

This article was downloaded by: [Purdue University]

On: 19 January 2015, At: 04:14

Publisher: Taylor & Francis

Informa Ltd Registered in England and Wales Registered Number:

1072954 Registered office: Mortimer House, 37-41 Mortimer Street,
London W1T 3JH, UK



Annals and Magazine of Natural History: Series 2

Publication details, including instructions for
authors and subscription information:

<http://www.tandfonline.com/loi/tnah08>

XL.—Notices of British fungi

Rev. M.J. Berkeley M.A. F.L.S. & C.E. Broome
Esq.

Published online: 14 Dec 2009.

To cite this article: Rev. M.J. Berkeley M.A. F.L.S. & C.E. Broome Esq. (1850)
XL.—Notices of British fungi , Annals and Magazine of Natural History: Series 2,
5:30, 455-466, DOI: [10.1080/03745486009494947](https://doi.org/10.1080/03745486009494947)

To link to this article: <http://dx.doi.org/10.1080/03745486009494947>

PLEASE SCROLL DOWN FOR ARTICLE

Taylor & Francis makes every effort to ensure the accuracy of all the information (the "Content") contained in the publications on our platform. However, Taylor & Francis, our agents, and our licensors make no representations or warranties whatsoever as to the accuracy, completeness, or suitability for any purpose of the Content. Any opinions and views expressed in this publication are the opinions and views of the authors, and are not the views of or endorsed by Taylor & Francis. The accuracy of the Content should not be relied upon and should be independently verified with primary sources of information. Taylor and Francis shall not be liable for any losses, actions, claims, proceedings, demands, costs, expenses, damages, and other liabilities whatsoever or howsoever caused arising directly or indirectly in connection with, in relation to or arising out of the use of the Content.

This article may be used for research, teaching, and private study purposes. Any substantial or systematic reproduction, redistribution, reselling, loan, sub-licensing, systematic supply, or distribution in any form to anyone is expressly forbidden. Terms & Conditions of access and use can be found at <http://www.tandfonline.com/page/terms-and-conditions>

[Continued from p. 380.]

[With two Plates.]

ERIOSPORA, n. g.

Stroma multicellulare; cellulis globosis poro unico communi
sporas filiformes tenerrimas primo quaternatim sporophoras cor-
nantibus effudentibus.

438. *Eriospora leucostoma*. On dead leaves of *Typha*, Spye
Park, Wilts, Feb. 1850, C. E. Broome.

Spots pitch-brown, very thin and diffused toward the edges,
not a line broad, marked in the centre with a punctiform white-
bordered pulverulent aperture. Stroma depressed. Cells vary-
ing in number, generally globose, but sometimes from the con-
fluence of one or more depressed. Spores very long, filiform, so
delicate that they wave from the minute currents formed by the
evaporation of the water in which they are placed for examina-
tion on the table of the microscope, at first seated four together
on short cylindrical sporophores, but soon falling off.

Not unlike the foregoing species, but the spores forbid its
being placed in the same genus. It exactly answers to the genus
Robergea of the Ascosporous series.

PLATE XI. fig. 1. Spores with their sporophores highly magnified.

