ON A NEW GENUS OF THE DEMATIACEAE

by

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Introduction.

The group of the *Dematiaceae* is well represented in the Netherlands Indies. Species belonging to genera of a wide distribution, are equally found predominating in temperate regions. Only a rather small number of our dematiaceous fungi seem to be restricted to tropical countries.

The species to be discussed in this paper is one of them and as far as I can judge is not only undescribed, but even the type of a new form-genus.

Up to the present it was only found growing on the fallen male flowers of *Arenga pinnata,* which, when this palm is flowering, are always present in large numbers at the base of the stem.

All efforts to cultivate the fungus on the usual media have failed so far. It seems therefore probable, that the species is in some way or another specialized on the said substratum.

Blastophorella BOEDIJN, nov. gen.

Mycelio repente, fuscidulo. Conidiophoris longis, erectis, non ramosis, dilute coloratis, apice in capitulum conidia gerens leniter inflatum subfusoideum productis. Conidiis sessilibus hyalinis cylindraceis 1-septatis.

In and on the substratum there is a creeping mycelium, composed of branched and septated, brown coloured hyphae. From those hyphae the large and erect conidiophores are arising. They are unbranched, at first pale coloured afterwards distinctly brown, especially near the base. Near the tops they are increasing in diameter, giving rise to a subfusoid head, bearing the conidia. Conidia wholly sessile, borne on thin places in the wall of the capitulum; hyaline, cylindric, 2-celled.

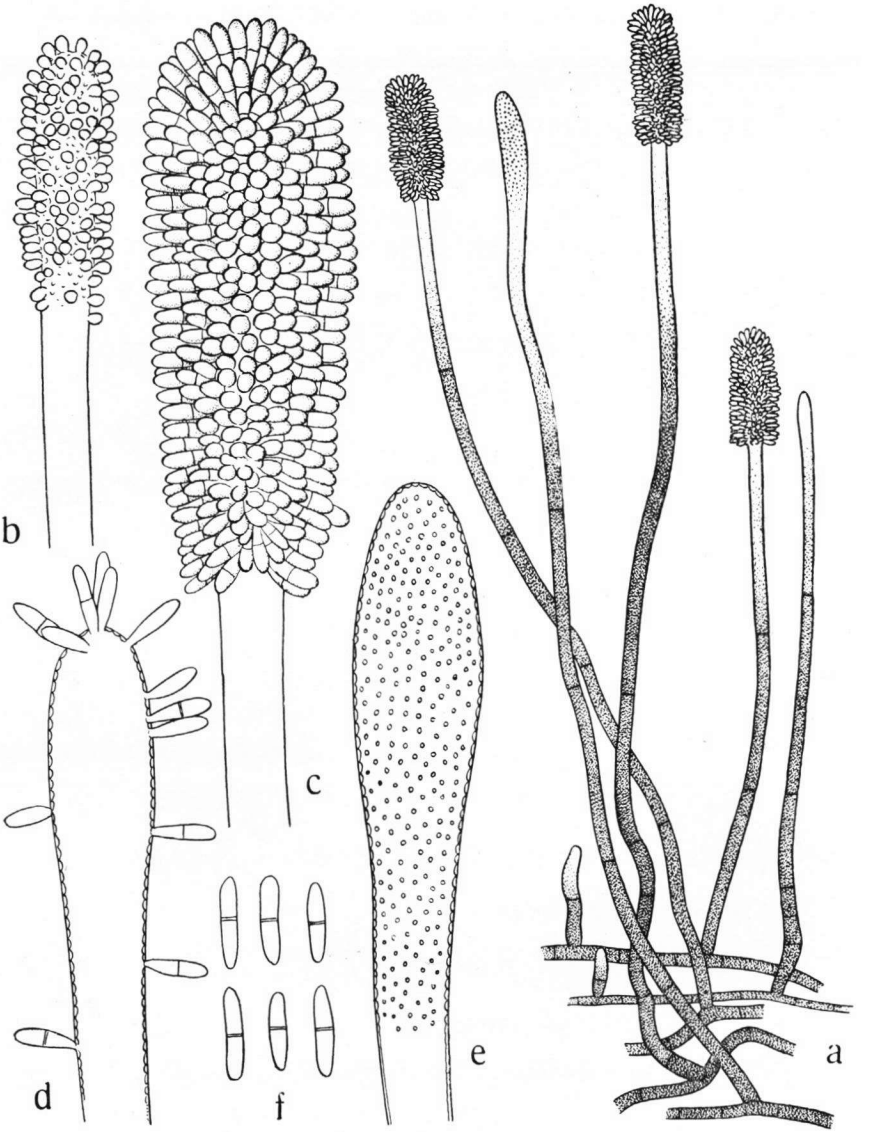

Fig. 1. **Blastophorella Smithii.**

a Conidiophores × 65; **b** young capitulum; **c** mature captulum; **d** capitulum in optical section; **e** capitulum after the conidia have been shed; **f** conidia; **b—f** ± 300 ×.

The genus is well characterised by its sessile conidia. At first they sprout from the capitulum and in this stage are continuous and nearly globose (fig. 1 *b*). Gradually they elongate and when fully ripe, show a cross-wall at about the middle of the conidium (fig. 1 *c*). When all conidia are shed, the capitulum shows a distinctly pitted wall, each pit indicating the place af attachment of a conidium (fig. 1 *e*).

Blastophorella Smithii BOEDIJN, nov. spec.

Conidiophoris erectis, 1—2 mm longis, 11—12 μ crassis. Capitulo 96—130 μ longo, 19—31 μ crasso. Conidiis hyalinis, cylindraceis, 1-septatis, 17—22 μ longis, 3½—4½ μ crassis.

Mycelium consisting of branched and septate, sepia coloured threads, 5—7 μ in diam. From this mycelium arise the erect conidiophores, which are 1—2 mm long. They are simple, septate, at first very pale coloured, afterwards of a transparent brown colour, fading near the apex, which is nearly hyaline. In the middle they measure 11—12 μ in diam. increasing in breadth near the apex, which ends in a subfusoid capitulum, bearing the conidia. Capitulum 96—130 μ long, 19—31 μ broad in the middle, slightly tapering near the rounded top.

Conidia sessile, borne in pits in the wall of the capitulum, hyaline, cylindric, 2-celled, with rounded tops: 17—22 × 3½—4½ μ.

SUMATRA. Res. East Coast of Sumatra: Kampong Baroe near Medan, on decaying male flowers of *Arenga pinnata*, 23 April 1927, BOEDIJN 248 S.

JAVA. Res. Batavia: Depok, on decaying male flowers of *Arenga pinnata*, May 1930, BOEDIJN 677.

This remarkable species forms a dark grey, hairy growth on the old and fallen flowers. When such flowers, which do not show any trace of the mould are kept in a humid atmosphere, the fungus in most cases will soon appear on the substratum.