

## DESCRIPTION OF PLATE LXIII.

- Fig. 1. Threads and spores of *Pellicularia Koleroga*  $\times$  500.  
 „ 2. Portion of thread and spores further magnified.  
 „ 3. Pseudospores of *Uromyces sphaeropleum*  $\times$  500.  
 „ 4. Pseudospores of *Uromyces heterogenum*  $\times$  500.  
 „ 5. Spores of *Ustilago pulveracea*  $\times$  500.  
 „ 6. Pseudospores of *Puccinia Kurdistani*  $\times$  500.  
 „ 7. Pseudospores of *Puccinia rostrata*  $\times$  500.  
 „ 8. Portion of stem with sori of *Uromyces Hobsoni*.  
 „ 9. Pseudospores of *Uromyces Hobsoni*  $\times$  500.  
 „ 10. Spores of *Clasterisporium maculatum*  $\times$  500.  
 „ 11. Threads and spores of *Glenospora didyma*  $\times$  500.  
 „ 12. Discoid body accompanying the threads of *Glenospora*  $\times$  500.  
 „ 13. Conidia and peridium of *Capnodium Mangiferum*  $\times$  500.  
 „ 14. Asci and sporidia of same  $\times$  500.  
 „ 15. Free sporidia of *Capnodium mangiferum*  $\times$  500.

## NEW AND RARE BRITISH FUNGI.

By WM. PHILLIPS and CHARLES B. FLOWRIGHT.

[Continued from Vol. III., p. 126, with plate 62.]

31. **Hygrophorus mucronellus.** *Fr. Hymen. Europ. p. 418. Fr. Ep. p. 331.*

Fragile, pileus submembranaceous, conico-campanulate, acute, smooth, bright-red, becoming pale, stem fistulose, thin fibrous, somewhat silky, base white, gills decurrent, triangular, thick, yellow.

In a grass field by the sea bank. Kings Lynn. Dec., 1875, in company with *H. russo-coriaceus*. Probably not uncommon.

32. **Paxillus paradoxus.** (*Kalehb.*) *Berk. Kalehb. Fung. Hung. t. 16, fig. 1.*

Spores  $\cdot 0006 \times \cdot 0002$  in., with a nucleus at each end.

The Rev. M. J. Berkeley considers this a *Paxillus*. Wrekin, Salop, Sept., 1875.

- \* **Sistotrema confluens.** *Pers.*

A curious and interesting form of this plant occurred at Hereford this year, it was for the most part stemless, incrusting sticks, leaves, fragments of earth, etc., extending into the holes made by the burrowing of some animal, either a mole or a rat, some of the best developed specimens growing subterraneously upon the roof of the burrows.

33. **Stereum pini.** *Fr. Hymen. Europ. p. 643. Fr. Ep. p. 553.*

Resupinate coriaceo-cartilaginous peltato-adsnate submarginate, smooth beneath, pallid, at length bullate, hymenium purple, flesh-coloured, then brownish, pruinose.

Growing upon the under side of dead branches of *Pinus*

*sylvestris*, while they were still attached to the tree. North Wootton.

34. **Corticium typhæ** *Fekl. Symbol. Mycol. p. 27.* *Athelia typhæ, Pers. Mycol. Europ. p. 84.*

Longitudinally effused, thin, then quite smooth, very pale tan-coloured.

On *Typha latifolia*. North Wootton, 1874.

Almost invisible when dry.

- \* **Solenia fasciculata.** *Fr.*

This occurred on dead *Salix*, near Shrewsbury, Jan., 1876.

- \* **Phallus iosmos.** *Berk.*

This plant occurred abundantly on the sand hills by the sea shore at Scratby, near Yarmouth, in November, 1874, from whence the Rev. Kirby Trimmer kindly sent us specimens; after a very careful examination we were unable to differentiate these specimens from various forms of *P. impudicus* we have met with either by habit, colour, or odour; one specimen only had a reddish tinge upon the stem, several of the older ones were blackened by some *Cladosporium*. Mr. Trimmer, however, says—"I have had the opportunity of testifying to the appropriateness of the specific name of 'iosmos,' though, in the midst of these specimens, I found them by sight and not by scent. In getting them up from the sand, they yielded a pleasant violet odour, and it was not until the third day after gathering that they became offensive." Rev. M. J. Berkeley, to whom specimens were sent, says, "doubtless the plant of *Curtis' Entomology*, but it is very doubtful whether it is a species."

