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TARAXACUM SECTION CELTICA

Celtica species are mostly found in the western and northern districts of the British Isles, being largely restricted to wet meadows in southern England. Elsewhere, they occur in a range of habitats from mountain cliffs to lane banks, grasslands and even somewhat saline habitats, but like the Naevosa they are rarely found in waste places as ruderals or weeds. 34 species are known from the British Isles, and all (except perhaps *T. nietoi*) are native here. The British Isles forms the centre of the distribution of the section, with much more diversity here than in other countries, and no less than 19 species (56%) are endemic to these islands. The present account includes three new Irish species which have not yet been published.

- Celtica species are never gross like some Ruderalia and usually have rather flat simply lobed leaves.
- Like Hamata species, involucres are often pruinose and bluish-green and exterior bracts do not exceed 12 mm in length.
- Unlike the Hamata innermost exterior bracts are usually patent to erect, not arcuate.
- Also unlike any Hamata, many Celtica species lack pollen and have stigmas which dry yellow. These characters are also rare in section Ruderalia.
- Taken together, these features are closely allied to those in section Naevosa, from which Celtica differ chiefly by an absence of spotting on the upper leaf surface.

In the Celtica, only *T. olgae* and *T. berthae* regularly have spots. These species are rare and localised in the north-west, and are related to *T. nordstedtii*. Because they are spotted, they are not treated here, but in section Naevosa. Occasionally *T. nordstedtii* itself also shows spotting, usually in extreme-Atlantic conditions.

Like Naevosa, most Celtica are tetraploid (2n = 32) or hexaploid (2n = 48). Hamata and Ruderalia species are invariably triploid (2n=24).

1a. Species lacking pollen (check stigmas with a lens)

2a. Stigmas yellow, concolorous with the ligules in the fresh and dry condition



(T. ostenfeldii)

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3a. Exterior bracts spreading to recurved (see above), ligule stripes solid, brown

4a. Terminal leaf-lobes narrower than mid-leaf, usually subdivided (Wales) Taraxacum breconense





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3b Exterior bracts erect; ligule stripes tenuous, streaky, red







3c. Exterior bracts erect; ligules tubular, yellow distally, brownish proximally (Orkney) **Taraxacum claudiae**



2b. Stigmas discolored when dry; darker than ligules when fresh

5a. Ligules twice the length of inner bracts, striped purple; exterior bracts appressed; leaves linear-spathulate, scarcely lobed, rounded at apex (rare) **Taraxacum palustrisquameum**

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(T. palustrisquameum)

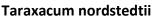
5b. Ligules usually short, scarcely exceeding inner bracts, with a solid purple-brown stripe below; exterior bracts erect, pruinose, lacking a border; distal margin of lateral leaf-lobes usually concave-angled

6a. Exterior bracts erect-patent; lateral leaf-lobes linear distally; achene body <3.4 mm (scarce)





6b Exterior bracts erect (-appressed); lateral leaf lobes various; achene body >3.3 mm (widespread)







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5c Ligules striped grey, grey-pink to violet, not purple-brown

7a Exterior bracts +/- equalling interior bracts in bud; leaves +/- lacerate, leaf-lobes linear, dentate **Taraxacum fulvicarpum**





Taraxacum fulvicarpum

7b Exterior bracts much shorter than interior bracts in late bud; leaf-lobes not lacerate-dentate

8a Exterior bracts erect-appressed, > 3.6 mm wide, clearly white-bordered Taraxacum lancastriense







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8b Exterior bracts erect-appressed, <3.5 mm wide; leaves narrow, dark and (Scottish Highlands)





8c Exterior bracts erect, <3.5 mm wide; ligules with red teeth; leaf side-lobes patent (Ireland)

Taraxacum gaelorum inedit.



8d Exterior bracts spreading-recurved, <3.5 mm wide, unbordered or scarcely so

9a Terminal leaf-lobes trilobate; some leaf-lobes usually forward-pointing Taraxacum celticum

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(T. celticum)

9b Terminal leaf-lobes hastate to helmet-shaped; lateral leaf-lobes recurved Taraxacum inane





1b Species bearing pollen (check stigmas with a lens)

10a Ligules inrolled, orange (Ireland)



Taraxacum aesculosum inedit.



