

***Acacia* Miscellany 8. *Acacia masliniana* (Leguminosae: Mimosoideae: Section *Plurinerves*), a new species of Western Australia**

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Abstract

Cowan, R.S. *Acacia* Miscellany 8. *Acacia masliniana* (Leguminosae: Mimosoideae: Section *Plurinerves*), a new species of Western Australia. *Nuytsia* 9 (1): 79-82 (1993). *Acacia masliniana* is described and compared with related taxa in the context of a discussion of their morphological character states.

Introduction

This new wattle may be valuable in connection with reclamation of farmland in semi-arid regions rendered sterile by the accumulation of salt in the soil, for it is very salt-tolerant. In the following, all measurements and observations have been made using dried herbarium material but includes the field observations of the specialist for whom the species is named.

Description

Acacia masliniana Cowan, sp. nov. (Figure 1)

Frutices vel arbores parva 1-3 m altae, cortice fibroso, griseo, ramulis teretibus, appresso-puberulis. Phyllodia teretia, acute elongato-pungentia, parce curvata, 50-95(135) mm longa, 1-1.5 mm diametro, glabra (inter nervos numerosos tenues elevatos sericea exceptis), plus minusve glauca; glandula plerumque 4-5 mm super pulvinum. Pedunculi binati, 0.5-2 mm longi; capitula globularia, 4-5 mm diametro, 30-45-floribus; bracteolae spathulatae, ciliolatae, plus minusve puberulae. Flores (4)5-meri, puberuli, sepalis plus minusve spathulatis, 1/4-2/3-connatis, petalis anguste ellipticis, discreta vel 1/2-cohaerentibus, puberulis. Legumina linearia, supra semina valde elevata, (30)70-100 mm longa, 3-4.5 mm lata, chartacea, recta, grosse reticulata, glabra. Semina longitudinalia, elliptico-oblonga, 4.5-5 mm longa, 2-2.5 mm lata, nitida, brunnea, arillo terminale.

Typus: between Ninghan Station and Fields Find, Western Australia, 30 August 1976, B. R. Maslin 4244 (holo: PERTH; iso: AD, BM, BRI, CANB, G, K, MEL, NSW, NY, W, Z).

Rounded *shrubs* or *bushy trees* 1-3 m tall. *Bark* grey, fibrous, exfoliating in narrow, thin, recurved sheets. *Branchlets* terete, sometimes ribbed, appressed-puberulous. *Phyllodes* terete, basally contracted into an indistinct pulvinus and with a long-tapered, sharply pungent apex, 50-95(135) mm long, 1-1.5 mm diameter, rigid, ascending, straight to slightly curved, light green and more or less glaucous, glabrous except commonly sericeous between the numerous, fine, parallel, raised nerves; gland 1.5-5(10) mm above the phyllode-base, small, slit-like and embedded in wider portion of phyllode. *Peduncles* 2 per axil, 0.5-2 mm long, appressed puberulous to glabrous; basal peduncular bracts cucullate, more or less semicircular, appressed-puberulous and ciliolate; *heads* globular, medium golden-yellow, 4-5 mm diameter, 30-45-flowered; bracteoles spatulate to oblong-spatulate, puberulous, ciliolate, longer than calyx. *Flowers* (4)5-merous. *Sepals* 1/2-3/4 as long as petals, 1/4-2/3-united, oblong-spathulate to spatulate, puberulous, ciliolate. *Petals* narrowly elliptic, free or 1/2-coherent and becoming free with age, puberulous and ciliolate. *Ovary* puberulous or appressed-puberulous. *Pods* linear, strongly raised over seeds, (30)70-100 mm long, 3-4.5 mm wide, chartaceous, straight, coarsely reticulate over seeds, glabrous. *Seeds* longitudinal, elliptic-oblong, 4.5-5 mm long, 2-2.5 mm wide, glossy, brown, the aril terminal.