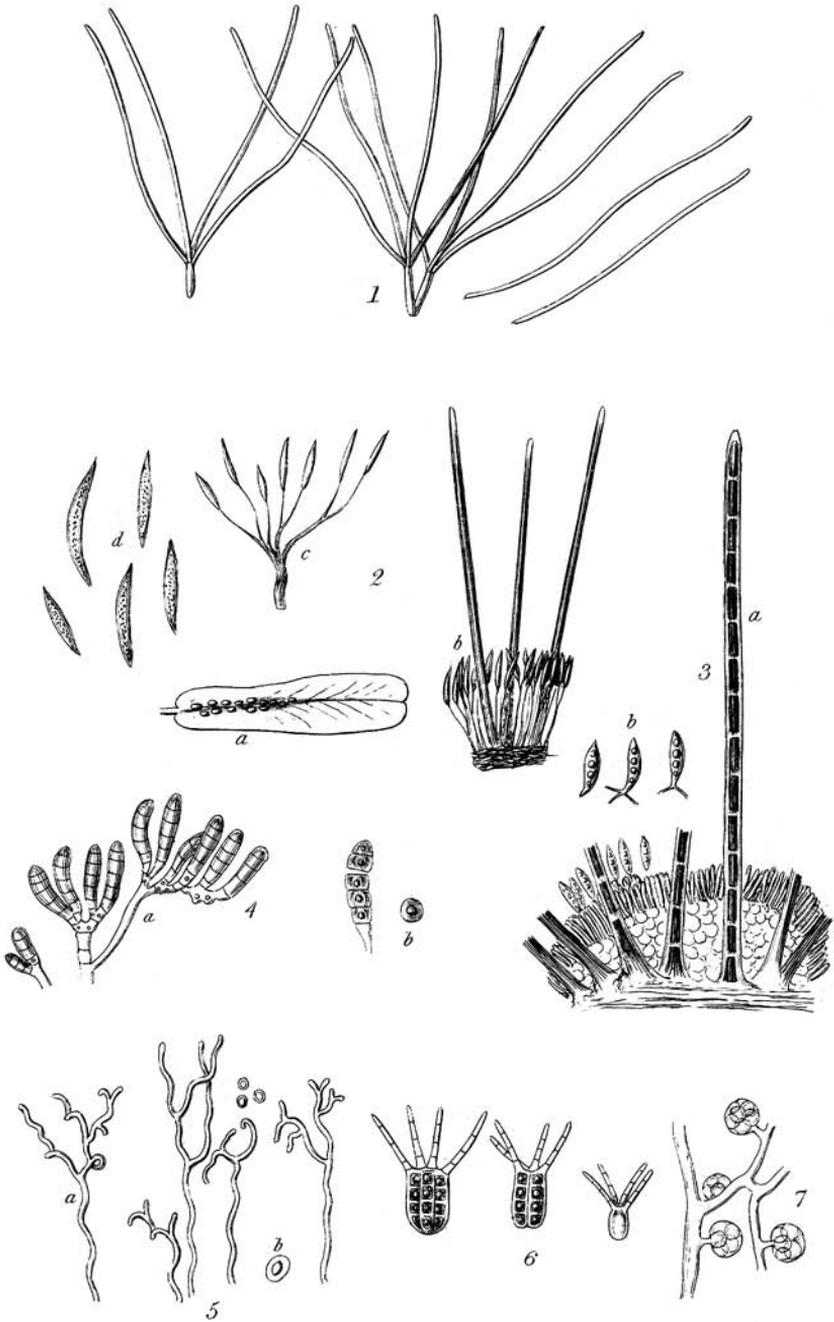
439. *Glaosporium paradoxum*, Mont. in litt. = *Myxosporium
paradoxum*, D. Not. Mic. Dec. 2. fig. 10. On leaves of ivy, Pen-
zance, J. Ralfs, Esq.; King's Cliffe.

440. *G. labes*, Mont. in litt. = *Asteroma labes*, Berk. Brit. Fung.
no. 346.

441. *G. concentricum*, Berk. & Br. = *Cylindrosporium concen-
tricum*, Grev. Scot. Crypt. Fl. t. 27.

Authentic specimeus lately forwarded for inspection by Dr.
Greville show the spores to be produced beneath the cuticle, and
to form little heaps by oozing out as in other species of *Glaos-
porium*. The notion formerly broached, of its being a form of
Cystopus candida, arose from a specimen in Sir W. J. Hooker's
herbarium received from Dr. Greville, but which unfortunately
was not the true plant, but a form of the common white rust with
cylindrical truncate spores.

441*. *Cheirospora botryospora*, Fr. Summa Veg. Scand. p. 499
= *Hyperomyza stilbosporoides*, Corda, Ic. Fasc. 3. fig. 89 = *Stil-
bospora botryospora*, Mont. Ann. d. Sc. Nat. 1837, t. 18. fig. 5.
Abundant on beech twigs, Wraxall, Somers., C. E. Broome,
Bristol, H. O. Stephens, Esq.



Fries proposed the name of *Cheirospora* in the addenda to 'Syst. Orb. Veg.' in 1825, more than ten years before *Thyrsidium*, Mont., and we therefore adopt his name in preference to *Myrioccephalum*, D. Notaris, a name proposed much later than *Thyrsidium*, but in favour of which Dr. Montagne had kindly waved his title to priority.

442. *Pilidium carbonaceum*, Lib. = *Cenangium fuliginosum*, Fr. On willow branches, King's Cliffe, &c.

This is no *Cenangium*, being destitute of asci. The spores are falciform and septate. We scarcely think it a good *Pilidium*, according to Kunze's notion of the genus, taking *P. acerinum* as the type.

443. *Melasmia acerina*, Lév. Ann. d. Sc. Nat. May 1846, p. 276. On leaves of *Acer Pseudo-platanus*, Beddellart, Horatio Piggot, Esq.

Resembling very much a depauperated state of *Rhytisma acerinum*, or rather *R. punctatum*, but differing greatly in structure, having no asci, but minute oblong spores.

444. *Excipula macrotricha*, n. s. Peritheciis hispidis; pilis longis rectis; sporis minimis lunulatis. On dead branches of *Ulex europæa*. The precise locality has not been preserved.

Perithecia larger than in the other species, coarsely hispid; hairs long, thicker than in *E. Vermicularia*, Corda; their inner tube separating easily from the outer. Spores far more minute, lunulate.

A much coarser species than that just mentioned, easily recognized by its larger size, coarser hairs, and minute spores.

445. *E. chatostroma*, n. s. Gregaria convexa cinerea ubique setis nigris percursa; sporis lunatis, subfusiformibus. On dead ash keys, Leigh Wood, Somersetshire.

