EPACRIS LIMBATA SP. NOV., A LOCALISED HEATH FROM EASTERN TASMANIA

by Kristen J. Williams and Fred Duncan

(with one plate)

A description is given of Epacris limbata sp. nov., a new species of heath known from three locations on Tasmania's eastern coast. Notes on taxonomic affinities and habitat of the species are presented.

Key Words: Epacridaceae, Epacris, endemic species, Apsley River, Tasmania.


INTRODUCTION

A new endemic species of Epacris was discovered in the course of ecological surveys conducted in the Apsley River catchment in the East Coast botanical region (Orchard 1988) of Tasmania. Epacris limbata sp. nov. is an addition to a growing list of plant species restricted to localised dry sclerophyll habitats (Kirkpatrick et al. 1980, Kirkpatrick & Brown 1984). The following is a description of the species, which is illustrated in plate 1.

TAXONOMY

Epacris limbata K.J. Williams et F. Duncan sp. nov.

Frutex erectus c. 0.5–2(-3) m altus, caulibus longis, gracilibus; ramuli puberuli pilis adpressis longis vel brevibus, vetustiores asperi pilis sparsis. Lamina cinereo-viridia, patentia versus extramitates ramorum aggregata sed in ramis vetustioribus absentia vel sparsa. Lamina late ovata, acuminata, 4.3–8.1 mm longa, 3.0–5.6 mm lata, concava, supra glabra praeter pilos paucos breves basi dispositos; subtus nervis 5–7; costa distal iter carinata; basis cordata, amplexicaulis; margo anguste hyalinus, minutely serrulatus, 0.1–0.3 mm latus; apex pungens, 0.4–1.2 mm longus; petiolus 0.4–0.9 mm longus, 1.0–1.8 mm latus, cauli appressus dense villosus. Flores solitarii, axillares, in capitula foliata 50–400 mm longa, versus extremitates ramorum aggregati; pedicelli 1.2–2.4 mm longi. Bracteae 9–24, 0.6–3.8 mm longae, 0.3–1.6 mm latae, ovatae vel late lanceolatae, ciliolatae, acuminatae, translucentae, saepe suffosae roseae. Sepala ovata-elliptica, acuminata, translucentia vel alba, rosea suffusa, 3.4–5.2 mm longa, 1.1–1.8 mm lata; margo ciliatus. Corolla late elliptica, acuminata, translucentia vel alba, rosea suffusa, 3.4–5.2 mm longa, 1.1–1.8 mm lata; margo ciliatus. Corolla white, campanulate; tube 2.2–3.5 mm long, shorter than the calyx; lobes broadly ovate, acute 3.0–5.8 mm long, 2.2–4.3 mm lata, tubo longiores. Stamina exserta, antheris 1.0–2.0 mm longis, filamentis 0.8–1.5 mm longis. Ovarium 0.8–1.4 mm latum, 0.6–1.2 mm longum; nectarium e squamis 5, obtusis, triangularibus, constatum, 0.2–0.5 mm longum; stylus 0.9–1.3 mm longus, versus basim paulo tumidus; stigma antheras non attingens.

Typus


Description

An erect shrub 0.5–2(-3) m high, with long, slender stems; branchlets pubescent with long or short appressed hairs; older stems rough, with few scattered hairs. Leaves grey-green, spreading, crowded towards the ends of the branches, but absent or scattered on older stems. Lamina broadly ovate-acuminate, 4.3–8.1 mm long, 3.0–5.6 mm wide, concave; upper surface glabrous except for a few short hairs at the base; under surface with 5–7 veins; midrib keeled distally; base cordate, stem-clasping; margin narrowly hyaline, minutely serrulate, 0.1–0.3 mm wide; apex pungent. Flores solitarii, axillares, in capitula foliata 50–400 mm longa, versus extremitates ramorum aggregati; pedicelli 1.2–2.4 mm longi. Bracteae 9–24, 0.6–3.8 mm longae, 0.3–1.6 mm latae, ovatae vel late lanceolatae, ciliolatae, acuminatae, translucentae, saepe suffosae roseae. Sepala ovata-elliptica, acuminata, translucentia vel alba, rosea suffusa, 3.4–5.2 mm longa, 1.1–1.8 mm lata; margo ciliatus. Corolla white, campanulate; tube 2.2–3.5 mm long, shorter than the calyx; lobes broadly ovate, acute 3.0–5.8 mm long, 2.2–4.3 mm wide, longer than the tube. Stamens exserta, anthers 1.0–2.0 mm long, filaments 0.8–1.5 mm long. Ovary 0.6–1.2 mm long, 0.8–1.4 mm wide; nectary of five bluntly triangular scales,
Epacris limbata has its closest affinity with the inland form of E. marginata. Both species have a short style and exerted anthers. Leaves are crowded towards the ends of the branches, are shortly stalked and have distinct hyaline or scarious margins. However, E. marginata is a stout, rigid and much-branched shrub, whilst E. limbata attains a taller and finer stature. The older stems of E. marginata are noted for their raised, rounded leaf scars, whilst the older stems of E. limbata are comparatively smooth. The leaves of E. marginata arch inward and spread widely, whereas those of E. limbata are semi-erect to spreading and arch outwards, particularly toward the tip. The flowers of E. marginata are clustered for short lengths below the tips of the branches, whereas those of E. limbata form long leafy heads. The sepals of E. marginata are acute, generally longer than those of E. marginata which are blunt (Curtis 1963), and exceed the length of the corolla tube. Epacris limbata has some vegetative resemblance to E. heteronema, E. gunnii and E. microphylla in having ovate to broadly ovate, cordate, acuminate leaves with hyaline or scarious margins, but differs from these species in its floral morphology. For example, E. heteronema has almost sessile anthers, E. gunnii and E. microphylla have anthers at the throat of the corolla tube, whilst the anthers of E. limbata are exerted.

Two other epacrids, E. apsleyensis and E. grandis, have been described recently from the Apsley River area (Crowden 1986). Epacris limbata is readily differentiated from both species by its cordate leaves with hyaline margins, and by several floral characters. The anthers of E. apsleyensis are enclosed within the...
corolla tube, whereas those of E. limbata are distinctly exserted. Epacris apsleyensis flowers in winter and E. limbata flowers from mid-Spring to Summer. Epacris grandis shares a similar flowering period with E. limbata but differs in possessing hirsute bracts and being generally larger than E. limbata in all floral parts.

Epacris limbata occurs in the same general area as E. lanuginosa and E. tasmanica, but is easily distinguished from both species by its long, dense flower heads and its diagnostic leaf morphology. A specimen with floral and vegetative characteristics intermediate between E. limbata and E. lanuginosa was collected from the margins of Eucalyptus ovata woodland, in which Epacris lanuginosa was a prominent member of the understorey.

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**REFERENCES**


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