Botanical name

Acacia jibberdingensis Maiden & Blakely, J. Roy. Soc. W. Australia 13: 29, pl. 17, figs 8-13 (1928)

The botanical name is derived from Jibberding (a West Australian place name) and -*ensis* (native of). When *A. jibberdingensis* was first described it was known from only a single specimen collected from Jibberding by Max Koch in September 1906. As noted below, the species is not confined to the Jibberding region.

Common name

Jibberding Wattle.

Characteristic features

Dense, bushy growth habit. *Phyllodes* very long and narrow, green, with 3 evident longitudinal nerves on each face when flat (8-nerved in all when +/- terete), acuminate with delicately curved, hairy tips. *Spikes* long, on distinct, appressed-hairy peduncles. *Flowers* 4-merous. *Pods* +/- moniliform, long. *Granite rock* habitat.

Description

Habit. *Shrubs* or *small trees* (1.5-)2-4 m tall but can reach 7 m in favourable situations, single-stemmed to 1.5 m or dividing just above ground level into two main stems, plants are typically rounded with dense, spreading crowns 2-3(-6) m wide and occupying 70-90% of the total plant height, mature trees can have rather crooked trunks and main branches (the trunks reaching 25 cm diameter at ground level and 15 cm diameter at breast height), when growing in dense scrub the plants are sometimes rather spindly, obconic in outline and with the crown occupying 25% of the total plant height.
Bark. Grey, longutudinally fissured towards base of main stems, smooth on upper branches.
Branchlets. Appressed-hairy at extremities or glabrous.
Phyllodes. Narrowly linear, flat or (when very narrow) compressed to +/- terete, 15-32 cm long, 1-1.5 mm wide (up to 4 mm wide when flat), not rigid, straight to shallowly incurved, green, glabrous except margins commonly minutely hairy towards phyllode apices; obviously 3-*nerved* on each face when flat (8-nerved in all when not flat); *apices* acuminate with delicately curved, hairy, non-pungent tips; *pulvinus* pale lime green.
Spikes. Commonly single within axil of phyllodes, 20-35 mm long, 8 mm in diameter when fresh, golden; *peduncles* 6-11 mm long, appressed-hairy.
Flowers. 4-merous; *sepals* 1/2 to fully united.
Pods. Sub-moniliform to almost moniliform, (7-)8-21 cm long, 4.5-7 mm wide, pendulous, thinly coriaceous-crustaceous, glabrous, brown over seeds, margins yellow.
Seeds. Longitudinal in the pods, 4.5-5.5 mm long, 2.5-3.5 mm wide, somewhat shiny, black, the central area minutely pitted (rest of seed smooth); *aril* cream or creamy white.

Taxonomy

Related species. On account of having very long, narrow phyllodes and long spicate inflorescences *A. jibberdingensis* can be confused with *A. longiphyllodinea* or *A. stanleyi*. Upon close inspection, however, *A. jibberdingensis* can easily be recognized by its phyllodes which are not continuous with the branchlets and which have a well developed basal pulvinus (see *A. stanleyi* for further details).

Because of its 4-merous flowers arranged in spikes and commonly hairy-margined phyllodes *A. jibberdingensis* appears to have affinities with *A. acuminata* which has usually sessile spikes and wider, multi-nerved phyllodes. It is also closely related to *A. sessilispica* (does not occur in the Kalannie region) which is most readily distinguished by its consistently terete to slightly compressed, shorter phyllodes, sessile spikes and shorter pods.

Distribution

Occurs in Western Australia where it ranges from Mullewa and Jingemarra Station southeast to Peak Charles National Park. There is an outlying population at Kathleen Valley (about 350 km east of Jingemarra Station).

Acacia jibberdingensis is of scattered occurrence in the Kalannie region but is quite common in the places where it occurs.

Habitat

Grows in association with granite rocks in hard, light brown sandy loam.

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

Conservation status

Not considered rare or endangered.

Flowering

Specimens at the Western Australian Herbarium indicate that in its native habitat *A. jibberdingensis* flowers mainly from April to August (rarely in October). However, Elliot and Jones (1982) record flowering as extending from May to December while Simmons (1988) gives July to October; plants in cultivation in Melbourne are recorded by McDowall (1997) as floweing from late February to early August. The reason for these discrepancies in flowering times is not known but may be related to water availability.

Plants in the Kalannie region appear to flower between April and June..

Fruiting

Over its geographic range this species produces pods with mature seeds from November to January.

Judging from observations of Kalannie region populations in December 1996 it appears that *A. jibberdingensis* is variable with regard to seed set: some plants had good pod crops but many were sterile or had light crops (reduced seed set also occurred in many other acacias in the region that year). It is possible that local conditions (perhaps the intensity and/or incidence of rainfall events in particular) influence seed-set in the species.

The pods are easily collected by hand and the seed easily extracted from the seeds.

There are about 78 000 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

Growth characteristics. A moderately fast-growing species which, according to Elliot and Jones (1982), is drought and moderately frost tolerant.
Diseases. Appears to be quite susceptible to Gall Rust, with both old branches and pods being affected.

Propagation

Can be grown from both seeds and cuttings according to Elliot and Jones (1982); use a well-drained soil mix of sand and loam (and clay-loam if needed).

Informal germination tests, using various hot water treatments, were conducted by Angela Waters (Kalannie Tree Supplies). Fair results (about 50% germination) were obtained by boiling the seed for 5 minutes prior to soaking overnight before sowing. Soaking seed overnight in just-boiled water resulted in very low germination response. Untreated seed failed to germinate.

The following account is taken from McDowall (1997) and is based on observations of plants in cultivation in Melbourne: “Light tip pruning needs to be done frequently when the plant is young and especially towads the end of the flowering season before new shoot growth has begun, as shoot regeneration does not occur readily from the old wood. For this reason, attempts to shape the tree by hard pruning once it has become too large for its situatuon can result in a bare leggy base with flowering restricted mostly to the upper branches. Heavy pruning after new shoot growth has begun can kill the tree.”

Revegetation

This species has potential for use in revegetation programs, especially those involving granite rocks. Its growth form is suited to providing windbreaks, visual screens, and shade and shelter for both stock and wildlife. It would also be useful for soil stabilisation of granite rocks.

Utilisation

Erosion control. See Revegetation above.
Windbreaks and visual screens. Good for these purposes according to Elliot and Jones (1982); also see Revegetation above.
Shade and shelter. See Revegetation above.
Wildlife refuge. See Revegetation above.
Ornamental and amenity planting. An excellent ornamental species according to Elliot and Jones (1982).

References

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

McDowall, M.A. (1997). Some useful acacias flowering in Autumn. SGAP *Acacia* Study Group Newsletter 78: 6.

Simmons, M.H. (1988) *Acacias of Australia*. Volume 2. (Viking O’Neil, Penguin Books Australia Ltd: Melbourne.)