

### NOTES ON TWO RARE SCOTTISH SEDGES

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It seems worth recording a few notes on two of the rare Scottish Sedges from the Lawers range found in the summer of 1951.

(1) CAREX MICROGLOCHIN Wahlenb.

This was found when I had set out to look for *Roegneria Doniana* (F. B. White) Meld. with Mr. J. E. Raven and Dr. S. M. Walters. After scrambling up the rocks above Lochan na Cat, I proceeded towards the summit of Meall Garbh, and then turned south-east, making my way along the shoulder of the mountain. I had hoped eventually to descend by way of Lady Davy's locality for *Carex microglochin*.

There were patches on this shoulder where the runnels opened out into dark bare peaty areas of micaceous bog, and here the vegetation was very sparse and low. The plant that attracted my attention first was *Equisetum variegatum*, but on further investigation I found a great abundance of *Carex microglochin* growing with *Kobresia simpliciuscula*, *Carex capillaris*, and *C. saxatilis*. The following is a list of species associated with this sedge; with the exception of *Carex atrofusca* Schkuhr, which I failed to find, it seems to be very similar to the list Druce (1924) records from Lady Davey's original locality in Coire nam Buidheag (the Yellow Corrie).

*Thalictrum alpinum* L.

*Saxifraga aizoides* L.

*Tofieldia pusilla* (Michx.) Pers.

*Juncus articulatus* L.

*J. triglumis* L.

*J. biglumis* L.

*Eleocharis pauciflora* (Lightf.) Link.

*Kobresia simpliciuscula* (Wahlenb.)

Mackenzie.

*Carex saxatilis* L.

*C. capillaris* L.

*C. demissa* Hornem.

*C. flacca* Schreb.

*C. panicea* L.

*Festuca vivipara* (L.) Sm.

*Equisetum variegatum* Schleich.

I took a soil sample from this bog, and it was clear, on examining it, that this apparently peaty soil contained an abundance of minute particles of micaceous schist, and was probably exceedingly base-rich. On returning to Leicester I did some pH tests on this soil, using Muirhead's Electrochemical pH meter, and found the soil had a pH of 7.05. This is an interesting contrast to the acid bog areas where one normally finds *Carex pauciflora* Lightf. (the species that resembles *C. microglochin* most closely in Britain), which in my limited experience always grows on soils with a pH varying between 4.5 and 5.5.

The micaceous bog on the shoulder of Meall Garbh was at an altitude of between 2,900 ft. and 3,000 ft. and somewhat higher than the Yellow Corrie, but I feel fairly confident that, if the area was explored further, more *C. microglochin* might well be found, since there appear to be other suitable habitats for the sedge in the neighbourhood. My only regret is that I had not time to investigate the area further.

(2) *CAREX RUPESTRIS* All.

This plant was also found accidentally during one of our further searches for *Roegneria Doniana*, on a spur of Meall nan Tarmachan. The habitat, a damp rocky ledge with a north-easterly aspect, did not strike me as a typical one for this sedge, the vegetation being very dense and high and the position too wet. The plant was scarce, and, although there were several fruiting spikes still to be seen, the *Carex rupestris* was certainly only tolerating its conditions. But this and a similar record made by Dr. S. M. Walters from the same area, half a mile distant from my locality, are to my knowledge the only records of *C. rupestris* from this area. There are however two other records for the sedge from the Breadalbane mountains. Firstly one mentioned in White (1886) from Ben Heasgarnich, and secondly a record from the north side of Glen Lyon made by R. Mackechnie and E. C. Wallace (1938).

I saw this sedge on Ben-y-Vrackie in July 1951, and Mr. J. E. Raven kindly sent me a small specimen and a soil sample from Inchnadamph, where I also saw it in 1952. I thought therefore it might be interesting to record a list of associated species from these habitats together with the results of some pH tests I have made on the different soils, for the latter are strikingly similar.

*Carex rupestris* was at an altitude of between 2,000 and 2,200 ft. on Meall nan Tarmachan and Ben-y-Vrackie, although at Inchnadamph it was at only about 500 ft. In the first two localities the sedge was growing in the turf, or on the rock ledges, and on both mountains the rocks were very base-rich, and probably made up of micaceous schists. But the ecological conditions and aspect of the two habitats were very different, for Ben-y-Vrackie is a particularly dry mountain, and the sedge, which was in fair abundance, was growing on a slope with a south-easterly aspect, and appeared to be well suited ecologically. On Meall nan Tarmachan, however, the habitat was cold and wet and faced north-east, the competition from larger and more vigorous plants was considerable, and the sedge was very scarce. I am including a species list for the two localities, as I think this is indicative of the rather different plant associations on the two mountains which are obviously linked with the different aspect and moisture conditions. There is however no doubt that Ben-y-Vrackie provides the better habitat. I have also added a list for Inchnadamph.

Species.	(1) Meall nan Tarmachan.	(2) Ben-y- Vrackie.	(3) Inch- nadamph.
<i>Viola tricolor</i> L. ....		+	
<i>Cerastium alpinum</i> L. ....		+	
<i>Linum catharticum</i> L. ....	+		+
<i>Astragalus alpinus</i> L. ....		+	
<i>Oxytropis Halleri</i> Bunge .....		+	
<i>Dryas octopetala</i> L. ....			+
<i>Alchemilla alpina</i> L. ....	+	+	+
<i>Saxifraga aizoides</i> L. ....	+		+
<i>S. oppositifolia</i> L. ....	+		
<i>Galium pumilum</i> Murr. ....	+		+
<i>Calluna vulgaris</i> (L.) Hull .....		+	
<i>Vaccinium Myrtilus</i> L. ....		+	
<i>Campanula rotundifolia</i> L. ....	+	+	
<i>Euphrasia micrantha</i> Reichb. ....	+		
<i>Pinguicula vulgaris</i> L. ....	+		
<i>Thymus Drucei</i> Ronn. emend. Jalas ...	+	+	+
<i>Plantago maritima</i> L. ....			+
<i>Polygonum viviparum</i> L. ....	+		+
<i>Carex lepidocarpa</i> Tausch .....	+		
<i>C. flacca</i> Schreb. ....	+		+
<i>Molinia caerulea</i> (L.) Moench .....			+
<i>Brachypodium pinnatum</i> (L.) Beauv. ..			+
<i>Asplenium viride</i> Huds. ....		+	
<i>Polystichum Lonchitis</i> (L.) Roth .....	+	+	
<i>Cystopteris fragilis</i> (L.) Bernh. ....	+	+	
<i>Rhacomitrium canescens</i> (Hedw.) Brid.		+	

Lastly I give the pH of the three soils, again determined by an electrochemical method. The very great similarity of my results from these three widely separated Scottish localities is exceedingly interesting. In each case the pH of the soils proved to be about neutral, being 7.0 at Ben-y-Vrackie and Meall nan Tarmachan, and 7.2 at Inchnadamph.

Thus it seems that this sedge prefers a neutral or slightly alkaline base-rich soil, a warm, fairly dry rock ledge with a southern aspect, and not too much competition from the surrounding vegetation.

#### REFERENCES.

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