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A NEW MELANOGRAPHIUM WITH MONONEMATOUS CONIDIOPHORES

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ABSTRACT

Melanographium laxum Rifai is described and illustrated, based on colonies growing on palm petioles collected in Bogor Botanic Gardens, Java. Unlike the other members of *Melanographium,* the present species does not form tufted or fasciculated conidiophores.

ABSTRAK

Jenis baru *Melanographium laxum* Rifai dipertelakan dan digambar berdasarkan koloni yang tumbuh pada tangkai daun palem di Kebun Raya Bogor. Berbeda dengan anggota marga *Melanographium* lainnya, jenis ini tidak membentuk konidiofor yang memberkas atau bertukal.

Melanographium laxum Rifai, *spec. nov.* — Fig. 1.

Coloniae effusae, lanulosae, atro brunneae vel brunneo atrae. Mycelium in substrato immersum, vel partim superficiale ex hyphis septatis pallide brunneis vel brunneis, laevibus, 3—6 µm crassis, ramosis, reticulatis compositum. Conidiophora singula ex lateritibus hypharum oriunda, simplicia, ascendentia, flexuosa vel raro recta, septata, pallide brunnea vel brunnea, laevia, usque ad 190 *µm* longa, 4—8 µm crassa, apicem versus pallidora et saepe incolorata, cicatricibus minutis praedita. Conidia solitaria, non septata, laevia, brunnea, obovoidea vel saepe curvata vel subcymbiformia, 16—20 x 7—10 *µm.*

Habitat in petiolis emortuis Astrocaryi, Horto Botanico Bogoriensis, Septembri 1977, M.A. Rifai (BO 18380 typus est.).

The dead petioles of the Brazilian palm genus *Astrocaryum* cultivated in Bogor Botanic Gardens occasionally harbour widely effused and dark blackish brown to brownish black colonies of a dematiaceous fungus which undoubtedly belongs to *Melanographium* Sacc, inspite of the fact

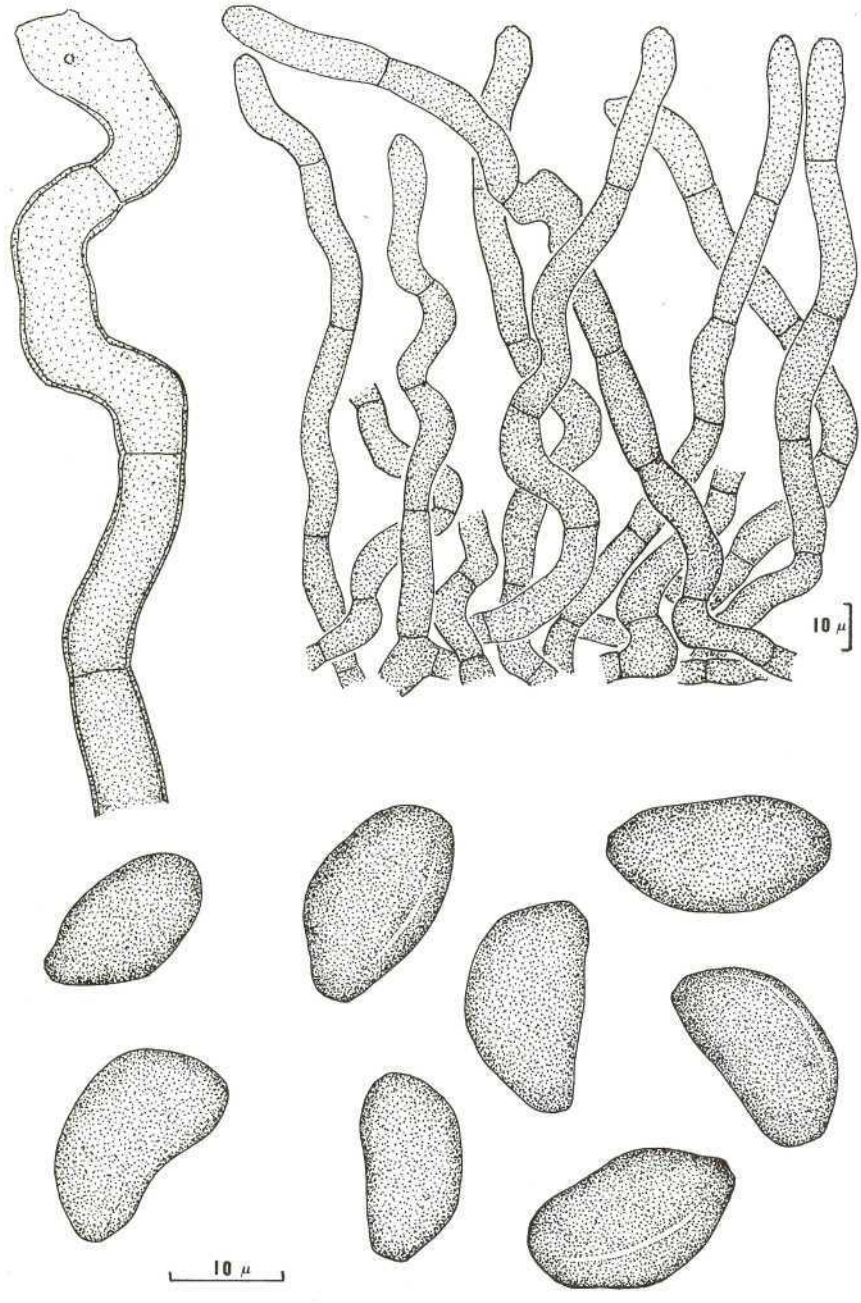

FIG. 1. *Melanograpiiium la sum* Rifai: conidiophores and conidia.

that it does not have conidiophores arranged in loosely or densely compacted fascicles or synnemata. Consequently the colonies do not appear bristly, hairy or velvety as in other species of this genus (Ellis 1963, 1971). Instead they are laxed and loosely woolly or lanulose, and hence the name *Melanographium laxum* is chosen to characterize its deviation from the other members of the genus.

The stroma is poorly developed in this species. Its mycelium is mostly immersed in the substrate or partly superficial. This mycelium is composed of a network of much branched, pale brown to brown, smooth walled, septate hyphae with cells measuring 3—6 µm in diameter.

The conidiophores are arising in a wide area over the surface of the substrate. They are macronematous, distinctly mononematous and arising laterally or apically on the hyphae, unbranched, generally ascending, mostly flexuous or sometimes straight, many septate, brown to pale brown, much paler towards the apex, smooth and thin walled. They measure up to 190 µm long by 4—8*µm* thick.

In common with the other species of the genus *Melanographium*, the conidiogenous cells of the present species are polyblastic, integrated terminal, elongate by sympodial growth but hardly enlarging in width, cicatrized but the conidial scars are thin and tiny and hence visible only under a high power microscope.

The one-celled conidia of *Melanographium laxum* are also typical for the genus. They are asymmetrically obovoid, slightly curved to subcymbiform and often a little protruding at the flattened base, dark reddish brown, smooth walled but with a distinct hyaline germslit running longitudinally along their side. These conidia measure 16—20 x 7—10 *µ.m.* They are usually formed singly as blown-out ends at the apex of the conidiogenous cell and the tips of the successive new growing points which develop immediately below and to one side of the previous terminal conidium. As Ellis (1963) has written, under the microscope the conidia of this genus are seldom found attached to their conidiophores.

JAVA. On dead petioles of *Astrocaryum vulgare*, Bogor Botanic Gardens, September 1977, *M.A. Rifai* (BO 18380 typus).

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Autumn Foray bindly commented on the affinity of the species described above.

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