# A new *Epilobium* hybrid from Scotland, *E. pedunculare* A. Cunn. × *E. montanum* L.

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#### ABSTRACT

A new hybrid, *Epilobium*  $\times$  *kitcheneri* McKean hybr. nov. (Onagraceae), between a widespread British species, *Epilobium montanum* L., and a much more local alien species *E. pedunculare* A. Cunn. is described from its one wild location in West Perthshire, v.c. 87. This new taxon more closely resembles the New Zealand parent but is generally larger in its parts and the shoots are ascending towards the apex instead of being prostrate as in *E. pedunculare*.

KEYWORDS: New Zealand, Onagraceae

#### INTRODUCTION

One new hybrid *Epilobium* (Onagraceae) is described, which now brings the number of hybrids involving New Zealand species in Britain to six (Kitchener & McKean 1998). The others all have *E. brunnescens* (Cockayne) Raven & Engelhorn as the New Zealand parent but this latest hybrid has the much less widespread *E. pedunculare* A. Cunn. (*E. linnaeoides* Hook. f.) as one of the parents. This latter species is found on wet ground in open habitats mainly in W. Perth (v.c. 87), W. Galway (v.c. H16) and W. Mayo (v.c. H27); in England and Scotland it is a very local weed in gardens (Stace 1997). The other parent, *E. montanum*, is widespread throughout Britain and Ireland. The few well formed seeds of the hybrid (Fig. 1F) are similar in size and sculpturing to those of *E. montanum*, with the papillae evenly distributed. The seeds of *E. pedunculare* are about 0.8 mm long, uniformly papillose on the convex side, and the ends are pointed, with the apex obtuse and the anterior end pale in colour and more acute, similar in shape to *E. ciliatum* Raf. seeds (cf. Stace 1997, Fig. 445 no. 4). The flat side is smooth except for a pale-coloured ridge between the two ends.

This hybrid is fairly distinct from the hybrids with *E. brunnescens* because the leaves are much larger and the leaf margins are sharply toothed as in *E. pedunculare*.

## E. × kitcheneri McKean, hybr. nov. (*E. pedunculare* A. Cunn. × *E. montanum* L.)

Hybrida inter *E. pedunculare* A. Cunn. et *E. montanum* L., characteribus inter parentes variantibus; planta semi-prostrata, effusa; stigmata lobis clavatis vel breviter lobatis ferentia; caulibus pilis crispatis brevibus uniformiter obtectis, folia glabra, margine ciliato, ovario pilis ad pedicellum subtentum extensis; florum colore pallide roseo, et seminibus praecipue sterilibus sed interdum fertilibus tum plus quam 1 mm longis.

A semi-prostrate straggling herb c. 20 cm long and 8 cm tall, rooting at the lower nodes and occasionally branching. Stem terete, generally clothed in dense short crisped hairs. Lower leaves opposite, upper ones alternate, ovate with prominent teeth, 4-11 on each side, slightly bronze coloured on the underside, largest  $2.5 \times 1.8$  cm, glabrous except margins ciliate, base more or less rounded, attenuate to petiole; petiole 3-5 mm long. Sepals linear-lanceolate, c. 0.35 mm; corolla light pink, c. 1.1 cm across with veined petals 7 mm long; 4 short stamens just reaching the stigma base and capable of shedding pollen there, 4 long stamens slightly overtopping stigma. Ovary c. 1.3 cm long with scattered short crisped hairs becoming denser on the pedicel. Style 0.4 mm, bearing clavate or shortly 4-lobed stigma. Capsule c. 1.7 cm, with scattered short crisped hairs, fruiting pedicel c. 2 cm long. Seeds mainly sterile, but with a few well developed ones c. 1.0-1.3 mm long.



FIGURE 1. *Epilobium* × *kitcheneri*. A. plant; B. mid-stem; C. flower (half cut away); D. clavate style; E. 4-lobed style; F seed; G. transverse section of capsule.

HOLOTYPUS: Scotland, West Perth, v.c. 87, near Aberfoyle, off Duke's Pass Road, dampish hillside track in oak wood, leading to abandoned quarry, grid reference NN/516.016, 18 August 1996. *G. D. Kitchener*, s.n., bar-code no. 00076122 (E).

Paratypes (2) were cultivated from basal shoots of the wild plant and grown on to fruiting condition: 9 August 1997. *G. D. Kitchener* s.n., bar-code nos. 00076120 & 00076121 (E).

The plant was growing in patches of *Epilobium pedunculare* (abundantly naturalised in the vicinity of Duke's Pass) and both *Epilobium montanum* and *E. obscurum* Schreber grew nearby.

The hybrid is named in honour of its finder, Mr Geoffrey Kitchener, an amateur botanist, who has been involved in the study of New Zealand willowherbs hybridising with British species.

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#### REFERENCES

KITCHENER, G. D. & MCKEAN, D. R. (1998). Hybrids of *Epilobium brunnescens* (Cockayne) Raven & Engelhorn (Onagraceae) and their occurrence in the British Isles. *Watsonia* **22**: 49–60.

STACE, C. A. (1997). New Flora of the British Isles. 2nd ed. Cambridge University Press, Cambridge.

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