KEY TO THE SECTIONS OF BRITISH AND IRISH DANDELIONS

(after Stace 1991)

1. Plants delicate, usually with strongly dissected (often nearly pinnate) leaves; outer row of exterior bracts rarely > 7 mm; capitula rarely > 3 cm across 2

1. Plants usually medium to robust, rarely with nearly pinnate leaves; outer row of exterior bracts usually > 7 mm; capitula usually > 3 cm across 3

2. Achenes grey-brown, with pyramidal cone ≤ 0.5 mm long; leaves often with 6 or more pairs of lateral lobes **Section *Obliqua***

   Section Obliqua *Small plants with many leaves which are many-lobed and bright green. Achenes short-coned and brown. Bracts small and appressed. Confined to coastal habitats, especially dunes. Two species.*

2. Achenes usually violet-purple or reddish, to yellowish-brown, with cylindrical cone *c.* 1 mm long; leaves rarely with > 6 pairs of lateral lobes **Section *Erythrosperma***

   Section Erythrosperma *Usually small plants. Leaves dissected. Bracts small (3–9 mm). Achenes often reddish. Achene narrow, with fine spines and a cylindrical, narrow cone which can be up to 1.3 mm long. In dry, well-insolated habitats. 30 species. (For key, see page 20.)*

3. Outer row of exterior bracts appressed, ovate with broad scarious border; leaves very narrow, usually scarcely lobed **Section *Palustria***

   Section Palustria *Very narrow-leaved plants with broadly scarious appressed bracts which are ovate. Fen plants. Four species.*

3. Outer row of exterior bracts appressed to recurved, linear to narrowly ovate, with narrow to very narrow scarious border or unbordered; leaves broader, usually distinctly lobed 4

4. Leaves simple, bright green, with green petioles; rare plants of a few mountain cliffs in Scotland **Section *Taraxacum***

   Section Taraxacum *Medium-sized plants with orange-yellow heads and simple, smooth, bright green leaves, spotted in some species. Confined to high mountains in Scotland. Six species.*

4. Lowland plants or, if on mountain cliffs, with leaves usually dark or blotched or spotted with purple and petiole usually purple 5

5. Achene (including cone but excluding beak) > 4.5 mm, nearly cylindrical; outer row of exterior bracts erect to appressed; ligules usually with red stripes on lower side; pollen usually 0 **Section *Spectabilia***

   Section Spectabilia *Small to medium-sized plants with rather olive- to grey-green spathulate leaves which are entire or simply lobed. Bracts appressed to erect. Achenes broadly plump and long (4–5 mm). Leaves can be spotted. Plants of damp places, usually acid and mostly montane or submontane. Three species.*

5. Achene body < 4 mm, narrowly top-shaped; outer row of exterior bracts rarely appressed; ligule stripes rarely red; pollen present or 0 6

6. Leaves with large dark spots covering > 10% of surface **Section *Naevosa***

   Section Naevosa *Small to robust plants. Leaves typically rough, coarsely lobed and with spots. Pollen often absent. Bract orientation variable but mainly erect or spreading. Generally of a northern to western distribution. 12 species. (For key, see page 22.)*

6. Leaves unspotted or with spots covering < 10% of surface (but beware of damaged leaves) 7

7. Upper sides of petiole and midrib green or solid red or purple; outer row of exterior bracts usually > 10 mm, often recurved, not very dark on lower side; leaves often complexly lobed and folded in three dimensions **Section *Ruderalia***

   Section Ruderalia *Typically robust. Leaves generally fairly complicated and multilobate. Bracts rarely erect and most often recurved to reflexed. Achenes short and stubby, to 3.5 mm, and with short, broad-based cones. Anthocyanin development various, but many species are totally 'green'.*

Apart from a few select native and endemic species, they have a great tendency to weedy behaviour. By far the largest section, with many introduced species. 120+ species. (For key, see page 26.)

7. Upper sides of petiole and midrib usually minutely striped red or purple (use lens); outer row of exterior bracts rarely > 10 mm, usually patent to erect and dark on lower side; leaves ± flat, relatively simply lobed 8

8. Lateral leaf-lobes broad-based, with convex front and concave rear edge, commonly in four pairs; outer row of exterior bracts usually arched to various degrees, often subobtuse, pruinose above, dark olive-green below **Section *Hamata***

Section Hamata *Medium-sized or robust plants. Leaves dark olive green with simple lobation of hamate lobes and with a most characteristic midrib of 'interwoven' purple and green strands (use lens). Bracts regular, spreading and arcuate. Related to at least some of the Celtica but, like those of the last section, their ecology is predominantly 'weedy'. 18 species. (For key, see page 25.)*

8. Lateral leaf-lobes rarely as above, often 5–6 pairs; outer row of exterior bracts erect to recurved all ± to same degree, often acute **Section *Celtica***

Section Celtica *Medium-sized plants. Leaves generally smooth with a mid- or bluish-green colour. Petioles and midribs often bright purple or red. Leaves not usually spotted. Bracts spreading to erect. As the name suggests, with a generally western distribution. They are plants of 'good' habitats, occurring in old hedges, at woodland edges and on riversides, on generally damp soils. 30+ species. (For key, see page 23.)*

Key to Section *Erythrosperma*

1 Petioles narrow, deep purple 2
1 Petioles not as above 4

2 Scapes completely glabrous **5 T. rubicundum**
2 Scapes pubescent, at least at top at first 3

3 Achenes pale brown; open capitulum diameter < 25 mm **14 T. tortilobum**
3 Achenes dark violet when mature **6 T. dunense**
3 Achene colour otherwise; open capitulum diameter > 25 mm **1 T. lacistophyllum, 4a T. commixtum, 9 T. oxoniense**

4 Exterior bracts strongly recurved 5
4 Exterior bracts spreading to erect 7

5 Achenes chestnut; styles blackish **8c T. disseminatum**
5 Achenes dark brown or puce; styles discoloured **8 T. proximum**
5 Achenes pale; styles yellow or discoloured 6

6 Pollen absent; styles yellow **12 T. glauciniforme**
6 Pollen present; styles discoloured **11c T. retzii, 12a T. wallonicum**

7 Pollen absent 8
7 Pollen present 14

8 Achenes chestnut to dark red 9
8 Achenes brown or puce 11

9 Leaves spotted **1a T. inopinatum**
9 Leaves unspotted 10

10 Ligules inrolled, striped reddish-orange **3 T. argutum**
10 Ligules flat, striped otherwise **4 T. arenastrum, 5a T. parnassicum**

11 Achenes cinnamon or pale brown 12
11 Achenes dark brown or puce **8 T. proximum**

12 Styles yellow **8a T. proximiforme, 11 T. fulvum, 13c T. tanylepis**
12 Styles discoloured 13

13 Ligule teeth yellow; exterior bracts conspicuously bordered **13 T. degelii**
13 Ligule teeth dark; exterior bracts not or slightly bordered **8a T. proximiforme, 10 T. fulviforme, 11 T. fulvum**

14 Achenes chestnut to red 15
14 Achenes brown or dark purple 17

15 Styles yellow; ligule teeth dark — **7a T. gotlandicum**
15 Styles usually discoloured; ligule teeth yellow — 16

16 Ligule stripe purple-violet — **2 T. brachyglossum, 4 T. arenastrum**
16 Ligule stripe grey-purple — **1 T. lacistophyllum, 2a T. scanicum**

