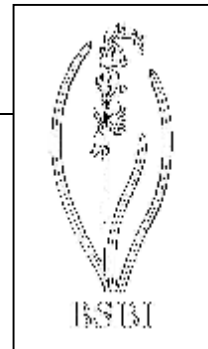


Plant Crib



OROBANCHE

A full account of the British species, including a key to herbarium material, full illustrations and distribution maps is given in Rumsey & Jury (1991). Good photographs of all the British species can be found in Kreutz (1995) and Pusch (1996). All *Orobanche* species produce examples lacking in the darker (?anthocyanin) pigments, which could be the result of a single gene mutation. These have been recognised at various ranks, but in the absence of other morphological, ecological or phenological discriminating characters are best considered forms.

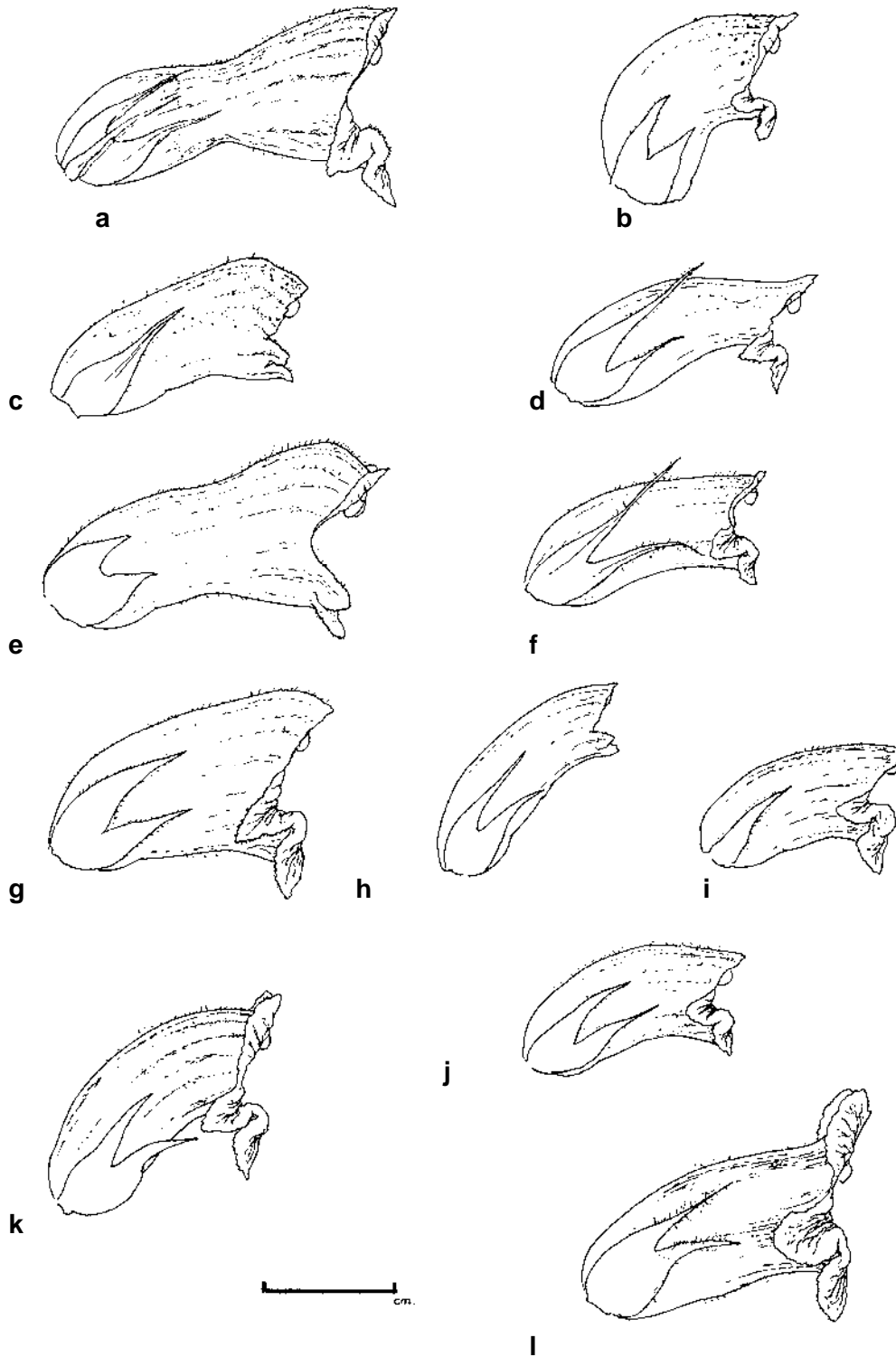
Many incorrect determinations derive from incorrect assumptions as to the host. Most species have a limited host range and where a connection can be demonstrated this may aid identification. However, excavation is not usually desirable as many species are endangered or rare. For identification collection of whole specimens is preferable; however, two pressed flowers plus associated bracts etc., with one corolla dissected along its upper surface, and flattened to show the filaments, and the other flattened entire laterally, plus, where possible, habitat photos, will prove sufficient for identification.