Minute, convex, black; disc rough, with the long inarticulate bristles which everywhere penetrate its substance. Spores on rather long fasciculate or connate sporophores, lunate, subfusiform, acute at either extremity, pale; endochrome granulated, green under the microscope.

This is to the genus *Excipula* precisely what *Desmazierella* is to *Peziza*; but as the species is so much lower in the scale, we consider the protrusion of the bristles through the disc as of less importance, and therefore do not regard it as generically distinct. It is in fact an *Excipula* in every other respect. We have a closely allied species on some *Panicum* from South Carolina.

PLATE XI. fig. 2. *a.* Plant nat. size on an ash key; *b.* portion showing the stroma, hairs and spores, with their sporophores magnified; *c.* sporophores and spores more highly magnified; *d.* spores very highly magnified.

446. *Dinemasporium gramineum*, Lév. Ann. d. Sc. Nat. May

1846, p. 274 = *Excipula graminum*, Berk. Br. Fung. no. 328. A second species of this genus occurs in South Carolina.

MYXORMIA, n. g.

Perithecium tenue excipuliforme apertum e cellulis elongatis compactum. Sporophoræ teneræ. Sporæ oblongæ concatenatæ demum liberæ, mucò involutæ.

447. *M. atroviridis*. On dead leaves of grass, Batheaston, Dec. 1849.

Perithecia excipuliform, scattered, minute, quite smooth, formed of long closely-packed narrow cells. Sporophores filiform. Spores linear-oblong, concatenated, connected by a very delicate thread which frequently breaks off with them, containing one or more globose nuclei, generally one at either end, involved in gelatine forming a black green mass resembling strongly the fructifying stratum in the genus *Phallus*.

Closely resembling externally *Myrothecium gramineum*, Lib., but differing greatly in structure. The genus is allied to *Excipula*, but separated from it by habit, by the absence of flocci, and above all by its concatenate spores. The spores collectively are very gelatinous. We do not observe any distinct gelatinous coat to each spore, but infer the presence of a gelatinous medium from the extreme tenacity of the fructifying mass. The genus appears to be allied to *Catinula*, Lév.

PLATE XII. fig. 9. *a*. Plant nat. size; *b*. ditto magnified; *c*. portion highly magnified, showing the sporophores springing both from the walls and cellular base; *d*. spores magnified 340 diameters.

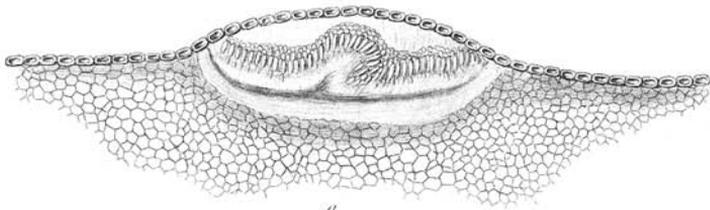
CYSTOTRICHA, n. g.

Perithecium rima longitudinali dehiscens. Sporophoræ ramosæ articulatæ submoniliformes hic illic sporis oblongis uniseptatis obsitæ.

448. *C. striola*. On decorticated wood, Batheaston. Probably very common.

Perithecia punctiform or linear, often forming little rows, black, with a reddish tinge, opening by a longitudinal fissure. Disc reddish. Sporophores highly developed, greatly elongated, bearing one or two branches above, articulate from the base submoniliform, the articulations about as long as broad, giving off here and there oblong pellucid spores, which are at first simple, but at length uniseptate.

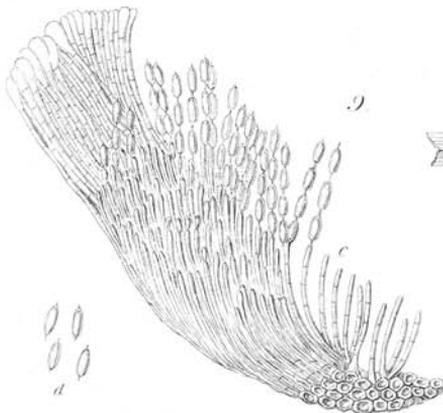
This curious little plant has nearly the structure of *Tubercularia*, with the addition of a perithecium, the sporophores however being closely articulate. It resembles very much *Stictis parallela*, which has however distinct asci and sporidia as



a



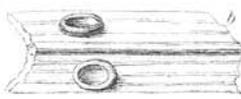
8



9



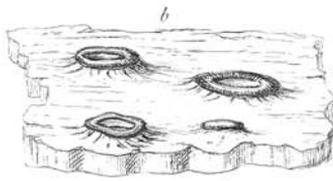
a



b

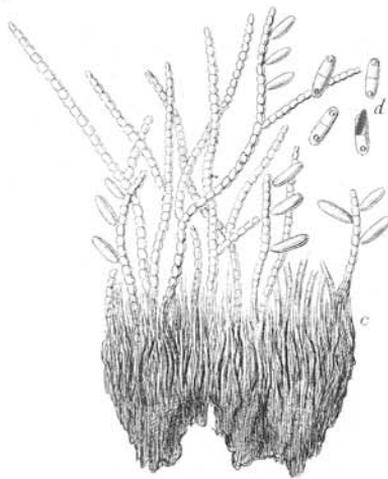


a



b

10



d

c

represented by Corda and confirmed by ourselves. *Endotrichum* of Corda again has a close external resemblance, but a glance at the figure and description shows clearly that they cannot belong to the same genus. *Labrella punctum*, Corda, may also be compared with it. The extremely close external resemblance of objects belonging to as many very different genera would make a nice subject for amplification to those who adopt the notions prevalent with some of the transformation of species.