17 Achenes dark violet; styles yellow — **7 T. haworthianum**
17 Achenes pale; styles usually discoloured — 18

18 Ligule teeth yellow, stripe grey-violet — **11b T. falcatum**
18 Ligule teeth dark — 19

19 Ligule stripe grey-violet — **8a T. proximiforme, 11a T. scoticum**
19 Ligule stripe dark violet — **13a T. acutum**
19 Ligule stripe silver-grey — **13b T. placidum**

Key to Section *Naevosa*

1 Pollen absent or confined to marginal florets and very sparse — 2
1 Pollen present in all florets — 4

2 Leaves with scattered small spots — 3
2 Leaves with many, larger, often confluent spots — **24 T. euryphyllum, 25 T. maculosum**

3 Exterior bracts recurved — **27 T. subnaevosum**
3 Exterior bracts suberect to spreading — **29a T. richardsianum**

4 Leaves with scattered spots or none; western and/or northern spp. — **24a T. hirsutissimum, 27a T. cornubiense, 28 T. drucei, 29 T. stictophyllum**
4 Leaves with many, larger, often confluent spots — 5

5 Open capitulum diameter > 50 mm — **23 T. naevosum, 23b T. rubellum**
5 Open capitulum diameter < 50 mm — 6

6 Spots fading; leaves ± glabrous; exterior bracts spreading, curved — **26 T. pseudolarssonii**
6 Spots permanent; leaves hairy; exterior bracts spreading to suberect — **23a T. naevosiforme**

Key to Section *Celtica*

1 Pollen absent — 2
1 Pollen present — 10

2 Styles yellow — 3
2 Styles discoloured or dark — 4

3 Exterior bracts spreading to erect, pruinose, with a clear white border — **46 T. unguilobum**
3 Exterior bracts spreading to recurved, pruinose or not, ± unbordered — **43 T. ostenfeldii, 43a T. breconense**

4 Exterior bracts spreading to recurved — 5
4 Exterior bracts spreading to erect or appressed — 6

5 Terminal leaf-lobe ± obtuse — **38 T. inane**
5 Terminal leaf-lobe trilobate — **35 T. celticum**

6 Lateral leaf-lobes coarsely dentate; exterior bracts pruinose throughout; achenes cinnamon (oxidising to brown) — **45 T. fulvicarpum**
6 Not as above — 7

7 Exterior bracts clearly bordered — 8
7 Exterior bracts not or scarcely bordered — 9

8 Exterior bracts dark green, glaucous; ligules short, striped grey — **42e T. lancastriense**
8 Exterior bracts green, pruinose or not; ligules striped purple — **42c T. olgae, 42f T. palustrisquameum**

9 Exterior bracts pruinose; ligules rather short, striped puce — **42 T. nordstedtii, 42b T. berthae, 44 T. caledonicum**
9 Exterior bracts not pruinose; ligules striped purple — **41 T. landmarkii**

10 Ligules lacking a stripe — **46a T. luteum**
10 Ligules striped — 11

11 Proximal lateral leaf-lobes filiform or acuminate **33a T. oellgaardii, 34 T. duplidentifrons, 34a T. porteri, 40 T. haematicum**
11 Proximal lateral leaf-lobes acute to obtuse 12

12 Leaves heavily and distinctly dark-blotched on lower surface of interlobes 13
12 Leaves unblotched or indistinctly blotched 14

13 Terminal leaf-lobe obtuse to rounded **37 T. excellens, 39 T. fulgidum, 39a T. tamesense**
13 Terminal leaf-lobe acute to trilobate **33 T. subbracteatum, 35 T. celticum, 36 T. hesperium, 36a T. 'cestrense', 40 T. haematicum**

14 Midrib bright purple almost to apex 15
14 Midrib not bright purple or, if so, not distally 18

15 Lateral leaf-lobes 2–3(–4) on each side; rare spp. **31a T. orcadense, 31b T. nietoi, 39b T. texelense**
15 Lateral leaf-lobes (3–)4 or more on each side 16

16 Ligules short, striped puce, brown or purple **42 T. nordstedtii, 42a T. pseudonordstedtii**
16 Ligules longer, stiped grey to purple 17

17 Exterior bracts blackish on lower surface; styles blackish **32 T. britannicum**
17 Exterior bracts dark green on lower surface; styles not blackish **31 T. bracteatum, 33 T. subbracteatum, 42d T. cambricum**

18 Lateral leaf-lobes 2–3 on each side; rare spp. **39c T. hygrophilum, 40a T. akteum, 40b T. beeftinkii**
18 Lateral leaf-lobes (3–)4 or more on each side 19

19 Exterior bracts pruinose **32 T. britannicum, 34 T. duplidentifrons, 35 T. celticum, 42 T. nordstedtii**
19 Exterior bracts green **30 T. gelertii, 33a T. oellgaardii, 34 T. duplidentifrons**

Key to Section *Hamata*

1 Exterior bracts with a narrow but ± clearly demarcated border 2
1 Exterior bracts unbordered, or border indistinct 3

2 Exterior bracts with a white border **47a T. hamatulum, 52b T. pruinatum, 55 T. lamprophyllum**
2 Exterior bracts with a border, but not white **49a T. quadrans, 50 T. pseudohamatum, 50b T. prionum**

3 Buds very dark, pruinose, inky-black at apex; involucre of exterior bracts stellate **47 T. hamatum**
3 Not as above 4

4 Terminal leaf-lobe ± obtuse 5
4 Terminal leaf-lobe subacute, acute or acuminate 6

5 Terminal leaf-lobe typically with one or more teeth **52 T. atactum, 52a T. sahlinianum**
5 Terminal leaf-lobe entire **51 T. boekmanii**

6 Terminal leaf-lobe toothed 7
6 Terminal leaf-lobe ± entire 8

7 Terminal leaf-lobe not larger than pairs of lateral lobes, with elongated apex **48a T. marklundii, 54 T. kernianum, 55 T. lamprophyllum**
7 Terminal leaf-lobe obtuse or subacute, without elongated apex **50a T. fusciflorum**

8 Terminal leaf-lobe with elongated apex 9
8 Terminal leaf-lobe without elongated apex 10

9 Midrib green or weakly coloured 11
9 Midrib strongly coloured purple 12

10 Midrib bright purple to apex, usually with red side-veining **51 T. boekmanii**
10 Not as above 13

11 Lateral leaf-lobes recurved, with distal margin strongly dentate throughout; exterior bracts suffused purple **48a T. marklundii**

11 Lateral leaf-lobes with distal margin slightly dentate proximally; exterior bracts pruinose, pale green on upper surface **48 T. subhamatum**

12 Interlobes heavily blotched; maximum width of exterior bracts > 3.5 mm **50b T. prionum, 55 T. lamprophyllum**

12 Interlobes blotched or unblotched; maximum width of exterior bracts < 3.5 mm **50b T. prionum, 53 T. hamatiforme, 53a T. spiculatum, 53b T. lancidens**

13 Ligule stripe brown, without yellow border at apex; uncommon sp. **50a T. fusciflorum**

13 Ligule stripe bordered yellow at apex 14

14 Inner involucral bracts not equally broad, usually irregularly connate **49 T. hamiferum**

14 Inner involucral bracts ± equally broad 15

15 Maximum width of exterior bracts > 3.5 mm **50 T. pseudohamatum**

15 Maximum width of exterior bracts < 3.5 mm **49a T. quadrans, 53 T. hamatiforme**

Key to Section *Ruderalia*

1 Pollen absent; bracts ± erect **81b T. exsertiforme**

1 Pollen absent; bracts recurved **63b T. subhuelphersianum, 67a T. cherwellense, 69b T. speciosum**

1 Pollen present 2

2 Underside of petioles green to white with little or no trace of red **Key A** (page 27)

2 Underside of petioles of outer leaves green to white, but of inner leaves pink **Key B** (page 29)

2 Underside of petioles of all leaves uniformly pink, red or purple **Key C** (page 30)

(N.B. Lead 2 is best assessed on fresh material in the open and with the base of the plant exposed.)

