EPACRIS CURTISIAE, A NEW SPECIES FROM NORTHWESTERN TASMANIA

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(with two text-figures)

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A new species of *Epacris* is described. It is restricted to northwestern Tasmania where it is a prominent component of heathland vegetation on peaty soils.

Key Words: Epacridaceae, *Epacris*, Tasmania.

INTRODUCTION

Epacris is restricted to the eastern Australian mainland, Tasmania and New Zealand. It contains approximately 40 species, 21 of which have been reported previously from Tasmania (including 14 endemics). The genus is a common component of heathland vegetation and is widespread throughout the state. However, individual species may be very localised, as exemplified by Epacris curtisiae sp. nov. which is known only from a small area in northwestern Tasmania.

DESCRIPTION

Epacris curtisiae S.J. Jarman sp. nov.

Frutex ad 0.5-2 (-5) m altus caulibus uno ad plures erectis gracilibus; ramuli pubescentes; caules veteriores asperi cicitricibus foliorum prominentibus. Folia erecto-patentia; lamina plana vel parum concava, late obovata vel suborbicularis vel late ovata, 3-6 mm longa, 2.5-4.5 mm lata, crassa anguste hyalino-marginata, margine scaberulo, apice obtuso vel late acuto, supra glabra praeter pilos breves in triangulo parvo basi dispositos, subtus glabra, 3-5 nervis, distaliter parum carinata, apice incurvo; petiolus brevis, 0.5-1 mm longus, supra puberulus subtus glaber. Flores solitarii conferti, in capitula foliata brevia 1-5 cm longa in extremitatibus ramulorum aggregati; pedicelli 1-1.5 mm longi. Bracteae 9-12, 1-3.5 mm longae, ovatae vel ovataeellipticae, ciliolatae; sepala ovata-elliptica, 3-4 mm longa, ciliolata saepe colore roseo suffuso, apice obtuso. Corolla alba; tubus cylindricus vel anguste infundibuliformis, 2.5–3.5 mm longus; lobi obtusi, 2.5–3 mm longi, tubo breviores vel fere aequantes. Stamina inclusa; antherae 0.8–1.2 mm longae, filamenta 0.2–0.35 mm longa. Discus e squamis 5 obtusis constatus. Stylus brevis, 0.6–1 mm longus, basim versus paulo tumidus; stigma antheras haud attingens.

Typus: Australia, Tasmania, Rebecca Road, 1 km west of Nelson Bay River in buttongrass (Gymnoschoenus sphæerocephælus) moorland, 150 m, 27.ix.1985, S.J. Jarman and G. Kantvilas 287. (Holotypus: HO 101085. Isotypi: AD, CANB, MEL, NSW)

Shrub from 0.5-2 (-5) m high, with one to several erect slender stems; branchlets pubescent, older stems rough with raised leaf scars. Leaves half-spreading; blade flat or slightly concave, broadly obovate to almost orbicular to broadly ovate, 3-6 mm long, 2.5-4.5 mm wide, thick, with a narrow hyaline scaberulous margin, apex blunt to broadly acute, upper surface glabrous except for short hairs forming a small triangle at the base. lower surface glabrous with 3-5 weak nerves, slightly keeled distally with the short callous tip incurved; petiole short, 0.5-1 mm long, puberulent on the upper surface, glabrous on the underside. Flowers solitary, crowded, forming short leafy heads 1-5 cm long at the ends of the branches; pedicels 1-1.5 mm long. Bracts 9-12, 1-3.5 mm long, ovate or ovate-elliptical, ciliolate; sepals ovate-elliptical, 3-4 mm long, ciliolate, often tinged with pink, apex blunt. Corolla white; tube cylindrical or narrowly funnel-shaped, 2.5-3.5 mm long; lobes blunt, 2.5-3 mm long, shorter than or almost equal to the tube. Stamens included; anthers

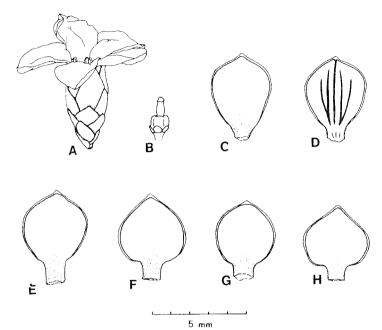


FIG. 1 — Epacris curtisiae:
(A) flower, (B) gynoecium,
(C) upper leaf surface,
(D) lower leaf surface,
(E-H) variation in leaf shape.

