

## A new species of *Microcorys* (Lamiaceae) from the Wongan Hills, Western Australia

Kevin F. Kenneally

Western Australian Herbarium, George Street, South Perth, W.A. 6151

### Abstract

Kenneally, Kevin F. A new species of *Microcorys* (Lamiaceae) from the Wongan Hills, Western Australia. Nuytsia 4(1): 23-27 (1982). A new species *Microcorys eremophiloides* Kenneally (Lamiaceae), is described and illustrated from the Wongan Hills, Western Australia where it appears to be endemic. It was formerly incorrectly referred to *M. longifolia* (Bebtg.) Benth.

### Introduction

The genus *Microcorys* R.Br. (Lamiaceae) is endemic to the south-west of Western Australia. Two species, *M. ericifolia* Benth. and *M. longifolia* (Benth.) Benth., are recorded for the Wongan Hills (Kenneally, 1977). An examination of type material at the Royal Botanic Gardens, Kew, England, has revealed that the species from the Wongan Hills, formerly referred to *M. longifolia*, is a distinct taxon. It requires describing in order to provide a name for the purpose of flora protection and to validate its inclusion in an updated flora list for the Hills.

### Taxonomy

***Microcorys eremophiloides* Kenneally, sp. nov.** (Figures 1 and 2)

*M. longifolia* (Benth.) Benth. affinis sed floribus duplo longioribus, corollae labio superiore labio inferiore multo longiore etiam lobis labii inferioris acutis (haud obtusis).

*Typus*: Eastern Edge of the Wongan Hills (c. 30°50'S 116°40'E), W of Conway's property "Dunmoor", approx. 15 km N of township of Wongan Hills, Western Australia, 27 October 1980, K. F. Kenneally 7497 (holo: PERTH; iso: AD, CANB, K, MEL, NSW, NY, PERTH).

Erect, openly-branched *shrub* to 2 m high. *Stems* with slightly fissured bark when young, becoming deeply fissured and corky with age. *Branches* and young shoots hoary with a minute tomentum. *Leaves* opposite, often crowded towards the ends of the terminal branchlets, linear, 30-60 x 1-3 mm, sessile, obtuse, with revolute margins, minutely scabrous above becoming glabrous with age, hoary or white tomentose underneath. *Flowers* axillary. *Pedicels* slender, sigmoid, 1 cm long, with a pair of linear-subulate bracteoles 3 mm long, 3 mm below the calyx. *Calyx* narrow-cylindrical, ca 10-15 mm long, puberulous with a mixture of glandular and simple hairs; *teeth* lanceolate, equal to or shorter than the tube, the uppermost tooth usually larger than the others. *Corolla* 4 cm long, deep pink to red, slightly glandular-pubescent; *tube* exerted, cylindrical, somewhat dilated upward; *upper lip* narrow,