Key A: Underside of petioles green to white with little or no trace of red

1 Styles yellow or yellowish **67b T. porrigens, 69 T. undulatiflorum, 69a T. chloroticum, 76 T. aequisectum**

1 Styles discoloured 2

2 Upper surface of midrib darker than petiole, usually coloured 3

2 Upper surface of midrib not darker than petiole 6

3 Leaves flat; terminal lobe large, subacute to obtuse; lateral lobes 2–3(–4) on each side **73 T. ancistrolobum**

3 Not as above 4

4 Some exterior bracts > 5 mm in maximum width; midrib discoloured, often bordered by black lines **74 T. sellandii**

4 Exterior bracts < 5 mm wide 5

5 Bracts violet on upper surface **70a T. cyanolepis, 70b T. curtifrons, 70c T. acutifrons**

5 Bracts leaden-violet on upper surface **70 T. piceatum**

5 Bracts pale green on upper surface **70d T. chrysophaenum, 102d T. sublongisquameum**

6 Plant small, with fleshy, grey-green leaves; petiole and midrib chalk-white **68a T. obtusilobum**

6 Not as above 7

7 Petioles unwinged in basal half 8

7 Petioles winged basally, sometimes narrowly so 10

8 Exterior bracts erect to appressed or erect to spreading **57 T. pannucium, 57a T. subexpallidum, 59a T. tenebricans**

8 Exterior bracts spreading to recurved 9

8 Exterior bracts recurved **67 T. stenacrum, 69 T. undulatiflorum**

9 Exterior bracts spreading, bordered, 4–5 mm wide **63d T. margettsii, 75 T. altissimum**

9 Exterior bracts often recurved, unbordered, usually < 4 mm wide **57a T. subexpallidum, 64a T. lepidum, 67 T. stenacrum, 72 T. intumescens, 72a T. angulare**

10 Petiole wings parallel, narrow; exterior bracts recurved or reflexed but spreading at apex **60 T. alatum, 60b T. densilobum**
10 Petiole wings not usually parallel; exterior bracts not as above 11

11 Exterior bracts usually < 3 mm in maximum width 12
11 Exterior bracts usually > 3 mm in maximum width 15

12 Exterior bracts suffused purple, narrow, spoke-like **61 T. insigne**
12 Not as above 13

13 Lateral leaf-lobes with patent, often double, linear processes **67 T. stenacrum**
13 Not as above 14

14 Ligule tips dark **62a T. nigridentatum**
14 Ligule tips orange-red **66 T. croceiflorum**
14 Ligule tips yellow **63a T. pallescens, 64a T. lepidum, 65 T. expallidiforme, 65a T. subcyanolepis**

15 Upper surface of exterior bracts whitish 16
15 Upper surface of exterior bracts pale green or darker 18

16 Terminal leaf-lobe abruptly acuminate **68 T. leucopodum**
16 Not as above 17

17 Leaves greyish green, usually hairy or at least matt **60a T. horridifrons**
17 Leaves rather pale green, sometimes hairy **63c T. necessarium, 65b T. pallidipes**

18 Leaves ± strongly crisped **56a T. macrolobum, 58 T. corynodes, 59 T. undulatum, 59b T. dilaceratum, 89c T. lunare**
18 Leaves not strongly crisped 19

19 Terminal leaf-lobes of outer leaves narrowly protracted **56a T. macrolobum, 57 T. pannucium, 57a T. subexpallidum, 61a T. laciniosum, 85a T. procerisquameum**
19 Terminal leaf-lobes sometimes acute but not protracted 20

20 Leaf-lobes crowded, ± overlapping **63 T. laticordatum, 63c T. necessarium**
20 Leaf-lobes not crowded 21

21 Plant very large with rather regular lateral leaf-lobes with large teeth; rare sp. **67c T. 'broddesonii'**
21 Not as above **56 T. laeticolor, 59b T. dilaceratum, 61b T. atonolobum, 62 T. pannulatiforme, 64 T. sublaeticolor, 89c T. lunare**

Key B: Underside of petioles of outer leaves green to white, but of inner leaves pink

1 Styles yellow **67b T. porrigens, 80c T. edmondsonianum**
1 Styles discoloured 2

2 Exterior bracts reflexed or recurved 3
2 Exterior bracts recurved, spreading or erect 5

3 Scapes heavily arachnoid-hairy throughout when young **78b T. stereodes**
3 Scapes ± glabrous 4

4 Petioles coloured, clearly demarcated from the parallel-sided green wings **79 T. adiantifrons, 80c T. edmondsonianum**
4 Petioles unwinged or, if winged, with petiole colour not clearly demarcated **84 T. lingulatum**

5 Pink petioles clearly demarcated from the parallel-sided green wings **79b T. semiglobosum, 80b T. latens, 86a T. remanentilobum, 93a T. diastematicum, 93b T. tanyphyllum, 99a T. planum**
5 Pink petioles unwinged or with midrib indistinct 6

6 Some leaves at least with terminal lobe larger than pair of lateral lobes below it **63a T. pallescens, 70 T. piceatum, 84a T. macranthoides, 88 T. sagittipotens, 89 T. ekmanii, 96a T. fagerstroemii**
6 Terminal lobe not larger than pair of lateral lobes below it, except sometimes on inner leaves 7

7 Interlobes blotched dark below **62 T. pannulatiforme, 96 T. huelphersianum, 102c T. maculatum**
7 Interlobes not usually blotched dark 8

8 Some lateral leaf-lobes with long linear processes; open capitulum exceeding 50 mm in diameter **89b T. aurosulum**
8 Not as above 9

9 Exterior bracts somewhat twisted **99a T. planum**
9 Exterior bracts not twisted 10

10 Lateral leaf-lobes sometimes divided **66a T. lacerifolium, 78b T. stereodes, 96a T. fagerstroemii**
10 Lateral leaf-lobes never divided **87 T. cordatum**

Key C: Underside of petioles of all leaves uniformly pink, red or purple

1 Exterior bracts claw-shaped, coloured; interlobes blotched dark on young leaves **100 T. polyodon, 103b T. acutifidum**
1 Not as above 2

2 Terminal lobe large and rounded or helmet-shaped on all or most leaves **88a T. hexhamense, 90 T. aberrans, 90a T. 'non-severum', 91a T. cophocentrum**
2 Terminal lobe large and rounded only on inner leaves or not at all 3

