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A NEW SPECIES OF MYCOVELLOSIELLA FROM INDIA

P. KUMAR AND KAMAL

Mycology Laboratory, Department of Botany
Gorakhpur University, Gorakhpur 273 001

THE genus *Mycovellosiella* was established by Rangel with *M. cajani* (P. Henn.) Rangel ex. Trotter as the type species (Muntanola¹). Recently during their mycological collections of Gorakhpur region, authors have collected a fungus on *Hymenodictyon excelsum* Wall, which was found to be an undescribed species of *Mycovellosiella*.

The detailed studies carried out on the morphology of this fungus, in comparison with the earlier known species (Deighton², Ellis^{3,4} Shaw and Deighton⁵, Sutton⁶) show that the present fungus comes close to *M. triumfetteae* Deighton (Deighton²), but differs from it in having less number of septa and smaller size of narrower conidia; hence it is described as a new species.

Mycovellosiella gorakhpurensis sp. nov.

Contagionis maculae amphigenae, enormes, effusae, rubrobrunneae; Coloniae hypophyllae; mycelium partim immersis partim superficialibus, septatis, ramosis, hyalinis vel subhyalinis, principale immersis, septatis, hyalinis, ramosis, secundarium septatis, subhyalinis, levibus, ramosis, per stomata emergentibus, primo super folii superficiem repentibus, deinde succrescentibus, compositum; conidiophora semimacronemata mononemata, ex apice vel latere hypharum superficialium ramorum orta, ramosa, recta vel flexuosa, levia, intertexta, pallide brunnea, longitudine varia, 2.7–4.5 μ m diametro; cellulae conidiogenae integrae, polyblasticae, plerumque terminales, nonnumquam intercalares, sympodiales, cylindricae, cicatricibus manifeste incrassatis notatae; conidia singularia, acropleurogena, raro catenata, pallide olivacea, simpli-

cia, levia, cylindrica vel obclavata, basi truncata, apice obtuso, plerumque recta, raro leviter arcuata, 3–7-septata, ad septa leviter constricta, 23–60 μ m longa, ad 3.7 μ m crassa.

In foliis vivis *Hymenodictyi excelsi* Wall. Rubiacearum, Gorakhpur, m. Feb. 1978, leg. P. Kumar 202, IMI 228146, typum.

Infection spots amphigenous, irregular, effuse, reddish brown colonies hypophyllous, mycelium partly immersed and partly superficial, septate, branched, hyaline to subhyaline, primary mycelium immersed, septate, hyaline, branched; secondary mycelium septate, subhyaline, smooth, branched, emerging through the stomata, at first repent over the leaf surface and then growing upwards; conidiophores semimacronematous, mononematous, arising laterally or terminally from the branches of the superficial hyphae, branched, straight or flexuous, smooth, intertwining, light brown, variable in length, 2.7–4.5 μ m wide; conidiogenous cells integrated, polyblastic, usually terminal, sometimes intercalary, sympodial, cylindrical, cicatrized, with conspicuously thickened scars; conidia solitary, acropleurogenous, rarely catenate, pale olive, simple, smooth, cylindrical to obclavate, with truncate base and obtuse apex, mostly straight, rarely slightly curved, 3–7 septate, slightly constricted at the septa, 23–60 \times up to 3.7 μ m (Fig. 1 a, b).

