British Dermateaceae: 4B. Dermateoideae Genera G-Z

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Generic descriptions and keys to species in Dermateoideae: Genera G-Z

This is the second part of the descriptions of genera and keys to species in the subfamily Dermateoideae. The genera are alphabetically arranged, and the format follows that of previous parts in the series (Nauta & Spooner, 1999a,b; Spooner & Nauta, 1999), Nauta & Spooner, 2000. For the key to the genera see Nauta & Spooner (1999c). Two new combinations, *Leptotrochila svalbardensis* (Lind) Spooner & Nauta and *Niptera trichophoricola* (Graddon) Nauta & Spooner are proposed.

Graddonia Dennis, *Kew Bulletin* 359, 1955
Type: *G. coracina* (Bres.) Dennis

Apothecia sessile, superficial; hymenium reddish brown; receptaculum dark brown, glabrous. Outer excipulum a *textura globulosa* consisting of thin-walled elements with dark brown walls, paler towards margin. Asci I-, narrowly cylindrical with obtuse apex, apex not differentiated; spores ellipsoid to fusiform, hyaline, multiguttulate, 0-septate or becoming 1-septate. Paraphyses hyaline, slightly enlarged at top.
Conidial state unknown.
Saprophytic, on damp, rotten wood.

Lit.: Dennis, 1955; Gminder, 1993

Number of species: 1 in GB, 1 in total.

Species in Great Britain:
G. coracina (Bres.) Dennis. Asci 140-185 x 13-16 µm, spores 16 - 24 x (7-)8 - 10.5 µm.

Hysteronaevia Nannf., *Nordic Journal of Botany* 4: 227, 1984
Type: *Propolis holoschoeni* de Not.

Apothecia at first immersed, soon erumpent through a slit in the epidermis or epidermal 'lid'; hymenium expanding and broader than the receptaculum, retracting or not when dry. Outer excipulum laterally reduced, hyphal, brown-walled. Medullary excipulum laterally sometimes with refractive walls. Asci broadly clavate, I-, with thick refractive wall; spores large, subfusiform (13-36 x 2-8 µm), hyaline or faintly pigmented, 0 - 1 (-3)-septate. Paraphyses filiform, apex irregularly enlarged and with a gelatinous sheath bearing brownish, granular matter.
Conidial state unknown
Saprophytic on monocotyledonous plants: Juncaceae, *Carex*, grasses

Lit.: Nannfeldt, 1984b

Number of species: 4 in GB, 12 in total.

Species in Great Britain:
H. fimbriata Dennis & Spooner
H. lyngei (Lind) Nannf.
H. olivacea (Mont.) Nannf. (= *Eupropolella celata* Graddon)
H. scirpina (Peck) Nannf. (= *Hysteropezizella hebridensis* Graddon; *Mollisia foecunda* W. Phillips)

Key to British species of Hysteronaevia

1. Margin white fimbriate; spores 12 - 15 µm long; on *Carex* ..... **H. fimbriata**
1. Margin not white fimbriate; spores longer than 15 µm; on *Carex* or other hosts 2
2. Apothecia emerging through a 'lid' of host tissue, completely retracting when dry; spores eventually pale brown and sometimes finely punctate, commonly > 20 µm; on *Carex* ..... **H. olivacea**
2. Apothecia not emerging through a 'lid', not retracting when dry; spores remaining hyaline and smooth, length in range 16 - 36 µm; on *Trichophorum* or grasses 3
3. Spores mostly 16 - 20 µm long, on grasses ..... **H. lyngei**
3. Spores mostly 20 - 36 µm long, on *Trichophorum* ..... **H. scirpina**

Hysteropezizella Höhn., *Sitzungsberichten der Kaiserlichen Akademie der Wissenschaften, Mathematisch-naturwissenschaftliche Klasse*, Abt. 1, 126: 310, 1917

Type: *H. subvelata* (Rehm) Höhn. (= *H. diminuens* (P. Karst.) Nannf.)
= *Asteronaevia* Petrak 1929

Apothecia subepidermal in development, immersed then partly erumpent, up to c. 0.3 mm; hymenium yellowish or greyish; receptaculum dark brown. Outer excipulum a *textura angularis* comprising elements with brown, rather thickened walls; marginal excipulum composed of elongated elements with thin, yellow-brown walls. Asci I +, cylindrical or narrowly clavate, apex rounded; spores ellipsoid, 0 – 1-septate. Paraphyses enlarged toward the apex, typically lanceolate, with granulate walls, overtopping the asci.
Conidial state unknown.
Saprophytic, on monocotyledonous plants.

Lit.: Défago, 1968, Dennis, 1983; Hein, 1980, 1981, 1983; Nannfeldt, 1932

Number of species: 1 in GB, c. 10 in total.

Species in Great Britain:
H. diminuens (P. Karst.) Nannf. (= *Micropeziza subvelata* Rehm; = *Hysteropezizella caricis* (Peck) Sydow; = *Mollisia euparaphysata* (J. Schröt.) Rehm). Asci 45-60 x 10-12 µm; spores 11-22 x 3-5 µm.

