Muelleria 17: 15–17 (2003)

Ranunculus amplus (Ranunculaceae) a new stoloniferous species from Victoria

N.G. Walsh[1] and B.G. Briggs[2]

[1]National Herbarium of Victoria, Birdwood Avenue, South Yarra, Victoria 3141, Australia
[2]National Herbarium of New South Wales, Mrs Macquaries Road, Sydney 2000, NSW, Australia

Abstract

Ranunculus amplus N.G. Walsh & B.G. Briggs is described and illustrated. It is a robust stoloniferous species, of aquatic or moist habitats in southern Victoria. It has a restricted distribution and is threatened (if not extinct) in at least part of its range.

Introduction

A new aquatic or semi-aquatic species of *Ranunculus* native in Victoria has been distinguished and is described here so that it can be included in the treatment of Ranunculaceae for the *Flora of Australia* (Eichler *et al.*, in prep.).

Taxonomy

Ranunculus amplus N.G. Walsh & B.G. Briggs, *sp. nov.*
A *Ranunculo inundato* R. Br. ex DC. combinatione characterum sequentium distinguitur: folia majora, petiolo 5–45 cm longo, diametro laminae 5–13 cm; petala multiora (8–16); achenia majora, 2–4 mm longa (rostro excluso).
Type: Victoria, Surry River at Gorae, *A.C. Beauglehole 6610* (holotype: MEL; isotypes: AD, CANB, MEL (2 sheets), NSW).
Stoloniferous *perennial*. Basal *leaves* with lamina palmatisect, 5–13 cm diam., glabrous; ultimate segments 0.5–2 mm wide; petioles 5–45 cm long, glabrous. Flowering stems 10–30 cm high, 1–3-flowered, glabrous or pilose just below flowers. *Sepals* 5, spreading, 3–6.5 mm long, glabrous or shortly ciliate near basal margin. *Petals* 8–16, narrowly obovate to obovate, 5–13 mm long, yellow, obtuse or emarginate; nectary near petal base, c. 1 mm long, lobe rounded to truncate, free for up to ¼ its length. *Stamens* 20–45. *Pistils* 25–45. Receptacle shortly hirsute in stamen-zone, hairs scattered between achenes. *Achenes* ± lenticular, 2–4 mm long, lateral faces smooth or somewhat warty, sometimes indistinctly rippled, the broad margins thickened; beak ± straight, erect or antrorse, c. ¼–⅓ as long as achene-body. (Fig. 1)

Etymology: The epithet is from the Latin *amplus*, large, abundant, referring to the large leaves.

Flowering period: October–November.

Specimens examined: **VICTORIA**: Wannon River, Grampians, E of Mirranatwa Gap, *A.C. Beauglehole 16352*, 9.xii.1967 (MEL, NSW); Wannon River, Grampians, S of Mirranatwa Gap, *A.C. Beauglehole 30601*, 23.ii.1969 (MEL, NSW); Wannon River, 17 km NNE of Dunkeld, *N.G. Walsh 5559*, 24.vii.2002 (MEL); bed of River Wannon under Mount Sturgeon, *Robertson, s.n., s.d.* (K); Wannon, *Wilhelmi, s.n.*, 1857 (K); c. 23 km SW of Casterton, *A.H. Corrick 612*, 19.xi.1980 (MEL); Yarra Glen, 2 miles [3.2 km] south of the town, *H.I. Aston, s.n.*, 2 Dec 1959 (MEL); Yarra River, 2 miles west of Yering Station, *J.H. Willis, s.n.*, 11 Oct 1949 (MEL, NSW); Lilydale, *A.H.S. Lucas, s.n.*, xi.1885 (NSW); Kananook Ck, Seaford, *D. Cook, s.n.* 6.ix.2002 (MEL).

Distribution and Conservation Status: Ranunculus amplus is apparently endemic in

Figure 1. *Ranunculus amplus*. **a.** habit (*Willis*, NSW 44986); **b.** leaf; **c.** flower (Isotype, NSW); **d.** head of achenes**; e.** achene (*Beauglehole 30601,* NSW). Scale bar: a, b = 6 cm; c = 1.5 cm; d = 1 cm; e = 0.6 cm.

Victoria and largely confined to the south-west, from the southern Grampians to near Portland with isolated records from near Yarra Glen (c. 40 km NE of Melbourne), Frankston (c. 35 km S of Melbourne) and Yarram (c. 170 km SE of Melbourne). Occurrences at Yarra Glen have not been relocated despite searches in suitable habtitat in the area by one of us (NGW) and several local botanists (D. Frood, A. Hill, G. Lorimer, D. van Bockel, pers. comm.). It may be extinct at this disjunct locality where wetlands have undergone substantial modification through drainage of the floodplain, dam construction and incursion of weedy aquatic species since the last known occurrence in 1959. It is conserved in the Grampians (Gariwerd) National Park (but there has been no estimate of numbers in the park), and at Bryans Swamp Wildlife Reserve near Dunkeld (south of the Grampians) where there is a large population over several hectares (D. Cook, pers. comm.). Its conservation status is assessed as 3RC-, that is, rare, conserved to some extent, but degree of reservation unknown (Briggs & Leigh 1996).

Habitat: Verges of streams and swamps, tolerating periods of partial submergence, but leaves and flowering stems emergent. At sites in the southern Grampians, *R. amplus* is associated with a dense band of sedges (e.g. *Baumea articulata*, *Cyperus lucidus*, *Carex gaudichaudiana*) and rushes (*Juncus procerus*, *Baloskion tetraphyllum*) fringing a shallow swamp.

Notes: Ranunculus amplus shows considerable variation in leaf size (compare Fig. 1a and 1b), but mostly has leaves larger than any other native stoloniferous *Ranunculus* species with the exception of robust plants of *R. undosus* Melville (which has leaves with significantly broader ultimate divisions). Differences from *R. inundatus*, in addition to the large size of leaves and achenes, include the larger and usually more numerous petals, receptacle shortly pilose among the achenes, and the usually straight achene beak. *Ranunculus inundatus* has leaf laminae 1–3.5(–5) cm diam., on petioles 1–15 cm long; petals 4.5–7 mm long, 5–7 in number; receptacle almost glabrous among the achenes, achenes 1.5–1.8 mm long (excluding the beak) and the achene beak is usually antrorsely curved. The smooth or indistinctly rippled achene faces are among the features distinguishing *R. amplus* from *R. undosus* Melville and *R. meristus* B.G. Briggs & R.O. Makinson, which have ridged lateral achene faces.

Acknowledgements

We thank Lesley Elkan for the illustration, Helen Aston for helpful discussion of habitats, Damien Cook, Doug Frood, Andrew Hill, Graeme Lorimer and David van Bockel for information on the flora of the Yering floodplain, Damien Cook for information on other populations of *R. amplus* and Karen Wilson for advice on the Latin diagnosis. This work was supported by a grant from the Australian Biological Resources Study.

References

Briggs, J.D. and Leigh, J.H. (1996). Rare or threatened Australian plants (1995 revised edition). (CSIRO: Collingwood).

Eichler, H.J., Jeanes, J.A. and Walsh, N.G. (in prep). Ranunculaceae. *Flora of Australia* **2**. (ABRS/CSIRO: CSIRO Publishing: Melbourne).