PLATE XII. fig. 10. *a.* Plant nat. size; *b.* ditto magnified; *c.* portion highly magnified; *d.* spores magnified 340 diameters.

449. *Coryneum compactum*, n. s. Minutum primitus tectum sero denudatum; sporis late fusiformibus obtusiusculis, nucleis concatenatis. On dead twigs of elm, Wraxall, Som., March 1845. It occurs also in Upper Carolina on *Betula rubra*.

Forming minute scattered pustules at first quite covered by the cuticle, at length exposed. Stroma convex; spores pedunculate, widely fusiform, slightly obtuse, 4-5-septate, nuclei large, connected with one another.

This species bears nearly the same relation to *Stilbospora pyriformis* that the next does to *S. angustata*. The nuclei are connected with one another after the fashion of the endochromes of *Sirosiphon ocellatus*, Kütz., *Saccothecium Corni*, Mont., *Helminthosporium Hoffmanni*, Berk. and Curt., and some others. The shape of the spores is very much that of the same organs in *Hymenogaster griseus*, Tul.

450. *C. disciforme*, Kze. Myc. Heft I. p. 76. On dead twigs of birch, woods near King's Cliffe.

b. ellipticum, Berk. & Br. Magnum transversum; stromate elliptico crasso pulvinato, sporis pedunculatis multiseptatis fusiformibus; endochromatibus ut plurimum biguttatis. On trunks of birch-trees, King's Cliffe.

Bursting transversely through the bark, large, elliptic, pulvinate; stroma thick, white, black towards the edges, consisting of closely-packed elongated cells; spores fusiform, multiseptate; articulations slightly constricted; endochromes granular, containing generally two transversely arranged globules.

We were at first inclined to consider this a new species, but specimens exactly agreeing with Corda's figure have since occurred on smaller twigs, which exhibit occasionally two globules in the endochromes, and we now regard it merely as a very highly developed form.

451. *C. microstictum*, n. s. Tectum; stromate obsoleto; sporis minutis breviter lanceolatis 2-3-septatis. *Sporocadus rosacola*, Rab. no. 1166. On dead twigs of rose, vine, *Kerria japonica*, &c. Sent by Mr. Stephens, Mrs. Hussey, &c.

Scattered over the twigs and always concealed by the cuticle, which cracks in the centre of each little pustule. Stroma obsolete. Sporophores elongated; spores minute, brown, shortly lanceolate, with two or three septa.

This has very much the habit of an *Hendersonia*, but there are no perithecia. We cannot place it in *Stilbospora*, because the spores are not ejected as in the species of that genus. It is in fact just intermediate between *Stilbospora* and *Coryneum*. The spores vary slightly, but not sufficiently to justify the proposition of more than one species.

452. *Sporidesmium polymorphum*, Cord. Ic. Fasc. 1. fig. 119. On decorticated oak, Wraxall, Som., Feb. 1845, C. E. Broome.

Remarkable for its closely septate peduncle. Corda's specimens are on white birch.

453. *S. antiquum*, Cord. Ic. Fasc. 3. fig. 11.

Var. *compactum*, Berk. & Br. On hard wood, Wraxall, Som., C. E. Broome.

Our species agrees in general character with Corda's, of which we have a specimen from the author, but it is more compact and composed of smaller cells.

454. *S. pyriforme*, Cord. Ic. Fasc. 1. fig. 116. On decayed boards, Luciefelde, Shropshire, Rev. W. A. Leighton, July 1842.

Our species seems to be exactly what is figured by Corda, but we have no authentic specimen. It forms a thick crust-like stratum.

455. *S. melanopum*, Berk. & Br. Sporis subglobosis basi cellulosa suffultis, stratum e pluribus soris congestum efformantibus. *Spiloma melanopum*, Ach. Meth. t. 1. fig. 3; Eng. Bot. ! t. 2358. Common on the bark of apple-trees.

We are indebted to Mr. Borrer for authentic specimens. Forming broad black patches made up of many smaller spots. Spores subglobose, very opaque, apparently simple, but really composed of numerous cells supported by a cellular base, which varies much in length and breadth. In some specimens, but not in all, short articulated filaments occur, which seem to belong to a species of *Helminthosporium*.

456. *S. scutellare*, Berk. & Br. Soris scutellæformibus; sporis late obovatis cellulosis, basi brevi cellulosa suffultis. On larch-bark, Ulting, Essex, H. Piggot, Esq.