3 Styles yellow or yellowish 4
3 Styles discoloured 7

4 Interlobes strongly blotched dark below 5
4 Interlobes unblotched or scarcely so 6

5 Lateral leaf-lobes 5 or more on each side **76 T. aequisectum, 80c T. edmondsonianum, 100a T. multicolorans, 100b T. nitidum**
5 Lateral leaf-lobes 2–5 on each side **80c T. edmondsonianum, 102 T. xanthostigma, 102a T. longisquameum, 102b T. scotiniforme**

6 Most terminal leaf-lobes with a protracted apex **79a T. retroflexum, 81a T. exsertum, 82c T. leptodon**
6 Terminal leaf-lobes lacking an obviously protracted apex **80c T. edmondsonianum, 88b T. amplum, 89d T. coartatum, 96b T. hepaticum**

7 Some exterior bracts not exceeding 3 mm in maximum width 8
7 Exterior bracts exceeding 3 mm in maximum width 11

8 Exterior bracts recurved or hanging vertically; petiole usually vivid purple **95 T. dahlstedtii, 95b T. pachylobum, 98 T. pectinatiforme, 98a T. caloschistum**
8 Exterior bracts erect to recurved; petiole not vivid purple 9

9 Petiole very broadly winged, short; terminal leaf-lobe tripartite **99 T. trilobatum**
9 Not as above 10

10 Exterior bracts twisted **80 T. aequilobum, 80a T. latissimum**
10 Exterior bracts not twisted **62a T. nigridentatum, 78 T. angustisquameum, 91 T. oblongatum, 100 T. polyodon, 103b T. acutifidum**

11 Petiole shining purple; exterior bracts broad and spreading **82b T. obtusifrons, 97 T. subundulatum, 97a T. pulchrifolium**
11 Petiole rarely shining purple but, if so, then exterior bracts not broad 12

12 Terminal leaf-lobe very acute or acuminate or at least protracted 13
12 Terminal leaf-lobe obtuse to acute, but not ending in a fine point 14

13 Leaves flat, hairy, at least when young; scapes arachnoid-hairy, at least when young **81 T. acroglossum, 82 T. exacutum**
13 Leaves often ± crisped; leaves and scapes ± glabrous **77 T. interveniens, 78a T. mimulum, 80b T. latens, 90b T. pseudoretroflexum, 99a T. planum**

14 Lateral leaf-lobes 2–3 on each side **82a T. valens, 105 T. lucidum, 105a T. sundbergii**
14 Lateral leaf-lobes usually 4 or more on each side 15

15 Exterior bracts twisted **80 T. aequilobum, 80a T. latissimum, 99a T. planum**
15 Exterior bracts not twisted 16

16 Petiole narrowly parallel-winged with a clearly demarcated red midrib **80c T. edmondsonianum, 93 T. dilatatum, 103a T. subxanthostigma**
16 Not as above 17

17 Interlobes strongly blotched dark below 18
17 Interlobes unblotched or weakly coloured 22

18 Leaf-lobes strongly dentate, cut almost to midrib **101 T. incisum**
18 Leaf-lobes sometimes strongly dentate, but not cut as far as midrib 19

19 Leaves grey-green with scattered punctate spots **104 T. melanthoides**
19 Not as above 20

20 Leaves smudged blackish on upper surface; leaf-lobes more or less overlapping **92 T. pachymerum**
20 Distal margins of lateral leaf-lobes with many dark teeth **62a T. nigridentatum**
20 Not as above 21

21 Midribs pink to purple **100b T. nitidum, 103a T. subxanthostigma**
21 Midribs green to slightly coloured **71 T. tumentilobum, 80c T. edmondsonianum, 100 T. polyodon, 103 T. fasciatum**

22 Midribs golden-brown on upper surface, especially in centre of leaf (in fresh specimen) **83 T. pannulatum, 89a T. ochrochlorum**
22 Midribs not golden-brown on upper surface 23

23 Petioles very short, more or less obsolete, broadly winged **83 T. pannulatum, 94a T. laciniosifrons**
23 Petioles not very short or, if short, then not broadly winged 24

24 Leaves bright green, shiny, crisped, with omnidirectional lobes **94 T. sinuatum**
24 Leaves with lateral lobes somewhat divided **78b T. stereodes, 96a T. fagerstroemii**
24 Not as above 25

25 Apex of inner ligules blackish **95c T. latisectum**
25 Apex of inner ligules reddish **95a T. obliquilobum**
25 Apex of inner ligules yellow 26

26 Scapes arachnoid-hairy, at least when young **78b T. stereodes, 82a T. valens, 86a T. remanentilobum**
26 Scapes ± glabrous 27

27 Exterior bracts < 14 mm long **80b T. latens, 85 T. rhamphodes, 86 T. vastisectum, 90b T. pseudoretroflexum, 96a T. fagerstroemii**
27 Exterior bracts > 14 mm long **80b T. latens, 80c T. edmondsonianum, 83 T. pannulatum, 96a T. fagerstroemii**

MULTI-ACCESS KEY

Introduction

This key is designed for use with living material in good condition. Examine the specimen to see whether any of the character states are present. From this examination, construct an alphabetical list based on the character states that seem to be present in your specimen. If the character is not very clear or is variable, the letter may be placed in brackets.

Compare the resultant list with the alphabetical list of profiles; this should enable you to narrow the choice to a few species. The silhouettes, involucre pictures, descriptions and distributions of these species should then be consulted to make a final choice.

Common character states

A Upper surface of leaf-blade with large irregularly-shaped black spots > 1 mm in diameter
B Upper surface of leaf-blade with small punctate spots < 1 mm in diameter
C Midrib coloured red or purple to extreme apex
D Petiole white but midrib becoming increasingly dark towards leaf apex
E Petiole (underside) and midrib white to green throughout
F Petiole brilliantly coloured purple or violet
G Interlobes blotched blackish on underside of leaf
H Interlobes clearly plicate
I Petiole unwinged, at least for basal third
J Proximal margin of lateral leaf-lobes often with at least one marked tooth
K Proximal margin of lateral leaf-lobes uniformly convex
L Apex of terminal leaf-lobe with a well-differentiated tip
M Most or all lateral leaf-lobes strongly subdivided so as to appear 'double'
N Interior bracts noticeably corniculate at apex
O Bud involucre strongly pruinose
P Exterior bracts closely appressed to the involucre in bud and early flower
Q Exterior bracts strongly reflexed into a vertical position in late bud and early flower

R Exterior bracts irregularly arranged in late bud and early flower, often twisted
S Upper surface of exterior bracts strongly coloured red, purple or blue in late bud and early flower
T Exterior bracts all < 6 mm in length
U Exterior bracts all > 15 mm in length
V Apical teeth of inner florets dark (red, grey or black)
W Stigmas yellow or yellowish in fresh and dried states
X Stigmas blackish in fresh and dried states
Y Pollen absent or rudimentary (remaining in anther tubes)
Z Achenes reddish or red-brown

Rarer character states

a Spots fading
b No ligule stripes
c Ligule stripes incomplete, crimson
d Ligules inrolled
e Scapes completely glabrous, even just below capitulum (Use lens.)
f Scapes thickly arachnoid-hairy
g Leaves very narrow, lacking clear leaf-lobes
h Achenes blackish-purple
j Capitulum orange
k Upper surface of leaf thickly scabrid with short stiff hairs
l Involucre black or blackish
m Exterior bracts with white or scarious border > 0.5 mm
n Inner bracts of markedly different widths
o Achene body almost smooth throughout
p Achene cone > 1.1 mm long
q Achene body excluding cone > 4.0 mm long
r Occasional lateral lobes of leaves strongly rounded (the remainder acute)
s Ligule apex completely brown beneath

Taraxacum key profiles

(Brackets denote character states which commonly vary for the species or which are not clear cut.)

