

A new graniticulous species of *Myriophyllum* (Haloragaceae)

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Abstract

Orchard, A.E., A new graniticulous species of *Myriophyllum*. (Haloragaceae). Nuytsia 8(2): 237-239 (1992). A new species, *Myriophyllum lapidicola*, is described from a granite outcrop in the goldfields region of Western Australia.

Introduction

In my recent revision of Australian *Myriophyllum* (Orchard 1986) I documented the large increase in numbers of known taxa over the last 15 years and observed that "Further exploration, particularly in semi-arid areas with ephemeral creeks and waterholes, will undoubtedly push the number of Australian species of the genus to more than 40 in the future [from its present 37]". This prediction has started to be realised with the discovery of a previously unknown species in a rockhole in a granite outcrop near Chiddarcooping Nature Reserve, NNE of Merredin, Western Australia. The new species is described below.

Myriophyllum lapidicola Orchard, sp.nov. (Figure 1)

Herba annua aquatica; caules infirmi, sparsim ramosi, ad nodos radicanes. Folia alterna, in pagina aquae natantia; petioli c. 7-10 mm longi, laminae integrae, obovatae, 7-10 mm longae, 4-7 mm latae. Flores solitarii in axillas foliorum superiorum, bisexuales. Bracteolae chloro-hyalinae, ovatae, c. 0.6 mm longae. Sepala 4, ovata, 0.4 mm longa. Petala 4, rubra, cucullata, c. 1.2 mm longa. Stamina 4; filamenta 0.4-0.6 mm longa; antherae rubrae, oblongae, c. 0.9 mm longae. Styli 4. Ovarium ovoideum, 4-loculare. Fructus viridis, cylindricus, 3.3 mm longus, 1.6 mm latus; mericarpia infirme tuberculata ad basim, basis styli persistentis incrassata dens lignosus terminalis formans.

Typus: WNW of Chiddarcooping Nature Reserve, Western Australia, 11 September 1989, R.J. Cranfield 7805 & P. Spencer (holo: PERTH).

Annual aquatic herb. Stems weak, sparsely branched, 25-30 cm long, rooting at the nodes. Leaves alternate, widely spaced, confined to the upper parts of the stems and floating on the surface of the water. Petioles c. 7-10 mm long; lamina entire, semi-succulent, obovate, 7-10 x 4-7 mm, with a distinct terminal hydathode and obscure \pm parallel venation. Flowers solitary in the axils of the upper leaves, bisexual. Bracteoles green-hyaline, ovate, c. 0.6 mm long. Sepals 4, green to reddish, ovate, 0.4 x 0.25 mm. Petals 4, red, hooded, c. 1.2 mm long, becoming reflexed, persistent on the developing fruit until near maturity. Stamens 4, antisepalous; filaments 0.4-0.6 mm long; anthers red, oblong, c. 0.9 x 0.4 mm. Styles 4, c. 0.15

