

NOTES ON THE FLORA OF THE SCILLY ISLES AND THE LIZARD HEAD

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The Isles of Scilly and the Lizard Head are still little known to botanists in the early spring. In the course of a stay of ten days (from March 27th to April 6th, 1950) in the Scilly Isles, followed by five days at the Lizard, my father, Dr R. C. L. Burges and I made a number of discoveries that seem to call for a brief note.

The first plant of interest is *Poa infirma* H.B.K., the ally of *Poa annua* L. known to British botanists from the Channel Isles under the names—among others—of *Poa annua* var. *remotiflora* (Murb.) and *P. exilis* (Frey) Murb. This grass is in perfect condition in early April and may well disappear comparatively early in the season. On the islands of St Mary's, Tresco and St Martin's, we found it to be widely distributed and often abundant on waste places, roadsides, tracks and cliff-paths. We did not visit Bryher or any of the uninhabited islands. On St Agnes we failed to observe it, but there is every reason to suppose that it will be found there also. It frequently grows in the company of *Poa annua*, from which it can usually be distinguished, even at a distance, by its yellow-green colour.

For *Viola nana* (DC.) Corbière there are apparently two old localities: first, sandhills near New Grimsby, Tresco, where it was said to have been exterminated by the building of the sea-plane base in the 1914-18 war; and second, sandy fields below the school on St Martin's. In this latter station, early in June 1948, I did eventually find, in fields that had recently been dug, a very small number of unusually robust plants. Professor T. G. Tutin, however, had told us that in 1936 he had seen the plant on Tresco, and we therefore made a careful search of suitable ground. We succeeded in finding two quite distinct colonies, each restricted to a very small area of sandy, closed, rabbit-grazed turf. In the first of these areas the plant was exceedingly abundant, in the second relatively scarce. It was always very small, about an inch in height, but was already on March 29th flowering freely.

The main objective of our visit to the Scilly Isles was, however, to try to determine the identity of the species of *Ophioglossum* on the islands. On previous visits we had formed the opinion that both *O. vulgatum* L. var. *polyphyllum* Braun and *O. lusitanicum* L. were present; and on this occasion we were able fully to corroborate that belief. Indeed *O. vulgatum* var. *polyphyllum* was found in a large number of localities, chiefly on Tresco and St Martin's, but also in one spot, of which we had been told by Mr J. E. Lousley, at the northern end of St Mary's. The type of habitat was always much the same, gentle slopes of closed turf on a sandy subsoil. On Tresco the plant seems

almost always to be accompanied by *Scilla non-scripta*. In most localities there were already many fronds above ground, a large proportion of which bore fertile spikes in an early stage of development. The roots of this plant are long and fibrous, and the small rhizome bears either one or two fronds, both of which are sometimes fertile. The fronds are narrowly ovate, quite thin in texture and of a uniformly bright dark green with a curiously metallic gloss.

On St Agnes, where we failed to detect *O. vulgatum* var. *polyphyllum*, my father and I had previously found a single small colony of a strikingly distinct plant. On this occasion we twice revisited this same colony, but, despite a careful search of the rest of the island, did not succeed in finding any others. The habitat lies on the rough heath in the southern half of the island. It is a flat area, of little more than a square yard, at the foot of a large boulder. It bears such species as *Armeria maritima* and *Plantago Coronopus* and is surrounded by stunted *Calluna* and *Ulex*. In this small area there were at least a hundred specimens of *Ophioglossum lusitanicum*, a plant of barely half the size of *O. vulgatum* var. *polyphyllum*—often indeed much smaller—the frond of which is narrower, of a leathery texture and with almost parallel sides. By the beginning of April the fertile spikes had all fallen, except for a single one that was dried and bent, and the fronds, which lie flat upon the ground, were beginning to turn yellow. The stock consists of a larger rhizome than that of *O. vulgatum* var. *polyphyllum*, bearing two fronds, but this species evidently fruits, here at least, much less freely than its ally. Both in the nature of its habitat and in its appearance and time of fruiting, the plant on St Agnes seemed to us to be unquestionably conspecific with that which we had seen, on about the same date in 1949, on the cliffs of Petit Bot in Guernsey. And this impression, based primarily upon the field characters, was confirmed by Mr A. H. G. Alston, whose comment on the fresh specimens sent to him from St Agnes was as follows: "I think that it is *O. lusitanicum* because of the narrow fleshy leaves without small secondary veins and the straight-sided epidermal cells."

None of the species here reported from the Scilly Isles had yet been found upon the Lizard Head. We ourselves searched many areas that appeared to be superficially suitable for each, but were successful in finding only *Poa infirma*. It, at least, seems to be not uncommon; though there is only a little of it in the Caerthilian valley and on the Lizard Town green, it proved to be plentiful and widely distributed on a stretch of cliff between Kennack Sands and Black Head. Here it sometimes attains unusual dimensions; Professor Tutin, who kindly confirmed our determination of the grass both here and on the Scilly Isles, commented on one exceptionally coarse and broad-leaved specimen from near Kennack that "the large plant is also *Poa infirma*, looking much more like it does in the Mediterranean than anything else I have seen here." In this station, too, it was occasionally accompanied by dense tufts of *Juncus capitatus* Weig., much of it already in full flower, on

these sheltered sunny slopes, as early in the season as April 9th. But apart from *Poa infirma*, all the other species found on the Scilly Isles were, on the mainland, conspicuous by their absence.

On the other hand, a number of plants characteristic of the Lizard Head have yet to be found in the Scilly Isles. *Isoetes Hystrix* Durieu, for instance, the range of which on the mainland is considerably greater than has yet been reported—we saw it in abundance not only in the Caerthilian and Kynance valleys but also in Gew-graze and near Mullion Cove—would appear to be absent from Scilly: long and careful search of many likely areas proved invariably fruitless. And the same can be said, though with less confidence so early in the season, of *Juncus capitatus*. Again, while *Artrolobium pinnatum* (Mill.) Britten & Rendle, so common in the Scilly Isles, is unknown on the mainland, the three characteristic clovers of the Lizard—one at least of which, *T. strictum* L., was evidently going to be unusually abundant and fine this year—remain as yet undiscovered in the Scilly Isles. It would appear, therefore, if only the rarest species are taken into account, that the differences between the floras of the two districts greatly outweigh the similarities.

The differences between the floras of mainland Cornwall as a whole and the Scilly Isles are indeed much greater than this. Further investigation of this fact, due presumably to a combination of edaphic and climatic factors, might well yield illuminating results. In any case, a week of the spring spent in either area can hardly fail to be of the utmost interest to the field-botanist.