A(B)(C)(D)F(G)O(S)VY	24 euryphyllum
A(B)(C)(F)(G)OY	25 maculosum
A(B)(C)Hk	23 naevosum
A(B)(C)HZ(k)	23b rubellum
(A)B(C)(J)(P)k	29 stictophyllum
(A)BDWY(k)	27 subnaevosum
A(B)(H)(k)	23a naevosiforme
A(C)(G)a	26 pseudolarssonii
(B)CFG(K)(S)V(X)	39 fulgidum
BC(F)(G)(P)VY	29a richardsianum
BCF(H)IPVYc(g)oq	18 faeroense
BCFIPVYcq	18b serpenticola
BDILPVXY	42c olgae
(B)(E)H(I)OP(V)(Y)	42 nordstedtii
(B)EIPY(g)	42f palustrisquameum
BEO(j)	22 pycnostictum
(B)FIPe	17 anglicum
(B)(F)I(P)Y	42e lancastriense
B(G)(H)Q	104 melanthoides
(B)I(G)(J)(K)O(S)VYZ	45 fulvicarpum
BIKOP(l)o	28 drucei
BILNOYZ	1a inopinatum
B(I)(L)(W)	27a cornubiense
Bk	24a hirsutissimum
BOP(V)Y	42b berthae
C(D)GH(M)(P)	33 subbracteatum
CFGI(M)O(S)V	36 hesperium
(C)FGIS	39a tamesense
CFGJKMO(S)	37 excellens
(C)(F)GJK(S)	100b nitidum
C(F)GJMO(S)V	36a 'cestrense'
(C)(F)G(M)(O)W	100a multicolorans
CF(I)LOPlo	32 britannicum
(C)FIO(P)b(k)	46a luteum
CF(I)OV	51 boekmanii
CFIP	31 bracteatum
CF(I)PVoq	18a geirhildae
C(F)(L)(M)Q	98 pectinatiforme
C(F)(L)O	53a spiculatum
CFNW	13b placidum
(C)GHJMf	94a laciniosifrons
(C)(K)Oo	42d cambricum
DGH(I)LV	75 altissimum
DGH(J)(M)(R)(V)	62a nigridentatum
D(G)H(J)O(S)(U)(V)	74 sellandii
D(G)(H)KS(V)	70b curtifrons
DGH(L)S	70 piceatum
DG(M)V	102c maculatum
DG(U)	102d sublongisquameum
D(G)(V)	73 ancistrolobum
D(H)	103b acutifidum
DH(Q)U(k)	85a procerisquameum
DIWYd	43a breconense
E	12a wallonicum
Eejoq	19a clovense
E(G)(H)(I)(L)(M)	57 pannucium
E(G)HILWYZdjs	3 argutum
(E)GH(J)KV	72 intumescens
(E)GH(J)M	62 pannulatiforme
E(G)(H)(J)(S)r	65a subcyanolepis
E(G)(H)(J)(U)	65b pallidipes
E(G)H(L)M	59b dilaceratum
EG(H)(M)(R)	61a laciniosum
EGHQV	84a macranthoides
(E)(G)(J)	64 sublaeticolor
E(G)(J)(K)(P)(S)	56 laeticolor
E(G)(K)(Q)(V)(W)	63c necessarium
EG(L)	69 undulatiflorum
EGMU	67c 'broddesonii'
EH(I)(L)NPTV(W)cde(j)	15 obliquum
EH(J)(K)f	59 undulatum
(E)H(J)(K)(U)V	105a sundbergii
EH(J)(L)P	59a tenebricans
EH(J)(M)	58 corynodes
EH(J)(M)OQk	60b densilobum
EH(J)(M)V(j)	66 croceiflorum
EHJ(R)(U)(W)f	89d coartatum
EHJ(U)f	89c lunare
EH(K)V	70d chrysophaenum
E(H)(L)	65 expallidiforme
E(H)L(M)OQ(V)k	60a horridifrons
E(H)M	66a lacerifolium
EHMNVWYZ	12 glauciniforme

E(H)(Q)V	61b atonolobum
EHW(Y)ej(q)	19 ceratolobum
E(I)	63d margettsii
E(I)(J)Or	64a lepidum
E(I)(K)LS(r)	70c acutifrons
EI(L)	69a chloroticum
E(I)LM	56a macrolobum
E(I)LM	67 stenacrum
E(I)LM(W)	67b porrigens
E(I)(L)NPTVW	15a platyglossum
EILNVYZe	5b cenabense
EIMY	67a cherwellense
(E)(I)(O)	87 cordatum
E(I)WY	13c tanylepis
E(J)(K)	63 laticordatum
E(J)(K)RSV	61 insigne
EJLO(R)U	68 leucopodum
EKSV	70a cyanolepis
EL	39c hygrophilum
ELNSVWZ	7a gotlandicum
ELS	68a obtusilobum
E(L)(U)V	72a angulare
E(M)	57a subexpallidum
(E)(O)(Q)	88 sagittipotens
EO(Q)(V)	60 alatum
E(P)W	40b beeftinkii
EQ(Y)	63b subhuelphersianum
(E)r	63a pallescens
EV(e)jq	19b xiphoideum
EWY(j)	20 craspedotum
EWZj	21 cymbifolium
(F)GHILMO	54 kernianum
FGHIL(M)(S)V	40 haematicum
FGH(I)LOSV(s)	55 lamprophyllum
F(G)HJ	97 subundulatum
(F)(G)HO(R)	93 dilatatum
FGHVY	38 inane
(F)(G)IO	53 hamatiforme
F(G)LOV(X)Y	35 celticum
FHI(J)LNOPTX	14 tortilobum
FH(I)J(O)(V)	94 sinuatum
FHIKV	105 lucidum
(F)HI(L)OPSVY(d)	44 caledonicum
F(H)IQ	95 dahlstedtii
FHJLM(Q)VX	99 trilobatum
F(H)r	95b pachylobum
(F)(H)U	93b tanyphyllum
FIJM	97a pulchrifolium
(F)I(K)WY	43 ostenfeldii