Excluded names:
H. foecunda (W. Phillips) Nannf. = *Hysteronaevia scirpina* (Peck) Nannf.
H. hebridensis Graddon = *Hysteronaevia scirpina* (Peck) Nannf.
H. hysterioides (Desm.) Nannf. (= *Phragmonaevia hysterioides* (Desm.) Rehm) position uncertain, not a *Hysteropezizella*
H. lyngei (Lind) Nannf. = *Hysteronaevia lyngei* (Lind) Nannf.
H. olivacea (Mouton) Nannf. = *Hysteronaevia olivacea* (Mouton) Nannf.
H. prahliana var. *orcadensis* Dennis = not a *Hysteropezizella*
H. pusilla (Lib.) Nannf. = probably a *Diplonaevia*
H. rehmii (Jaap) Nannf. = *Diplonaevia exigua* (Desm.) B. Hein
H. seriatum Lib. = *Diplonaevia seriata* (Lib.) B. Hein (= *Merostictis seriata* (Lib.) Défago)
H. valvata (Mont.) Nannf. = *Hysterostegiella valvata* (Mont.) Höhn.

Hysterostegiella Höhn., *Sitzungsberichte der Kaiserlichen Akademie der Wissenschaften, Mathematisch-naturwissenschaftliche Klasse*, Abt. 1, 126: 313, 1917
Type: *Stictis fenestrata* Desm.
= *Stegopeziza* Höhn. 1917

Apothecia intraepidermal in development; hymenium yellowish; receptaculum brownish. Basal excipulum a *textura globulosa* to *textura angularis*, walls pale brown; lateral excipulum of more elongated, pale brown elements, at the margin bearing cylindrical, obtuse hairs with verrucose walls. Asci I +, cylindrical; spores ellipsoid, non-septate. Paraphyses lanceolate, smooth.
Conidial state unknown.
Saprophytic on leaves and stems of various plants.

Lit.: Hein,1983

Number of species: 6 in GB, 10 in total.

Species in Great Britain:
H. dowardensis (Graddon) B. Hein (= *Hysteropezizella dowardensis* Graddon)
H. dumeti (Sacc. & Speg.) B. Hein (= *Stegia dumeti* Sacc. & Speg.)
H. fenestrata (Roberge ex. Desm.) Höhn. (= *Stictis fenestrata* Roberge ex Desm.)
H. lauri (Caldesi) B. Hein
H. quercea (Fautrey & Lambotte) B. Hein
H. valvata (Mont.) Höhn.

Excluded names:
H. crassomarginata Graddon = ? *Pyrenopeziza*

Key to British species of Hysterostegiella

1. Spores < 5 µm long, on leaves of *Laurus* ..... **H. lauri**
1'. Spores > 5 µm long, on other substrates 2
2. On *Ammophila*, apothecia twice as long as broad [spores 5.5-7 µm] ..... **H. valvata**
2'. Not on grasses, apothecia more roundish 3
3. Marginal hairs with apical threads of crystals 4
3'. Marginal hairs without threads 5
4. Crystal-threads <10 µm; on *Rubus*-twigs [spores 5-6 µm] ..... **H. dumeti**
4'. Crystal-threads longer; on leaves of *Quercus* ..... **H. quercea**
5. Receptaculum yellowish, apothecia up to 0.2 mm; spores clavate, 5-7 µm; on *Carex* ..... **H. dowardensis**
5'. Receptaculum brown, apothecia 0.6 x 0.4 mm; spores ellipsoid, 6-8 µm long; on *Cladium* or *Scirpus* ..... **H. fenestrata**

Leptotrochila P. Karst., *Bidrag till Kännedom af Finlands Natur och Folk* 19: 22, 1871
Type: *Leptotrochila radians* P. Karst.
= *Fabraea* Sacc. 1882; *Ephelina Sacc.* 1889

Apothecia erumpent, developed subepidermally, sometimes associated with *Sporonema* anamorph, hymenium yellowish; receptaculum dark. Stroma as spots on leaves. Excipulum well-developed, a *textura globulosa* composed of dark-walled elements up to the margin. Asci mostly I+, narrowly clavate; spores ellipsoid, hyaline, 0-1-septate. Paraphyses filiform, slightly enlarged at top, slightly overtopping the asci.
Conidial state *Sporonema* or unknown.
Parasitic, on leaves of various Dicotyledonous herbs.

Lit.: Dennis, 1951, 1975; Schüepp, 1959

Number of species: 10 in GB, 18 in total.