35. **Dinemasporium fimeti.** *n. sp.*

Excipulum subrotund, superficial, black. Spores appendiculate, .0003 exclusive of appendage. Smaller and more compact than *D. graminum*, Lév., with much smaller spores.

On rabbits' dung. Kings Lynn, 1874.

Pl. 62 fig. 1. Spores.

36. **Excipula petiolicola.** *Fekl. Symb. Mycol. p. 400.*

Perithecia scattered, minute, hemispherical or oblong; black, cup-shaped when dry.

On the petioles of *Tilia*. Ringstead, Ap., 1872.

37. **Torula pinophila.** *Chev. Rabh. F. E., No. 1668.* *Cooke's Fung. Brit. 2nd edit. fus. IV. No. 335.*

On *Abies pectinata*. Dolgelly, North Wales. June, 1875.

38. **Gymnosporium Physciæ.** *Kalchbr. Szep. Gomb. Jcb. No. 856.*

On the apothecia of *Physcia parietina*. Common about King's Lynn, but we have never seen it upon any other lichen.

39. **Puccinia acuminata.** *Fekl. Symb. Mycol. p. 55.*

On *Galium saxatile*. Montgomeryshire. Rev. J. E. Vize.

40. **Uromyces Beta.** *Kühn in Bot. Zeitg. 1869, sp. 540.* *Fuekel. Symb. Mycol. 64.*

On *Beta vulgaris*, doubtless the advanced condition of *Tricho-*

*basis betæ*, Lèv., from which it may readily be distinguished by the naked eye from the darker colour of its pustules.

Kings Lynn, October, 1875.

41. **Fusidium cylindricum.** *Corda Fockel Symb. Mycol. p. 371.*

On green but fading leaves of *Lapsana communis*, Mr. T. Brittain, 1875. Agreeing with Continental specimens from Dr. Geo. Winter, etc.

42. **Fusisporium Kühnii.** *Fckl. Symb. Mycol. p. 371.*

Mycelium arachnoid, white, effused. Hypha thin, branched, septate, matted, then vanishing; conidia in little heaps, subregular, lunate, uniseptate, hyaline.

Overrunning mosses, lichens, etc., on the bark of trees, frequently about Kings Lynn, but by no means always in a fruitful condition.

43. **Ramularia variabilis.** *Fckl. Symb. Mycol. p. 361.*

Cæspitose, spreading, thin, white, on a brownish or greenish spot. Hypha fasciculate, flexuous, very short; conidia hyaline, very various, ovate, obovate, elliptical or cylindrical.

On fading leaves of *Digitalis purpurea*. Mr. T. Brittain.

44. **Vibrissia Guernisaci.** *Cr. Ann. des Sc. Nat. Vol. vii., 1857, c. i.*

Very small, 1-3 millm. in diameter, sessile, gelatinous, lenticiform or turbinate, slightly brown beneath; hymenium plane or convex, white, greenish-yellow or ochery-yellow, pale grey or bluish-grey; asci usually straight, containing 8 uncoloured sporidia, which are long, filiform, curved, much attenuated, and excessively slender; paraphyses numerous, articulated, presenting one to three chain-like bifurcations, the terminal cells being round or pear-shaped, and larger than the others; sporidia about  $\cdot 0038$  in. long.

On the inner side of dead bark of willow. Shrewsbury. Nov., 1875.

45. **Peziza (Humaria) semi-immersa.** *Karst. Myc. Fenn. I., p. 45. Phillips, El. Brit., No. 60.*

Sub-gregarious, sessile, half immersed in the earth, at first sub-spherical, then hemispherical, at length expanded, applanate, very slightly pubescent, or becoming glabrous; margin crenulate-unequal, pallid, ochraceous, or incarnato-testaceous, epithecium darker; asci cylindraceo-clavate; sporidia ellipsoid, one or two nucleate,  $\cdot 016\text{-}\cdot 024 \times \cdot 09\text{-}\cdot 011$  m.m.; paraphyses articulated; apices curved and unequal.

On damp earth. Shrewsbury.

\* **Peziza (Sarcoscyphæ) melastoma.** *Sow.*

A single specimen was found at Whitfield, near Hereford, in May, 1875.

