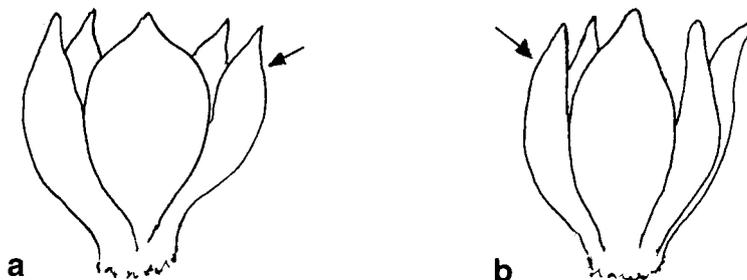


HUPERZIA SELAGO SUBSP. SELAGO AND SUBSP. ARCTICA

It has been suggested (*Flora Europaea* 1, 2nd ed. [Tutin *et al.* 1993], Stace's *New Flora*) that the northern Scandinavian taxon *H. selago* subsp. *arctica* is present in Scotland. *H. selago* is, however, a variable species and from our individual field work in Greenland (RWMC) and in Britain and Ireland (ACJ & FJR), forms showing different growth habits may be the result of environmental effects. This is also the opinion of some Scandinavian botanists (e.g. see Engelskjøn & Skifte 1995). More comparative study is needed before definitive answers can be given but in the meantime recorders are asked to look at the following characters and mark cards accordingly. The gemmiferous buds ('bulbils') are possibly useful characters and material holding them should be collected as voucher specimens (which should be sent to ACJ at the Natural History Museum, Cromwell Road. London SW7 5BD).

***H. selago* (L.) Bernh. ex Schrank & C. Mart. subsp. *selago*:** Shoots often much-branched, and then decumbent in the lower half. Leaves herbaceous when young, becoming coriaceous, lustrous, narrowly triangular to lanceolate, spreading-ascending (in shade) to appressed-ascending (in sun). Gemmiferous branchlets produced in a pseudowhorl at end of annual growth (or throughout season?); gemmae 4-5 mm × 3-4.5 mm, easily detached, lateral leaves (arrowed) 1.5-2 mm wide.

***H. selago* 'subsp. *arctica*' sensu Stace:** Shoots branched only at base in tight clusters, erect or decumbent only in lowest 1 cm. Leaves coriaceous even when young, not lustrous, lanceolate to elliptical, usually tightly appressed (even when growing amongst scrubby heather). Gemmiferous branchlets strict or appressed, often hidden in branch leaves, produced more irregularly throughout fertile branch rather than in whorls; gemmae 3-3.5 mm × 3-4 mm, possibly remaining attached for two seasons, lateral leaves 0.5-1 mm wide.



Gemmiferous branchlets of *Huperzia selago* (a) subsp. *selago*, (b) 'subsp. *arctica*'.

Furthermore the species complex is pan-boreal and elements described from N. America may also be involved. In his extended studies into the genus *Huperzia* in temperate regions, J. Beitel (pers. comm. 1987) had indicated that some British material of *H. selago* showed abortive spores and he postulated the possibility of hitherto undescribed taxa in Europe. Unfortunately he did not finish his survey before his untimely death in 1991 but in view of his remarks it is worth checking fruiting material for 'bad' spores and reporting any finds. Beitel went on to describe *H. appalachiana* Beitel & Mickel (subsequently published in Beitel & Mickel 1992) and equated much of the Greenland material to that species. The relationship of that Greenland material to the European material called here *H. selago* subsp. *arctica* is not yet clear and the two may be identical. Further study is needed.

Plant Crib

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