Species in Great Britain:
L. brunellae (Lind) Dennis (= *Beloniella brunellae* Lind; *Ephelina prunellae* W. Phillips)
L. cerastiorum (Wallr.) Schüepp (= *Pseudopeziza cerastiorum* (Wallr.) J. Schröt)
L. jasionis (Romell) Schüepp (= *Pseudopeziza jasionis* (Romell) Nannf.)
L. lugubris (de Not.) Schüepp (= *Ephelina lugubris* (de Not.) Höhn.; *Ephelina radicalis* (Cooke) Massee; *Ephelina rhinanthi* (W. Phillips) Sacc.; *Ephelis rhinanthi* W. Phillips)
L. medicaginis (Fuckel) Schüepp
L. radians (Roberge) P. Karst.
L. ranunculi (Fr.) Schüepp (= *Fabraea ranunculi* (Fr.) P. Karst.; *Pseudopeziza ranunculi* (Fr.) Fuckel)
L. repanda (Fr.) P. Karst.
Leptotrochila svalbardensis **(Lind) Spooner & Nauta comb. nov.** (= *Pseudopeziza svalbardensis* (Lind) Nannf.) basionym: *Pyrenopeziza svalbardensis* Lind, *Skrifter om Svalbard og Ishavet* 13: 13 (1928)
L. verrucosa (Wallr.) Schüepp

Key to British species of Leptotrochila

1. On *Prunella vulgaris*; ascospores large, 14 - 20 x 4 - 5 µm, asci to 100 µm long ..... **L. brunellae**
1'. On other hosts; asci and ascospores mostly smaller ... 2

2. Asci I- ; ascospores non-septate 3
2'. Asci I+ ; ascospores septate or not 4

3. On *Medicago*; ascospores 7.5 - 10 µm long ..... **L. medicaginis**
3'. On *Saxifraga*; ascospores 12 - 17 µm long ..... **L. svalbardensis**

4. On Campanulaceae 5
4'. On other host families 6

5. On *Campanula*, spores 9 - 11 x 2.5 - 3 µm ..... **L. radians**
5'. On *Jasione*, spores 9 - 14 x 2.5 - 3.5 µm ..... **L. jasionis**

6. Ascospores 1-septate; on *Cerastium* & *Stellaria* or *Potentilla* 7
6'. Ascospores non-septate; on other hosts 8

7. On *Cerastium* & *Stellaria*; ascospores 8 - 13 x 2.5 - 4 µm ..... **L. cerastiorum**
7'. On *Potentilla*; ascospores 12 - 19 x 2.5 - 3.5 µm ..... **L. repanda**

8. On *Ranunculus*; asci 11 - 14 µm wide, ascospores 11 - 16 µm long ..... **L. ranunculi**
8'. On other hosts; asci 6 - 10 µm wide, ascospores 7 - 13 µm long 9

9. On *Rhinanthus*; asci 55 - 75 µm long ..... **L. lugubris**
9'. On Rubiaceae; asci 50 - 90 µm long ..... **L. verrucosa**

Micropeziza Fuckel, *Symbolae mycologicae*: 291, 1870
Type: *Micropeziza scirpicola* Fuckel
= *Niesslella* Höhn. 1919; = *Actinoscypha* P. Karst. 1888

Apothecia superficially developed, below a shield of radial hyphae; hymenium pale yellowish-brown; receptaculum pale brownish. Outer excipulum comprising basally and on lower flanks of a *textura globulosa* consisting of brown, thin-walled elements, towards the margin composed of thick-walled, gelatinised, hyaline hyphae with refractive walls. Asci clavate, I +, 8-spored; spores ellipsoid, 0–3-septate, hyaline to pale brown. Paraphyses filiform, apically slightly enlarged, often with brown oily contents.
Conidial state unknown.
Saprophytic on Gramineae and Cyperaceae.

Lit.: Müller, 1966; Nannfeldt, 1976

Number of species: 2 in GB, 3 in total.

Species in Great Britain:
M. cornea (Berk. & Broome) Nannf. 1986 (= *Peziza cornea* Berk. & Broome; *M. scirpicola* Fuckel; *Actinoscypha scirpicola* (Fuckel) E. Müll.; *Mollisia sylvatica* P. Karst.; *Belonidium aurantiacum* Rehm)
M. poae Fuckel; *Mollisia poae* (Fuckel) Sacc.; *Niptera poae* (Fuckel) Rehm (= *M. karstenii* Nannf.; *Actinoscypha graminis* P. Karst.; non *Micropeziza graminis* (Desm.) Rehm)

Excluded names:
M. karstenii Nannf. = *M. poae* Fuckel (see above)

Key to British species of Micropeziza

1. Shield present; margin of apothecium thick, consisting of thick-walled, gelatinous, hyaline hyphae embedded in gel; spores 0 - 1 -septate, 14-21 x 2.5 - 3.5 µm; on grasses ..... **M. poae**
1'. Shield sometimes not visible; margin of apothecium narrow, consisting of few pale-brown - walled gelatinous outer excipular elements, and some hyaline, gelatinous hyphae; spores 0 - 3- septate, 15-18 x 2.5-3.5 µm, on sedges or rushes ..... **M. cornea**

Mollisia (Fr.) P. Karst., *Bidrag till Kännedom af Finlands Natur och Folk* 19: 15, 1871. nom. cons.
Type: *M. cinerea*
= *Mollisiopsis* Rehm 1908; = *Tapesia* Fuckel 1870; = *Haglundia* Nannf. 1932; = *Bulbomollisia* Graddon 1984

Apothecia superficial or erumpent in an early stage; subiculum absent or present. Outer excipulum usually well-developed, in its typical form composed of radially arranged rows of globose elements, forming a *textura globulosa*, sometimes forming clavate outgrowths or hairs; at margin often with more hyaline elongated elements. Medullary excipulum usually well-developed. Paraphyses filiform, subclavate; in fresh state mostly part of paraphyses with one striking, long vacuole with oily contents. Spores ellipsoid, 0-1(- 3)-septate, mostly only in a later stage becoming septate; septa thin.
Conidial state *Anguillospora, Phialophora* or unknown.
Saprophytic on various substrates.

