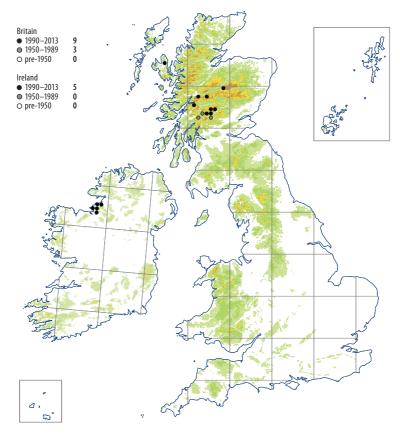
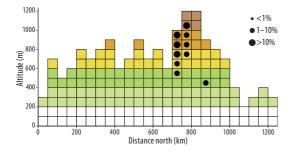
Timmia norvegica



A rare plant of at least periodically irrigated, mineral soils derived from calcareous rocks, usually at high altitudes on the mainland but occurring much lower down on the basalt of Skye and on the Carboniferous Limestone in NW Ireland. Stands normally consist of scattered shoots or small groups of stems in an open turf, either at the base of crags or on ledges which have occasional flushing from above, or on the stable edges of flushes. On Ben Lawers, a typical site would be on soil at the base of a crevice or on sheltered ledges where there has been a build-up of micaceous soil. Associates include Oxyria digyna, Saxifraga aizoides, S. oppositifolia, Thalictrum alpinum, Aneura pinguis, Anoectangium aestivum, Bryum pseudotriquetrum, Campylium stellatum, Cratoneuron flicinum, Creindium molluscum, Distichium capillaceum, Fissidens adianthoides, Meesia uliginosa, Mnium thomsonii, Oncophorus virens, Orthothecium



rufescens, Tortella tortuosa and, rarely, *Tayloria lingulata*. Altitudinal range: 250–1160 m.

Dioicous; Capsules are unknown in Britain and there are no specialised means of vegetative propagation but when the shoots are dry the leaves are very fragile and deciduous leaves may act as an agent of dispersal.

Circumpolar Boreo-arctic montane. In Europe from Iceland, Svalbard and Arctic Russia south to the Pyrenees, Alps, C Italy and Bulgaria, also on Corsica; Caucasus. Turkey, Georgia, Kazakhstan, Arctic and boreal Russia, N China, Japan. N America (south to Colorado), Greenland. Disjunct in the Southern Hemisphere (New Zealand).

G.P. Rothero