

Botanical name

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

The botanical name is derived from *Ligustrum* (Privet, a genus in the family Oleaceae) and the Latin suffix *-inus* (resembling). It is assumed that the specimen used by the original author of this species, Carl Meissner, resembled a species of *Ligustrum*.

Common name

None known.

Characteristic features

Branchlets minutely appressed-hairy. *Phyllodes* short, often widely spreading and shallowly recurved, slightly shiny, green, 1-nerved on each face, with 1-3 glands often on short projections along the upper margin. *Heads* globular. *Pods* moniliform, curved to loosely and +/- irregularly coiled or twisted, blackish. *Aril* bright orange and 1/2 to wholly enveloping seed.

Description

Habit: Erect, obconic *shrubs* or *small trees* 1-3.5 m tall with dense, wide-spreading, sub-rounded crowns (2-4 m or sometimes up to 6 m wide) confined to the upper half of the plants, in open disturbed sites (e.g. road verges) it can develop as large, low-domed spreading plants about 1 m high and 4-5(-6) m wide with the dense crown extending to the ground, dividing at (or just above) ground level into 2 to many main stems.

Bark. Grey, fibrous except smooth on upper branches.

New shoots. Sub-glaucous with a silvery sheen (due to presence of short, appressed hairs: observe at x10 magnification).

Branchlets. With minute, appressed to sub-appressed, +/- straight hairs.

Phyllodes. Asymmetrically oblong-elliptic to oblanceolate or narrowly elliptic, 2-6 cm long, 3-9 mm wide, l:w = 4-12, thinly coriaceous, frequently widely spreading and shallowly recurved, slightly shiny, green, +/- glabrous; with 1, somewhat obscure *longitudinal nerve* (midrib) on each face; *apices* obliquely acute to obtuse or sometimes truncate, ending in a small non-pungent point; *glands* 1-3 often on short projections along upper margin of phyllode, lowermost gland situated 5-10 mm above the pulvinus.

Heads. Paired within axil of phyllodes, globular, 8-9 mm in diameter when fresh, bright mid-golden, 20-40-flowered; *peduncles* 5-10 mm long, glabrous.

Flowers. 5-merous; *sepals* free.

Pods. Moniliform, curved to loosely and more or less irregularly coiled or twisted, 1-4 cm long, 3-4 mm wide, thinly coriaceous-crustaceous, blackish, sparsely appressed-hairy.

Seeds. Longitudinal in the pods, 2.5-3 mm long, 1-1.5 mm wide, shiny, dark brown to black; *aril* conspicuous, bright orange and 1/2 to wholly enveloping the seed.

Taxonomy

Related species. *Acacia ligustrina* is related most closely to *A. sericocarpa* (which does not occur in the Kalannie region) and to *A. merrallii*. Low-domed or low-spreading plants can be mistaken for *A. merrallii* but *A. ligustrina* is distinguished by its thinner, more elongated phyllodes, some of which have more than one gland along their upper margin (these glands are often on slight projections which are absent in *A. merrallii*).

Distribution

Occurs in southwest Western Australia where it extends from Mt Kokeby Siding (between Beverly and Brookton) north to Morawa and Kalannie; there is a single collection from the North West Coastal Highway north of the Murchison River.

In the Kalannie region *A. ligustrina* is reasonably common but is of scattered occurrence.

Habitat

Over its range this species grows in gravelly loam, loam and clay on or near salt flats and depressions or in open eucalypt woodland.

In the Kalannie region it occurs in reddish brown sandy loam or clay on flats near salt lakes and in other slightly to moderately saline low-lying areas. It sometimes occurs along highly degraded roadverges but generally does not form dense population.

Recorded from the following Kalannie region Land Management Units. Colluvial Flat-Earth; Red Brown Earth; Alluvial Sand over Clay; Colluvial Flat-Solodic.

Conservation status

Not considered rare or endangered.

Flowering

Over its geographic range *A. ligustrina* flowers mainly from August to October, or occasionally in July.

In the Kalannie region the species was in bud and full flower in early September 1997.

Fruiting

Over the geographic range of this species produces pods with mature seeds in November and December.

In early December 1996 plants from the Kalannie region were sterile (reduced seed set also occurred in many other acacias in the region that year). It is therefore possible that local conditions (perhaps the timing and/or intensity of rainfall events) influence seed-set in this species.

Biological features

Diseases. Kalannie plants are sometimes lightly infected with Gall Rust.

Propagation

Can be grown from seeds or cuttings according to Simmons (1987).

Revegetation

Because of its variation in growth form and its preference for slightly to moderately saline heavier soils, *A. ligustrina* would appear to have considerable scope for revegetation in the Kalannie region. Low spreading forms are a good wildlife refuge and are particularly useful where soil stabilisation is desired. The erect forms with their dense crowns on the upper half of the plants would be effective as a visual screen, low windbreak and would provide shade and shelter for stock and wildlife. Maximum benefit from using this species would be obtained if individuals are planted reasonably close together.

Acacia ligustrina is recommended by Wilcox *et al.* (1996) for revegetation in the Midlands and northern wheatbelt regions of Western Australia where the soils comprise (often saline) red loam over hardpan.

Utilisation

Salinity control. See Revegetation above.

Erosion control. See Revegetation above.

Windbreak. See Revegetation above.

Shade and shelter. See Revegetation above.

Visual screen. See Revegetation above.

Wildlife refugia. See Revegetation above.

Ornamental and horticulture. An ornamental species not well-known in cultivation. However, on account of being highly floriferous and of variable habit this species would appear to have some horticultural potential.

References

Simmons, M.H. (1987). *Growing Acacias* (Kangaroo Press.)

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.).