

TARAXACUM SECTION TARAXACUM

The following account of *Taraxacum* Section *Taraxacum*, Alpine Dandelions, is based on the BSBI dandelion handbook (Dudman & Richards 1997) and follows their species numbers.

Taraxacum Section *Taraxacum* includes the six alpine dandelions in Britain, most of which are rare in the mountains of central Scotland. They are generally confined to base-rich soils and rocks, and often only occur in small quantities.

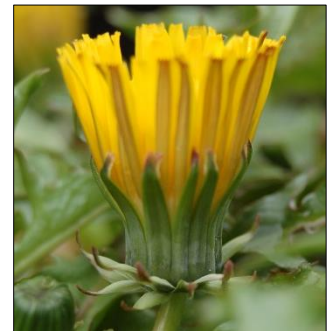
Section *Taraxacum* species are characterised by having:

- Petioles green, winged
- Leaves bright green, toothed or with simple lobing (midribs may be coloured or not).
- Orange-yellow heads (relative to other sections).
- Bracts usually small (c. 7-11(-14) x 2-2.5(-4) mm), spreading.



There may be other species in alpine grasslands such as *T. caledonicum* (Section *Celtica*), *T. faeroense* (Section *Spectabilia*) and often Section *Naevosa* species. These tend to have dark green leaves, with or without purple blotches and usually have red to purple petioles.

A significant problem for surveys of Section *Taraxacum* species is that they are often out of reach on cliffs or have leaves grazed in the more open grasslands at the base of the cliffs; it will not be possible to name every plant.



Key

Pollen absent (check young, freshly emerged stigmas); fresh styles yellow or yellowish

Achene body + cone 4.7 mm; leaves mid green; pollen present or absent

Achene body + cone 3.5 mm; leaves pale green; pollen absent

Pollen present; fresh styles yellow to discoloured

Leaves with punctate spots; involucre bracts glaucous, stiff

Leaves unspotted; involucre bracts green or pruinose on upper surface, soft

Middle and young leaves usually with deep lateral lobes more than half width of leaf

Bracts bordered; fresh achenes straw coloured

Bracts unbordered or scarcely bordered; fresh achenes rusty-reddish

Middle and young leaves with teeth or shallow lobes less than a third of width of leaf

Bracts 9-14 x 3-4 mm; achene body 4.8-5.3 mm

Bracts c. 9 x 2 mm; achene body 3.8-4.2(-4.4) mm

19. *T. ceratolobum*

20. *T. craspedotum*

22. *T. pycnostictum*

19. *T. ceratolobum*

21. *T. cymbifolium*

19a. *T. clovense*

19b. *T. xiphoideum*



cymbifolium



clovense



ceratolobum



pycnostictum

(NB cymbifolium achenes rusty-reddish when fresh, but old and somewhat faded in picture above)

19. *T. ceratolobum* Horned-leaved Dandelion

Taraxacum ceratolobum is the most widespread Scottish mountain species (V.cc. 88-90, 92, 94, 96-98, 105).

It is characterised by the long, mid green leaves with many, regular, usually patent, narrow side lobes, the styles yellow or only slightly discoloured when fresh (usually discoloured dry) and the bordered bracts. Pollen may be present or absent. The achenes are light brown, c 4.0 mm long with a cone 0.7 mm.

The leaves are variable, ranging from the typical handbook pictures for robust plants on the cliffs to small grazed ones in scree. The side lobes are often patent, but can also curve backwards to a degree. New young leaves are broader and less regularly lobed. The amount of small toothing on the interlobes also varies from virtually none to regular small lobules.



When pollen is absent, the bigger achenes are the best way to distinguish it from 20. *T. craspedotum*.

19a. *T. clovense* Clova Dandelion

This rare endemic is confined to the Glen Clova area from Corrie Fee eastwards to Glen Mark (V.c. 90).

This is a robust species characterised by the shallowly lobed leaves, the large bracts 9-14 x 2-3 mm with pale borders, deep yellow heads, discoloured styles, pollen and the large straw-coloured achenes 4.8-5.3 mm long, nearly smooth and narrowed imperceptibly into a very short cone.



19b. *T. xiphoideum* Sword-leaved Dandelion

Taraxacum xiphoideum is a rare species, so far only recorded from a few Scottish mountains (V.c. 97 Moy Corrie and Coire Adair, V.c. 98 Meall Bhuide). A record for V.c. 96 requires verification.

It is characterised by the nearly parallel-sided leaves with only shallow triangular teeth, the discoloured styles and the spreading bracts. The achenes are rugose and have spines.

Taraxacum xiphoideum plants are most typical on dry ledges, where the pure green leaves with very broad petioles and small side teeth and small (7-11 x 2-2.5 mm) spreading bracts with clear whitish borders are distinctive. It may seed into open grass below where the plants may be somewhat flushed with purple colour and have slightly coloured midribs. The new inner leaves are narrower and more toothed than the outer leaves. The leaves may be hairy, at least when young. Seedlings have very similar leaf shape to those of *T. ceratolobum*

This may be a relatively early species to flower in the mountains; on 6 July 2016 in the Moy Corrie, *T. xiphoideum* was in fruit on the cliffs, whilst all other dandelions were only in flower.



Taraxacum xiphoideum retains the features of the early-developing leaves (shallow lobes) throughout its lifetime. Young leaves of other species look like these when immature so can be hard to separate based on leaves alone, and it is recommended that identifications are based on flowering/fruiting material.

