

Botanical name

Acacia tysonii Luehm. (as `Tysoni'), Victorian Naturalist 13: 112 (1896)

The botanical name commemorates Isaac Tyson, a pastoralist who collected the type specimen from Mount Narryer Station in 1896-97 (see Hall 1984 for biographical notes).

Common name

Tyson's Wattle.

Characteristic features

New shoots densely appressed-hairy. *Phyllodes* minutely and finely appressed-hairy, grey-green to glaucous, prominently 1-nerved on each face, apices obtuse to acute. *Heads* globular, arranged in short racemes (with minutely hairy axes), sub-densely flowered; *peduncles* long and minutely hairy. *Pods* moniliform or sub-moniliform, large, hard-textured. *Seeds* large, the *aril* small and dull red.

Description

Habit. Compact, bushy *shrubs* 1.5-3 m tall, maturing to small, rounded or sub-gnarled *trees* to 6 m tall, single-stemmed or 2- to many-branched at ground level, crowns 1.5-4 m (or perhaps more, but data not available) across.

Bark. Grey.

New shoots. Pale yellow (at least when dry) ageing silvery due to a covering of dense, appressed hairs.

Branchlets. Sparsely to densely minutely hairy.

Phyllodes. Narrowly elliptic to narrowly oblong, 2-4.5 cm long, 4-10 mm wide, rather thin-textured, smooth, covered by a layer of minute, fine, appressed hairs, grey-green to glaucous; with 1 prominent *longitudinal nerve* (midrib) on each face; *apices* obtuse to acute, not pungent; *gland* not prominent, situated on upper margin of phyllode 1-5 mm above the pulvinus, rarely a second gland at base of the apical mucro.

Heads. Arranged in 2-4-branched racemes 5-20 mm long, the *raceme axis* minutely hairy and often growing out as a "leafy" shoot with the subsequent heads arising from within the axils of the uppermost young phyllodes, globular, bright golden, sub-densely 25-30-flowered; *peduncles* 10-25(-30) mm long, minutely hairy.

Flowers. 5-merous; *sepals* united into a +/- truncate calyx.

Pods. Moniliform or sub-moniliform, 5-10 cm long, 8-13 mm wide, crustaceous to sub-woody, smooth, sparsely and minutely appressed-hairy, brown to red.

Seeds. Longitudinal in the pods, +/- spherical but compressed, 7-8 mm long, 6-7 mm wide, dull to slightly shiny, brown or greyish brown; *aril* small but distinct, dull red.

Taxonomy

Related species. As discussed by Chapman and Maslin (1992) *A. tysonii* belongs to an Australia-wide group of 12 species which has its centre of diversity in Western Australia. The only members of this group to occur in the Kalannie region are *A. ligulata* and *A. tysonii*. *Acacia ligulata* is most readily distinguished by its glabrous branchlets, phyllodes, peduncles and pods, its longer and narrower phyllodes, shorter peduncles, narrower pods and smaller seeds.

Acacia tysonii resembles *A. sclerosperma* subsp. *glaucescens* which has a more coastal distribution (occurring in the Shark Bay area) and which differs in its indumentum, gland number, inflorescences and size of legumes and seeds (see Chapman and Maslin 1992 for discussion).

Variants. *Acacia tysonii* shows little morphological variation within the Kalannie region. However, at Lake Auld on the edge of the Great Sandy Desert there is a small phyllode variant which is presumably this species (see Maslin in press). Also, on Glenburgh and Meka Stations, north of the Kalannie region, *A. tysonii* is thought to hybridize with *A. ligulata* (see Chapman and Maslin 1992 for discussion).

Distribution

Occurs in Western Australia from Gascoyne Junction and Peak Hill south to Morawa and Jibberding; possibly also at Lake Auld.

Acacia tysonii is rare in the Kalannie region.

Habitat

Over its range this species grows in sand, loam and clay and is usually associated with calcrete or limestone.

In the Kalannie region it occurs in hard grey-brown sandy loam around edge of Samphire lake.

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

Conservation status

Although *A. tysonii* is rare within the Kalannie region in the broader context is not considered rare or endangered.

Flowering

Over its geographic range *A. tysonii* flowers from July to September.

There is no reliable information available on the flowering time of plants from the Kalannie region.

Fruiting

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

Plants collected from the Kalannie region in December 1996 were mostly sterile. It is therefore probable that local conditions (the timing and/or intensity of rainfall events probably being the most important) influence seed-set in this species.

Biological features

No information available.

Propagation

Propagate from seed.

Revegetation

Acacia tysonii would appear to have limited potential for use in revegetation within the Kalannie region. However, it is a hardy species and could be included in seed mixes for soil stabilisation on saline sites.

Utilisation

Soil stabilisation. See Revegetation above.

Seed for human food. Although Cherikoff and Isaacs (1989) report that the seeds of this species having been consumed by traditional aborigines *A. tysonii* is not one of the species highly recommended by Maslin *et al.* (1998) for trialling as a “human food”.

References

- Chapman, A.R. and Maslin, B.R. (1992). *Acacia* Miscellany 5. A review of the *A. bivenosa* group (Leguminosae: Mimosoideae: Section Phyllodineae). *Nuytsia* 8: 249-283.
- Cherikoff, V. and Isaacs, J. (1989). *The Bushfood Handbook*. (Ti Tree Press: Balmain)
- Hall, N. (1984). *Botanists of Australian Acacias*. (CSIRO: Melbourne.)
- Maslin, B.R. (in press). *Flora of Australia* treatment.
- Maslin, B.R., Thomson, L.A.J., McDonald, M.W. and Hamilton-Brown, S. (1998). *Edible Wattle Seeds of Southern Australia. A review of species for semi-arid regions of southern Australia*. (CSIRO, Forestry and Forest Products, Australian Tree Seed Centre: Canberra.)