Botanical name

Acacia cylindrica Cowan & Maslin, Nuytsia 10: 31 (1995)

The botanical name is derived from the Latin, *cylindricus* (cylindrical), in allusion to the cylindrical shape of the flower spikes which distinguishes the species from most of its presumed closest relatives.

Common name

None known.

Characteristic features

Bark dark- to mid-grey. *Branchlet* tips with silvery white appressed hairs between the reddish brown resin ribs. *Phyllodes* long, +/- terete, sub-rigid, finely multi-nerved (the nerves sub-equally prominent), dull greyish green, somewhat rigid; *apices* acuminate to short-acuminate and ending in a shallowly curved, hard, brown point.. *Spikes* +/- sessile. *Flowers* 4-merous. *Pods* linear, narrow, flat.

Description

Habit. Narrowly obconic *shrubs* 1.5-4 m tall and normally 1-3 m wide, single-stemmed or 2-3-branched at (or just above) ground level, the main stems 3-6 cm diameter at ground level and together with the branches are rather straight, crowns rounded to sub-rounded, normally not dense and occupying 20-40% of the total plant height (however, in open sites such as gravel pits it grows as a rounded shrub to 3 m across with a rather dense crown occupying 30-60% of the total plant height, when occurring in dense scrub the plants can have a rather spindly growth habit).
Bark. Dark- to mid-grey, thin, very finely longitudinally fissured on lower part of stems, smooth on upper branches.
Branchlets. With silvery white appressed hairs between the reddish brown resin ribs at extremities.
Phyllodes. Terete or quadrangular-terete, 7-13 cm long, about 1 mm wide, sub-rigid, ascending to erect, straight to very shallowly incurved, dull, greyish green, whitish in the shallow longitudinal grooves between the nerves due to minute appressed hairs; *longitudinal nerves* 16 (but sometimes only 8 superficially visible: observe at x10 magnification), close together, slightly raised and sub-equally prominent (the broadest ones located on the four slight angles and about 0.2 mm wide), resinous (but not viscid); *pulvinus* pale yellow-orange and obscured by a dense layer of silvery hairs; *apices* acuminate to short-acuminate and ending in a shallowly curved, hard, brown, innocuous or somewhat spiny point.
Spikes. Single or paired within axil of phyllodes, +/- sessile (*peduncles* 0-2 mm long and densely silvery appressed-hairy), bright golden, prolific, 15-20 mm long and 8 mm wide when fresh, flowers densely arranged within the spikes.
Flowers. 4-merous; *sepals* 1/2-3/4-united.
Pods. Linear, flat, slightly raised over the seeds and slightly constricted between them, 6-7(-8.5) cm long, 2-2.5 mm wide, pendulous to widely spreading, firmly chartaceous to thinly crustaceous, straight, light brown but with a silvery sheen due to minute, appressed hairs (observe at x10 magnification), the margins light brown.
Seeds. Longitudinal in the pods, 3.5-4 mm long, about 1.5 mm wide, +/- shiny, light greyish brown, areole cream; *aril* white.

Taxonomy

Related species. *Acacia cylindrica* was erroneously placed in the “Acacia heteroneura group”, by Cowan and Maslin (1995). Its closest affinities are with *A.*

filifolia and related taxa (see Maslin, in press), none of which occur in the Kalannie region.

Superficially similar species. *Acacia cylindrica* sometimes grows with *A. coolgardiensis* subsp. *coolgardiensis* and the two taxa can be easily be confused on account of their similar growth habits, long, slender, terete phyllodes, +/- sessile inflorescences and narrow pods. Despite these similarities the two taxa are not particularly closely related. Subspecies *coolgardiensis* can be distinguished by its less rigid, often somewhat shorter phyllodes, shorter spikes, 5-merous flowers (observe under magnification) and terete pods. Also, in the field subsp. *coolgardiensis* is further distinguished by its shallowly fluted trunks and commonly lighter grey bark.

Acacia longispinea is superficially similar to *A. cylindrica* in its growth form and in phyllode length and colour, however, these two species are not at all closely related. *Acacia longispinea* differs very markedly from *A. cylindrica* in having prominently 5-nerved phyllodes and globular heads on long peduncles; the two species grow together in a few places in the Kalannie region.

Distribution

Occurs in Western Australia where it has commonly been collected in the Southern Cross to Bullfinch area; it also occurs at Mt. Correll (about 50 km north of Bullfinch) and Bungalbin Hill (about 50 km north of Koolyanobbing) as well as in the Kalannie region (about 200 km northwest of Southern Cross).

Acacia cylindrica has a scattered distribution and is not especially common in the Kalannie region, but it is reasonably frequent in the places where it does occur.

Habitat

Over its geographic range this species grows in deep yellow sand or gravelly, well-drained sand on flat to gently undulating plains or on the sides of low hills, in open shrubland.

In the Kalannie region it grows on yellow sand in dense, low shrubland towards the base of low rises. In some places it regenerates well in disturbed sites such as gravel pits and along roadverges.

Recorded from the following Kalannie region Land Management Units. Sand over Gravel; Spillway Sand.

Conservation status

Treated as a Priority 3 taxon on the Department of Conservation and Land Management's *Declared Rare and Priority Flora List*.

Priority 3 - Poorly Known Taxa. 'Taxa which are known from several populations, at least some of which are not believed to be under immediate threat (i.e. not currently endangered). Such taxa are under consideration for declaration as 'rare flora', but are in need of further survey.'

Flowering

Over its geographic range *A. cylindrica* flowers from August to October.

Plants in the Kalannie region were at full anthesis in early September 1997.

Fruiting

Over the geographic range of this species pods with mature seeds have been collected in December, but there are very few fruiting collections.

Most pods had dehisced on plants collected from the Kalannie region in early early December 1996, indicating that mature seeds would have been present in November, at least in this region.

Biological features

Diseases. Some plants, especially those in regrowth populations around gravel pit, are highly susceptible to infestation by Gall Rust.

Propagation

No information available.

Revegetation

Useful for inclusion in mixed plantings on soils with sandy profiles.

Utilisation

Windbreak and shelter belts. Has potential as a low windbreak. Plants are likely to develop their best form for this purpose (i.e. crowns moderately dense and spreading to 3 m across) if grown in open sites away from competition. In dense vegetation the crowns are somewhat sparse and not especially spreading.
Visual screen. The growth form of this species offers some potential for use as a visual screen.
Wildlife refuge. On account of its growth form and because it can form rather dense populations this species would be suitable for offering shade and shelter for larger animals such as Kangaroos.

References

Cowan, R.S. and Maslin, B.R. (1995). *Acacia* Miscellany 10. New taxa and notes on previously described taxa of Acacia, mostly section Juliflorae (Leguminosae: Mimosoideae), in Western Australia. Nuytsia 10(1): 15-62.

Maslin, B.R. (in press). *Acacia*. In *Flora of Australia* vol. 11 (CSIRO, Melbourne: Australia.)