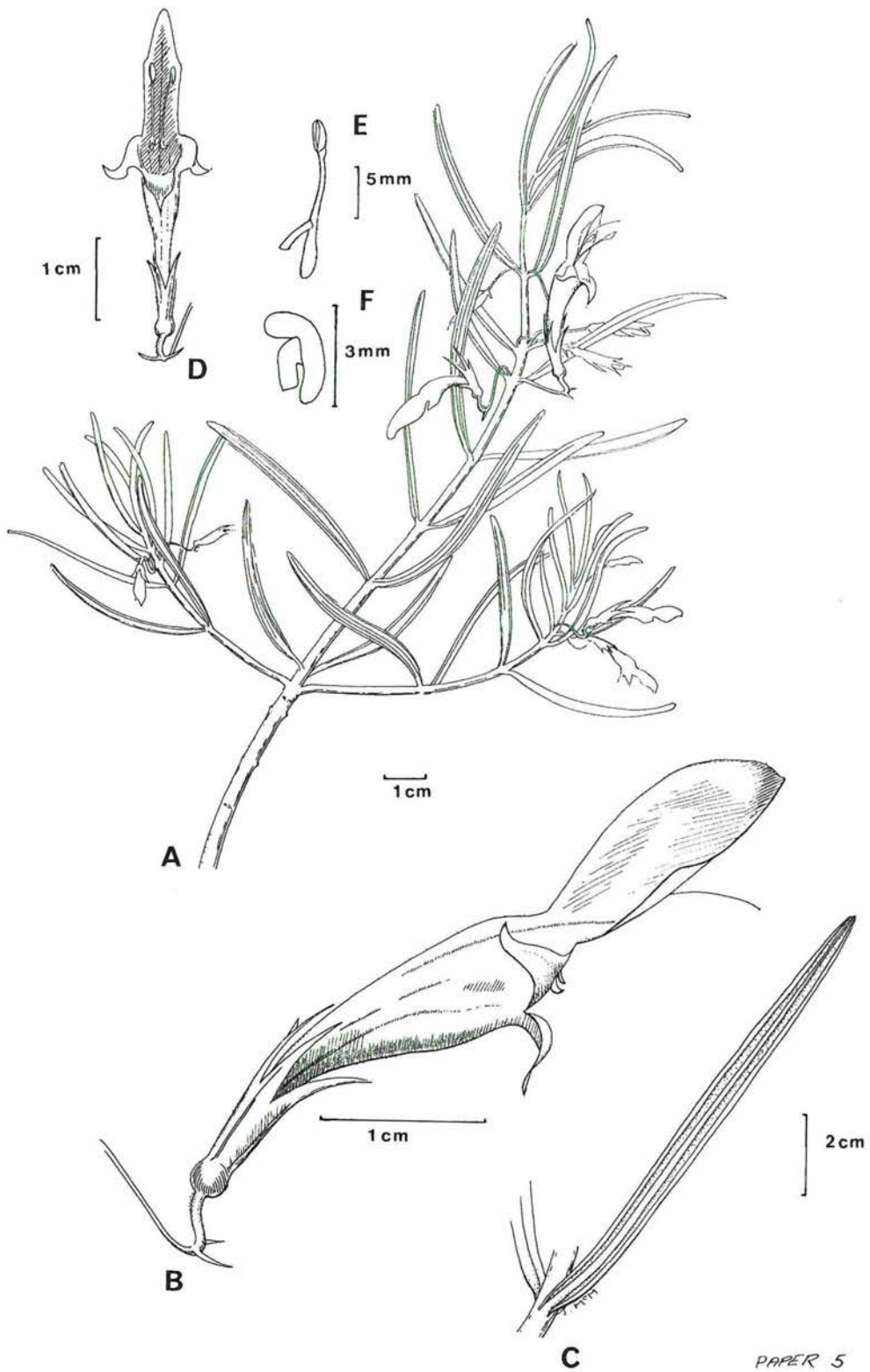


Figure 1. *Microcorys eremophiloides*. A—habit. B—flower. C—leaf (abaxial view). D—flower (abaxial view). E—upper stamen. F—lower stamen. From the holotype (Kenneally 7497).

concave, slightly emarginate, somewhat shorter than the tube; *lower lip* much shorter than the upper lip, spreading, with three acute, entire lobes. *Stamens* four, included; *upper stamens* with one large fertile cell, lower end of connective 5 mm long and dilated at the end but scarcely bearded; *lower stamens* with two linear sterile lobes. *Nutlets* dry, cylindrical, 3-4 mm long, irregularly ribbed, dark brown.

*Other specimens examined.* WESTERN AUSTRALIA: *J. Drummond* s.n. (K); Wongan Hills, 7 Oct. 1903, *A. Morrison* s.n. (PERTH); 8 km NW Wongan Hills township, 17 Sept. 1963, *J. H. Willis* s.n. (PERTH); Monks Well Gully in the Wongan Hills, *K. F. Kenneally* 2281 (PERTH); PMG site (TV translator tower) in the Wongan Hills, *J. S. Beard* 8017 (PERTH).

*Distribution.* South-west Western Australia (Avon District, South-west Botanical Province—Beard, 1980); known only from the Wongan Hills, c. 140 km NE Perth.

*Habitat.* Favouring shallow soil over massive laterite where it occurs as scattered plants in closed heath of *Casuarina campestris* and *Dryandra* spp. with emergent *Eucalyptus drummondii* and *E. ebbanoensis* mallees.

*Flowering season.* Commences early September, peaks in October and finishes in early November.