Taraxacum ceratolobum is a slightly bigger plant when on cliffs (both may be dwarfed when grazed), has yellow stigmas, lacks pollen, and usually has much longer lateral lobes on the leaves.

20. *T. craspedotum* Pale-leaved Dandelion

Taraxacum ceratolobum is a rare species scattered in the Scottish mountain species (V.cc. 88-99, 92, 94, 96-98, 105). It is most typical of the acidic Cairngorms.

It is characterised by the pale green leaves, deep yellow flowers, conspicuously bordered bracts, yellow styles and absence of pollen. It has quite small 3.2 mm, pale brown achenes with short cones 0.3 mm.



21. *T. cymbifolium* Ben Lawers Dandelion

In Britain this species is confined mica-schist cliffs and, most frequently, on open grassy scree on Ben Lawers and Ben Ghlas (V.c. 88); the record on Ben Vrackie (V.c. 89; Usher & Richards 2009) is now thought not to be *T. cymbifolium*. Elsewhere, it occurs in Arctic Scandinavia, including the extremely disjunct Bjorn Øya (Bear Island), where plants once distinguished as *T. acromaurum* Dahlst. are now considered synonymous.

It is characterised by the bright green leaves with yellow-orange heads and reddish achenes (when fresh).

Identification of ideal-growing plants is relatively easy in the field on Ben Lawers – the key thing is the fleshy, thick, bright green leaves with few, blunt, broad triangular lobes on the outer leaves. The inner leaves are increasingly more toothed. Young plants have almost entire, obovate leaves (*cymbifolium* means ‘boat-leaved’, which the young leaves certainly are) which look different to the mature leaves, but transitional leaves can also be found. The styles are quite dark, and have pollen. Bracts on buds tend to be recurved, whilst on open heads the bracts vary from spreading to recurved, and they may have partial, narrow borders. Achenes are rusty-red when fresh (not straw coloured).

However, the sheep grazing makes plants quite hard to identify as the leaves are often bitten off with only the bases remaining and it can be impossible to name them.

Compared to *T. ceratolobum* which grows with it, the leaves are bright green, fleshy and broad with a few, broad lobes (*T. ceratolobum* leaves are duller, narrower and have more, narrower lobes).



(wild)



(Cultivated material looks quite different. L. Tucker).

22. *T. pycnostictum*, Small-spotted Dandelion

This species is uncommon on wet ledges in the mountains in Central Scotland (V.cc. 88-90, 92, 97, 98).

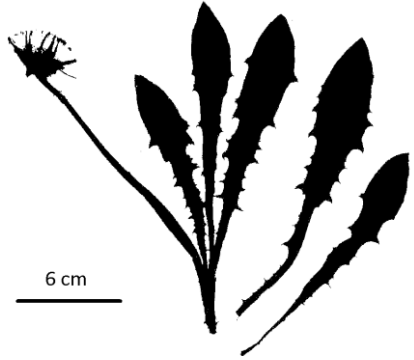
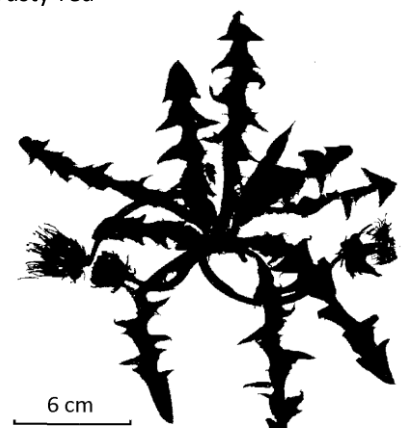




Within Section *Taraxacum*, this species is characterised by the black-spotted, roughly hairy leaves and the stiff, glaucous, scarcely bordered bracts.

Also widespread in the uplands with spotted leaves are Section *Naevosa* species, which lack the stiff glaucous bracts and *T. faeroense* (section *Spectabilia*) which has erect-appressed bracts and red-stripped ligules.



All cultivated material (L. Tucker)

Summary Field Sheet

<p><i>T. clovense</i> Pollen present, styles discoloured, bracts 9-14 x 2-3 mm with pale border; achenes almost smooth</p> 	<p><i>T. cymbifolium</i> Pollen present, styles discoloured, leaves bright green, bracts without or with partial narrow border, achenes rusty-red</p> 	<p><i>T. craspedotum</i> Pollen absent, styles yellow, bracts conspicuously bordered, leaves pale green, achenes 3.2 mm, cone 0.3 mm</p> 
<p><i>T. ceratolobum</i> Pollen present or absent, styles yellow, bracts bordered, leaves with regular narrow side lobes; achenes 4 mm, cone 0.7 mm</p> 	<p><i>T. pycnostictum</i> Pollen present, styles discoloured, leaves spotted, involucre stiff, bracts glaucous, scarcely bordered</p> 	<p><i>T. xiphoideum</i> Pollen present, styles discoloured, bracts bordered c 9 x 2 mm, leaves ±parallel-sided with deltoid teeth</p> 

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

Usher, M. B. & Richards, A. J. (2009). *Taraxacum cymbifolium* in Scotland. *BSBI News* 112: 3-4.

Pictures C. Ferguson-Smyth, T. Rich, A. J. Richards, L. Tucker