



Alchemilla subcrenata in Teesdale ($\times \frac{1}{2}$), 24th May 1952.

M. C. F. Proctor.

ALCHEMILLA SUBCRENATA BUSER IN BRITAIN

By S. M. WALTERS.

Alchemilla subcrenata Buser in Magnier, 1893, *Scrinia Fl. Select.*, fasc. 12, 285, is one of several *Alchemilla* micro-species recorded erroneously as British by Jaquet (1928; see also Salmon, 1925); his material was, in fact, the common *A. vestita* (Bus.) Raunk. (see Walters, 1949, 15). The true *A. subcrenata* is, however, a common plant in Switzerland, and also in Scandinavia, with a Continental type of distribution similar to that of *A. monticola* Opiz and *A. acutiloba* Opiz (see map in Samuelsen, 1943, 19). It was not therefore surprising to find (1951) that the plant does in fact occur in Upper Teesdale where the other two continental micro-species occur in some abundance.

The description given by Jaquet (1928, 520), though more or less correct, is based on Swiss material of *A. subcrenata* (and manifestly does not fit the plants cited by him—which are *A. vestita* as stated above); it may therefore be useful to give a short description here embodying the distinguishing features of the plant seen growing in Upper Teesdale (May 1952):—

Plant medium-sized (20-50 cms.), with relatively few inflorescences, and well developed cauline leaves. 'Summer' radical leaves \pm circular in outline, very obviously wavy, with rather broad, deep lobes, and coarse, broad teeth; rather sparsely spreading-hairy on upper surface, more evenly hairy beneath. Petioles and lower part of inflorescence stems obviously spreading-hairy, some hairs usually slightly downwardly-directed. Inflorescence-branches, pedicels and urceoles \pm glabrous. No pinkish colouring on stipules or at base of stem.

The presence of slightly downwardly-directed hairs, though not mentioned by Buser, Jaquet or Lindberg (1909), seems to be a useful character, as no other British *Alchemilla*, with the possible exception of *A. acutiloba*, ever shows such a tendency. It cannot be said, however, that all plants of *A. subcrenata* show this character, which seems to develop more obviously on petioles and inflorescence-stems later in the season.

Two distinct localities in Upper Teesdale are so far known; in one of these, a hay meadow, the plant was very abundant (24th May 1952) and in some parts of the field was the only *Alchemilla* present. A species-list was made on the margin of this field, a south-facing 5° slope:—*Alchemilla subcrenata* l. ab., *A. acutiloba* occ., *Ranunculus acris* L., *Cerastium vulgatum* L., *Geranium sylvaticum* L., *Trifolium pratense* L., *Canopodium majus* (Gouan) Loret, *Heracleum Sphondylium* L., *Bellis perennis* L., *Hypochoeris radicata* L., *Taraxacum officinale* Weber agg., *Veronica serpyllifolia* L., *Rhinanthus minor* Ehrh., *Plantago lanceolata* L., *Rumex acetosa* L., *Anthoxanthum odoratum* L., *Agrostis stolonifera* L., *Holcus lanatus* L., *Cynosurus cristatus* L., *Dactylis glomerata* L., *Festuca rubra* L., *Lolium perenne* L. Bryophytes:—

Brachythecium glareosum (Bruch) B. & S., *Pseudoscleropodium purum* (Hedw.) Fleisch., *Rhytidiadelphus squarrosus* (Hedw.) Warnst., *Lophocolea* sp.

The presence of this, a third continental *Alchemilla*, in Upper Teesdale makes the problem of the distribution of such plants even more interesting; for although we now know that neither *A. monticola* nor *A. acutiloba* are strictly confined to Teesdale (both occur in Weardale, where *A. acutiloba* is locally common, May 1952, and *A. monticola* occurs also south of Teesdale, in v.-c. 65), nevertheless there seems to be a high concentration of their occurrences in Upper Teesdale, whence, of course, local spread on roadsides would be quite likely. A fourth species, *A. gracilis* Opiz (*A. micans* Buser) has a similar European distribution, but has not yet been found in Britain; it should obviously be sought in Teesdale.

I am greatly indebted to Miss M. E. Bradshaw for the original material of *A. subcrenata* collected in June (and September) 1951, for much information on the occurrence of *Alchemillas* in the vicinity of Teesdale and Weardale, and for assistance in visiting the localities in May 1952, and to Mr. M. C. F. Proctor for the photograph here reproduced.

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A MYSTERIOUS CAREX ON BEN LAWERS

By N. Y. SANDWITH.

On July 18th, 1948, when botanizing on Ben Lawers, I came across a patch of a curious Sedge which I could not recognize and which attracted attention on account of its short stiff culms and simple terminal spikes. It was growing on a steep upper slope of the mountain at 2700-2800 ft., facing east, near the head of a boggy rill close to rocks. At the time it did not, I think, recall the familiar *Carex dioica* L. and, as I could not place it, I collected a considerable number of specimens. The plant seemed to occupy an extremely limited area, and I did not find it again during my week's visit.

On returning to Kew, I found that the specimens were closely related to *C. dioica*, but differed from all the herbarium material in the stiff habit and the relatively long and narrow spikes, while all the fruits, which were quite immature, were still erect-ascending. I saw that there was a resemblance to the Scandinavian species, *C. parallela* (Laest.) Sommerf., but I could not refer my plants to this, because of the scabrous upper margins of their utricles, a differential key character of *C. dioica*.

On August 28th, 1951, on the advice of Mr. E. Nelmes, I revisited the locality in the hope of finding ripe fruits. On this occasion I saw fewer of the relatively large, stiff plants in the original spot, which was swampy ground with plenty of herbage of rushes and sedges, but I found quantities of smaller plants a few yards away, occupying a larger area than I had expected and growing on a damp, almost bare, stony surface of mica-schist over which other tiny rills were trickling. I was much disappointed that I could still find no properly developed fruits, even at this late season.

The entire area in which I saw this plant is only a few square yards in extent, and I have not yet found it elsewhere. The accompanying species (noted on the spot) are characteristic of the mica-schist stony rills and bogs of the higher slopes of Ben Lawers, viz., *Thalictrum alpinum*, *Alchemilla glabra* and *A. alpina*, *Epilobium alpinum*, *Saxifraga aizoides*, *S. oppositifolia* and *S. stellaris*, *Euphrasia frigida*, *Pinguicula vulgaris*, the fine dark-flowered form of *Thymus Drucei*, *Oxyria*, *Polygonum viviparum*, *Tofieldia pusilla*, *Juncus triglumis* and *J. castaneus*, *Luzula spicata*, *Carex pulicaris*, *C. capillaris*, *C. lepidocarpa* and *C. saxatilis*, and *Selaginella selaginoides*.

Typical *Carex dioica* was not seen anywhere in the vicinity, nor have I noted it at any high altitude on the upper slopes of Ben Lawers. I wonder if this has been the experience of other botanists. It is plen-