Lit.: Dennis, 1950; Graddon, 1984; Gremmen, 1954, 1955, 1956a, 1956b, 1957, 1958; Le Gal & Mangenot, 1956, 1958, 1960, 1961, 1966

Number of species: c. 100 in GB, c. 200 in total.

A preliminary list of species in Great Britain and excluded names will be published in one of the next issues of Mycologist.

Niptera Fr., *Summa Vegetabilium Scandinaviae*: 359, 1849
Type: *N. lacustris* (Fr.) Fr.
= *Nimbomollisia* Nannf. 1983

Apothecia subepidermally developed, later erumpent; hymenium yellowish to pale brownish; receptaculum dark brown, drying black, margin concolorous, indistinct. Excipulum a *textura globulosa*, consisting of short rows of brown-walled elements ± perpendicular to surface; medullary excipulum consisting of narrow, repent, hyaline hyphae, without Ca-Ox-crystals. Asci broadly clavate to cylindrical, thick-walled when young, I+ or -, with usually broad, shallow apical apparatus, 8-spored in GB species; spores ellipsoid to fusiform, usually with gelatinous sheath, 1-3-septate, septa thick. Paraphyses hyaline, often enlarged at top.
Conidial state unknown (? *Phialophora*).
Saprophytic on monocotyledonous plants in GB.

Following Baral (1994), but in contrast to Nannfeldt (1983, 1986), *Niptera* and *Nimbomollisia* are considered synonymous here. For discussion see Baral (l.c.).

Lit.: Dennis, 1964, 1972; Graddon, 1976, 1977; Nannfeldt, 1983, 1986

Number of species: 8 in GB, c. 20 in total.

Species in Great Britain:
N. ambigua Dennis & Spooner
N. eriophori (Kirchn.) Rehm (= *Nimbomollisia eriophori* (Kirchn.) Nannf.; *Mollisia cymbispora* Rostrup; *Niptera phaea* (Rehm) Rehm)
N. lacustris (Fr.) Fr. (= *Patellaria aquatica* Curr.; *Peziza scirpicola* Rabenh.)
N. melanophaea Rehm
N. melatephra (Lasch) Rehm
N. melatephroides (Rehm) Sacc. (= *Nimbomollisia melatephroides* (Rehm) Nannf.)
N. pulla (W. Phillips & Keith) Boud.
***Niptera trichophoricola* (Graddon) Nauta & Spooner comb. nov.**
basionym: *Dibeloniella trichophoricola* Graddon, *Kew Bulletin* 31: 512 (1977)
(= *Nimbomollisia trichophoricola* (Graddon) Nannf.)

Excluded names:
N. excelsior (P. Karst.) Dennis = *Belonopsis excelsior* (P. Karst.) Rehm
N. exsiliens Speg. = probably *Mollisia*
N. muelleri-argoviensis Rehm (= *Pyrenopeziza muelleri-argoviensis* (Rehm) Galán) = *Mollisia*
N. myriadea (Cooke & Massee) Boud. = *Herpotrichia macrotricha* (Berk. & Broome) Sacc.

N. phaea (Rehm) Sacc. = *Niptera eriophori* (Kirchn.) Rehm
N. pilosa (Crossl.) Boud. = probably *Mollisia*
N. ramincola Rehm = probably *Mollisia*
N. stockii (Cooke & W. Phillips) Boud. =? *Lachnum sulphureum* (Pers.) P.Karst.
N. subbiatorina Rehm = ? *Mollisia*
N. submelaena Rehm = ? *Mollisia* (= *N. melatephra* sensu W. Phillips, 1887)
N. umbelliferarum Velen.: British material referred here appears to be misidentified and probably belongs in *Mollisia.*

Key to British species of Niptera

1. Spores longer than 25 µm 2
1'. Spores shorter than 25 µm 3
2. Spores 3-septate, 29-44 x 3.5-5 µm, ... **N. pulla**
2'. Spores 1-septate, 26-31 x 3 µm ..... **N. ambigua**
3. Spores 10-14 µm long, on *Trichophorum caespitosum* ..... **N. trichophoricola**
3'. Spores longer than 14 µm, on various substrates 4
4. Asci > 70 µm long; spores often becoming 3-septate ..5
4'. Asci < 70 µm long; spores not more than 1-septate..... 7
5. Spores surrounded by thick gelatinous sheath (total width 10-13 µm) [spores 18-22 x 5-7 µm] ..... **N. melatephroides**
5'. Spores surrounded by narrower gelatinous sheath, total width up to 7 µm 6
6. Spores 15-20 x (4-)5-6 µm; asci with very low I + apical ring ..... **N. eriophori**
6'. Spores 19-25 3-4 µm; asci I + or I -, if I + with high apical ring ..... **N. lacustris**
7. Paraphyses filiform, not enlarged at apex; spores up to 6 µm wide [spores 15-17 x 6 µm] ..... **N. melanophaea**
7'. Paraphyses enlarged at apex up to 4 µm; spores 2.5 3 µm wide [spores 15-20 x 2.5-3 µm]..... **N. melatephra**