FIL(M)OV(s)	53b lancidens
FILNOPTV(Y)eh	5 rubicundum
FILN(T)YZ	5a parnassicum
FILNVh(p)	6 dunense
FI(L)VY	41 landmarkii
(F)I(P)	31a orcadense
FIPgm	16b sarniense
FIPYgm	16a webbii
(F)IPYgm(o)	16 palustre
F(I)Q	98a caloschistum
FIVXZ	8c disseminatum
FIWm	31b nietoi
FIZ	9 oxoniense
F(K)	33a oellgaardii
FK(O)(S)(W)(Z)	88a hexhamense
F(K)P	30 gelertii
(F)(L)Y	81b exsertiforme
GH	90 'non-severum'
GHf	96 huelphersianum
GHI(J)(K)(L)R	80a latissimum
(G)H(I)(J)(L)	78 angustisquameum
GH(I)(J)V	101 incisum
(G)(H)ILr	77 interveniens
(G)(H)(I)L(V)f	82 exacutum
GHILYZ	11b falcatum
(G)(H)I(M)Qf	78b stereodes
GHI(M)V	71 tumentilobum
GHIV(W)	102a longisquameum
(G)HJKQ	92 pachymerum
GHJ(K)QW	80c edmondsonianum
(G)(H)(J)(O)qs	50a fusciflorum
GHJVW	102 xanthostigma
(G)H(L)R	80 aequilobum
(G)(H)LV	89b aurosulum
GHLVWZ	11a scoticum
(G)H(M)U	83 pannulatum
(G)HQVW	76 aequisectum
G(H)V	103 fasciatum
GHV	80b latens
GHV	103a subxanthostigma
G(H)VWf	102b scotiniforme
GILOVYZ	10 fulviforme
(G)I(L)O(W)m	47a hamatulum
(G)ILWf(k)	82c leptodon
(G)(I)O	82b obtusifrons
(G)IOl	47 hamatum
(G)IOn	49 hamiferum
G(J)LVWYj	69b speciosum
(G)L	34a porteri

G(L)(f)(k)	81 acroglossum
(G)LO(S)	48a marklundii
(G)LO(S)	48 subhamatum
(G)LQr	84 lingulatum
GLSV	100 polyodon
G(M)	93a diastematicum
(G)O(V)	50 pseudohamatum
(G)W	96b hepaticum
H	89 ekmanii
(H)(I)JLO	90 aberrans
(H)(I)(K)O	49a quadrans
(H)I(K)Q	78a mimulum
HILNPVWh	7 haworthianum
HILWZ(f)	4 arenastrum
(H)(I)Q(W)	79a retroflexum
(H)J	86 vastisectum
HJf	89a ochrochlorum
H(K)Or	85 rhamphodes
HL(R)	99a planum
(H)Of	86a remanentilobum
(H)Q	79b semiglobosum
(H)Qf	82a valens
(H)(R)UV	95a obliquilobum
H(S)Wf	88b amplum
I	40a akteum
IJNWYZ	4a commixtum

(I)(K)(L)Q	79 adiantifrons
IKNOWY(h)	8 proximum
IL	13a acutum
ILNOSVZ	2 brachyglossum
ILNOVW	8a proximiforme
ILNOZ	1 lacistophyllum
I(L)OV	52b pruinatum
(I)L(Y)p	13 degelii
IMNVZ	2a scanicum
(I)M(Q)(S)	96a fagerstroemii
INO	8b pseudoproximum
IOP(S)V	42a pseudonordstedtii
I(O)V	52 atactum
(I)(S)V	95c latisectum
(I)VWYZ	11 fulvum
JVZ	11c retzii
KL(O)(V)f(k)	50b prionum
(L)(N)(W)	81a exsertum
LQ	90b pseudoretroflexum
MV(X)(k)	34 duplidentifrons
OPWYZ	46 unguilobum
(O)(S)(V)	52a sahlinianum
(S)	91 oblongatum
	91a cophocentrum
	39b texelense

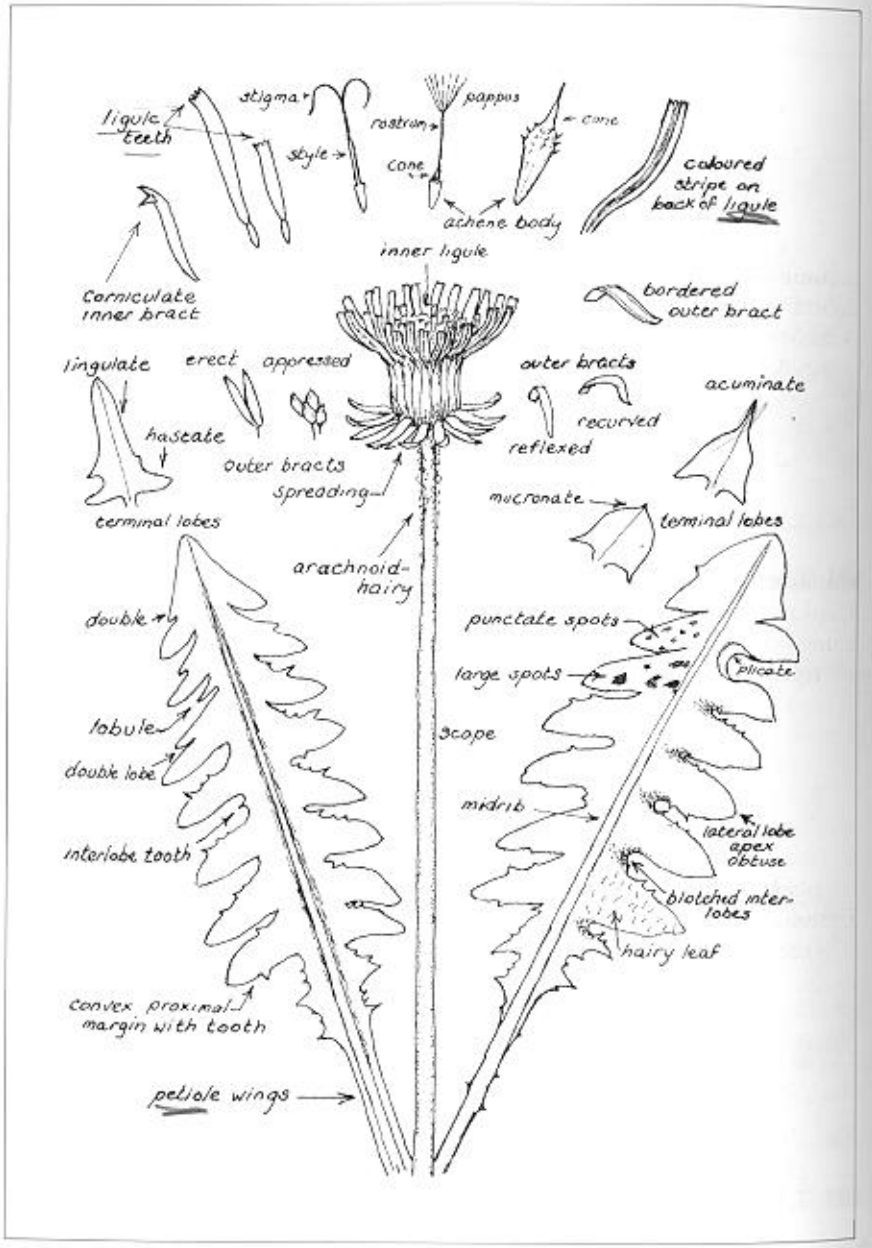
Profiles of species in alphabetical order

aberrans	(H)(I)JLO
acroglossum	G(L)(f)(k)
acutifidum	D(H)
acutifrons	E(I)(K)LS(r)
acutum	IL
adiantifrons	(I)(K)(L)Q
aequilobum	(G)H(L)R
aequisectum	(G)HQVW
akteum	I
alatum	EO(Q)(V)
altissimum	DGH(I)LV
amplum	H(S)Wf
ancistrolobum	D(G)(V)
anglicum	(B)FIPc
angulare	E(L)(U)V
angustisquameum	(G)H(I)(J)(L)
arenastrum	HILWZ(f)
argutum	E(G)HILWYZdjs
atactum	I(O)V