The main identification problems relate to the *O. minor* agg. (including *O. picridis* F. W. Schultz and *O. hederæ*) and their discrimination from atypical, particularly depauperate, examples of *O. rapum-genistæ*, *O. elatior* Sutton, *O. reticulata* Wallr. and *O. alba*. The first can be separated by its campanulate corolla, with stamens inserted less than 2 mm from the corolla base. *Orobanche elatior* is easily distinguished by the connate calyx lobes (i.e. the two bilobed segments are fused under the corolla).

Orobanche reticulata has a very distinctly shaped corolla (curved with a broad oblique mouth), with dark glands distally. *Orobanche alba* is the only other British species with a corolla with distinct coloured sessile glands. It differs from *O. minor* in its striking reddish coloration, glandular-ciliate corolla lobe margins and stamen insertion less than 2 mm from the corolla base.

Of the species more morphologically similar to *O. minor*, the most frequently encountered is *O. hederæ*. It can be distinguished by the constriction of the corolla towards its distal end and yellow stigma. Some specimens have somewhat purplish stigmas but other characters - the more acute corolla lobes, lax spikes, with flowers often from near ground level upwards and a conspicuous terminal 'bud' of unopened flowers - will then distinguish these specimens. *Orobanche hederæ* is notable for asynchronous flowering within populations, with some specimens still flowering after many are dead and fruiting. *Orobanche picridis* is the most widespread segregate of the *O. artemisiae-campestris* Vaucher ex Gaudin complex and the only taxon in this complex present in the British Isles. It is almost restricted to calcareous sea-cliffs, parasitising *Picris hieracioides* and rarely other members of the tribe Lactuceae (e.g. *Pilosella*). Sporadic ephemeral occurrences may be from wind-blown or inadvertently introduced seed. These plants are more variable and difficult to separate from *O. minor* than native examples. Typically *O. picridis* is a pale ivory colour but with an intense dark-purple stigma. It has more filiform calyx segments, longer bracts, longer corollas, with a more porrect (i.e. slightly upwardly directed) upper lip. The stamen bases are clothed with long white hairs and usually inserted higher than typical for *O. minor* (c. 4 mm from the base of the corolla).

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Flowers of *Orobanche* species. (a) *O. purpurea* (b) *O. reticulata* (c) *O. alba* (d) *O. hederiae* (e) *O. caryophyllacea* (f) *O. loricata* (g) *O. rapum-genistae* (h) *O. minor* var. *compositarum* (i) *O. minor* var. *maritima* (j) *O. minor* var. *minor* (k) *O. elatior* (l) *O. crenata*

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The varieties of *O. minor* are keyed out in Stace's *New Flora*. *Orobanche minor* var. *maritima* has been much confused with var. *minor*. It almost exclusively parasitises *Daucus carota* subsp. *gummifer*, and is usually a smaller, more heavily pigmented plant, with a puberulent stem often possessing a bulbous base. Plants from maritime habitats parasitic on *Eryngium*, which have been referred here, and to *O. amethystea* Thuill., are best treated as *O. minor sensu stricto*. An investigation of this aggregate and related taxa in a European context is long overdue.

Orobanche crenata Forssk., a rare but perhaps increasing casual naturalised in S Essex, differs from *O. minor* in its strong carnation scent, whitish stigma, erect, bilobed upper corolla lip and usually its greater corolla length. Many British specimens are, are depauperate and easily overlooked as being of the *O. minor* agg., particularly *O. picridis*.

Orobanche ramosa L., a casual which has not recently been reported, is like a slender, branched *O. purpurea* with narrow, more conspicuously constricted flowers.

Orobanche rapum-genistae is protected in the Republic of Ireland under the Wildlife Act 1976. *Orobanche hederæ* is protected in N Ireland under the wildlife (NI) Order 1985. *Orobanche caryophyllacea*, *O. picridis* (syn. *O. artemisiae-campestris* in part) and *O. reticulata* are protected in Britain under the Wildlife & Countryside Act 1981.

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