Patellariopsis Dennis, *Kew Bulletin* 19: 114, 1964
Type: *P. clavispora* (Berk. & Broome) Dennis

Apothecia scattered, superficial, sessile, discoid, blackish throughout or purple-brown at margin. Disc plane, smooth. Receptaculum smooth or pruinose. Outer excipulum of radially arranged, hyaline, septate, thin-walled hyphae terminating in chains of subglobose cells with dark brown or red-brown, encrusting pigment. Asci narrowly clavate, strongly I+; spores hyaline, clavate, with 1 - several septa. Paraphyses filiform, apically enlarged or clavate, sometimes dark brown and then forming a pseudo-epithecium.
Conidial state unknown.
Saprophytic on wood.

Lit.: Dennis, 1964, 1974

Number of species: 2 in GB, 5 in total

Species in Great Britain:
P. atrovinosa (A. Bloxam ex Curr.) Dennis (= *Patellaria atrovinosa* A. Bloxam ex Curr.; *Durella atrovinosa* (A. Bloxam ex Curr.) Sacc.
P. clavispora (Berk. & Broome) Dennis (= *Lecanidion clavisporum* (Berk. & Broome) Sacc.; = *Patellaria crataegi* W.Phillips; = *Lecanidion crataegi* (W.Phillips) Sacc.)

Key to British species of Patellariopsis

1. Paraphyses tips dark brown, clavate forming a pseudo-epithecium; asci to 125 x 10 µm, ascospores 3 - 5-septate, 27 - 38 x 4.5 µm; outermost excipular cells dark brown, opaque, subhymenium paler; apothecial margin black, receptacle smooth ..... **P. clavispora**
1'. Paraphyses tips hyaline, slightly enlarged, not forming a pseudo-epithecium; asci to 90 x 8 µm, ascospores 1 - 3-septate, 20 - 30 x 3 - 4 µm; outermost excipular cells red-brown, not opaque, subhymenium black; apothecial margin purple-brown, receptacle pruinose ..... **P. atrovinosa**

Pirottaea Sacc., *Michelia* 1: 424, 1878
Type: *P. veneta* Sacc. & Speg.

Apothecia erumpent; receptaculum brown, hairy/setose; subiculum absent. Outer excipulum a *textura angularis* or *textura globulosa*, consisting of thin-walled or somewhat thick-walled, often pale brown elements, with dark brown thick-walled grana and/or setae which are abruptly set off with a dark, thick basal septum from the excipulum elements. Medullary excipulum a hyaline *textura prismatica* to *textura porrecta.* Asci I +, cylindrical; spores ellipsoid to fusiform, often elongate, mostly 0 - 3 (-5)-septate. Paraphyses filiform, slightly enlarged at the apex.
Conidial state unknown.
Saprophytic, on Dicotyledonous plants.

Lit.: Nannfeldt, 1985

Number of species: 10 in GB, 24 in total.

Species in Great Britain:
P. brevipila (Roberge) J.Schröt. (= *P. vectis* W. Phillips)
P. caesiella (Bres.) Nannf. (= *Mollisia caesiella* Bres.; = *P. bresadolae* Sacc.)
P. exilispora Graddon
P. inopinata Nannf.
P. lamii Nannf.

P. nigrostriata Graddon
P. paupercula Nannf.
P. plantaginis Graddon
P. symphyti Nannf.
P. veneta Sacc. & Speg.

Excluded names:
P. bresadolae Sacc. = *P. caesiella* (Bres.) Nannf. (see above)
P. bresadolae var. *bartsiae* Grove = *Pyrenopeziza euphrasiae* (Fuckel) J..Kunze (Nannfeldt, 1985)
P. senecionis Nannf. GB records are misidentifications (see Nannfeldt, 1985)

