1956 J. Gremmen & F. Roll-Hansen (Norw. Forest Res. Inst.) Gremmen (1958) as *Humaria deerrata* (Karst.) Sacc.

Anatomy

The excipulum is two-layered. The ental layer is of a typical *textura intricata* of hyaline, septate, freely branched thin-walled hyphae 3.5-9 μ thick. This layer gradually enters the ectal layer of *textura globulosa-angularis* of polygonal or radially stretched, thin-walled cells 10-18 μ in diameter or up to 28 μ long. At base the outermost cells give rise to very long, hyaline, thick-walled, septate, flexuose hyphae 2.5-4 μ thick, and seem to form a kind of subiculum. Asci operculate, eight-spored, non-amyloid. Spores ellipsoid, hyaline, smooth, 11-12 × 6-7 μ, without oil drops. Paraphyses straight, filiform, branched.

Comments

Not being quite certain about the correct identification of this material it is difficult to place the genus with confidence taxonomically. But all known facts indicate that the genus is best placed in Pyronemaceae.

Pseudombropila guldeniae Svrček, Česká Myk. 20:17, 1966.

Comments

The excipulum of this species was described as of a *textura globulosa* with an external part of loosely interwoven, flexuose, septate, pale brown hyphae.

The outstanding characters of the species are the four-spored asci and the verruculose-reticulate spores.

ANTHRACOBIA Boud.

Anthracobia Boudier, Bull. Soc. Myc. Fr. 1:106, 1885.

Type species (by original designation): *Peziza melaloma* Alb. & Schw. ex Fr.

Synonym: *Ramulina* Velenovsky 1947.

Nomenclature

Whenever *Anthracobia* has been accepted as a genus, there has been no controversy of nomenclature or typification.

Description

Apothecia sessile, small, cupulate, becoming flat to lenticular. Hymenium orange, red or brownish, outer surface clothed with groups of short, brownish, septate, obtuse hairs. Excipulum two-layered, with an ectal layer of *textura angularis* or *globulosa,* and an inner, medullary layer of *textura intricata.* Asci cylindrical, not protruding, eight-spored, non-amyloid. Spores ellipsoid, hyaline, smooth, containing two oil drops or none, uninucleate. Paraphyses slender, septate, apex clavate or only slightly enlarged. No conidial stage is known. The majority of the species grow on burnt ground, some species on excrements or on rotten stems of herbs.

Anthracobia melaloma (Alb. & Schw. ex Fr.) Boud., Hist. Class. Discom. d'Eur. 65, 1907. Basionym: *Peziza melaloma* Alb. & Schw. ex Fr., Syst. Myc. 2:68, 1822.

Material examined

Norway: Buskerud: Nes: Smedsgården 4 October 1965 F.-E. Eckblad (0) and several other Norwegian collections.

Anatomy

Excipulum distinctly two-layered. The inner layer is probably composed of a *textura intricata* of densely interwoven, hyaline, branched, septate hyphae of very varying size and form. Globular or ellipsoid cells are not rare, although not common enough to give a *textura globulosa.* Hyphae 6-17 μ in diameter. Towards the margin this layer becomes much narrower, down to 15 μ thick, and composed of periclinally arranged, narrow hyphae. Inwards they end in a few stout, paraphysoid hyphae, partly with strongly swollen tips. The inner layer rather abruptly enters the ectal

layer of typical *textura angularis,* three to four cells thick, measuring 25-40 × 12-20 μ and distinctly radially arranged in the lower part of the apothecium, but periclinally stretched towards and in the margin. The uppermost cells of the marginal excipulum are 25-38 × 7-10 μ, clavate, with brown walls. All over the surface, short brown hairs, mostly closely adpressed, arise from the outermost cells of the excipulum.

Comments

Gamundi (1960) described the excipulum of *A. melaloma* as being composed of a cortex of large hyaline, subglobose or polygonal cells 35-48 μ in diameter, which form a kind of external clothing towards the periphery. Internally there was a medullary plectenchymatous layer of cellular elements of smaller diameter than in the cortex. This would mean that the two-layered excipulum has an ectal layer of *textura globulosa* to *angularis* while the ental layer is more of a *textura intricata,* which is in close agreement with the description given here.

Anthracobia maurilabra (Cooke) Boud., Hist. Class. Discom. d'Eur. 65, 1907. Basionym: *Peziza maurilabra* Cooke, Mycographia 1:231, 1879.

Anatomy

Gamundi (1960) described the excipulum of *A. maurilabra* as being pseudoparenchymatous and formed of large, subglobose cells; in other words it is of a *textura globulosa.*

MELASTIZA Boud.

Melastiza Boudier, Bull. Soc. Myc. Fr. 1:106, 1885.

Type species (selected): *Humaria miniata* Fuck., fide Seaver (1927, 1928) = *Melastiza chateri* (W. G. Smith) Boud.

Typification

The genus was introduced with two species *P. chateri* Smith, and *Humaria miniata* Fuck. Of these Clements & Shear (1931) selected the first species as the type. There is no reason not to follow the first selection inasmuch as the species are now (Le Gal 1958a) regarded as synonyms.

Description

Apothecia terrestrial, cupulate or scutellate, sessile, externally sparsely clothed with short, septate, blunt, brownish or yellowish hairs. Hymenium bright orange to red. Excipulum two-layered. Ental layer of *textura intricata,* ectal layer of *textura globulosa-angularis.* The hairs arise from the outermost cells of the excipulum. Asci cylindrical, not protruding at maturity, eight-spored, non-amyloid. Spores ellipsoid, hyaline, with oil drops, sculptured. The ornamentation is of a complex nature (Le Gal 1947, 1958a) and is alveolate or in the form of coarse warts often basically united by an incomplete reticulum. Paraphyses straight, septate, usually apically enlarged, and containing carotenoid granules.

