

## TWO NEW SPECIES OF EPACRIDACEAE FROM VICTORIA

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### ABSTRACT

Y. Menadue R.K. Crowden. Two new species of Epacridaceae from Victoria. *Muelleria* 8(3): 317–321 (1995). — *Richea victoriana* sp. nov. from the Baw Baw region is described and illustrated. Its affinity with *R. gunnii* Hook. f., a Tasmanian endemic, is discussed. *Epacris celata* sp. nov. from eastern Victoria and southern NSW, is described and illustrated. Its affinity with *E. breviflora* Stapf. and *E. petrophila* Hook. f. is discussed.

### INTRODUCTION

The taxon here described as *Richea victoriana* was first brought to our attention in 1979 when it was collected by R.K. Crowden and examined by Y. Menadue in a chemotaxonomic survey of *Richea* R.Br. for her B.Sc. honours project. The results of this survey will be published later in the year in a revision of *Richea*. The frequency and relative concentration of substituted flavonols in the three species (*R. victoriana*, *R. gunnii* and *R. continentis*) relevant to this paper clearly separate these taxa. Walsh (1987) referred to the new taxon as *R. gunnii* Hook.f. in its first literature appearance and all plants subsequently have been designated as *R. aff. gunnii*.

The *Epacris* species was first collected by the authors in 1984 but its identification has created difficulties for much longer, being variously referred to as *E. breviflora* or *E. petrophila*.

These species are described as part of an ongoing general review of both genera and so that they may be included in the *Flora of Victoria*.

### TAXONOMY

*Richea victoriana* Y. Menadue, sp. nov.

*Richea gunnii* Hook.f. affinis sed habitu grandi et ramosissimo, foliis longioribus latioribus tortisque, inflorescentia floribus plus numerosis, axe glabro et nectario destituta differt.

TYPUS: Victoria, Nine Mile Rd, 0.5 km N of Block 10 Rd, Thompson River headwaters, 40 km E of Warburton, alt. 1010 m., 37° 47'S, 146° 10'E (GR 4258–58205) 26 Dec. 1992, J. Davies (HOLOTYPE: HO 308233; ISOTYPE: MEL)

*Erect, multi-branched shrub* 0.3–2 m high, older branches bare of leaves with prominent annular scars. *Leaves* clustered near the top 10–40 cm of branches; imbricate and spreading, narrowly triangular, (3)–5–10 cm long, 5–11 mm wide, flat to concave; tapering to a pungent acute apex; base sheathing stem to 1 cm deep; lamina lacks distinct shoulder as leaf passes into sheathing base but margin becomes undulate in that area producing a twist in the leaves, margins scabrous. *Inflorescence* terminal, erect, slender panicles, 3–13 cm long, internodes upto 1 cm long; lateral floral branches glabrous, upto 1.5 cm long, bearing 3–20 flowers, subtended by bracts differing from leaves in having distinct shoulder and broad base to sheath the flowers, reducing in size distally, caducous. *Flowers* on short pedicels c. 1 mm long with narrow linear bracteoles, 2–4 mm long arising from the pedicels. *Sepals* 4–5, creamy-white, depressed ovate c. 1.6 mm long, 1.8 mm wide, obtuse. *Corolla* white, operculum narrowly ovoid-conical, 3–4 mm long, 1.5–2 mm wide above incision layer. *Stamens* 5–6; filaments 2–3.5 mm long, attached near top of anthers; *anthers* 1–1.5 mm long, opening by longitudinal slit. *Style* 1.5–2 mm long, 2/3 length of stamens, tapering; *stigma* indistinct; ovary globose, c. 1 mm diam. *Nectary scales* absent. *Capsule* 2–3 mm diam.; *seeds* oblong-elliptic, reticulate. (Fig. 1.)

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Fig. 1. *Richea victoriana* Y. Menadue. From the holotype.

#### ETYMOLOGY

This is a new endemic species for the state of Victoria so it is appropriate to name it after the state.

