

**Botanical name**

*Acacia gibbosa* Cowan & Maslin, Nuytsia 10: 28 (1995)

The botanical name is derived from the Latin *gibbosus* (hunch-backed), and refers to the small bracts at the base of the peduncles which have a basal swelling on their outer surface.

**Common name**

None known.

**Characteristic features**

*Crowns* dense and dark green, the new growth (which occurs during the fruiting period) imparts a characteristic rusty brown tinge to the plants. *Phyllodes* narrow, slender, green to darkish grey-green, with three, brown, resinous, impressed nerves on each face (observe at x10 magnification), the apices narrowed into acute to acuminate, delicate, curved points. *Heads* obloid to short cylindrical, +/- sessile, showy.

**Description**

**Habit.** Dense, rounded or obconic *shrubs* (1-)2-3 m tall and (1-)1.5-3.5 m wide (reported to reach 6 m wide near Bruce Rock), multi-stemmed or dividing at 10-50 cm above ground level into few to many, rather straight, much-branched main stems which are about 5 cm diameter at ground level and about 2 cm diameter at breast height, crowns occupying 30-75% of the total plant height except on young plants where they may extend to ground level, from a distance the crowns are dark green with a characteristic rusty brown tinge (due to brown nerves on the phyllodes) when making new growth during the fruiting period

**Bark.** Dark grey, thin, smooth.

**Branchlets.** Glabrous, slightly resinous (but not sticky) at extremities, transverse lenticels evident on mature branchlets.

**Phyllodes.** Linear, flat to compressed or terete, (3-)4-10 cm long, normally 0.8-1.5 mm wide, slender, thinly coriaceous, not rigid, widely spreading to erect, straight to shallowly incurved, glabrous, dull to slightly shiny, green to darkish grey-green; *longitudinal nerves* 3 on each face when phyllodes flat (8-nerved in all when terete), the nerves obscure when fresh (observe at x10 magnification), widely spaced, not raised, brown and slightly resinous (but not sticky); *apices* acute to acuminate with curved to sub-uncinate, delicate, non-pungent tips; *pulvinus* reddish brown.

**Heads/spikes.** Paired within axil of phyllodes, commonly appearing sessile at anthesis (but *peduncles* actually 1-4 mm long and glabrous), obloid to short-cylindrical, 8-10 mm long and 7-8 mm wide when fresh, bright light golden, 22-27-flowered.

**Flowers.** 5-merous; sepals shortly united in lower 1/3-united.

**Pods.** Linear, flat, slightly undulate, 3-6.5 cm long, 1.5-3 mm wide, spreading to pendulous, firmly chartaceous to thinly crustaceous, sub-straight, glabrous, yellowish brown to light brown or light reddish brown.

**Seeds.** Longitudinal in the pods, about 3 mm long and 1.5 mm wide, glossy, dark brown to black; *aril* white to pale cream.

**Taxonomy**

**Related species.** *Acacia gibbosa* is perhaps most closely related to *A. websteri* (which does not occur in the Kalannie region).

**Superficially similar species.** Within the Kalannie region *A. gibbosa* may superficially resemble *A. resinimarginea* because both species have long, narrow phyllodes with delicate, curved apices, rather short spikes on short peduncles, and narrow pods. *Acacia resinimarginea*, however, is readily distinguished by the transverse sectional shape of its phyllodes, i.e. rhombic.\*WORDING

*Acacia gibbosa* also commonly grows with *A. coolgardiensis* subsp. *coolgardiensis* which has superficially similar phyllodes, short spikes, narrow pods and often a similar growth form. However, in *A. coolgardiensis*, the trunks are shallowly fluted, the phyllodes normally a lighter greyish green and lack the brown resin nerves and curved-acuminate tips, and the pods are terete.

### **Distribution**

Occurs in Western Australia from the Kalannie region and Kellerberrin east to the Coolgardie and Norseman areas.

*Acacia gibbosa* is scattered but not uncommon in the Kalannie region where it can form dense roadside populations in appropriate sites.

### **Habitat**

*Acacia gibbosa* grows mostly on flats or slight elevations in light brown or brownish yellow sandy loam over clay. It is slightly salt tolerant.

**Recorded from the following Kalannie region Land Management Units.** Pediment; Sandy Loam over Clay; Spillway Sand.

### **Conservation status**

Not considered rare or endangered.

### **Flowering**

Over its geographic range *A. gibbosa* flowers in August and September.

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 December to January (occasionally in February).

Plants from the Kalannie region were with mature seed in early December 1996.

The pods occur scattered over the plants; they can be sparse or occur in great profusion (perhaps due to seasonal conditions). The most efficient way to collect pods in quantity is to manually shake or gently beat the branches and collect the pods and seeds on a ground sheet.

There are about 390 000 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**

Propagate from seed.

Informal germination tests, using various hot water treatments, were conducted by Angela Waters (Kalannie Tree Supplies). Very good results were obtained by boiling the seed for 1 minute and soaking overnight, or from simply soaking the seed overnight in just-boiled water prior before sowing. Untreated seed showed a reduced germination response.

## **Revegetation**

*Acacia gibbosa* is well-suited for revegetation purposes in the Kalannie region. Because of its dense, spreading, porous crown this species has scope as a low windbreak, visual screen and for providing shade/shelter for stock and wildlife in revegetation corridors. Under natural conditions it forms dense populations in open, disturbed sites.

## **Utilisation**

**Windbreak.** See Revegetation above.

**Shade, shelter and visual screen.** See Revegetation above.

**Wildlife refuge.** See Revegetation above.

**Ornamental and amenity planting.** Not known in cultivation but an attractive shrub when in full flower and could be useful in semi-arid areas as an ornamental and for amenity plantings.