Key to British species of Pirottaea

1. Spores > 20 µm (average length) 2
1'. Spores < 20 µm (average length) 5
2. Spores 38- 42 x 2.5-3.5 µm, 3-septate; setae thin-walled, 25-40(-60) µm. On stems of *Plantago* ..... **P. plantaginis**
2'. Spores < 36 µm, 0 - 3-septate; setae of various length, mostly thick-walled 3
3. Setae mostly non-septate; spores eventually 3-septate; on stems and petioles of *Centaurea*. [spores 20-28 x 2.5-3 µm] ..... **P. brevipila**
3'. Setae pluriseptate; spores at most 1-septate 4
4. Grana absent; setae with cylindrical basal elements; spores 20-28 x 3-4 µm; asci I-; on stems of *Cirsium* ..... **P. caesiella**
4'. Grana numerous; setae with strongly bulging basal elements; spores 23-30 x 1-1.5 µm; asci I+; on stems of *Symphytum* ..... **P. symphyti**
5. Average spore length < 14 µm 6
5'. Average length of spores > 14 µm 8
6. Grana abundant, forming compact clumps; setae very numerous, 40-50 µm long; spores 8-12 (-15) µm; on petioles and leaves of *Helleborus* ..... **P. veneta**
6'. Grana scarce or not in clumps; setae numerous to (sometimes) absent; spores 7-12 x 2-2.5 µm; other hosts 7
7. Setae sometimes absent, if present 15-25 µm long, not apically enlarged; on stems of *Geranium*.. **P. paupercula**
7'. Setae always present, up to 50 µm long, sometimes apically enlarged; on stems of *Heracleum* ..... **P. nigrostriata**
8. Grana absent to very scarce; spores 16-21 µm; on stems of *Centaurea* ..... **P. inopinata**
8'. Grana abundant, often growing out to setae; spores (12-)14-21(-23) µm 9
9. Setae with strongly bulging basal elements; spores (12-)14-18(-20) µm, non-septate; on stems of *Lamium* ..... **P. lamii**
9'. Setae with cylindrical basal elements; spores (14-)16-21(-23) µm, eventually 1-3 septate; on stems of Labiatae ..... **P. exilispora**

Podophacidium Niessl, in Rabenhorst, *Botanische Zeitung* 26: 558, 1868
Type: *P. terrestre* Niessl (= *P. xanthomelum*)
= *Melachroia* Boud. 1885

Apothecia subsessile; hymenium sulphur-yellow, smooth; margin prominent, blackish, toothed; receptaculum blackish. Outer excipulum a *textura globulosa*, consisting of dark brown, thin-walled elements. Asci cylindrical-clavate, long-stalked, apical pore broad, strongly I+; spores hyaline, ellipso-fusoid, with 2 large guttules, uniseriate in the ascus, 0-septate. Paraphyses filiform, obtuse, slightly enlarged at apex.
Conidial state unknown.
Saprophytic, on soil and debris.

Lit.: Dennis, 1978; Otani *et al.*, 1991; Seaver, 1939

Number of species: 1 in GB, 1 in total.

Species in Great Britain:
P. xanthomelum (Pers.) J. Schröt. (as "*P. xanthomelan*"; = *Phacidium humigenum* Cooke & Massee; = *Podophacidium terrestre* Niessl). Asci c. 150 x 10 µm; spores 13 - 15 x 5 - 6 µm.

Pseudonaevia Dennis & Spooner in *Persoonia* 15: 177, 1993
Type: *Actinoscypha muelleri* Graddon (= *P. caricina* Dennis & Spooner)

Apothecia superficial, developed below a shield of brown-walled hyphae; hymenium and receptaculum pale yellow. Outer excipulum at base a *textura angularis* consisting of slightly thick-walled pale elements, at margin composed of rows of pale, slightly thick-walled prismatic elements. Asci I +, clavate, 8-spored in type; spores ellipsoid, 0-3-septate, hyaline. Paraphyses filiform, slightly enlarged at apex, overtopping asci.
Conidial state unknown.
Saprophytic on *Carex*.

Lit.: Dennis & Spooner, 1993

Number of species: 1 in GB, 1 in total.

Species in Great Britain:
Actinoscypha muelleri Graddon. Asci 80 - 110 x 16 - 19 µm, spores 18 - 28 x 5.5 - 8 µm.

Pseudopeziza Fuckel, *Symbolae mycologicae*: 290, 1870
Type: *P. trifolii* (Biv.) Fuckel

Apothecia developed from a stroma, evident as spots on leaves. Excipulum laterally lacking, basally composed of brown-walled elements. Asci I-, cylindrical to clavate; spores ellipsoid or narrowly clavate, hyaline, 0 - 1-septate, often guttulate. Paraphyses filiform, obtuse, slightly enlarged at the apex.
Conidial state unknown.
Parasitic, on leaves of dicotyledonous herbs.

Lit.: Schüepp, 1959

Number of species: 3 in GB, c. 8 in total

Species in Great Britain:
P. calthae (W. Phillips) Massee (= *Fabraea rousseauana* Sacc. & E. Bommer)
P. medicaginis (Lib.) Sacc.
P. trifolii (Biv.) Fuckel

Excluded names:
P. alismatis (W. Phillips & Trail) Sacc. = *Mollisia*
P. jasionis (Romell) Nannf. = *Leptotrochila jasionis* (Romell) Schüepp
P. svalbardensis (Lind) Nannf. = *Leptotrochila sualbardensis* (Lind) Spooner & Nauta

Key to British species of Pseudopeziza

1. On *Caltha*; spores 14 - 19 µm long, asci 13 - 19 µm wide ..... **P. calthae**
1'. On *Medicago* or *Trifolium*; spores 9 - 12 µm long, asci 10 - 14 µm wide 2

2. On *Medicago* ..... **P. medicaginis**
2'. On *Trifolium* ..... **P. trifolii**

Pyrenopeziza Fuckel, *Symbolae mycologicae*: 293, 1870
Type: *P. chailletii* Fuckel

