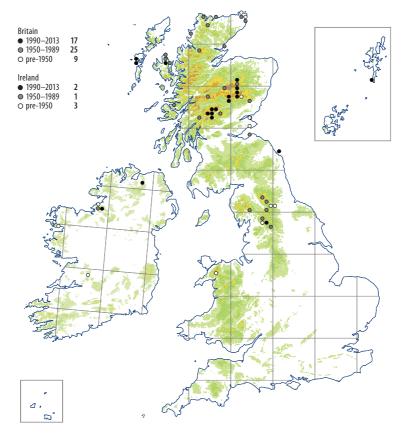
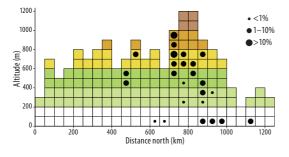
Encalypta rhaptocarpa



Usually in small quantity in crevices, on crumbling earthy ledges and on broken ground on dry or seasonally moist base-rich rocks. Its principal substrates are Carboniferous Limestone and dolerite in the Pennines, calcareous schists in C Scotland, and basalt in Skye and Co. Londonderry. It is associated with other calcicoles such as *Didymodon* spp., *Pseudoleskeella catenulata*, *Schistidium* spp. and *Tortula subulata*. It favours but is not confined to unshaded cliffs and crags facing east, south or west. On northern coasts it also occurs on calcareous fixed sand dunes and at the edge of dune slacks. Altitudinal range: 0–1100 m.

Coastal development may have led to the loss of an Irish site in Co. Mayo, but it was refound in Co. Leitrim in 2012 and it may still occur in many of its older British and Irish sites,



some of which are in remote upland areas. It was last seen in Wales in 1880.

Autoicous; capsules are common, mature in summer. Protonemal gemmae are produced in culture (Whitehouse, 1987).

Encalypta rhaptocarpa is a variable species. In the narrow sense it has ribbed capsules and a well-developed coloured peristome (often with a preperistome), whereas the segregate *E. trachymitria* Ripart (*E. rhaptocarpa* var. *leptodon* Lindb.) has less strongly ribbed capsules and a pale, fragile peristome. Fedosov (2012) found molecular evidence for the recognition of *E. trachymitria* as separate species. British material has not yet been revised in the light of these distinctions.

Circumpolar Boreo-arctic montane. In a broad sense, *E. rhaptocarpa* is widespread in Arctic and montane parts of Europe (including Svalbard), south to S Spain, C Italy and the Balkan mountains. Reported from N Africa and Ethiopia. Turkey; widespread in N, W and C Asia east to Japan. N America south to Arizona and Mexico; Bolivia, Greenland. New Zealand. Some of these reports could belong to other taxa of the complex.

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