

ERODIUM

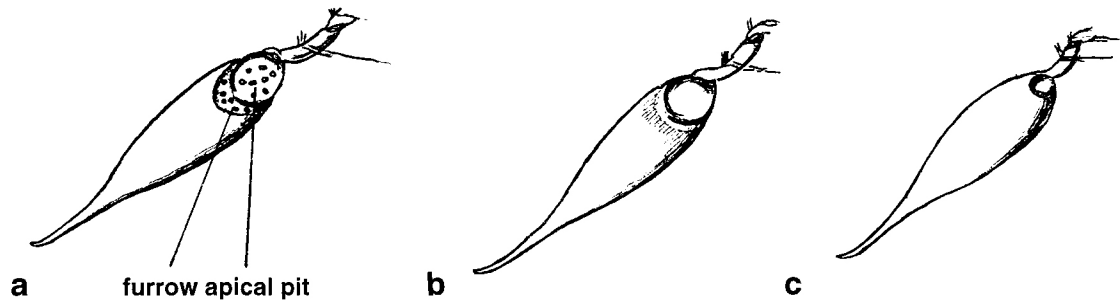
The four native taxa can be separated using the key below (Stace's *New Flora* also includes eleven introduced species). Note that *E. cicutarium* is now split into *E. cicutarium* s.s. and *E. lebelii* (*E. glutinosum* Dumort.), and *E. cicutarium* subsp. *dunense* has too many intermediates to merit recognition (Stace's *New Flora*).

In *E. lebelii* and *E. cicutarium*, glandulosity, size of flowers and number of flowers in an inflorescence are unsatisfactory characters. Starved *E. lebelii* is often sparsely glandular, as are barren first year plants of both species. Starved *E. cicutarium* often has solitary flowers. Well-grown *E. lebelii* may have flowers 12 mm across, and 5 in an inflorescence. The hybrid between *E. lebelii* and *E. cicutarium* is intermediate but has showy inflorescences of large flowers with persistent petals, and is highly if not completely sterile. Pollen grains vary in size (20-75 µm) and colour (yellow to red) in the same anther. Fruits are mostly not developed. It occurs occasionally with the parents.

Typical *E. maritimum* is distinct at a glance, but *E. moschatum* looks like a robust *E. cicutarium* / *E. lebelii*. When collecting material for identification, include mature fruits and note petal colour.

- 1 Leaves simple or lobed to c. ½ way (Fig. c); petals shorter than sepals, usually incomplete or absent; mericarps (carpels) c. 2.5 mm, beak c. 8 mm. Mostly S & W coasts of Britain (*Scarce Plants*), and Ireland ***E. maritimum*** (L.) L'Hér.
- 1 Leaves pinnate with pinnatifid leaflets (Figs. d-f); petals longer than sepals, always 5; mericarps 4-6 mm, beak 16-30 mm or more
2
- 2 Apical pits of mericarps conspicuous with a raised sharp edge surrounded by an equally sharp-edged furrow so that each pit looks like two pits, one superimposed on the other (Fig. a); pit and furrow with shining sessile glands; most of the leaflets divided to less than ½ way (Fig. d). Mostly S & W coasts of Britain (*Scarce Plants*), and Ireland ***E. moschatum*** (L.) L'Hér.
- 2 Apical pits of mericarps with or without a glabrous, weakly furrowed surrounding zone; apical pits without glands; leaflets pinnatifid to 2-pinnatifid, most leaflets cut to more than ½ way (Figs. e, f)
3
- 3 Mericarps 5-6 mm, beak (20-)23-30 mm; apical pits 2/3 maximum diameter of mericarp, sharp-edged and surrounded by a glabrous weakly furrowed zone, the hairs of the mericarp not projecting over the edge of the pit; petals mauve, the two upper often slightly smaller, darker-coloured and with a colourless (rarely black-centred) spot at the base; stigmas purple; nectaries dark purple, slightly broader than long with a rounded or truncate apex (if petals whitish then plant semi-albino with pale green stems, greenish white stigmas and yellow nectaries); enlarged base of fertile filaments with straight sides and sloping to squared 'shoulders'; pollen 56-62 µm; dry seeds 2.5-3.0 mm. Dry pastures, waste ground, dunes, sea cliffs, widespread
E. cicutarium (L.) L'Hér. s.s.
- 3 Mericarps 4-5 mm, grey-brown, beak 16-21 mm; apical pits minute, to 1/3 maximum diameter of mericarp, weakly defined, not surrounded by a glabrous furrowed zone (Fig. b), the hairs of the mericarp slightly projecting over the edge of the pit; petals pale lilac, unspotted; stigmas pink; nectaries much broader than long, with retuse apex, dark purple; enlarged base of fertile filaments with rounded sides and usually a tooth on one or both sides; pollen 47-52 µm; dry seeds 2.2-2.5 mm. Larger coastal dune systems in S & W Britain and Ireland, usually with *E. cicutarium* s.s.
E. lebelii Jord.

Plant Crib



Mericarps (a) *E. moschatum*, (b) *E. cicutarium* s.s., (c) *E. lebelii* (del. P. M. Benoit)



Leaves (c) *E. maritimum*, (d) *E. moschatum*, (e) *E. cicutarium* s.s. (f) *E. lebelii*.

Reference Benoit, P. M. (1967). *Proc. BSBI* 6: 364-366.

Author P. M. Benoit, March 1998.