Sori scattered, minute, scutelliform; spores obovate, evidently cellular, springing from a cellular stroma and supported by a few variously arranged cells, which are sometimes reduced to merely one.

TETRAPLOA, n. g.

Sporæ nudæ ut plurimum 4-articulatæ quaternatim connatæ, quæque seta coronata.

457. *T. aristata*. On grass, Westhay Woods, King's Cliffe.

Forming a thin olive-black stratum, consisting of generally quadriarticulate oblong spores growing four together and perfectly connate, each crowned with an articulate seta as long as itself.

This most curious fungus has occurred once only. It is a compound *Sporidesmium*. The quadriaristate bodies may either be regarded as made up of four spores or as spores formed of four parallel rows of cells, each row being terminated by a bristle. They remind one strongly of the achæmium of some Composite plant.

PLATE XI. fig. 6. Young and mature spores highly magnified.

457*. *Echinobotryum atrum*, Cord. Ic. Fasc. 2. fig. 6. Parasitic on some species of *Pachnocybe*, Milton, Mr. Henderson ; King's Cliffe.

The spores have the appearance of fascicles of minute perithecia.

458. *Dictyosporium elegans*, Corda in Weitenweber Beit. no. 1. p. 87 ; Cord. Ic. Fasc. 2. fig. 29. On barked oak-trees, Brockley Combe, Som., C. E. Broome, Feb. 1845.

Allied to *Sporidesmium*. A very curious and distinct production, of which we have specimens from the author.

459. *Coniothecium effusum*, Cord. Ic. Fasc. 1. fig. 21. Common on fence rails.

Possibly the barren state of some well-known fungus. This is probably *Lepraria nigra*, Eng. Bot.

460. *C. Amentacearum*, Cord. Ic. Fasc. 1. fig. 26. On dead willow-twigs : extremely common.

461. *C. betulinum*, Cord. l. c. fig. 25. On dead birch-twigs, King's Cliffe.

462. *Torula Sporendonema*, Berk. & Br. *Sporendonema Casei*, Desm. Ann. d. Sc. Nat. vol. xi. p. 246 ; Mougeot & Nestler, no. 998.

We have lately met at King's Cliffe with well-developed specimens of this species, which is precisely the plant of Mougeot and Nestler. It has exactly the structure of *Torula*, and certainly has not the spores contained within a tube. Corda's *Torula Casei* appears to be very different. A variety occurs on rats' dung. The rats had probably been robbing a cheese infested with the mould. The specimens came from Mr. Henderson.

463. *T. pulvillus*, n. s. Cæspitibus pulvinaribus ; floccis compactis rectis ramosis ; articulis oblongis leviter constrictis. On dead twigs of oak bursting in little tufts through the bark, Ape-thorpe, March 1841.

Tufts cushion-shaped, half a line broad, compact, black ; flocci straight, slightly branched, often suddenly diminishing in size

and again incrassated, consisting of numerous slightly constricted oblong joints; endochrome containing a single nucleus.

Resembling somewhat in structure *T. stilbosporoides*, Corda, of which we have an authentic specimen, but differing greatly in habit.

464. *T. abbreviata*, Cord. Ic. Fasc. 1. fig. 130.

b. sphaeriaformis, Berk. & Br. On dead stems of herbaceous plants, Apethorpe. On decorticated branches of *Pinus sylvestris*, Wraxall, Som.

Our specimens exhibit rather a different form from that figured by Corda. Instead of being widely diffused they present little Sphaeria-like tufts, and have a highly developed hyphasma, consisting of forked threads, at the apices of which the short chains of spores are fixed. The form of these is identical with what was observed by Corda, and we regard the species as the same with his, though constituting a distinct variety.

465. *T. basicola*, n. s. Hyphasmate repente ramoso hic illic assurgente; floccis fertilibus brevibus 5-7-articulatis fastigiatis; articulis non constrictis sero caducis, ultimo obtuso. At the base of stems of peas and of *Nemophila auriculata*, King's Cliffe.

Black, effused. Hyphasma creeping, branched, here and there rising from the general mass and giving off fascicles of short fastigiate fertile threads consisting of from 5-7 articulations. Articulations not constricted, ultimately separating, the last very obtuse. Each endochrome has usually a single nucleus.

A very curious species, distinguished from most *Torulæ* by its articulations not being constricted. In the plant on *Nemophila* the fertile threads grow singly, but there is no other difference. It is either destructive of the plant on which it grows, or is developed on it in consequence of previous disease.

PLATE XI. fig. 4. *a.* Flocci with fructifying branches magnified; *b.* a mature fructifying branch and separate articulation highly magnified.

466. *Septonema spilomeum*, Berk. in Lond. Journ. Bot. vol. iv. t. 12. fig. 5. On old fence rails, Guernsey, Rev. T. Salwey.

The Guernsey specimens exhibit longitudinal as well as transverse septa, and are more transparent. They differ in no other respect, the proportions of the constituent parts being precisely the same. Mr. Salwey writes that the tufts are green when fresh. We have specimens from Upper Carolina in which the threads are still more opaque than in those from Ohio.