#### OTHER SPECIMENS EXAMINED

*Victoria* — from type locality, 15 May 1984, *R.K. Crowden s.n.* (HO 308263); 8 Feb. 1989, *R.K. Crowden & Y. Menadue s.n.* (HO 308264); 26 Dec. 1992, *J. Davies s.n.* (HO 308234); Upper Thompson River catchment, Newlands Rd extension, 4 km W from Rocky Knob, 7 Dec. 1981, *N.G. Walsh 694* (MEL); Thompson Forest Wildlife Reserve, 24 Nov. 1982, *A.C. Beauglehole ACB 71727 & C.M. Beardsell* (MEL); c. 50 m S

of J.W. McMahon Ski Lodge, SE slope of Mt Erica, 7 Dec. 1984, *I. Salasoo* 6 (MEL); 5 km NNE Mt Margaret, upstream from crossing of Blue Range Road on Storm Ck, 23 Mar. 1985, *S. Forbes* 2820 (MEL); Near Scout Hut between Mt Erica summit and car-park, 13 July 1985, *D.E. Albrecht* 1846 (MEL); Upper Thompson R. at Newlands Rd Crossing, Jan. 1992, *J.B. Davies* s.n. (HO 132105):

#### DISTRIBUTION

The Baw Baw plateau and the Blue Range, between Marysville and Taggerty.

#### ECOLOGY

Locally abundant in wet heath or scrub land and on the fringes of cool temperate rainforest where it usually grows near streams or bogs with *Epacris paludosa* R.Br. and *E. microphylla* var. *rhombofolia* L. Fraser & Vickery (*E. coriacea* Cunn. ex DC. sensu Ross 1990). The main flowering period is between late November and early January. This species may produce adventitious roots from the lower stems and has the ability to layer.

#### DISCUSSION

The collections of *Richea victoriana* were previously referred to as *R. aff. gunnii* and the taxon does show affinity with *R. gunnii* in that both lose leaves early and have clear annular leaf scars and they grow in the same kind of environment. However *R. victoriana* is distinct in several characters. It differs in its habit, being a much larger more robust plant. Its leaves are considerably longer (5–10 cm) and wider (5–11 mm), and have a distinctive twist to them. The shorter (3–6 cm), narrower (5–7 mm), more rigid leaves of *R. gunnii* grow in a swirling arrangement around the stem. The inflorescence of *R. victoriana* has lateral branches bearing many more flowers (3–20) than *R. gunnii* (3–5). Individual flowers are similar although in *R. victoriana* the operculum is narrower, the filaments are attached to the top of the anthers and there are no nectary scales. Also the axis and lateral branches of the inflorescence are glabrous, but are minutely pilose in *R. gunnii*. *R. victoriana* inflorescence matures basipetally whereas *R. gunnii* matures acropetally.

There is only one other *Richea* occurring in Victoria and NSW and that is *Richea continentis*. This was described by B.L. Burt (1941) as a distinct taxon where it was previously thought to be *R. gunnii*. It is clearly different in habit, forming compact multi-branched shrubs, it does not have distinct annular scars and it has a narrow, elongated inflorescence and it matures acropetally.

#### *Epacris celata* R.K. Crowden, *sp. nov.*

*Epacris petrophila* et *E. breviflora* affinis sed foliis rotundioribus planioribusque, apice obtuso vel mucrone brevi, et foliis margine incrassato conspicuoque.

Typus: Victoria, Bogong High Plain, Watchbed Creek, 10 Feb. 1993, *R.K. Crowden & Y. Menadue* (HOLOTYPE: HO 308232; ISO TYPE: MEL)

*An erect to spreading shrub*, 20–60 cm high, young stems red-brown, ridged with raised leaf scars, pubescent; old stems dark grey-brown with flaking bark, scars inconspicuous. *Leaves* erect to spreading, elliptical or obovate, 2–4 mm long, 1.4–2.5 mm wide, glabrous; lamina flat rarely slightly concave, 1–3 veined, mid-rib conspicuous; apex broadly acute to obtuse, blunt or with short mucro; base broadly to narrowly acute; margin entire, distinctively thickened, scabrid in young leaves; *petiole* appressed upto 1 mm long glabrous or sparsely ciliate. *Flowers* few 7–8 mm diam., clustered at ends of branches, peduncle 1–2 mm long; *bracts* red-tinged ovate, margins ciliate; sepals red-tinged, 2.5–3 mm long, c. 1 mm wide, ovate-lanceolate, acute, margins ciliate; *corolla* white, campanulate 2 mm diameter in the throat, tube 1–1.5 mm long, lobes spreading 2–3 mm long, apex obtuse; corolla caducous. *Stamens* 5, *anthers* visible in the throat, projecting inwards, c. 1 mm long, on filaments equally long, attached in centre; *stigma* rounded, below the level of anthers; style short and slender c. 0.5 mm long; *ovary* glo-