\* **Peziza (Sarcoscyphæ) sepulta.** *Fr.*

Terrington, St. Clements, Norfolk (C. B. P.). Nov., 1874.

46. **Peziza (*Dasyscyphæ*) palearum.** *Desm. Ann. Sc. Nat.* 1846. *Crypt de Fr. Exs. ii.*, No. 917. *Phillips, El. Brit.*, No. 68.

Minute, scattered, stipitate, whitish-tawny, acetabuliform, then plane, externally furfuraceo-tomentose, ciliated round the margin; disc ivory; stipes rather long, dark brown at the base; asci small, cylindrical; paraphyses large, acute at the summits; sporidia  $\cdot 01\text{--}\cdot 013 \times \cdot 002$  m.m.

On straw. King's Lynn (C. B. P.). On *Psamma arenaria*. Towyn, North Wales. June, 1875.

47. **Peziza (*Dasyscypha*) luzulina.** *Phillips. Grevillea, Vol. iv.*, pl. 51, fig. 266.

Gregarious or scattered, shortly stipitate, minute, white, pubescent; disc pale yellow, plane, margined; asci clavate; sporidia 8, fusiform, straight or slightly curved,  $\cdot 0005\text{--}\cdot 0008 \times \cdot 0002\text{--}\cdot 00025$  in.; paraphyses linear.

At the base of dead leaves of *Luzulina sylvatica*. Conway, North Wales.

48. **Peziza (*Dasyscypha*) friabilis.** n.s.

Scattered or congregated, sessile, when young globose, then hemispherical, externally whitish, minutely pubescent, concave, brittle; margin fractured, uneven; disc testaceous; asci cylindrical-clavate; sporidia 8, filiform,  $\cdot 06 \times \cdot 001$  m.m., multiseptate; paraphyses slender.

On dead oak branches, growing on the woody fibre only. Dolgelly, North Wales. June, 1875.

PLATE 62, FIG. II.—1, natural size of plant; 2, a cup magnified; 3, asci and paraphyses; 4, sporidia.

49. **Peziza (*Dasyscyphæ*) flammea.** *A. & S. Consp. p.* 319, *t.* 11, *f.* 7. *Phillips, El. Brit.*, No. 72.

Gregarious or scattered, sessile, hemispherical, strigoso-villous, dull red throughout; sporidia oblong, simple or spuriously uniseptate,  $\cdot 01\text{--}\cdot 016 \times \cdot 0025\text{--}\cdot 0035$  m.m.; paraphyses slender.

On *Salix aurita*. Aviemore, N.B. (Rev. J. Keith).

50. **Peziza (*Dasyscypha*) miliaris.** *Wallr.*

Sessile, scattered, minute, becoming pallid, externally thinly pruinose, immarginate, same colour as the disc, which becomes somewhat convex; asci clavato-cylindrical,  $\cdot 002 \times \cdot 0003$  in.; sporidia 8, oblong-ovate,  $\cdot 0004 \times \cdot 00015$  in.

On the upper side of *Peltigera canina*. North Wootton. Nov. 15, 1875.

- \* **Peziza (*Tapesia*) Bloxami.** *B. & Br.*

On dead wood. Near Barmouth, North Wales. June, 1875.

We were unable to find fruit in our specimen, and are indebted to Dr. Cooke for confirming our determination.

51. **Peziza (*Mollisea*) litoralis.** n.s.

Sessile, scattered or crowded, minute, black; disc dark brown, concave; margin incurved, fractured; asci subclavate; paraphyses

linear; sporidia cylindrical, narrow, enucleate, straight, or slightly bent,  $\cdot 025 \times \cdot 002$  m.m.

On dead wood washed up from the Loch. Lynwilg, Scotland (Rev. J. Keith).

PLATE 62, FIG. IV.—1, natural size of plant; 2, cups magnified; 3, asci and paraphyses; 4, sporidia.

52. *Peziza (Mollisea) maura*. n.s.

Scattered, sessile, at first globose, becoming patellate, sooty-black; margin raised, crenulate; asci clavate, elongated, and narrow below; paraphyses curved at the summits; sporidia narrowly fusiform, with five to seven nuclei,  $\cdot 03\text{--}\cdot 038 \times \cdot 005\text{--}\cdot 006$  m.m.

