

SHORTER COMMUNICATION

OROBANCHE MINOR VAR. *COMPOSITARUM* IN SOMERSET

Common Broomrape (*Orobanche minor*) is currently regarded as having two distinct subspecies, subsp. *minor* and subsp. *maritima*, the former with two varieties recognised in Britain: var. *minor* and var. *compositarum*. A third variety, var. *flava*, which apparently only differs in its lack of purple pigmentation, may best be considered a forma. Some yellow plants, such as those at Newport Docks, are closer to subsp. *maritima* in some characters and may be evidence of hybridisation between different races of *O. minor* (Thorogood *et al.*, 2009). There are old records of var. *compositarum* from Berrow, North Somerset (VC6), and a Somerset Rare Plants Group visit to Berrow Dunes on 25 June 2009 provided an opportunity to search for specimens of this taxon which were needed by Chris Thorogood, who is carrying out research on *O. minor* at the University of Bristol. A total of 13 spikes were found, in three sites on the dunes.

O. minor var. *compositarum* Pugsley was first described in 1940, distinguished from typical *O. minor* by its usually denser inflorescence of paler sub-erect, narrower (3–4 mm) and more glabrous corollas. This variety normally grows on Smooth Hawk's-beard (*Crepis capillaris*) or Cat's-ear (*Hypochaeris radicata*); it has often been mistaken for the extremely rare Oxtongue Broomrape (*O. picridis*) because of the similarity in host, pale flowers and hairy filaments. *O. minor* var. *compositarum* is under-recorded and is apparently endemic to Britain (although the species itself is of questionable native status). Most specimens seen have been from the sandy soils of East Anglia and ecologically similar areas in Surrey. There have been few recent records nationally and many of those may in fact be other somewhat atypical forms of *O. minor* showing some, but not all, of the distinctive characters of var. *compositarum*, for example sub-erect corollas – a feature which occurs to an extent in all fruiting plants of this species. An attempt by

Chris Thorogood to re-find material for molecular study in eastern England in 2009, funded by the Botanical Society of the British Isles, proved unsuccessful. This made the Somerset discovery all the more important.

In his description, Pugsley (1940) cited a range of specimens in addition to those listed as types. Within this list he mentioned plants from 'about Brean, north Somerset'. Pugsley's herbarium is now in the Natural History Museum (**BM**) and a single herbarium sheet bears three different collections, all from the same area. The earliest was collected by H.W. Pugsley himself from 'Sandhills, Berrow, Som.' on 8 July 1897 and is clearly var. *compositarum*. Two specimens, one of which has the typical dense, narrow, rather erect corollas of this variety, were collected by J.E. Lousley from 'Sandhills, near Berrow, V.C.6' on 3 August 1923. The third specimen, found 'On *Hypochaeris radicata*, Burnham Sandhills, north Somerset' on 30 June 1935, lacks the distinctively upright corollas and is not convincing material of this taxon.

The only past records of this taxon in Somerset are those mentioned above; it receives no mention in the Floras. Thus our record in 2009 was the first unequivocal one since 1923 for a broomrape which, in Somerset, has only ever been found on a short stretch of the coast.

References

- Pugsley, H.W., 1940. 'Notes on *Orobanche* L.', *Journal of Botany (London)* 78, 105–16.
Thorogood, C.J., Rumsey, F.J., Harris, S.A., and Hiscock, S.J., 2009. 'Gene flow between alien and native races of the holoparasitic angiosperm *Orobanche minor* (Orobanchaceae)', *Plant Systematics and Evolution* 282, 31–42.

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