Apothecia erumpent; hymenium greyish; receptaculum dark; margin usually white-fimbriate and arching over hymenium. Outer excipulum a tight *textura angularis*, brown-walled, occasionally with an outer layer with partly sclerotinised walls; marginal excipulum with elongated hyaline elements arching over hymenium; medullary excipulum sometimes with gelatinised walls. Asci I+ or I-, cylindrical; spores ellipsoid to subclavate, 0 - 1 - septate. Paraphyses hyaline, subclavate, slightly enlarged at top, smooth-walled, in living state with amorphous contents or several vacuoles.
Conidial state sometimes present, *Phialophora* or unknown.
Saprophytic or parasitic on various substrates, usually on dicotyledonous herbs.

Lit.: Gremmen, 1958; Hütter, 1958; Nannfeldt, 1932; see also *Mollisia*.

Number of species: c. 25 in GB; c. 50 in total.

A preliminary list of species in Great Britain and excluded names will be published in one of the next issues of Mycologist.

Schizothyrioma Höhn., *Annales Mycologici* 15: 296, 1917
Type: *S. ptarmicae* (Desm.) Höhn.

Apothecia subcuticular; developed in a stroma on nerves of leaves. Basal excipulum *textura angularis* consisting of dark brown-walled elements; lateral excipulum reduced. Asci I+ or I, narrowly clavate, 2 - 8-spored; spores obovoid to subclavate, hyaline, with 1 submedian septum. Paraphyses hyaline, slightly enlarged at top.
Conidial state unknown.
Parasitic, on leaves of dicotyledonous herbs (British species on *Achillea*).

Lit.: Holm, 1971

Number of species: 2 in GB, 4 in total.

Species in Great Britain:
S. aterrimum (P. Karst.) Holm (= *Fabraea aterrima* P Karst.)
S. ptarmicae (Desm.) Höhn. (= *Labrella ptarmicae* Desm.)

Key to British species of Schizothyrioma

1. Asci (6-) 8-spored, I +; spores 2 - 2.5 µm wide [length 10-12.5 µm] ..... **S. aterrimum**
1. Asci 2- (4)-spored, I-; spores 4 - 5 µm wide [length 9-12.5 µm] ..... **S. ptarmicae**

Scutobelonium Graddon, *Transactions of the British Mycological Society* 83: 379, 1984.
Type: *S. amorilens* Graddon

Apothecia sessile, developed beneath a shield of dark brown, radially arranged hyphae. Outer excipulum a *textura globulosa*, of pale brown, thin-walled elements with at the surface sometimes dark brown, clavate elements, forming dark "striae". Asci I+, narrowly clavate; spores cylindrical-clavate. Paraphyses slightly enlarged at the apex, wall slightly granulate.
Conidial state unknown.

Saprophytic on grasses.

Lit.: Graddon, 1984

Number of species: 1 in GB, 1 in total.

Species in Great Britain:
S. amorilens Graddon on *Poa*. Asci 65 x 6 µm; spores 1-septate, 7 - 9 x 2 µm.

Scutomollisia Nannf., *Botaniska Notiser* 129: 337, 1976
Type: *S. punctum* (Rehm) Nannf.

Apothecia superficial, developed beneath a shield of brown, radial hyphae. Outer excipulum a *textura globulosa* consisting of brown-walled elements; marginal excipulum consisting of more elongated elements. Asci I + or I -, cylindrical; spores ellipsoid to clavate, 0-3-septate. Paraphyses hyaline, slightly enlarged at apex.
Conidial state unknown.
Saprophytic on monocotyledonous herbs.

Lit.: Graddon, 1980, 1984, 1990; Nannfeldt, 1976

Number of species: 9 in GB, 14 in total.

Species in Great Britain:
S. contraria Graddon
S. fimbriomarginata Graddon
S. integromarginata Graddon
S. morvernensis Graddon
S. operculata Nannf.
S. pallideochracea Graddon
S. papillata Graddon
S. punctum (Rehm) Nannf.
S. stenospora Nannf.

Key to British species of Scutomollisia

1. Asci I-, broadly clavate, c. 55 x 12 µm; spores 1-septate; apothecia on grasses ..... **S. punctum**
1'. Asci I+, cylindric-clavate, < 12 µm wide; spores septate or not; apothecia on grasses or other monocotyledonous plants 2

2. Ascospores mean length >16 µm 3
2'. Ascospores mean length < 16 µm 4

3. Ascospores non-septate, 16 - 22 x 2 - 3 µm; paraphyses c. 2 µm wide above; on *Juncus* ..... **S. stenospora**
3'. Ascospores 3-septate, 22 - 30 x 3.5 - 5 µm; paraphyses to 5 µm wide at apex; on grasses ..... **S. pallideochracea**

