Plant Crib 3



TARAXACUM

The BSBI Handbook Dandelions of the British Isles (Dudman & Richards 1997) is the standard source of reference. Together with *Hieracium* and *Rubus*, this is the most challenging genus British and Irish botanists encounter. The plasticity of dandelions is such that it takes a great deal of experience to learn what a species can 'do', and there are a great many of them. Through much of our islands, a thorough study of ones local 'patch' might eventually yield 80-100 species, and casual introductions from elsewhere in Europe are always a possibility. One should only examine well-grown, typical individuals just before and during early flowering (a 'window' of about a month, although this extends with increasing altitude), and even then be prepared not to name a substantial proportion of material. For a serious student, there is no substitute for developing a comprehensive herbarium of well-preserved material named by an authority. For others, there are perhaps 20-30 species which are easily and reliably learnt (e.g. T. lacistophyllum, T. rubicundum, T. argutum, T. inopinatum, T. faeroense, T. euryphyllum, T. pseudolarssonii, T. luteum, T. unguilobum, T. nordstedtii, T. bracteatum, T. subbracteatum, T. hamatum, T. pseudohamatum, T. exacutum, T. ancistrolobum, etc.). For other species, identification needs to be based on plants carefully selected in the field, which are then pressed for later reference (see notes on collecting below). Random collections by the inexperienced rarely produce worthwhile specimens or names.

The key to the nine Sections in the BSBI *Taraxacum Handbook* (Dudman & Richards 1997) and Stace's *New Flora* are essentially identical, and allow some provisional groupings to be made. By its nature, the sectional division of *Taraxacum* produces much more "fuzzy" categories than the species or genus, hence the sections must be keyed out using as many characters as possible, including ecological ones. Indeed, ecological characters are very significant for, given the habitat or locality, one can expect to find members of certain sections. Conversely, the presence of some sections says a lot about the quality of the habitat! Of the nine British sections, Sections *Taraxacum*, *Obliqua* and *Palustria* are all very restricted ecologically and contain very few species. Section *Spectabilia* is now a much more restricted concept than hitherto and essentially only one common and widespread but very plastic species viz. *T. faeroense* (Dahlst.) Dahlst. is recognised (three endemics also present in Shetland and one on St Kilda). The other three largely native sections, Sections *Naevosa*, *Celtica* and *Erythrosperma* each contain substantial numbers of species. Of the more 'weedy' sections with many casuals and likely introductions, Section *Hamata* has been usefully split away from Section *Ruderalia*, but the latter still contains about half the known species in Britain. Section *Hamata* appears to be a fairly homogeneous group but it has affinities with Section *Celtica* and, in certain cases, some species could fit fairly happily into either section.

Separate illustrated *Plant Crib* accounts to Sections *Celtica*, *Erythrosperma*, *Hamata* and *Naevosa* are available for to help name plants.

Collecting notes

It is most important that the plants are collected carefully and selectively if identification is to be possible. The following notes may help:

- i) Collect until mid-late flowering period only. Leaves produced later will be the 'summer' leaves, and are usually larger and not of typical shape.
- ii) Plants should be well-grown, and not from shaded, heavily-trodden, mown or grazed areas, or diseased.

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- iii) Note in the field
 - the attitude and dimensions of the outer involucral bracts (i.e. whether erect, spreading, or recurved).
 - the length & width of the involucral bracts, their colour (all green, suffused purple, red-tipped, etc.), and whether bordered.
 - leaf colour (shade of green), and whether blotched or spotted.
 - petiole colour, midrib colour (underneath).
 - colour of stigma, ligule stripe.
 - diameter of the head when fully open (usually in sunshine).
- iv) The whole plant should be collected (single leaves and heads are not of much use), but specimens should be excised at the top of the root. If possible include both flowering and fruiting heads (especially Sect. *Erythrosperma*). Flowers can be 'clocked' (i.e. flowers placed in water until the fruits have matured, if necessary) but the oldest flowers in a specimen also usually go to seed in the press.
- v) Plants are best preserved if pressed immediately after collection (i.e. in the field) as the leaves curl very rapidly. Leaves must be flattened individually, and heads pressed from the side. Small leaves and buds in the rosette may be removed. The silhouettes in the *Taraxacum Handbook* show how to lay out plants.
- vi) Rapid drying is essential if the true colours are to be preserved. This will mean a change of paper at least once a day, preferably twice, and the press near a source of gentle heat (e.g. a radiator).
- vii) If leaves become curled and flaccid, the whole plant may be immersed in water for up to 24 hours until it is again fully turgid. It is then easily pressed (after gently shaking to remove excess water), but additional changes of drying paper are required.

Digital images

Digital images to accompany specimens can markedly enhance their value as characters lost or obscured by pressing can be assessed and pictures should be taken at the time of collection. Particularly useful are pictures of involucres in late bud, the attitude of the ligules underneath, and the colour of the outside of the petiole. Images can be numbered with the collecting number and either printed out or sent on disc with specimens.





References Dudman, A. & Richards, A. J. (1997). Dandelions of Great Britain and Ireland. Botanical Society of the British Isles, London.

Author Based on pers. comm. with C. C. Haworth 1987 **U** and A. J. Richards, 1987, 2012.