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10b Ligule stripe absent; ligules entirely yellow, flat

Taraxacum luteum





10c Ligules yellow, striped below, flat

11a Interlobes heavily tar-blotched at least below in the fresh and dry state

12a Terminal leaf-lobes large, rounded; exterior bracts patent to erect Taraxacum fulgidum





12b Terminal leaf-lobes trilobate to obtuse-triangular; exterior bracts recurved to erect

13a Ligules striped purple, ligule teeth purple; robust plants of western Britain with 4-6 leaf side-lobes, interlobes cut to mid-rib, dentate and heavily blotched

Taraxacum hesperium

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(T. hesperium)

13b Ligules striped grey-violet, ligule teeth yellow; leaf side-lobes 5-6; interlobes short, acute T. excellens



(T. excellens)

13c Ligules striped purple, ligule teeth yellow; exterior bracts purple, erect; small plants of southern water-meadows with 2-3 leaf side-lobes and long narrow purple petioles **Taraxacum tamesense** (similar water-meadow plants with whitish petioles and heterophyllous leaves with subdivided endlobes have been equated with **T. akteum**).



(Taraxacum tamesense)

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11b Interlobe tar blotches absent, or only evident on dried material

14a Leaves narrowly oblong. Leaf side-lobes mostly >5 per side

15a. Mid-rib purple; side-lobes sometimes double, with sigmoid distal margins; exterior bracts spreading, valvate **Taraxacum subbracteatum**



Taraxacum subbracteatum

15b. Mid-rib greenish distally, not strong purple; side lobes with convex distal margins, denticulate proximally; exterior bracts erect **Taraxacum oellgaardii**



T. oellgaardii

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14b. Leaves lanceolate to oblong; lateral leaf-lobes 2-4 pairs.

16a. Terminal leaf-lobe longer than other lobes, +/- entire, obtuse to rounded

17a. Leaf side lobes 3-5; mid-rib purple; ligule stripes purple (common and widespread)

Taraxacum bracteatum





Taraxacum bracteatum

17b. Leaf side lobes 2 (-3); mid-rib greenish; ligule stripes grey-purple (Orkney) Taraxacum orcadense





T. orcadense

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16b. Terminal leaf-lobes no longer than other lobes, usually acute

18a Leaves oblong, hairy; leaf lobes acuminate; ligule teeth blackish; leaf lobes acuminate

19a Leaves fairly flat; stigmas dark, drying blackish (common and widespread) Taraxacum duplidentifrons





T. duplidentifrons

17b. Leaves strongly three-dimensional, contorted; stigmas yellowish, drying grey-yellow (Orkney)



18b Leaves lanceolate, glabrous or nearly so; ligule teeth not blackish, leaf side lobes not acuminate

19a Exterior bracts erect to appressed, pruinose, without a border; ligules <1.5 x inner bracts, striped brown-purple below

20a Leaves green, prostrate to ascending, side-lobes concave-angled distally, patent to forward-pointing;
 common and widespread in wet meadows etc
 Taraxacum nordstedtii (see lead 5b above)

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20b Leaves suffused purple, prostrate and genetically dwarf, side-lobes with convex distal margins, cut to midrib (rare plants of calcarous flushes in N. Pennines) **Taraxacum pseudonordstedtii**



T. pseudonordstedtii

19b Ligules >1.5 x inner bracts, rarely striped brown-purple

21a Exterior bracts erect to appressed, blackish, scarcely bordered; ligules >1.5 x inner bracts; stigmas dark, terminal leaf-lobe obtuse, achenes smooth **Taraxacum britannicum**





21b Exterior bracts spreading-erect, white-bordered, not blackish, often pruinose

22a Petioles green; terminal leaf-lobes rounded (Kent)

Taraxacum hygrophilum

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(T. hygrophilum)

22b Petioles purple

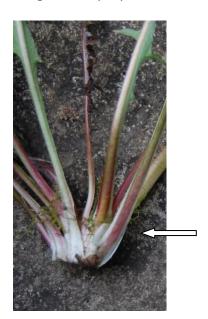
23a Terminal leaf-lobes extenuate, narrowly acute; exterior bracts spreading

24a Distal margin of lateral leaf-lobes angled-concave; petioles brilliant purple Taraxacum haematicum (not illustrated)

24b Distal margin of lateral leaf-lobes +/- straight; petioles dull greenish-purple Taraxacum porteri







23b Terminal leaf-lobe rather broad, obtuse; exterior bracts suberect

25a Ligule stripes solid greyish-pink; exterior bracts bordered, pruinose; terminal lobe often with a 'high tooth' (common and widespread) Taraxacum gelertii

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(T. gelertii)

25b Ligule stripes solid brown; exterior bracts almost unbordered, not pruinose; terminal lobe lacking high tooth (western Britain, rare in Ireland) **Taraxacum cambricum**



25c Ligule stripes streaky red-brown; exterior bracts pruinose; leaf side lobes cut nearly to mid-rib (central Ireland)

Taraxacum hibernicola inedit.



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