SPOROSCHISMA, n. g.

Flocci erecti simplices; membrana exterior inarticulata tenax; endochroma demum in sporas quadriarticulatas emergentes secedens.

467. *S. mirabile*, Berk. & Br. Gard. Chron. 1847, p. 540.

Brockley Combe, Som., Feb. 1845; Stapleton, Gloucestershire, C. E. Broome and G. H. K. Thwaites, on rotten beech wood.

Forming a black velvety stratum. Flocci erect, simple, tapering towards the base. External membrane tough, inarticulate. Endochrome breaking up into cylindrical quadriarticulate spores, at length escaping from the ruptured thread, each joint having frequently a single nucleus.

A most curious genus, which has also been found near Paris by Dr. Roussel. It is accompanied both in the French and English specimens by a species of *Helminthosporium*.

The affinities of this plant are clearly with *Torula*, the circumstance of the endosporous mode of fructification being apparent rather than real. The outer membrane is very tough, and does not break up into separate portions with the spores. The plant is in fact a *Septonema* inclosed in an additional membrane. There is occasionally a second inarticulate membrane, a structure calling strongly to mind some *Scytonemata*. The conidia of *Graphium penicillatum* are produced in the same way. See Bot. Zeit. 1847, t. 4. fig. 4. It should be mentioned that Dr. Montagne had independently of ourselves formed a new genus for this plant, which however he has waved in favour of the name given, though certainly without any sufficient character, in the Gardeners' Chronicle.

468. *Puccinia Rhodiolæ*, n. s. Maculis fuscis, soris congestis; sporis brevibus articulis depressis constrictis, quandoque subdivisis. Berk. in Gard. Fl. Forfars. p. 296. On leaves of *Sedum Rhodiola*, Glen Callater, July 1844, Mr. W. Gardiner.

Spots orbicular, traversed by the central nerve, brown. Sori minute, crowded. Spores shortly pedicellate, articulations depressed, sometimes spuriously subdivided, showing a tendency to the structure of *Triphragmium*.

469. *P. Smyrniæ*, Cord. Ic. Fasc. 1. fig. 67. On *Smyrniium Olusatrum*, Penzance, J. Ralfs, Esq.

Remarkable for its coarsely tubercled spores.

470. *P. Umbilici*, Guépin in Dub. Bot. Gall. p. 890; Berk. Br. Fung. no. 329. On *Cotyledon umbilicus*, Penzance, J. Ralfs, Esq.; Guernsey, Rev. T. Salwey.

471. *P. Scrophulariæ*, Lib. no. 193. On *Scrophularia aquatica*, Penzance, J. Ralfs, Esq.

472. *P. Campanulæ*, Carn. MSS. On *Jasione montana*, Lampeter, J. Ralfs, Esq.

473. *P. coronata*, Cord. Ic. Fasc. 1. fig. 96. *Solenodonta graminis*, Castagne Cat. p. 202. t. 2. *Puccinia sertata*, Preuss in Deutsch. Fl. Abt. 3. no. 25. t. 3. On *Bromus giganteus*, Bangor, J. Ralfs, Esq.

We do not see how this differs generically from *Puccinia*. The

circumstance of the spores being multiapiculate instead of unia-
piculate surely cannot be of generic importance. At any rate
the name *Solenodonta* cannot stand, as it is preoccupied by a
genus of insectivorous mammals, Brandt in *Mém. de l'Ac. d. S.*
Pet. vol. ii. 1833, p. 459.

474. *Uredo Valeriana*, D.C. Fl. Fr. vol. v. p. 68; Berk. Br.
Fung. no. 349. On *Valeriana officinalis*. Received from Berwick,
Suffolk, Bristol and North Wales.

475. *U. Sympliyti*, D.C. Fl. Fr. vol. v. p. 87; Berk. Br. Fung.
no. 320. Audley End, Rev. J. E. Leefe, May 1841.

476. *U. Sempervivi*, A. & S. p. 126. On leaves of the com-
mon houseleek, Warwickshire, Rev. A. Bloxam.

477. *Lecythea Epitea*, Lévl. Ann. d. Sc. Nat. Dec., 1847, p. 374.
Uredo Epitea, Kz. Myc. Heft 1. p. 68. On willows, North Wales,
J. Ralfs, Esq.

478. *L. mixta*, Lévl. *l. c.* *Cæoma mixtum*, Lk. in Willd.
Lin. vi. P. 2. p. 40. On willows, Roscobie, Forfarshire, Mr.
W. Gardiner.

479. *Ustilago Montagnei*, Tul. Ann. d. Sc. Nat. Feb. 1847,
p. 88. t. 5. fig. 31. On *Rhynchospora alba*, Gamlingay, Prof. Hens-
low.

