery surface is rubbed away with the finger it will reveal a green bark beneath. Young twigs have a red-brown bark which peels off leaving the twigs sulphur yellow. The long straight white thorns are arranged in pairs and although they are very significant on young trees they often become barely noticeable on mature specimens.

Flowers: Bright yellow, golden, ball-like flowers which are sweetly scented are borne in clusters on shortened side shoots at the nodes and towards the ends of branches. Flowering occurs from August or September to November. Flowers are followed by the production of yellowish-brown to brown pods which split open to reveal the small hard brown seeds, which may be harvested from January to April.

Distribution and habitat

The fever tree occurs mainly in depressions and shallow pans where underground water is present or surface water collects after summer rains. It is also found in low-lying swampy areas, along the margins of lakes and on river banks. It often forms pure, dense stands of closed woodland in seasonally flooded areas on alluvial soils. Through its use as an ornamental species however, its distribution has extended beyond its natural habitat. It is now widely popular in many urban areas.

Ecology

- This tree is popular amongst birds for nest building as the thorns add extra protection against predators such as snakes.
- Young branches, leaves, flowers and seed provide food for animals including elephants, giraffes, monkeys and baboons. Insects such as bees are attracted by the yellow colour and sweet scent of the flowers and perform a pollination role.



Growth and Development

The growth rate of seedlings is fast, to a maximum of 7 m tall in 3 years. A growth rate of 1.5 m/year and 2 cm in diameter are common in young trees. The tree is deciduous in nature. The flowers are pollinated by insects such as bees and butterflies. In southern Africa flowering occurs in September–November, fruiting in January–April. *Vachellia xanthophloea* suffers stripping of bark, browsing and breakage by elephants, but exhibits high resilience to disturbance. Wild animals, particularly monkeys, play the role of seed dispersal as they consume the pods. Propagation is also promoted through wind and water dispersal



Propagation and Planting

- Seed production is often poor as a result of predation by animals.
- Seeds can be stored for a long time in a dry place but care should be taken to protect them from insect damage.
- Seeds should be soaked on hot water overnight or can be scarified mechanically
- Germination is generally fair, reaching about 70% after 2 weeks.
- When seedlings have reached the 2-leaf stage 6–8 weeks after sowing, they should be transplanted from seedling trays into nursery bags.
- Care should be taken not to damage the long taproot.
- *Vachellia xanthophloea* can also be propagated by cuttings.