atonolobum	E(H)(Q)V
aurosulum	(G)(H)LV
beeftinkii	E(P)W
berthae	BOP(V)Y
boekmanii	CF(I)OV
brachyglossum	ILNOSVZ
bracteatum	CFIP
breconense	DIWYd
britannicum	CF(I)LOPlo
'broddesonii'	EGMU
caledonicum	(F)HI(L)OPSVY(d)
caloschistum	F(I)Q
cambricum	(C)(K)Oo
celticum	F(G)LOV(X)Y
cenabense	EILNVYZe
ceratolobum	EHW(Y)ej(q)
'cestrense'	C(F)GJMO(S)V
cherwellense	EIMY
chloroticum	EI(L)

chrysophaenum	EH(K)V
clovense	Eejoq
coartatum	EHJ(R)(U)(W)f
commixtum	IJNWYZ
cophocentrum	
cordatum	(E)(I)(O)
cornubiense	B(I)(L)(W)
corynodes	EH(J)(M)
craspedotum	EWY(j)
croceiflorum	EH(J)(M)V(j)
curtifrons	D(G)(H)KS(V)
cyanolepis	EKSV
cymbifolium	EWZj
dahlstedtii	F(H)IQ
degelii	(I)L(Y)p
densilobum	EH(J)(M)OQk
diastematicum	G(M)
dilaceratum	E(G)H(L)M
dilatatum	(F)(G)HO(R)
disseminatum	FIVXZ
drucei	BIKOP(l)o
dunense	FILNVh(p)
duplidentifrons	MV(X)(k)
edmondsonianum	GHJ(K)QW
ekmanii	H
euryphyllum	A(B)(C)(D)F(G)O(S)VY
exacutum	(G)(H)(I)L(V)f
excellens	CFGJKMO(S)
expallidiforme	E(H)(L)
exsertiforme	(F)(L)Y
exsertum	(L)(N)(W)
faeroense	BCF(H)IPVYc(g)oq
fagerstroemii	(I)M(Q)(S)
falcatum	GHILYZ
fasciatum	G(H)V
fulgidum	(B)CFG(K)(S)V(X)
fulvicarpum	(B)I(G)(J)(K)O(S)VYZ
fulviforme	GILOVYZ
fulvum	(I)VWYZ
fusciflorum	(G)(H)(J)(O)qs
geirhildae	CF(I)PVoq
gelertii	F(K)P
glauciniforme	EHMNVWYZ
gotlandicum	ELNSVWZ
haematicum	FGHIL(M)(S)V
hamatiforme	(F)(G)IO
hamatulum	(G)I(L)O(W)m
hamatum	(G)IOl
hamiferum	(G)IOn
haworthianum	HILNPVWh
hepaticum	(G)W
hesperium	CFGI(M)O(S)V
hexhamense	FK(O)(S)(W)(Z)
hirsutissimum	Bk
horridifrons	E(H)L(M)OQ(V)k
huelphersianum	GHf
hygrophilum	EL
inane	FGHVY
incisum	GH(I)(J)V
inopinatum	BILNOYZ
insigne	E(J)(K)RSV
interveniens	(G)(H)ILr
intumescens	(E)GH(J)KV
kernianum	(F)GHILMO
lacerifolium	E(H)M
laciniosifrons	(C)GHJMf
laciniosum	EG(H)(M)(R)
lacistophyllum	ILNOZ
laeticolor	E(G)(J)(K)(P)(S)
lamprophyllum	FGH(I)LOSV(s)
lancastriense	(B)(F)I(P)Y
lancidens	FIL(M)OV(s)
landmarkii	FI(L)VY
latens	GHV
laticordatum	E(J)(K)
latisectum	(I)(S)V
latissimum	GHI(J)(K)(L)R
lepidum	E(I)(J)Or
leptodon	(G)ILWf(k)
leucopodum	EJLO(R)U
lingulatum	(G)LQr
longisquameum	GHIV(W)
lucidum	FHIKV
lunare	EHJ(U)f
luteum	(C)FIO(P)b(k)
macranthoides	EGHQV
macrolobum	E(I)LM
maculatum	DG(M)V
maculosum	A(B)(C)(F)(G)OY
margettsii	E(I)
marklundii	(G)LO(S)
melanthoides	B(G)(H)Q
mimulum	(H)I(K)Q
multicolorans	(C)(F)G(M)(O)W
naevosiforme	A(B)(H)(k)
naevosum	A(B)(C)Hk
necessarium	E(G)(K)(Q)(V)(W)
nictoi	FIWm

nigridentatum	DGH(J)(M)(R)(V)
nitidum	(C)(F)GJK(S)
'non-severum'	GH
nordstedtii	(B)(E)H(I)OP(V)(Y)
obliquilobum	(H)(R)UV
obliquum	EH(I)(L)NPTV(W)cde(j)
oblongatum	(S)
obtusifrons	(G)(I)O
obtusilobum	ELS
ochrochlorum	HJf
oellgaardii	F(K)
olgae	BDILPVXY
orcadense	(F)I(P)
ostenfeldii	(F)I(K)WY
oxoniense	FIZ
pachylobum	F(H)r
pachymerum	(G)HJKQ
pallescens	(E)r
pallidipes	E(G)(H)(J)(U)
palustre	(F)IPYgm(o)
palustrisquameum	(B)EIPY(g)
pannucium	E(G)(H)(I)(L)(M)
pannulatiforme	(E)GH(J)M
pannulatum	(G)H(M)U(r)
parnassicum	FILN(T)YZ
pectinatiforme	C(F)(L)(M)Q
piceatum	DGH(L)S
placidum	CFNW
planum	HL(R)
platyglossum	E(I)(L)NPTVW
polyodon	GLSV
porrigens	E(I)LM(W)
porteri	(G)L
prionum	KL(O)(V)f(k)
procerisquameum	DH(Q)U(k)
proximiforme	ILNOVW
proximum	IKNOWY(h)
pruinatum	I(L)OV
pseudohamatum	(G)O(V)
pseudolarssonii	A(C)(G)a
pseudonordstedtii	IOP(S)V
pseudoproximum	INO
pseudoretroflexum	LQ
pulchrifolium	FIJM
pycnostictum	BEO(j)
quadrans	(H)(I)(K)O
remanentilobum	(H)Of
retroflexum	(H)(I)Q(W)
retzii	JVZ
rhamphodes	H(K)Or
richardsianum	BC(F)(G)(P)VY
rubellum	A(B)(C)HZ(k)
rubicundum	FILNOPTV(Y)eh
sagittipotens	(E)(O)(Q)
sahlinianum	(O)(S)(V)
sarniense	FIPgm
scanicum	IMNVZ
scoticum	GHLVWZ
scotiniforme	G(H)VWf
sellandii	D(G)H(J)O(S)(U)(V)
semiglobosum	(H)Q
serpenticola	BCFIPVYcq
sinuatum	FH(I)J(O)(V)
speciosum	G(J)LVWYj
spiculatum	C(F)(L)O
stenacrum	E(I)LM
stereodes	(G)(H)I(M)Qf
stictophyllum	(A)B(C)(J)(P)k
subbracteatum	C(D)GH(M)(P)
subcyanolepis	E(G)(H)(J)(S)r
subexpallidum	E(M)
subhamatum	(G)LO(S)
subhuelphersianum	EQY
sublaeticolor	(E)(G)(J)
sublongisquameum	DG(U)
subnaevosum	(A)BDWY(k)
subundulatum	F(G)HJ
subxanthostigma	GHV
sundbergii	(E)H(J)(K)(U)V
tamesense	(C)FGIS
tanylepis	E(I)WY
tanyphyllum	(F)(H)U
tenebricans	EH(J)(L)P
texelense	
tortilobum	FHI(J)LNOPTX
trilobatum	FHJLM(Q)VX
tumentilobum	GHI(M)V
undulatiflorum	EG(L)
undulatum	EH(J)(K)f
unguilobum	OPWYZ
valens	(H)Qf
vastisectum	(H)J
wallonicum	E
webbii	FIPYgm
xanthostigma	GHJVW
xiphoideum	EV(e)jq