480. *U. typhoides* = *Erysibe Typhoides*, Wallr. Fl. Crypt. Germ.
vol. ii. p. 205. On stems of *Arundo Phragmitis*, which it mate-
rially injures, Fens of Cambridgeshire.

Forming thick bullate patches several inches long, occupying
whole internodes covered by their sheath; spores globose, larger
than in *U. hypodytes* and *U. longissima*.

A very good account of this species will be found in Wallroth's
book quoted above. Our plant is exactly his species. It some-
times occupies distinct lines, as in *U. longissima*. Whether *U.*
grandis, Fr., be the same thing or not can only be ascertained by
the sight of authentic specimens.

481. *U. hypodytes*, Fr. Syst. Myc. vol. iii. p. 518. This spe-
cies occurred in 1848 in the greatest profusion at King's Cliffe,
affecting almost every flowering-stem of *Bromus erectus*. A plant
of this grass being set in a garden produced none but diseased
flower-stems the following year.

482. *U. Salveii*, n. s. Soris elongatis parallelis nigris; sporis
obovatis granulatis. On leaves of *Dactylis glomerata*, St. Mar-
tin's, Guernsey, 1847; on hedge-banks, Rev. T. Salwey.

Forming elongated parallel sori on the upper surface of the
leaves. Spores four times as long as in *U. longissima*, obovate,
rough with minute granules.

A most distinct and interesting species, exhibiting in its spores
the type of an *Uredo* rather than of an *Ustilago*.

483. *U. grammica*, n. s. Minuta lineas breves parallelas in fascias transversas aggregatas efformans; sporis minimis globosis. On stems of *Aira aquatica*, Oxtou, Notts.

Forming little transverse fasciæ, consisting of short parallel black lines a line or more in length. Spores globose, far smaller than in *U. longissima*, not exceeding one-third of their diameter.

This species appears to me to be quite distinct from *U. longissima*, with which it is associated by Messrs. Tulasne.

484. *U. vinosa*, Tul. Ann. d. Sc. *l. c.* p. 96. On the swollen receptacles of *Oxyria reniformis*, Forfarshire, Mr. W. Gardiner.

Spores smaller than in *U. utriculosa*, and merely minutely papillose instead of being reticulated.

485. *Polycystis Colchici*, Tul. Ann. d. Sc. Nat. Feb. 1847, p. 117. *Sporisorium Colchici*, Lib. no. 194. *Uredo Colchici*, Br. Fung. no. 309. On leaves of meadow saffron, Rudloe, Wilts, C. E. Broome.

486. *P. parallela*, Berk. & Br. *U. parallela*, Eng. Fl. vol. v. part 2. p. 375. *Uredo Agropyri*, Preuss in St. Deutsch. Flora, no. 25. t. 1. On rye, Mr. J. Sowerby; on the leaves of some *Carex*, Forfarshire, Mr. W. Gardiner.

487. *P. Viola*, Berk. & Br. *Granularia Viola*, Sow. t. 440. On leaves and especially petioles of violets. Druid's Stoke, Gloucestershire, Capt. Munro; Portland Island, C. C. Babington, Esq.

The spores in this curious species are more or less globose, consisting of several cells surrounded by a common irregular crust.

488. *Tuburcinia Trientalis*, n. s. Hypo-epiphyllum; soris bullatis nigris; sporis irregulariter depresso-subglobosis. On leaves of *Trientalis europæa*, Aberdeen, Dr. Dickie.

Sori two lines broad, bullate, containing a black mass of rather irregular depressed subglobose spores, which are very opaque and distinctly cellular. Hyphasma white, branched, creeping, delicate.

489. *T. Scabies*, Berk. Sporis globosis cavis hic illic lacunosis olivaceis. Berk. in Journ. Hort. Soc. vol. i. t. 4. fig. 30, 31. *Rhizosporium Solani*, Rab. no. 900. On potatoes: very common: often confounded with the true potato scab.

The spores of this species are very curious; they are composed of minute cells forming together a hollow globe with one or more lacunæ communicating with the external air. A hollow shell with one or two apertures will give a notion of their form. They are generally attached laterally by a delicate thread.

490. *Æcidium Galii*, Pers. Syn. p. 207. On leaves of *Galium verum*, Sands of Barrie, Mr. W. Gardiner.

491. *Isaria Friesii*, Mont. Ann. d. Sc. Nat. ser. 2. vol. vi. p. 28

(t. 12. fig. 3. *l. c.* vol. v.). On dead stems of *Syringa vulgaris*, ash, elder, &c., Milton, Mr. J. Henderson; Apethorpe, Norths., Spye Park, Wilts., flourishing in the middle of winter.

Sometimes pale gray, sometimes pale fawn-coloured.

492. *Stilbum fasciculatum*, n. s. Stipitibus flabellato-fasciculatis basi connatis cinereis, capitatis incarnatis; sporis ellipticis minoribus. On decayed wood, Swansea, M. Moggridge, Esq.

Stems gray, fasciculate, connate at the base, so as to form little flabelliform tufts. Heads flesh-coloured; spores elliptic.