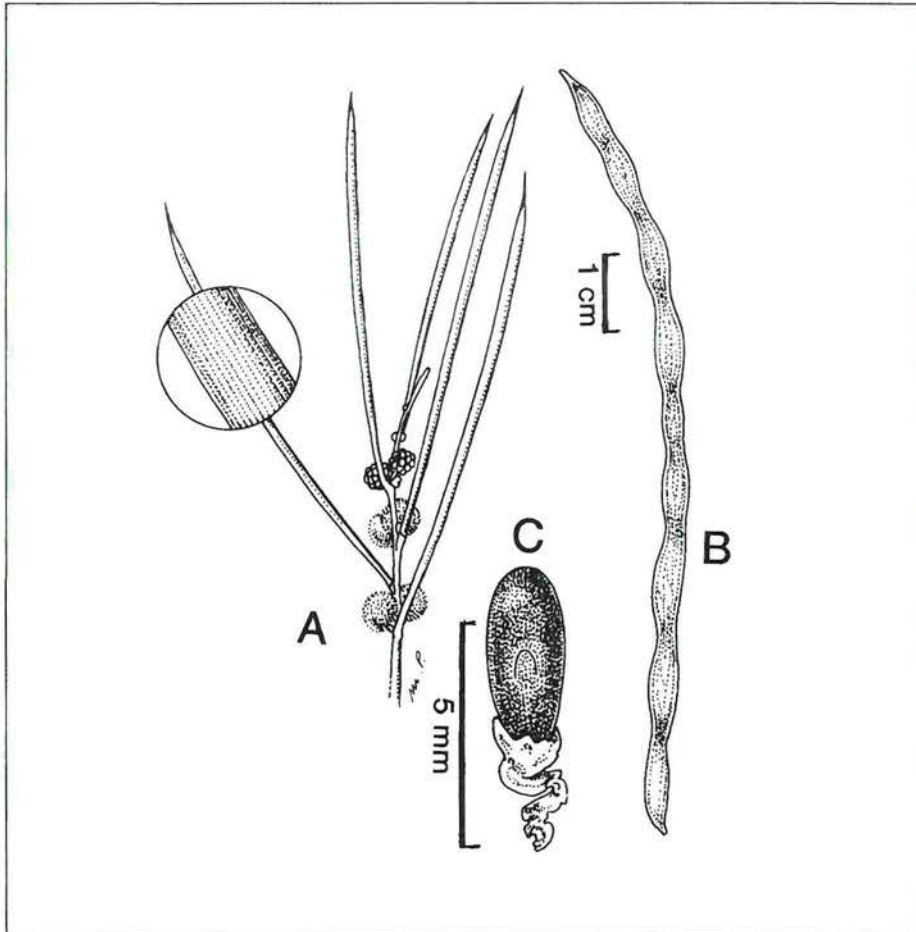


Figure 1. *Acacia masliniana* A - habit with enlargement of portion of phyllode to show form and nervature (x1) from *Maslin* 4248 (PERTH), B - pod (x1) from *Maslin* 4248 (PERTH) and C - seed from *Maslin* 4243 (PERTH). (Drawings by Margaret Pironi).

Other specimens examined. WESTERN AUSTRALIA: c. 535 km from Perth on inland highway [c. 34 km S of Mt Magnet towards Paynes Find on Great Northern Highway], *A.M. Ashby* 4228 (BM, BRI, PERTH); between Yuinmery and Cashmere Downs, *J.S. Beard* 6487 (NSW, PERTH); 28 mi [45 km] E of Perenjori, *J.S. Beard* 7364 (PERTH); western shore of Lake Lefroy, Kambalda, *R. Coveny* 8431 and *B. Haberley* (PERTH); 2.7 mi [3 km] S of Yalgoo towards Paynes Find, *R.J. Cumming* 1985 (NSW, PERTH); 6.2 mi [10 km] S of Fields Find towards Paynes Find, *R.J. Cumming* 2026 (PERTH); about 3 km N of Mt Magnet towards Cue, *B.R. Maslin* 3579 (CANB, K, PERTH); 1.6 km N of Cue towards Meekatharra, *B.R. Maslin* 3593 (NY, PERTH); between Ninghan Station and Fields Find, c. 29° 13' S, 117° 15' E, *B.R. Maslin* 4243 (CANB, K, MEL, PERTH); Thundelarra Station, between Yalgoo and Paynes Find, *B.R. Maslin* 4248 (PERTH); 47 km S of Yalgoo on road to Paynes Find, *B.R. Maslin* 6328 and *V. Maslin* (PERTH); 22.5 km E of Koolanooka Hills (E of Morowa) on Mungala Road, *B.R. Maslin* 6608 (PERTH); 3 km by road SSE of Warriedar Homestead (c. 50 km WNW of Paynes Find), *B.R. Maslin* 6629 (PERTH); 12 km by road SSE of Paynes Find on Maranalgo Road, E side of Lake Moore, *B.R. Maslin* 6658 (PERTH); c. 6 km S of Bimbijy Homestead (SE of Paynes Find) on road to Beacon, *B.R. Maslin* 6674 (PERTH); 26-27 km N of Kalgoorlie on road to Menzies, *M.H. Simmons* 1174 (PERTH); 1.8 km E of turn-off from Wooleen Station Road, along road to Twin Peaks, *L. Thomson* JC2327 (PERTH).

Distribution. South-west Western Australia, mainly in the Austin Botanical District but extending also into the adjacent Coolgardie Botanical District (1:250,000 maps G50-14, 15; H50-2, 3, 4, 6, 7; H51-9, 14). Most collections occur in the western goldfields from near Cue south to near Perenjori and east to near Youanmi. Two collections, representing the Coolgardie Botanical District, occur in the Kalgoorlie-Kambalda area, c. 300 km south-east of Youanmi.

Habitat. Margins of saline lakes, marshes and flats on red clay and yellow-, orange-, or red-brown loam in open scrub.

Flowering and fruiting periods. Flowers July-September; pods with mature seeds August-October.

Affinities. There are many species of *Acacia* with these rigid, pungent, terete phyllodes but not all are closely related by any means. In general aspect the new species may remind one of the terete-phyllode phase of *A. rigens* Cunn. ex Don which also has the sericeous inter-nerve areas on the phyllodes. The attenuate, sharply pungent apex of the subglaucous to glaucous phyllodes of *A. masliniana* quite readily separate it from *A. rigens* which also has a basal gland, longer peduncles and larger heads of fewer flowers, but in both species the sepals are partly united. *Acacia kalgoorliensis* Cowan & Maslin has similar phyllodes but its branchlets are crispate-sericeous, its straight phyllodes have about 20 nerves, raised stomata, usually two glands and free perianth parts. Another similar-appearing species from the same general region, *A. donaldsonii* Cowan & Maslin, has much coarser phyllodes with 4-8 distant nerves and quite different pods.

Conservation status. Not considered rare or endangered.

Etymology. This interesting new species is named for Bruce R. Maslin, with whom I have worked for the past several years preparing the account of the genus *Acacia* for the Flora of Australia. It is entirely appropriate that an *Acacia* species should bear the name of one of the most active and authoritative specialists on the taxonomy of the genus. I am very pleased indeed to have this opportunity of thus commemorating him and his devotion to achieving an understanding of the genus.

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