Comments

Le Gal (1947) first placed the genus in the tribe Ciliarieae with *Scutellinia, Cheilymenia, Neottiella,* and *Anthracobia.* Later she also compared it with *Scutellinia* (Le Gal 1958b). Recently she found the complex nature of the spore ornamentation to relate it closer to *Aleuria* (Le Gal 1963). It may be added that the excipulum is of the same type in both genera, and in fact I find that they differ only in the hairiness of *Melastiza.*

Melastiza chateri (W. G. Smith) Boud., Hist. Class. Discom. d'Eur. 64, 1907. Basionym: *Peziza chateri,* W. G. Smith. Gard. Chron. 9, 1872. Synonym: *Melastiza miniata* (Fuck.) Boud., Icon. Myc. Livr. 5, 1905.

Fig. 30.

Material examined

Norway: Oslo: South of Sognsvatn, on loamy soil in a roadside ditch, 28 August 1962 G. Gulden (0), and several other Norwegian

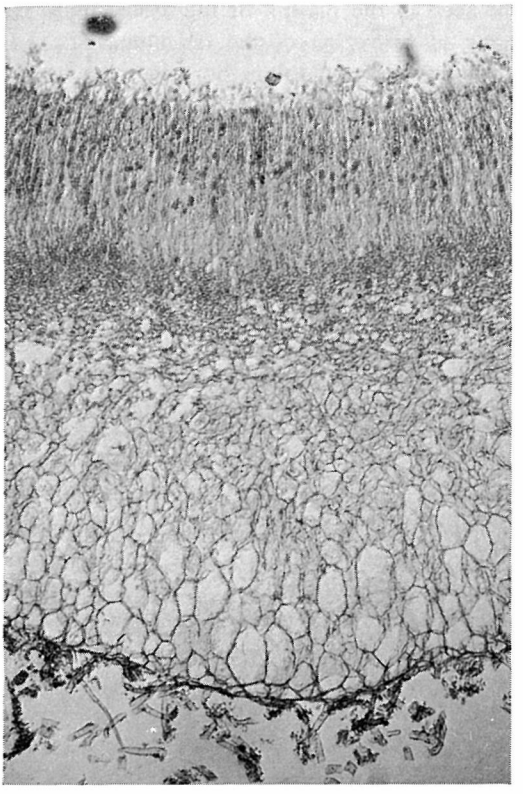

Fig. 30. *Melastiza chateri.* Section of excipulum ×100. South of Sognsvatn 1962.

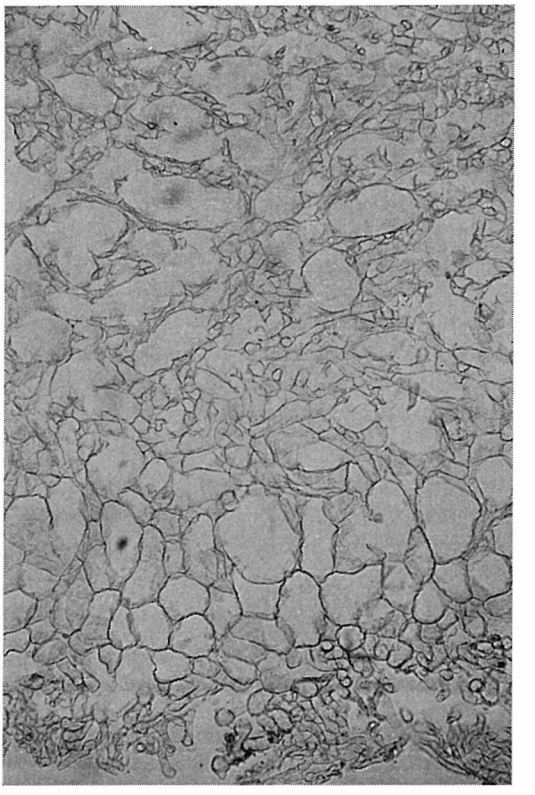

Fig. 31. *Aleuria aurantia.* Excipulum ×150. Norwegian Agricultural University 1965.

collections. First Norwegian record see Eckblad (1956, as *M. miniata* (Fuck.) Boud.).

Anatomy

Excipulum (Fig. 30) indistinctly two-layered, with a narrow inner layer of a small-celled *textura angularis,* of cells mostly 8-18 μ in diameter. Ectal layer of typical *textura angularis,* in which the cells are more or less rectangular in shape and distinctly radially arranged. Cells hyaline, rather thin-walled and up to 70 μ long and 30 μ wide. The outermost one or two layers of cells are shorter, more isodiametric in form, and with slightly thicker walls. The hairs arise from the outermost cells.

ALEURIA Fuck.

Aleuria Fuckel, Symb. Myc. 325, 1870.

Type species (selected): *Peziza aurantia* Oed. ex Fr.

Synonym: *Peziza* Dill. ex Boud. sensu Boud. non Fr.

Younger homonym: *Aleuria* (Fr.) Gill. 1879, which see.

Nomenclature

Most authors cite the generic name as '*Aleuria* Fuck.', but some also with a reference to Fries: Saccardo (1884), as a subgenus, 'subg. *Aleuria Fr.,* Fuck.', Dennis (1960) as *Aleuria* (Fr.) Fuck. To cite Fries's infrageneric taxon as a basionym must be incorrect and misleading. Fuckel (1870) did not mention Fries, and he evidently intended to use the name in a sense different from that of Fries.