On dead wood. Dinnore, Hereford. Oct., 1875.

PLATE 62, FIG. III.—1, natural size of plant; 2, cups enlarged; 3, cells of exterior of cup  $\times$  same as sporidia; 4, asci and paraphyses; 5, sporidia.

53. *Peziza (Mollisea) retrusa*. n.s.

Minute, scattered, at first concealed by the epidermis, then erumpent, sessile, hemispherical, or oblong, straw-coloured, smooth; asci clavate; sporidia eight, biseriate, oblong-ellipsoid,  $\cdot 017\text{--}\cdot 019 \times \cdot 005\text{--}\cdot 006$  m.m.; paraphyses not visible.

On needles of larch. Trefriw, North Wales. May, 1874.

When dry this is found with difficulty, as it becomes contracted, and conceals itself under a kind of lid formed of the ruptured epidermis; but when moist it is sufficiently conspicuous under a pocket lens. It should stand near *Peziza erumpens*, Grev.

PLATE 62, FIG. VI.—1, natural size of *P. retrusa*; 2, the same, much enlarged; 3, ascus; 4, sporidia.

54. *Peziza (Mollisia) ulcerata*. n.s. *Phillips, El Brit., No. 83.*

Scattered, erumpent, sticticiform, then patellate; margin fractured; disc dirty-orange; asci clavate, tetrasporous; paraphyses enlarged at the summits, simple or forked, often contorted; sporidia ovate, granular within,  $\cdot 015 \times \cdot 008$  m.m.

This is allied to *P. fusarioides*, Berk., and *P. assimilis*, C. & P.; but differs from both in the much larger sporidia, and having only four in each ascus.

On *Aster tripolium*. Kings Lynn (C. B. P.). Sept., 1875.

PLATE 62, FIG. V.—1, natural size of plant; 2, the same magnified; 3, asci and paraphyses; 4, sporidia.

Since the foregoing was in type, we have discovered that the same species is described by Berk. & Br. in *Ann. Nat. Hist.* as *Pez. Tripolii*.

55. *Peziza (Mollisia) arenevaga*. *Desm. Ann. Sc. Nat. 1852. Pl. Crypt. ii., No. 517. Phillips' El Brit., No. 84.*

Erumpent, minute, scattered, of a soft waxy consistency, glabrous, sessile, when young globose, then plane, externally tawny, with a somewhat tumid tawny elevated margin, which is black when dry; disc watery, nearly white, when dry brown; asci

clavate, subcylindrical, erect amongst simple paraphyses; sporidia eight, oblong-ovoid, hyaline, obtuse at the ends,  $\cdot 015 \times \cdot 005\text{--}01$  m.m.

On *Psamma arenaria*. North Wales, 1874. Scotland (F. Currey, Esq.).

56. *Stictis seriata*. *Lib. Phillips, El Brit., No. 100.*

Cups innate, punctiform, orbicular, plane or but slightly concave, disposed in approximate series, rubro-fuscous; asci linear, including 6-8 globose, minute, hyaline sporidia.—*Fckl.*

On *Carex ampullacea*. Forres, North Britain (Rev. J. Keith).

\* *Stictis lichenicola*. *Mont.*

The Rev. W. A. Leighton received specimens from Ireland of this doubtful *Stictis*, and kindly communicated them to us.

57. *Hypocrea contorta*. *Berk. & Curt. Sphæria contorta, Schweinitz Synopsis, p. 194, No. 1224.\**

Subrotund, fixed to the matrix by the central portion, spreading, becoming thin towards the margin, where it is free and variously lobed, dark olive-green externally, yellowish-white within; perithecia minute, globose, confined to the upper surface; asci  $\cdot 003$  in. long; sporidia, 16, spherical, with a central nucleus,  $\cdot 0002$  in.

On a rotten oak stick. Foxley Woods. Oct., 1875.

A very interesting addition to our flora, and agreeing exactly with American specimens received from Mr. J. B. Ellis.

58. *Hypocreopsis pulchra*. *Winter. Hedwigia, 1875, p. 26. Sphæriacei Britannici Cent. ii., No. 100.*

Compound. Perithecia 1 to 3, immersed in the elliptical verrucæform, or irregular, fleshy, red stroma, which is covered on the surface by a reddish down; ostiola erumpent, darker; asci oblongo-ventricose, sessile, 4 to 8 spored; sporidia crowded in the ascus, broadly elliptic, simple, hyaline,  $\cdot 002 \times \cdot 0008$  in.

