

VASCULAR EPIPHYTES ON TREES IN EASTER ROSS (v.c. 106)

Brian Ballinger

Vascular epiphytes are typically associated with tropical climates and temperate epiphytes are mainly bryophytes and lichens. However, vascular plant epiphytism does occur in this area (Zotz 2005) and this survey describes this phenomenon in Easter Ross (v.c. 106).

Between 2007 and 2011 vascular epiphytes growing on trees more than 1 m above the ground were noted in the course of routine botanical visits that covered a wide area in the vice-county.

61 examples of epiphytes were found in 34 different locations both in the east and the west of the vice-county.

By far the commonest species was *Polypodium vulgare* (29 sites). In these mainly woodland habitats this plant was not growing in other places and could be regarded as an obligate epiphyte in these locations.

All the other species were also to be found growing on the ground and could be described as accidental epiphytes. These were: *Oxalis acetosella* (10), *Luzula sylvatica* (5), *Dryopteris* sp (3), *Digitalis purpurea* (3), *Sorbus aucuparia* (2), *Tsuga heterophylla* (2), and one each of *Anthriscus sylvestris*, *Chamerion angustifolium*, *Geranium robertianum*, *Juniperis communis*, *Picea abies*, *Calluna vulgaris* and *Vaccinium myrtillus*.

The trees involved were mainly broadleaved and were: *Alnus glutinosa* (14), *Betula pubescens* (13), *Quercus* spp. (13), *Sorbus aucuparia* (6), *Salix* sp (5), *Betula pendula* (2) and one each for *Acer pseudoplanatus*, *Corylus avellana*, *Fraxinus excelsior*, *Pinus sylvestris*, *Prunus avium*, *Prunus padus* and *Ulmus glabra*.

Most sites were on the lower part of the trees with 35 from 1-2 m above ground level, 10 2-3 m, 11 3-4 m and only 5 above 4 m.

This survey confirms the occasional presence of epiphytic vascular plants in Easter Ross although all but *Polypodium vulgare* were also growing on the ground nearby. Most places were locally fairly moist although this phenomenon occurred in both the wetter west and the drier east of the vice-county.

It is suggested that the relative infrequency of epiphytes in this area may be accounted for by frosts and the widespread occurrence of conifers with their less welcoming bark. However it should be noted that the species diversity was less than on urban and rural walls where frosts also occur.

References

Zotz G. (2005) Vascular epiphytes in the temperate zones – a review. *Plant Ecology* 176: 173-183