This species has quite a tropical aspect, resembling somewhat the Brazilian *Stilbum stromaticum* and the South Carolina *S. Rhoidis*, but still more nearly *S. clavulatum*, Mont., from Surinam, and scarcely differing from a species which was produced abundantly in the Orchis house at Kew, except in having smaller, less oblong spores, and the base of the stems more decidedly connate. The Kew Garden species, which can scarcely however be considered indigenous, may be characterized:—

493. *S. vaporarium*, n. s. Stipitibus congestis fasciculatis basi plus minus connatis cinereis; capitulis incarnatis; sporis oblongis majoribus.

494. *S. fimetarium*, Berk. & Broome = *Helotium fimetarium*, P. Syn. p. 678. This species is not uncommon on cow-dung, rabbits'-dung, &c. It is certainly no *Peziza*, being destitute of asci, and approaches near to *S. erythrocephalum*, Dittm. Authentic specimens from Persoon show the identity of our plant.

495. *Periconia glaucocephala*, Corda, Ic. Fasc. 3. fig. 37. On rotten linen, King's Cliffe, 1841.

**Periconia discolor*, Corda, *l. c.* fig. 38, appears to be the same with *Pachnocybe grisea*, Eng. Fl. vol. v. part 2. p. 334. Splendid specimens of *Phycomyces nitens*, Ag., have lately been sent to us by Dr. Badham which we have propagated, and have consequently been able to watch the growth of the plant from its first appearance. It is a true Mucor, and certainly the prince of the genus.

**Volutella ciliata*, Fr. = *Psilonia rosea*, Berk. Eng. Fl. *l. c.* p. 353.

**Chatostroma Buxi*, Cord. = *Fusisporium Buxi*, Fr. Syst. Myc. vol. iii. p. 447. These two species are decidedly congeneric, as are also *Ægerita setosa*, Grev. t. 268. fig. 2, and *Psilonia hyacinthorum*, Berk. *l. c.*

The older name of *Volutella* must be retained for them. We have therefore *Volutella ciliata*, Fr., *V. Buxi*, *V. setosa* and *V. hyacinthorum*, belonging to the list of British Fungi, and the following new species:—

496. *V. melaloma*, n. s. Stromate aurantiaco; pilis atris; sporis breviter fusiformibus leviter lunatis appendiculatis. With *Neotiospora Caricum*, Spye Park, C. E. Broome.

Perfectly superficial. Stroma and spores bright orange, fringed with black articulated hairs. Spores shortly fusiform, slightly lunate, resembling, except in the latter character, those of *Neotiospora*.

It is most singular that a plant so different in general structure, though alike in colour and spores, should exist upon the same leaf with *N. Caricum*. In the present state of our knowledge of such matters we must regard it as distinct, though we cannot help suggesting the idea that the perithecium in the one is represented by the ciliating hairs in the other, a structure which was pointed out by one of us as a matter of analogy between *Sphaeronema blepharistoma*, Berk., and *Volutella Buxi*, many years since. What makes the resemblance more striking in the present instance is that the spores in either case grow in the same mode from the stroma, which inclines to a globose form.

PLATE XI. fig. 3. *a.* Portion of plant showing the hairs and stroma with the sporophores and spores, magnified; *b.* spores highly magnified.

497. *Illosporium carneum*, Fr. Syst. Myc. vol. iii. p. 259; Berk. Br. Fung. no. 293. On *Peltidea canina*, Apethorpe, Norths.

498. *I. corallinum*, Rob. in Desm. no. 1551. On *Borreria tenella*, Ulting, Essex, H. Piggot, Esq.

A beautiful specimen of this exquisite species has been just transmitted to us from Chelmsford without any distinct locality. This is clearly *I. coccineum*, Libert, and consequently of Corda.

499. *I. coccineum*, Fr. *l. c.* On *Pertusaria communis*, Fal-mouth, Miss Warren; Durdham Down, G. H. K. Thwaites, Esq.

500. *Epicoccum neglectum*, Desm. no. 540 (olim *Perisporium Zea*). On a decayed water-melon, King's Cliffe, Oct. 1840; on dead plants of *Potamogeton*, West of England, C. E. Broome, 1850.

At first sight our earlier specimen differs greatly, the stromata being seated on a broad blood-red spot, but the structure is exactly the same, and the greater development of the spot may depend upon the more juicy nature of the matrix. *Uredo Equiseti*, Engl. Fl., is an *Epicoccum* with smooth spores, but we have not at present sufficiently good specimens to propose it as a new species.

501. *Edemium atrum*, Corda in St. Deutsch. Fl. Fasc. 6. t. 9. On fallen branches, King's Cliffe, Capel Curig, M. J. Berkeley, and at Thame, Dr. Ayres.

The structure of this plant is at present very imperfectly ascertained. The flocci are of a vinous-brown, and here and there invested with mucilage. The larger sporangiiform bodies which adhere to them seem very much to resemble an *Epicoccum* with its globose or somewhat obovate scabrous spores.