

Botanical name

Acacia affin. *rigens*

The taxon described here has affinities to *A. rigens* but the nature of the relationship needs yet to be assessed.

Common name

None known.

Characteristic features

Phyllodes terete, sub-rigid, erect, very finely multi-nerved; *pulvinus* hairy on upper surface. *Heads* +/- globular, on very short peduncles. *Pods* moniliform to sub-moniliform, very thinly textured and readily breaking into 1- or few-seeded articles at the constrictions between the seeds.

Description

Habit. Obconic or rounded, multi-stemmed *shrubs* 0.7-1.7 m tall and with dense, spreading crowns 1.5-2.5 m wide, main stems slender (less than 1 cm diameter at ground level).

Bark. Smooth and grey to ends of branchlets

New shoots. Reddish brown.

Branchlets. Minutely hairy near base of phyllodes and at extremities of young branchlets, otherwise glabrous.

Phyllodes. Terete, 2.5-5 cm long, 0.7-1 mm wide, sub-rigid, erect, shallowly incurved, glabrous (except hairy at extreme base just above the pulvinus), pale green or sub-glaucous; *longitudinal nerves* numerous, very fine and close together; *apices* narrowed to shortly acuminate, sub-straight or shallowly curved, dark brown, innocuous to somewhat pungent points; *pulvinus* densely white hairy on the upper surface.

Heads. Single (rarely twinned) within axil of phyllodes, globular to slightly obloid, 16-18-flowered; *peduncles* 2-3 mm long, hairy but the indumentum obscured by resin.

Flowers. 5-merous; *sepals* free to variably united.

Pods. Moniliform to sub-moniliform, 3.5-6 cm long, 1.8-2.2 mm wide, chartaceous to very thinly crustaceous, readily breaking into 1- or few-seeded articles at the constrictions between the seeds, +/- straight, glabrous, yellow-brownish.

Seeds. Oblong-elliptic, 2.5-3 mm long, 1.5 mm wide, very dark brown to blackish; *aril* terminal and creamy white.

Taxonomy

The taxonomic status of this apparently rare taxon is unknown and further studies need to be conducted.

Related species. This taxon seems to have some affinities with *A. rigens* (which does not occur in the Kalannie region).

Distribution

Apparently confined to the Kalannie region (in the Goodlands Landcare District) where it is rare but locally abundant at the two localities where it is known to occur.

Habitat

Grows on hard brown granitic clay-loam beneath Mallee eucalypts (*Eucalyptus subangusta* and *E. celastroides*) and *Melaleuca uncinata*.

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

Conservation status

This taxon has been recommended for inclusion on the *Declared Rare and Priority List* of the Department of Conservation and Land Management, as a Priority 1 taxon.

Priority 1 - Poorly Known Taxa. 'Taxa which are known from one or a few (generally <5) populations which are under threat, either due to small population size, or being on lands under immediate threat, e.g. road verges, urban areas, farmland, active mineral leases, etc., or the plants are under threat, e.g. from disease, grazing by feral animals, etc. May include taxa with threatened populations on protected lands. Such taxa are under consideration for declaration as 'rare flora', but are in urgent need for further survey.'

Flowering

The Kalannie population of this species flowers for July to mid-August (E. Hudson, pers. comm).

Fruiting

Plants from the Kalannie region were with mature seed in early December 1996. Further studies are needed to accurately determine the phenology of this species.

There are about 375 000 seeds per kilogram. *Note:* This figure is derived from a single sample counted by Angela Waters (Kalannie Tree Supplies) and would most probably have included both viable and non-viable seeds.

Biological features

No information available.

Propagation

Informal germination tests, using various hot water treatments, were conducted by Angela Waters (Kalannie Tree Supplies). Good results were achieved by first soaking the seed overnight in just-boiled water prior to sowing, or by boiling the seed for 1 minute prior to soaking. Untreated seed showed a reduced germination response.

Revegetation

This rare taxon would appear to have limited potential for use in revegetation programs within the Kalannie region. Under natural conditions it forms dense, localized populations beneath Mallee eucalypts.

Utilisation

Soil stabilisation. This taxon may have potential for use in erosion control of some granite soils.

Wildlife refuge. Its low-spreading growth form and dense crowns renders this taxon suitable for protection of small wildlife; it would be particularly effective in this regard when individuals grow close together.