GLOSSARY

Achene: the fruit or cypsela. Measurements are given for the achene body and for the cone (q.v.).

Achene colour: This refers to the colour of the achene body; the cone is normally ± the same colour, while the rostrum is always ± silvery.

Acuminate: gradually tapering to a point with concave sides (see Figure 2).

Acute: sharply pointed with more or less straight sides (see Figure 2).

Arachnoid-hairy: hairy, with the indumentum having the appearance of a spider's web.

Arcuate: curved so as to form a quarter of a circle or more.

Attenuate: gradually tapering.

Bifurcate: dividing into two branches.

Border (of exterior bracts of the involucre): Most frequently, the edge of the exterior bract has a pale or scarious border. This is often very narrow and is best examined with a lens.

Callose: thickened.

Capitulum: the flower-head.

Cone: the apical appendage to the achene body, connecting it to the rostrum (q.v.).

Connate: fused, though distinct in origin.

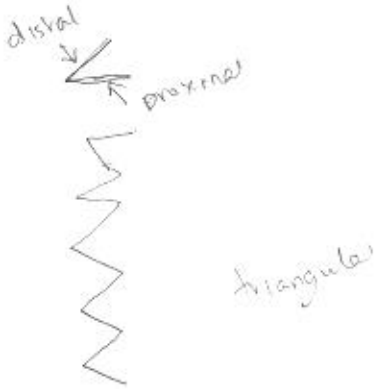
Corniculate (of the exterior and interior bracts of the involucre of species in Sections *Erythrosperma* and *Obliqua*): having a small appendage on the lower (outer) surface near the apex. On the interior bracts this is most easily seen in bud.

Crisped (of leaves): arranged in three dimensions, especially owing to the plicate nature of interlobes and interlobe teeth.

Deltoid (of leaf-lobes): with the proximal margin shorter than the distal margin (see Figure 1; cf *triangular*).

deltoid triangular

Figure 1: Shapes of leaf-lobes



Distal: away from the point of attachment (cf *proximal*).
Elongated: drawn out as a distinct process (q.v.) at the apex (including *acuminate* and *lingulate*).
Exterior bracts (or outer phyllaries): the smaller external row of bracts surrounding the involucre, which may be described as appressed (to the involucre, i.e. to the interior bracts), erect, spreading, arcuate, recurved, hanging vertically or reflexed. These bracts vary in their posture, and these adjectives describe the average bract posture in a mature involucre bud. See also *border*.
Falcate: sickle-shaped.
Filiform: very narrow and frequently flexuose (literally, wire-shaped).
Hamate (of lateral leaf-lobes or basal lobules of terminal leaf-lobes): hooked, with the distal margin convex and the proximal margin concave.
Hastate: shaped like a spear-head, with the two equal basal lobes turned outwards (cf *sagittate*).
Heterophyllous: with the inner leaves at flowering time differing conspicuously from the outer leaves, often by having a much larger terminal lobe.
Imbricate: closely overlapping, like tiles on a roof.
Interior bracts (or inner phyllaries): the bracts of the involucre within the exterior bracts (q.v.).
Interlobes: the narrower parts of the leaf-blade lying between the lobes.
Involucre: the exterior and interior bracts of the capitulum together, best viewed in late bud.
Involute: rolled inwards.
Laciniate: highly and irregularly divided and cut (as opposed to *lobate*).
Ligule stripe: The back (outer face) of a ligule of a marginal (outer) floret usually has a single-coloured (grey, purple, red, etc.) longitudinal stripe.
Ligule teeth: The apex of a central (inner, tubular) ligule has teeth, which may be either yellow or coloured red, black, etc.
Lingulate: narrowly tongue-shaped (see Figure 2).
Lobate: gently divided, with more or less rounded projections (cf *laciniate*).
Lobule: a small lobe positioned on a lobe or at an interlobe.
Mucronate: abruptly terminating in a small point (see Figure 2).
Obtuse: blunt, terminating at an angle greater than 90° (see Figure 2).
Patent: spreading more or less at right-angles.
Petiole colour: This is judged on the underside of the petiole. Petioles which are said to be "green" or "pallid" are very frequently white in the fresh-condition. In species with petioles coloured pink or purple on the underside, the very base is often white; ignore this. Also, species which typically have coloured petioles may be 'blanched' in shaded or etiolated plants.

Petiole wings: Proximally, below the lobes, the midrib becomes the petiole. The petiole is said to be winged (or alate) if the lamina continues to the ground. It is said to be unwinged (or exalate) if the basal portion is lacking a lamina.
Plicate: folded into a third dimension.
Pollen present: The emerging style and stigma branches brush past the anther tube, thus carrying pollen to the exterior. The presence of pollen on fresh or dried material is usually determined by examining the style and stigma branches with a lens. After rain, it may prove necessary to pull out the anther tubes and examine these with a lens.
Process: a clearly differentiated narrow projection on a leaf-lobe.
Proximal: towards the point of attachment (cf *distal*).
Pruinose: covered with a 'bloom' which rubs off.
Punctate (of spots): like small dots.
Regular (of lateral leaf-lobes): ± equal in size and arranged at ± regular intervals.
Rostrum: the beak of the fruit, connecting the cone of the achene to the pappus; very narrow and usually silver in colour.
Rugose: wrinkled.
Sagittate: shaped like an arrow-head, with the two equal basal lobes directed downwards (cf *hastate*).
Scape length: This is described relative to the leaves at the time of first flowering.
Sigmoid: shaped like an 'S'.
Sinuate: having a wavy margin.
Spathulate (of leaves): shaped like a spoon or paddle, with the petiole forming the 'shaft'.
Spinulose: bearing small spine-like projections.
Style colour: This refers also to the colour of the stigma branches. In some species the style and stigma branches are usually yellow in both a fresh and a dried condition, but poor drying or disease can discolour them in the press. It may be wise to examine several heads. Fresh stigmas which are dark in colour usually dry black in the press.
Triangular (of leaf-lobes): forming two sides of an isosceles triangle, so that the apex is patent to the centre of the base (see Figure 1; cf *deltoid*).

Figure 2: Shapes of leaf-lobe apices

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