

Botanical name

Acacia lasiocalyx C.R.P.Andrews, J. W. Austral. Nat. Hist. Soc. 1: 41 (1904)

The botanical name is derived from the Greek *lasios* (shaggy, hairy) and *calyx* (cup) and refers to the densely hairy calyx that is found on this species.

Common name

None known.

Characteristic features

Branchlets lightly pruinose. *Phyllodes* long, narrow and strap-like, finely multi-nerved, curved at the acute to acuminate apices. *Spikes* long, densely flowered, on relatively long peduncles. *Pods* long, narrow and +/- pruinose.

Description

Habit. Spreading, open, glabrous *shrubs* or *trees* 2-5 m and 2-6 m wide (perhaps reaching wider, but needs confirming), around the base of granite rocks (outside the Kalannie region) it can grow as erect trees to 12 m tall and with sub-straight, sparingly divided trunks (DBH 40-45 cm).

Bark. Grey, fibrous and longitudinally fissured on the main stem, smooth on the upper branches.

Branchlets. Orange-brown, lightly pruinose.

Phyllodes. Narrowly linear and strap-like, flat, 13-30 cm long, 2-6(-10) mm wide, coriaceous, not rigid, widely spreading to pendulous, sub-straight to recurved, green (can be grey-green to sub-glaucous when young); *longitudinal nerves* numerous, fine and close together, the central nerve more evident than the rest; *apices* obviously curved and acute to acuminate, not pungent.

Spikes. Mostly paired within axil of phyllodes, 3-5 cm long and 10-11 mm in diameter when fresh, bright golden, the flowers densely arranged within the spikes; *peduncles* 8-17 mm long.

Flowers. 5-merous; *sepals* united.

Pods. Linear to sub-moniliform, 8-16 cm long, 4.5-5.5 mm wide, thinly coriaceous, straight to shallowly curved, +/- pruinose.

Seeds. Longitudinal in the pods, 5-6 mm long, 2.5-3 mm wide, glossy, dark brown to black; *funicle/aril* thick and in several loops at seed-end.

Taxonomy

Related species. *Acacia lasiocalyx* is most closely related to *A. conniana* (which does not occur in the Kalannie region). It is also related to *A. longiphyllodinea* which has terete phyllodes that lack a clearly defined basal pulvinus and which are continuous on the branchlets.

Superficially similar species. *Acacia lasiocalyx* is similar in some respects to *A. yorkrakinensis* subsp. *acrita* which is most readily distinguished by its grey-green to glaucous, often shorter phyllodes and its shorter spikes which are arranged in short racemes.

Distribution

Widely distributed in south-west Western Australia from near Enneaba east to near Kalgoorlie and south to near Bremer Bay and Mt Heywood (north-east of Esperance).

Acacia lasiocalyx is rare in the Kalannie region being known from only two small roadside populations, one northeast of Wubin and the other west of Kalannie

township. In other parts of its range (including just outside the Kalannie region) the species can be quite common in the places where it occurs.

Habitat.

Over its geographic range this species grows in sand, gravelly sand, loamy sand, clayey sand and loam, commonly on slopes of granitic hills, granite outcrops and such granitic sites, but it also occurs on sandplains and on laterite, in mallee woodland, mallee heath and open heath. The plants growing at the base of granite rocks often form dense colonies and attain an arborescent habit, their main trunk tend to be straighter and more erect than on plants occurring elsewhere.

Recorded from the following Kalannie region Land Management Unit. Shallow Soil over Granite.

Conservation status

Although *A. lasiocalyx* is rare within the Kalannie region in the broader context is not considered rare or endangered.

Flowering

Over its geographic range *A. lasiocalyx* flowers from July to October.

Plants in the Kalannie region were in full flower in early September 1997.

Fruiting

Over the geographic range of this species pods with mature seeds have been collected from November to January.

There is no information available regarding the period of fruit set for the Kalannie plants.

The pods are easily collected by hand or by simple threshing techniques. The main problem associated with seed collection relates to the height of mature plants.

Biological features

Toxicity. The phyllodes of *A. lasiocalyx* contain relatively high concentrations of cyanogenic glucoside; however, they do not appear to possess an endogenous enzyme that is needed to hydrolyse this into hydrogen cyanide (Maslin *et al.* 1987). There are no reported cases of stock losses involving this species.

Wood. Air dry density is 800 kg/m³, based on 2 samples tested (G. Pronk, pers. comm.).

Propagation

Propagate from seed or cuttings according to Elliot and Jones (1982).

Revegetation

Although *A. lasiocalyx* is rare in the Kalannie region the species is worth investigating for use in shelterbelt planting within the area. Its growth form is suited to providing windbreaks and visual screens, as well as shade and shelter for both stock and wildlife. Under natural conditions (outside the Kalannie region) it often forms dense populations around the base of granite rocks, e.g. Mollerin Rock.

Utilisation

Windbreak. See Revegetation above.

Shade, shelter and visual screen. See Revegetation above.

Wildlife refuge. See Revegetation above.

Amenity planting. A decorative, long-lived small tree useful for providing shade in amenity plantings.

Wood. Some plants occurring at the base of granite rocks which have relatively undivided, sub-straight boles and may be worth examining as a potential source of small poles and other timber products. These forms of *A. lasiocalyx* do not occur in the Kalannie region but they are present in areas just to the southeast around Mollerin.

References

Elliot, W.R. and Jones, D.L. (1982). *Encyclopaedia of Australian Plants suitable for cultivation*. vol. 2. (Lothian Publishing Company).

Maslin, B.R., Conn, E.E. and Dunn, J.E. (1987). Cyanogenic Australian species of *Acacia*: A preliminary account of their toxic potential. pp. 107-111. In: Turnbull, J.W. (ed.) 'Australian *Acacias* in Developing Countries'. Proceedings of an international workshop held at the Forestry Training Centre, Gympie, Qld, Australia, 4-7 August 1986.