Near Shrewsbury, on sheep dung, 1874; on cow and sheep dung, Terrington, St. Clements, 1875.

59. *Nectria peltigeræ*. *Ph. & Pl.*

*Nectriella carnea*, *Fckl. Symb. Mycol. p. 176. Cryptodiscus Lichenicola*, *Ces. in Kl. Herb. Myc. ii., 523.*

On the living thallus of *Peltigera canina*, in company with and usually following its conidia, *Illiosporium carneum*, Fr. Castle Rising, Nov., 1875.

Fuckel is undoubtedly right in classing this plant with the *Nectriæ*, both on account of the perithecium and also by reason of the fruit.

60. *Sphæria (Sordaria) merdaria*. *Fr. Fr. Elench. ii. p. 100.*

*Coprolea merdaria*, *Fckl. Symb. Mycol. p. 240. Sordaria merdaria*, *Winter. Sord. p. 13, t. 7. f. 1. Sphæriacei Brit. ii. No. 56.*

Perithecia single or in groups of 2 or 3, surrounded by a stroma, which is black, shining, and semi-immersed in the matrix;

perithecia rugulose, dark brownish-black, shortly conical; ostiola obtuse; asci elongato-cylindrical; sporidia 8 ovate, simple, or with a nucleus, opaque, black, surrounded by gelatin,  $\cdot 001 \times \cdot 0004$  in.

On horse dung, Terrington St. Clements, 1874. On rabbits' dung, Kings Lynn, 1875.

61. **Sphæria (Sordaria) Equorum.** *Winter. Sord. p. 13, t. 7. fig. 2. Coprolepa Equorum, Fckl. Symb. Mycol. p. 240. Sphæriacei Britannici ii. No. 57. Cooke Fungi, Britt. ii., 241-2.*

Perithecia scattered, in a thin subcoriaceous crust-like stroma on the surface of the matrix, covered with a dark brown villosity; ostiola black, somewhat conical; asci cylindrical, octosporous; sporidia uniseriate, ovate, or oblong, black, simple, surrounded by a gelatinous envelope,  $\cdot 0007 \times \cdot 0003$  in.

On horse dung. North Wootton, Shrewsbury.

Grevillea vol. iii., t. 42, fig. 7.—*a*, section of fungus enlarged; *b*, sporidia; *c*, ascus and paraphysis.

62. **Sphæria parmeliarum.** n. sp.

Superficial perithecia, small, black, crowded, somewhat shining, smooth; ostiola minute but distinct, papillaform; sporidia eight, triseptate, elongated, somewhat constricted, pale brown, usually uniseriate, rarely 4-septate,  $\cdot 001 \times \cdot 0005$  in.

Growing parasitically upon *Parmelia saxatilis*, on a living spruce fir tree, Dolgelly, North Wales. June 22, 1875 (Rev. W. A. Leighton).

PLATE 62, FIG. VIII.—1, natural size; 2, asci; 3, sporidia.

63. **Sphæria (Diaporthe) resecans.** *Nke. Nitschke Pyren. Germ. p. 314. Sphæriacei Brit. ii., No. 43.*

Elongated, bursting through the bark longitudinally; perithecia, minute, globose, or slightly depressed; ostiola very small, short; asci clavate or oblong, octosporous; sporidia biseriata, obtusely fusiform, straight, hyaline, bipartite, 2-4 septate, somewhat constricted,  $\cdot 0004$  in.  $\times \cdot 0001$  in.

On *Syringa vulgaris*. Terrington St. Clements, 1874.

64. **Sphæria (Diaporthe) pinophylla.** n. sp.

Perithecia scattered, sometimes two or three in a group, seated beneath a widespreading black crust, immersed in the matrix; ostiola elongated, abruptly truncate at the apex; asci  $\cdot 001$  in. long; sporidia biseriata, hyaline, acute, quadrinucleate, then uniseptate,  $\cdot 007 \times \cdot 0002$  in.

On decaying fir needles (*Pinus sylvestris*), Belmont, Hereford. May, 1875.

PLATE 62, FIG. VII.—1, natural size; 2, a perithecium magnified; 3, ascus; 4, sporidia.