

Identification of prickly bushes

Prickly acacia (*Vachellia nilotica*), **Mesquite** (*Prosopis* spp.),
Parkinsonia (*Parkinsonia aculeata*), **Mimosa bush** (*Vachellia farnesiana*)



Prickly acacia



Mesquite



Parkinsonia



Mimosa bush

Four prickly leguminous bushes or trees are woody weeds of western Queensland. Because two or more are often present in the same area, land managers should correctly identify them before considering control measures.

With practice, mature plants of the four species can often be recognised from a distance by their overall shape and sometimes their foliage colour.

However, because many trees are not the 'standard' shape or colour, quick visual identifications from afar are not always correct. All four species produce thorns, yellow flowers and bean-like seed pods. For positive identification a plant must be examined closely.



Description

Prickly acacia

Restricted category 3 invasive plant

Prickly acacia (*Vachellia nilotica*) is a thorny tree growing to 10 m high but usually only to about 4–5 m. It has ferny type leaves, as does mimosa bush and mesquite. Prickly acacia is usually single stemmed unless damaged by fire or frost, when it becomes multi-stemmed at the base. The flowers are ball-shaped, golden yellow and about 1 cm across.

The pods are usually 10–15 cm, flattish, have constrictions between the seeds and are greyish when ripe. Young plants are very thorny but older plants tend to lose most thorns. The thorns are in pairs along the stem and are usually 1–5 cm long.

Mesquite (other common name: Algaroba)

Prohibited and restricted category 3 invasive plant

Mesquites (*Prosopis* spp.) are the most variable in size, shape and foliage colour of the four woody weeds described in this fact sheet. This is because more than one species is covered by the common name of mesquite: *Prosopis pallida*, *Prosopis glandulosa*, *Prosopis velutina* and a hybrid mesquite (*Prosopis* spp. hybrid).

Mesquites are thorny, usually spreading trees growing to 15 m tall. They were favoured historically as shade trees and are often found around homesteads and stockyards. Depending on the species, they can have a multi-stemmed shrubby habit with branches drooping to ground level or are single stemmed trees with spreading canopies.

The foliage is usually green but can vary to blue-green. The twigs are smooth, often with dark red or green bark, and zigzagged with straight, stout pairs of thorns usually 1–3 cm long. Overall, trees appear rather untidy with individual zigzagged twigs protruding beyond the main canopy. They are not as neat in appearance as prickly acacia.

The greenish-cream flower is 5–8 cm long, and cylindrical (described as ‘lamb’s tail’). The pods are 10–20 cm long, straight to slightly curved, smooth, with slight constrictions between the seeds, and straw coloured when ripe. In some species the pods may be purplish.

Parkinsonia (other common names: Jerusalem thorn, jelly bean tree)

Restricted category 3 invasive plant

Parkinsonia (*Parkinsonia aculeata*) is a thorny shrub or small tree which can grow to 10 m tall. It can be either single or multi-stemmed. The leaves are different to the ferny leaves of prickly acacia, mimosa bush and mesquite. They consist of a flattened leaf stalk up to 30 cm long with tiny oblong leaflets in rows along each side. Sharp, recurved thorns up to 1 cm long are found on the stem at the base of each leaf.

The stems, branches and often the trunk of parkinsonia are characteristically green. Perfumed flowers are mainly yellow, except that one of five petals has an orange spot or is completely orange. Flowers are arranged in drooping sprays about 20 cm long. The pods are straight, 5–10 cm long, straw to brown coloured, with long constrictions between the seeds.

Mimosa bush

Invasive plant

Mimosa bush (*Vachellia farnesiana*) is a rounded shrub growing to 3 m tall; it occasionally grows into trees up to 5 m tall. It has ferny type leaves, which are sometimes more of a yellowish green than the pure green of prickly acacia. The plant is nearly always multi-stemmed. The flowers are identical to those of prickly acacia except that they are sometimes more orange in colour.

The pods grow up to 6 cm long, are cigar shaped, slightly curved, and brown to black when ripe. The thorns are similar to those of prickly acacia.

Distinguishing characteristics

Fortunately, the four prickly bushes or trees can be easily distinguished, as follows:

- parkinsonia has leaves that are a flattened green leaf stalk with small leaflets moderately spaced along each side. The other three weeds all have ferny type leaves
- mesquites are easily distinguished from prickly acacia and mimosa bush by the flowers—‘lamb’s tail’ for mesquite versus small round flowers for the other two
- prickly acacia and mimosa bush are easily distinguished by their seed pods—constrictions between the seeds for prickly acacia versus a cylindrical pod for mimosa bush.

If there are no flowers, pods alone can be used to distinguish mesquites, prickly acacia and mimosa bush.

- If there are no flowers or pods, bark colour can be used, with some expertise.
- Parkinsonia plants of all ages have green bark.
- The young bark of mesquite is often green and/or dark red.
- The young bark of prickly acacia has a tinge of orange or green.
- In mimosa bush, the young bark is grey with white spots.

Further information

Further information is available from your local government office, or by contacting Biosecurity Queensland on 13 25 23 or visit biosecurity.qld.gov.au.

Table 1. Some characteristics to distinguish between the prickle bushes

Characteristic	Prickly acacia	Mesquite	Parkinsonia	Mimosa bush
Pod shape	Up to 23 cm long with constrictions between seeds	Up to 20 cm long, slight constrictions between seeds; straight or slightly curved	Up to 10 cm long, long thin constrictions between seeds; straight	Cigar-shaped, up to 6 cm long and slightly curved
Flowers	Ball-shaped, golden yellow, about 1 cm across	Greenish-cream flower spike 5–8 cm long and cylindrical in shape	Five petals mainly yellow except one which has an orange spot	Ball-shaped, golden yellow, about 1 cm across
Pod colour, hairiness	Blue-grey, fine hairs	Straw coloured, sometimes purple; no hairs	Straw coloured pod; no hairs	Brown to black; no hairs
Leaves	Leaves fern-like; 4 to 10 pairs of leaves, often overlapping	Leaves fern-like; 1 to 3 pairs of leaves, often with a gap between leaves	Leaves with long flattened leaf stalk with tiny oblong leaflets along each side	Leaves fern-like; 2 to 4 pairs of leaves with a gap between leaves
Leaflets	10 to 25 pairs or leaflets	10 to 14 pairs or leaflets		8 to 18 pairs of leaflets
Tree shape	Spreading tree to 10 m tall	Variable shape, usually a spreading tree to 15 m tall	Small tree or shrub usually to 5 m tall	Usually rounded shrub to 3 m tall
Bark	Bark on saplings has tinge of orange and/or green. Mature trees have dark rough bark	Bark rough, grey; smooth dark red or green on small branches	Bark smooth and green, straw coloured and lightly textured at base of older trees	Bark grey with prominent white spots
Branch shape	Branches more or less straight	Branches zigzag shaped	Branches slightly zigzagged	Branches zigzag shaped

Identification of prickly bushes – flowers



Prickly acacia



Mesquite



Parkinsonia



Mimosa bush

Identification of prickly bushes – pods



Prickly acacia



Mesquite



Parkinsonia



Mimosa bush



This fact sheet is developed with funding support from the Land Protection Fund.

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