

Botanical name

Acacia enervia Maiden & Blakely subsp. *explicata* Cowan & Maslin, Nuytsia 10: 232 (1995)

The species name is derived from the Latin *enervis* (without nerves) and refers to the very obscurely nerved phyllodes.

The subspecific name is derived from the Latin *explicatus* (to spread out or expand), and refers to the flattened phyllodes which distinguish this subspecies from subsp. *enervia*.

Common name

None known.

Characteristic features

Phyllodes linear to narrowly oblanceolate, narrowed towards the base, flat, ascending, straight to shallowly incurved, dull green, obscurely multi-nerved, acuminate with delicate, brown, curved points; *gland* absent or if present then situated at distal end of pulvinus. *Heads* globular. *Flowers* 5-merous. *Pods* 2-2.5 mm wide.

Description

Habit. Dense, rounded or obconic *shrubs* or rarely *small trees* 1.5-3.5 m tall and 1.5-3.5 m wide, single-stemmed or 2-6 branched at (or just above) ground level, the main stems (in Kalannie region at least) becoming twisted, crowns occupying about 30% of the total plant height with age.

Bark Dark grey, fibrous and longitudinally fissured towards the base of stems of oldest plants, fibrous or smooth on branches (depending upon age of plant).

Branchlets. Glabrous or tips appressed-hairy.

Phyllodes. Linear to narrowly oblanceolate, narrowed towards the base, 2-7(-9) cm long, 0.8-4(-6) mm wide (1.5-3 mm wide in Kalannie region plants), flat, ascending, straight to shallowly incurved, glabrous or sparsely appressed-hairy, dull, green; *longitudinal nerves* numerous, rather indistinct and close together; *apices* narrowed to delicate, acuminate, curved, brown, non-pungent or slightly pungent points; *gland* absent or if present then situated on upper margin of phyllode at the distal end of the pulvinus.

Heads. 1-3 within axil of phyllodes, globular, light golden, 5-8 mm in diameter when fresh, 18-33-flowered; *peduncles* 2-5(-7) mm long, pale red (at least in the Kalannie region), hairy or glabrous.

Flowers. 5-merous; *sepals* mostly free.

Pods. Linear, shallowly constricted between the seeds, 3-7 cm long, 2-2.5 mm wide, thinly coriaceous-crustaceous, straight to shallowly curved, glabrous or sparsely appressed hairy.

Seeds. Longitudinal in the pods, 3-4 mm long, about 1.5 mm wide, black; *aril* white.

Taxonomy

Subspecies. *Acacia enervia* comprises two subspecies. The typical subspecies occurs in central-southern wheatbelt and adjacent goldfields areas and is most readily distinguished from subsp. *explicata* by its terete to sub-terete phyllodes.

Related species. *Acacia enervia* together with *A. lineolata* and *A. inceana* constitute the "*A. enervia* group", see Cowan and Maslin (1995) for discussion. Three taxa

from this group occur in the Kalannie region, namely, *A. inceana* subsp. *conformis* and subsp. *latifolia*, and *A. enervia* subsp. *explicata*.

In the Kalannie region subsp. *explicata* is most likely to be confused with *A. inceana* subsp. *latifolia* and care is needed to ensure that plants are correctly named. Subsp. *latifolia* is most reliably distinguished from subsp. *explicata* by its phyllode glands being further removed from the pulvinus and by its 4-merous flowers, however, these are cryptic characters and somewhat difficult to see without the use of magnification; subsp. *latifolia* has slightly broader pods than those found on subsp. *explicata*.

Variants. Over its geographic range this subspecies shows much variation in phyllode size. Plants within the Kalannie region show little morphological variation.

Distribution

Occurs Western Australia from between Jibberding and Whitewells station south to near Lake Grace and east to Coolgardie; an outlier occurs near Salmon Gums.

Subspecies *explicata* is not overly common in the Kalannie region but is rather frequent in the places where it occurs. It can form localized populations in disturbed open sites such as along roadverges.

Habitat

Over its rather wide geographic range this subspecies normally occurs on flats near salt lakes.

In the Kalannie region subsp. *explicata* occurs on slightly to moderately saline, sandy clay or clay loam soils.

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

Conservation status

Although subsp. *explicata* is apparently rare within the Kalannie region in the broader context is not considered rare or endangered.

Flowering

Over its geographic range subsp. *explicata* flowers from August to October, with the main flush in September.

In September 1997 plants in some Kalannie region populations were sterile while others were in flower, suggesting that local conditions (perhaps the incidence and intensity of rainfall) influence flowering.

Fruiting

Over its geographic range this subspecies produces pods with mature seeds from December-January. However, it appears that local conditions (perhaps the timing and/or intensity of rainfall events in particular) affect seed-set.

Plants collected in December 1996 from the Kalannie region were mostly without pods or seeds (reduced seed set also occurred in many other acacias in the region that year).

Biological features

No information available.

Propagation

No information available.

Revegetation

Although subsp. *explicata* is not overly common in the Kalannie region it does have potential for revegetation purposes on account of its preference for heavy-textured, slightly to moderately saline soils.

Utilisation

Salinity control. See Revegetation above.

Shade and shelter. The growth form of these plants is suited to providing shade and shelter for stock and wildlife.

Reference

Cowan, R.S. and Maslin, B.R. (1995). *Acacia* Miscellany 15. Five groups of microneurous species of *Acacia*, mostly from Western Australia (Leguminosae: Mimosoideae: section Plurinerves). *Nuytsia* 10(2): 205-254.