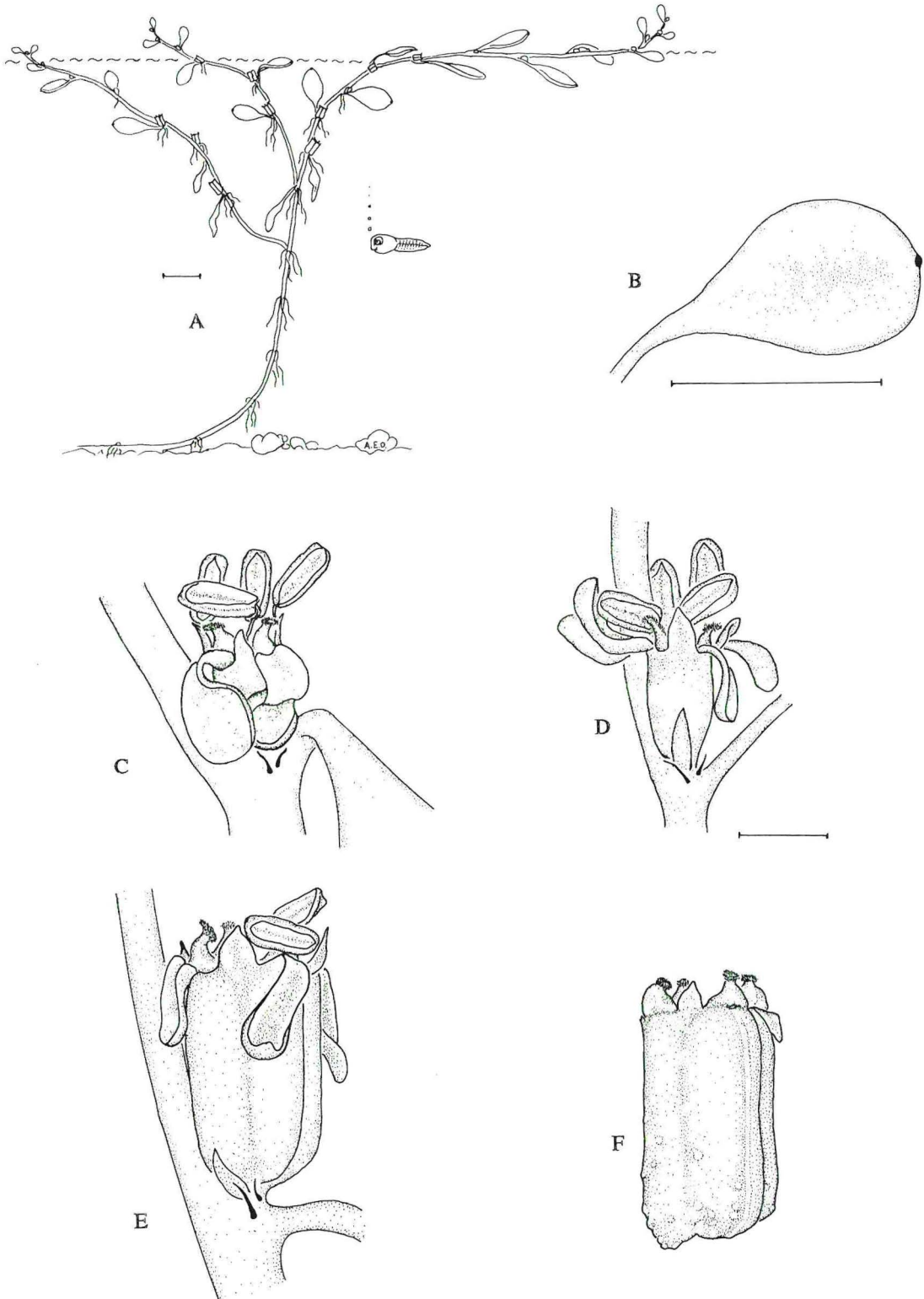


Figure 1. *Myriophyllum lapidicola*. A-Habit. B-Leaf. C-F - Development of flower into fruit. All from R.J. Cranfield 7805 & P. Spencer (PERTH). Scale bars represent 1 cm (A & B) or 1 mm (C-F).

mm long, extending with age, stigma fimbriate. *Ovary* green, ovoid, c. 0.6-0.7 mm long. *Fruit* green, cylindrical, 3.3 mm long, 1.6 mm in diameter, splitting at maturity into 4 mericarps. *Mericarps* cylindrical with a faint dorsal rib, weakly tuberculate at base, base of the persistent style thickening to form a woody terminal tooth.

Specimens examined. Known only from the type collection.

Distribution and habitat. Known only from a single, hung pool on a granite outcrop WNW of Chiddarcooping Nature Reserve, NNE of Merredin. The plant is aquatic with the subfleshy leaves floating on the surface of the water, presumably to expose the flowers for aerial pollination. Fruits develop quickly, apparently under water.

Flowering and fruiting period. September.

Affinities. *Myriophyllum lapidicola* is closely related to *M. petraeum*, a species also confined to sinkholes in granite outcrops, with a range abutting that of the current species (Coolgardie/Southern Cross south-eastwards to Mt Rugged/Boyatup Hill). The two taxa are very similar in their ecology, habit, and fruit shape, but *M. lapidicola* is distinguished from *M. petraeum* by its petiolate, obovate leaves (sessile and linear to oblanceolate in *M. petraeum*), bisexual (vs unisexual) flowers with 4 sepals and 4 stamens (male flowers in *M. petraeum* with no sepals and 8 stamens), and by its much larger fruit.

Conservation status. In view of the extremely specialised and limited habitat of this species, its conservation status must be assessed as 1E (Briggs & Leigh 1988).

Etymology. The specific epithet is a noun in apposition, meaning "dwelling on [granite] rocks", a reference to its specialised habitat.

Acknowledgements

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References

- Briggs, J.D. & Leigh, J.H. (1988). "Rare or Threatened Australian Plants." Revised edn. (Australian National Parks and Wildlife Service, Canberra.)
- Orchard, A.E. (1986). *Myriophyllum* (Haloragaceae) in Australasia. II. The Australian species. *Brunonia* 8: 173-291.