

Botanical name

Acacia stereophylla Meissner in J.G.C.Lehmann subsp. *stereophylla*, Pl. Preiss. 2: 203 (1848)

The botanical name is derived from the Greek *stereos* (stiff) and *phyllon* (leaf), and refers to the rigid phyllodes that typify this species.

Common name

Stiff-leaf Wodjil.

Characteristic features

Bark dark grey. **Branchlets** lenticellular. **Phyllodes** long and narrow, flat, rigid, ascending to erect, very finely multi-nerved, apices acute but not pungent; **pulvinus** smooth, pale orange, flared at its base. **Spikes** on short peduncles. Pods rather short, flat, chartaceous.

Description

Habit. *Shrubs* or *small trees* (1-)2-4(-6) m tall with crowns 2-6 m wide, young plants multi-stemmed with dense, rounded crowns occupying 80-90% of the total plant height, mature plants either single-stemmed (branching at about 1 m above ground level) or multi-stemmed and the crown confined to the upper half of the plants.

Bark. Dark grey, thin and hard, finely fissured on the main stems.

Branchlets. Glabrous except minutely hairy in axil of phyllodes, lenticellular.

Phyllodes. Linear, flat, 8-17 cm long, 3-6 mm wide, flat, rigid, ascending to erect, straight to shallowly incurved, glabrous, green to grey-green or sub-glaucous; *longitudinal nerves* numerous, very fine and close together, sometimes the central nerve slightly more evident than the rest; *apices* acute, not pungent; *pulvinus* discrete, pale orange, smooth, flared at its base.

Spikes. Paired within axil of phyllodes, 13-35 mm long and 6 mm in diameter when fresh, golden; *peduncles* 2-5 mm long, minutely hairy.

Flowers. 5-merous; *sepals* 1/4-1/2-united.

Pods. Narrowly oblong, raised over and irregularly constricted between the seeds, 1.5-4 cm long, 4-5 mm wide, pendulous, straight, chartaceous, glabrous, straw-coloured or light brown.

Seeds. Longitudinal to slightly oblique in the pods, about 3 mm long and 2 mm wide, glossy, brown, sometimes yellowish at centre with the pale-coloured tissue extending to the hilum; *aril* sub-lateral, cream.

Taxonomy

Varieties. *Acacia stereophylla* comprises two varieties, var. *stereophylla* and var. *cylindrata*, but only the former occurs in the Kalannie region. Variety *cylindrata* is recognized by its terete phyllodes.

Related species. Related to *A. sibina* which is most readily distinguished by its terete phyllodes (see *A. sibina* for further details).

Distribution

Occurs in Western Australia from Nerren Nerren Station southeast to Tammin and Boorabbin.

Acacia stereophylla subsp. *stereophylla* is not overly common in the Kalannie region but is abundant in the places where it occurs.

Habitat

Over its range this subspecies grows in sand, gravelly sand and loam and is often common in the places where it occurs.

In the Kalannie region it grows on a variety of light-textured soils but prefers shallow sand over laterite.

Recorded from the following Kalannie region Land Management Units. Wodjil; Sand over Gravel; Pediment; Deep Yellow Sand; Shallow Soil over Laterite; Spillway Sand.

Conservation status

Not considered rare or endangered.

Flowering

Over its geographic range var. *stereophylla* flowers from August to October.

In the Kalannie region this subspecies was in bud and just reaching anthesis in early September 1997.

Fruiting

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

In mid-December 1996 plants from the Kalannie region had pods with mature seeds.

The pods are numerous on the plants and easily collected by hand; they do not dehisce readily upon collection and it can be a tedious job removing the seeds from the small papery pods.

Biological features

Growth characteristics. Can withstand extended dry periods and is frost tolerant (Elliot and Jones 1982).

Propagation

Propagate from seed.

Revegetation

Acacia stereophylla subsp. *stereophylla* is a hardy species that is suitable for revegetation work within the Kalannie region, particularly on sites with surface gravel. It grows naturally on a range of light-textured soils and would be well-suited for soil stabilisation in disused gravel pits and for inclusion in shelterbelt plantings on light-textured soils.

Recent observations in the central wheatbelt showed natural regeneration of this species within a gravel pit located in a paddock that had been under crop and pasture for about 50 years; this suggests that seed of this species can remain viable in the soil for long periods (A. Napier, pers. comm.).

Wilcox *et al.* (1996) recommend *A. stereophylla* for revegetation in the Midlands and northern wheatbelt regions of Western Australia for the following soil types: sand over gravel and deep yellow acidic sand. According to Clarke (1997) *A. stereophylla* is particularly suited for revegetating sites with surface gravel.

Utilisation

Soil stabilisation. See Revegetation above.

Windbreak. Mature plants of this species could have potential as a low windbreak.

Shade and shelter. See Revegetation above.

Ornamental. Not well-known in cultivation but should be useful in semi-arid areas as an ornamental on account of its showy floral display.

References

Clarke, M. (1997, in press). West Morawa catchment revegetation report. (To be published in 1998 by Agriculture W.A.)

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

Wilcox, D.G., Lefroy, E.C., Stoneman, T.C., Schoknecht, N.R. and Griffin, E.A. (1996). *Trees and shrubs for the Midlands and Northern Wheatbelt*. (Agriculture W.A.: Western Australia.)