0.8–1.2 mm long, filaments 0.2–0.35 mm long, attached at the midpoint of the anther. Disk of 5 blunt scales. Style short, 0.6–1 mm long, slightly swollen towards the base; stigma below the anthers.

The above description of *E. curtisiae* was compiled from fresh material. As the plant dries, the leaves become more concave, the incurved apex is more accentuated and the venation becomes obscure. The plant is illustrated in figure 1.

The new species is named after Dr Winifred M. Curtis, in recognition of her contribution to knowledge of the Tasmanian flora.

Specimens Examined: Tasmania, Brooks Creek, near Ordnance Point, M. Cameron s.n., 26.iii.1981 (HO 39676). Rebecca Road, 1 km west of Nelson Bay River in buttongrass moorland, 150 m, S.J. Jarman & G. Kantvilas 288, 27.ix.1985 (HO, AD, MEL, NSW, BRI, CANB, CBG, PERTH, AK, CHR). Mt Bertha Road, in buttongrass moorland, 210 m, S.J. Jarman & G. Kantvilas 289, 27.ix.1985 (HO, AD, MEL, NSW). Rebecca Road, 1.5 km east of Nelson Bay River, 150 m, S.J. Jarman & G. Kantvilas s.n., 3.iv.1984 (HO 82457). Blackwater Road, west of the Frankland River, S.J. Jarman & G. Kantvilas s.n., 15.ix.1984 (HO 88590). Mt Balfour, A. Moscal 4937, 17.xii.1983 (HO). Dempster Lookout, A. Moscal 7567, 12.iv.1984 (HO).

DISCUSSION

Epacris curtisiae is distinct from any other species of the genus although it is not characterised by any single diagnostic feature. Its closest affinities are with E. serpyllifolia R. Br. It differs from this species in having a shorter style, obtuse broadly acute sepal apices (acute in E. serpyllifolia) and anthers more hidden in the corolla tube. The two species overlap in leaf shape for part of their range (ovate to broadly ovate leaves) but obovate or broadly obovate leaves are common in populations of E. curtisiae whereas they do not occur in populations of E. serpyllifolia. Furthermore, in E. curtisiae sp. nov., the hyaline point at the leaf apex is blunter and shorter than that usually found in E. serpyllifolia populations, and is never sharp. On drying, the tip turns opaque and forms a short callous point which is distinctly incurved. In E. serpyllifolia, the leaf point is either straight or only slightly incurved, and the leaves are somewhat prickly. The two species are separated by their flowering times, with E. curtisiae flowering from August to October and E. serpyllifolia flowering from November to January.

Epacris curtisiae grows in peaty soils on undulating terrain where it is locally common in heathlands, graminoid heathlands and scrub. In young vegetation it is represented by slender plants

with one or two stems. This habit may be maintained with increasing age, particularly in scrub communities where plants up to c. 5 m tall may be present. More commonly, however, the plants become multistemmed from ground level and form robust bushy individuals 1–2 m high.

Epacris curtisiae is known only from northwestern Tasmania where it occurs at altitudes below about 300 m. It has been recorded from Dempster Plains, and from buttongrass moorland around Nelson bay River. In the latter area, it has been recorded as far south as Mt Balfour and extends from the coast to just east of the Frankland River on Blackwater Road. It was not found on Lawson and Neasey Plains to the northeast of Dempster Plains in spite of the similar vegetation occurring there. Its distribution is shown in figure 2, using a format consistent with that adopted by Brown et al. (1983) in their atlas of endemic Tasmanian plants.

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REFERENCE

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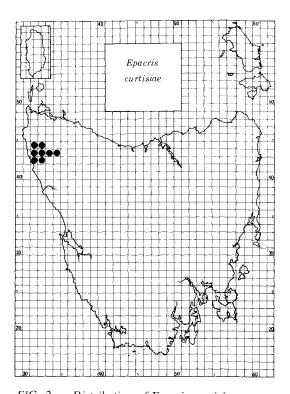


FIG. 2 — Distribution of Epacris curtisiae on a 10 km grid.