

acute, ends. The spores of *M. variabilis*, seen in the mass, have a faint brownish tinge; we were not able to observe any layer of mucilage surrounding each spore, as Zukal has recorded in the case of *M. longirostris*. The asci are extremely evanescent, and difficult to see—the perithecium containing as a rule only free spores. The latter are usually broadly lunulate in outline, and somewhat flattened; sometimes, however, they are slightly irregular in shape. The variability in the shape of the perithecium is very marked—the ostiolum being sometimes papilliform or even hardly visible, at others well-defined and forming a distinct more or less cylindrical neck, which is sometimes flexuous.

M. nidicola, sp. nov. (Figs. 62–65).

Peritheciis nigris glabris carbonaceo-membranaceis sparsis matrice subimmersis subglobosis $\frac{1}{3}$ mm. diam. ostiolo brevi conico, contextu parenchymatico densissimo e cellulis polygonis nigro-fuscis plus minus opacis 8–10 μ latis composito; ascis numerosis subgelatinosis ellipticis vel globoso-ellipticis 10–13 \times 6–8 μ octosporis citissime diffluentibus; sporis minutis anguste sublunulatis utrinque acutis laevibus hyalinis vel stramineis 7.5–8 \times 2 μ .

Hab.—In nido vetusto *Bombi* sp., sociis *Myxotricho setoso* (Eidam), Schroet., et *Arachnioto candido* (Eidam), Schroet., Kew, Mar. 1901.

M. longirostri, Zukal, sporis lunulatis comparanda, sed perithecii forma et glabritate, ascis minutis nec non sporis angustioribus majoribus longe recedens.

The above species occurred sparingly on an old nest of a Wild-bee (*Bombus* sp.). The nest, which was dug up in the Royal Gardens, Kew, was covered on the surface with large patches of *Myxotrichum setosum* and *Arachniotus candidus*. The wall of the perithecium, unlike that of *M. variabilis*, is very dense and opaque, so that its cellular structure is not readily apparent. The asci are subgelatinous, and very quickly dissolve in water, setting free the narrow somewhat lunate-shaped spores. The spores become finally of a pale straw colour, and the ascus itself is sometimes tinged with the same colour.

Spumatoria, gen. nov.

Perithecia subglobosa, semi-immersa, demum superficialia, membranacea, in rostrum longum cylindraceum apice fimbriatum plus minus dilatatum attenuata, ascis tenuibus, evanescentibus, octosporis, sporis didymis, hyalinis, demum in spuma mucilaginoso ex ore rostri ejectis; paraphysibus indistinctis.

S. longicollis, sp. nov. (Fig. 27).

Peritheciis sparsis 0.75-1 mm. altis semi-immersis demum superficialibus subglobosis olivaceis membranaceis contextu parenchymatico e cellulis polygonis 6-10 μ latis composito glabris vel basi hyphis repentibus instructis, in rostrum longissimum cylindricum atrum rugulosum apice fimbriatum plus minus dilatatum abrupte attenuatis; ascis cylindraceutis, 110-130 \times 13-15 μ deorsum in stipitem attenuatis, octosporis, citissime diffluentibus; sporis monostichis oblongis utrinque rotundatis 15-19 \times 5 μ hyalinis 1-septatis medio haud constrictis demum in spuma mucilaginis ex ore rostri ejectis; conidiis in eodem perithecio productis, oblongis, hyalinis, 17-20 μ longis, 1-septatis, basi plus minus attenuatis, in conidiophoris simplicibus brevibus acrogenis.

Hab.—In fimo equino, Epping Forest, Essex, October, 1900.

The perithecia of the present fungus, which appeared on some Horse-dung soon after it was collected, readily attract attention by reason of the long upright black cylindrical beaks. At maturity the spores are seen issuing forth from the apex of the beak in the mucilage formed by the deliquescence of the asci, &c. The mouth of the beak is composed of loosely arranged easily separating hyphae, which during the ejection of the spores are forced apart by the mucilaginous mass, so that the apex of the beak at this time is more or less dilated.

The conidia precede the asci in the same perithecium, and the Fungus in this stage appears to be identical with *Rhyncophoma*, Karst. emend. (see Allescher, in Rab. Krypt.-Fl. Deutschl., 6. Abth., vol. i, p. 711).

Xylaria pedunculata (Dicks.), Fr.; Sacc. Syll. Fung. i, 332 (1882).

Sphaeria pedunculata, Dicks., Pl. Crypt. Brit. iv, 27, Tab. XII, f. 8 (1801).

The spores in Dickson's type-specimen measure 50 \times 22-24 μ , and so slightly exceed the measurement ('40 \times 20') given by Saccardo, &c.

Hypocraeaceae. Sphaeroderma fimbriatum, Rostr. (Fig. 23).

S. fimbriatum, Rostr., in Meddel. om Groenland, xviii, 67 (1895); Sacc. Syll. Fung. xi, 356 (1895).

Perithecia scattered or subgregarious, superficial, about $\frac{1}{2}$ mm. diam., globose with a mamilliform ostiolum, which is surmounted by a tuft of short (60-100 \times 4-6 μ) rigid colourless hairs, otherwise glabrous or with a few spreading hyphal outgrowths near the base, at first yellowish,