*Fruiting season.* The four nutlets remain attached, surrounded by the calyx, until late February.

*Etymology.* The species is named from the resemblance of the flowers to those of the genus *Eremophila*.

*Microcorys eremophiloides* superficially resembles *M. longifolia* and was formerly incorrectly referred to this species. The type of *M. longifolia* is a specimen collected by Karl von Huegel from the "Swan River" (Bentham, 1837). Huegel visited Western Australia in 1833 and in the period 27 November-19 December collected in the vicinity of Perth and Fremantle (Napier, 1975). On 5 December, in company with J. S. Roe the Surveyor General, he made a collecting expedition through Ellens Valley—the present Helena Valley on the edge of the Darling Scarp. This is most likely the type locality for *M. longifolia* as it is known to occur in the Helena Valley and appears to be restricted to the Scarp.

Bentham (1837) originally placed *M. longifolia* in *Hemigenia*. When in 1848 he transferred it to *Microcorys* he amended his description to include characters found in a specimen collected by *James Drummond* (coll. 2, no. 214). Amongst the Kew material is an additional unnumbered Drummond collection, not cited by Bentham, but determined by him as *M. longifolia*, which is in fact *M. eremophiloides*.

Drummond's second collection, sent to Hooker at Kew in August 1844, consisted of four hundred specimens and included material from the Darling Scarp. However in January 1843 Drummond had already sent to Hooker a collection of one hundred and thirty specimens collected from the Wongan Hills and Moore River (Erickson, 1969). It is very probable that the specimen of *M. eremophiloides* collected by Drummond came from the Wongan Hills and that Bentham (1848, 1870) included this entity when preparing his description of *M. longifolia* for de Candolle's *Prodromus* and his own *Flora Australiensis*.



Figure 2. *Microcorys eremophiloides*. Occurrence in shallow soil over massive laterite, Wongan Hills, Western Australia.

*Microcorys eremophiloides* is the largest-flowered species so far described in the genus and belongs to Bentham's section Hemigenioides. Its closest relative is *Microcorys longifolia* from which it can be distinguished by its flowers which are twice as large, and by the upper lip of the corolla being much longer than the lower lip. The three lobes of the lower lip of the corolla are acute in *M. eremophiloides* and obtuse in *M. longifolia*. The leaves of *M. eremophiloides* tend to be crowded towards the ends of the terminal branchlets whereas young branches of *M. longifolia* are leafy throughout.

*Microcorys eremophiloides* is endemic to the Wongan Hills where only five populations, comprising approximately 200 mature plants, are known. About half of the plants occur on privately owned uncleared farming land and half on a Class A flora and fauna reserve (No. 33530) vested with the W.A. Wildlife Authority (B. Rye—pers. comm.). The conservation status of *M. eremophiloides* must therefore be considered as very rare (Hartley and Leigh, 1979).

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The illustration was prepared by Joyce McMahon.

#### References

- Beard, J. S. (1980). A new phytogeographic map of Western Australia. Western Australian Herbarium Research Notes No. 3: 37-58.
- Bentham, G. (1837). Labiatae. In S. L. Endlicher, E. Fenzl, G. Bentham and H. W. Schott 'Enumeratio plantarum quas in Novae Hollandiae . . . Huegel.' (Fr. Beck: Wien.)
- Bentham, G. (1848). Labiatae. In A.P. de Candolle, Prodrum systematis naturalis regni vegetabilis 12: 568. (Treuttel & Wurtz: Paris.)
- Bentham, G. (1870). Labiatae. Flora Australiensis 5: 70-137. (Reeve: London.)
- Erickson, R. (1969). 'The Drummonds of Hawthornden.' (Lamb Paterson Pty. Ltd.: Osborne Park, Western Australia.)
- Hartley, W. and Leigh, J. (1979). 'Plants at risk in Australia.' Australian National Parks and Wildlife Service. Occasional Paper No. 3.
- Kenneally, K. F. (Co-ordinator) (1977). 'The natural history of the Wongan Hills.' Handbook No. 11 (W.A. Naturalists' Club: Perth.)
- Napier, K. D. (1975). New Holland in Europe. Early Days Journal VII (VII): 55-68.