4. Ascospores 3 - 3.5 µm wide, 1-septate; paraphyses 4 - 6 µm wide above, overtopping the asci by c. 15 µm; excipulum surface with hyaline, projecting cells; on grasses ..... **S. papillata**
4'. Ascospores 2 - 2.5 µm wide, 0 - 1-septate; paraphyses 2.5 - 3 µm wide above, not overtopping the asci; excipulum surface lacking hyaline, projecting cells; on grasses or *Carex* 5

5. Spores 1-septate, 12 - 16 µm long; on grasses ..... **S. integromarginata**
5'. Spores non-septate, 6 - 12 µm long; on grasses or *Carex* 6

6. Apothecia entirely white; spores 6.5 - 8 µm long; on grasses ..... **S. contraria**
6'. Apothecia either entirely pigmented or white only at margin; spores 8 - 12 µm long; on grasses or *Carex* 7

7. Margin fimbriate, white; spores 11 - 12 µm long; on grasses ..... **S. fimbriomarginata**
7'. Margin even, pale brown; spores 8 - 11 µm long; on grasses or *Carex* 8

8. On *Carex*; shield remaining intact, appressed to the apothecium ..... **S. operculata**
8'. On grasses; shield ruptured and soon obscured by the developing apothecia ..... **S. morvernensis**

Spilopodia Boud., *Bulletin trimestriel de la Société Mycologique de France* 1: 120, 1885
Type: *S. nervisequa* (Pers.) Boud.

Apothecia developed from hyphal strand in veins of rotting leaves, erumpent, dark grey to blackish, sessile; receptaculum smooth. Outer excipulum a *textura globulosa/angularis*, consisting of brown-walled elements. Asci I+ or I-, cylindrical; spores ellipsoid, hyaline, 0 - several-septate. Paraphyses filiform, somewhat enlarged towards the apex, obtuse.
Conidial state sometimes present, *Melanodiscus*.
Saprophytic, on decaying leaves of dicotyledonous herbs.

Lit.: Boudier, 1885; Graddon, 1984; von Höhnel, 1920; Müller, 1989

Number of species: 3 in GB, 5 in total.

Species in Great Britain:
S. melanogramma Boud.
S. nervisequa (Pers.) Boud.
S. ranunculi Graddon

Key to British species of Spilopodia

1. On *Ranunculus*; spores 2 - 2.5 µm wide, 1-septate [spores 10 - 12 µm long] ..... **S. ranunculi**
1'. On *Mercurialis* or *Plantago*; spores 3 - 4 µm wide, non-septate 2

2. On *Mercurialis perennis*; apothecia to c. 0.5 mm diam. [spores 10 - 12 µm long] ..... **S. melanogramma**
2'. On *Plantago lanceolata*; apothecia to c. 1 mm diam. [spores 10 - 13 µm long] ..... **S. nervisequa**

Trochila Fr., *Summa Vegetabilium Scandinaviae*: 367, 1849
Type: *T. craterium* (DC.) Fr.

Apothecia developed beneath the epidermis, not or scarcely erumpent; hymenium greenish grey. Marginal excipulum scarcely present or lacking, basal excipulum a *textura globulosa* consisting of dark brown elements. Asci I +, cylindrical; spores ellipsoid, 0-septate, hyaline or sometimes becoming pale brownish. Paraphyses enlarged at top up to 7 µm, with olivaceous contents (observe in water).
Conidial state *Cryptocline, Myxosporium* or unknown.
Saprophytic, on leaves of dicotyledonous plants.

Lit.: Arx, 1970; Cannon *et al.*, 1985; DiCosmo *et al.*, 1984; Gregor, 1936; Greenhalgh & Morgan-Jones, 1964; Grove, 1937; Korf, 1973; Krieglsteiner, 1982; Siepe, 1996

Number of species: 3 in GB, 20+ in total.

Species in Great Britain
T. craterium (DC.) Fr. Anamorph: *Cryptocline paradoxa* (de Not.) Arx
T. laurocerasi (Desm.) Fr. (incl. *T. laurocerasi* var. *smaragdina* (Lév.) Sacc.) Anamorph: *Cryptocline phacidiella* (Grove) Arx
T. ilicina (Nees) Greenh. & Morgan-Jones (= *T. ilicis* (Fr.) P. Crouan & H. Crouan)

Excluded names:
T. buxi Capron ex Cooke = *Hyponectria buxi* (DC.) Sacc.
T. populorum Desm. = *Drepanopeziza populorum* (Desm.) Höhn.
T. salicis Tul. & C. Tul. = *Drepanopeziza salicis* (Tul. & C. Tul.) Höhn.
T. tini (Duby) Quél. = *Pyrenopeziza tini* (Duby) Nannf.

Key to British species of Trochila

1. Apothecia with remnants of covering attached as lid, apothecia -1 mm diam., on leaves of *Ilex* [spores 9 - 12 x 3.5 - 4.5 µm] ..... **T. ilicina**
1'. Apothecia with remnants of covering attached as teeth, apothecia smaller 2
2. On leaves of *Hedera*; spores 6-8 x 4-5 µm; asci -60 µm long ..... **T. craterium**
2'. On leaves of *Prunus laurocerasus*; spores 7-10 x 3-4 µm; asci 50-65 x 6-9 µm ..... **T. laurocerasi**

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