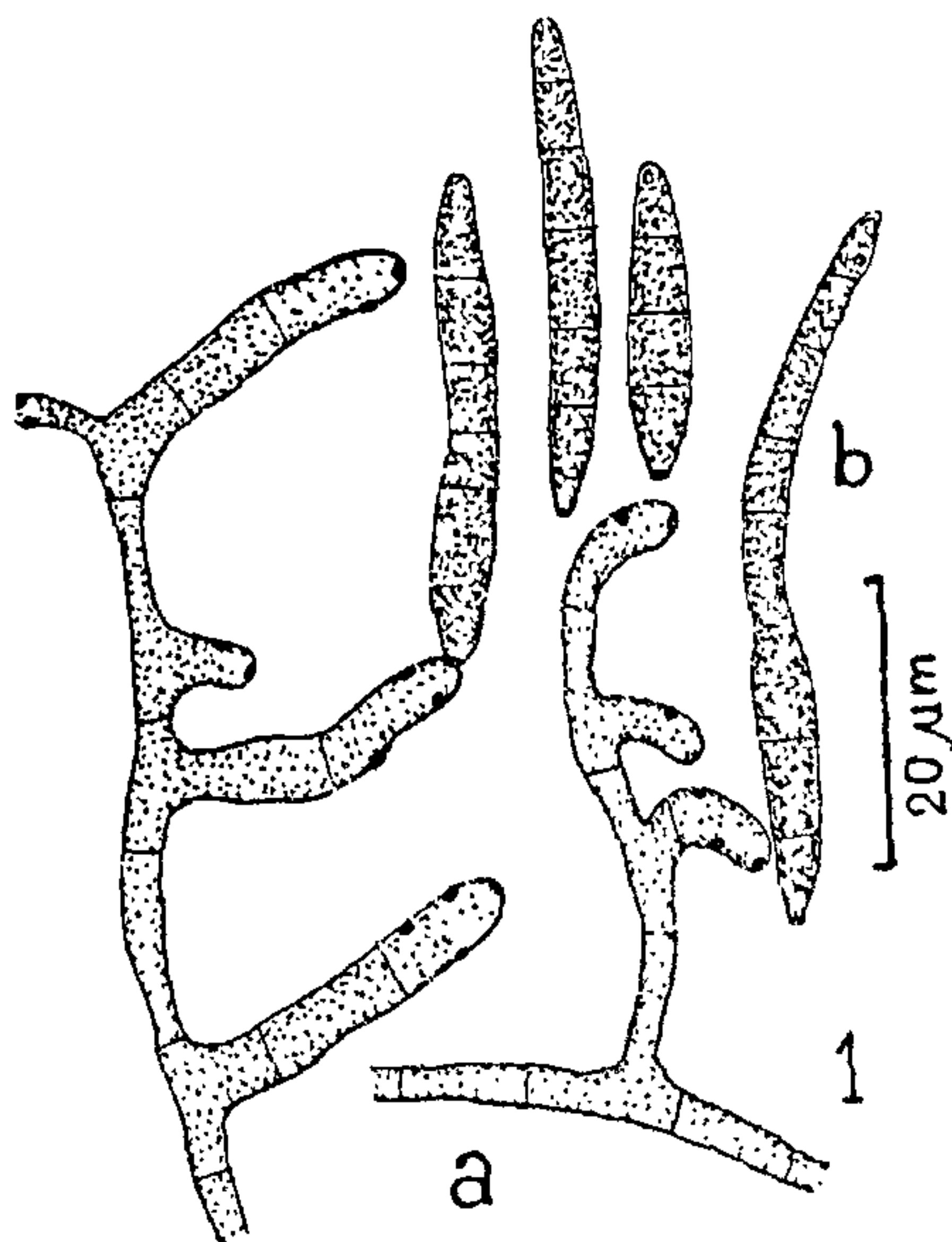


FIG. 1. *Mycovellosiella gorakhpurensis*. (a) Conidiophores; (b) Conidia.

On living leaves of *Hymenodictyon excelsum* Wall. (Rubiaceae); Gorakhpur; Feb. 1978; leg. P. Kumar, 202; IMI 228146.

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OCCURRENCE OF SOOTY MOULD ON OAK PLANTS

R. CHAKRAVORTY AND B. C. DAS
Regional Tasar Research Station, Imphal 795 002
Manipur

OAK (*Quercus acutissima* syn. *Q. serrata* Thunb) which grows abundantly in North Eastern India constitutes the principal food plant of tasar silkworm (*Antheraea proylei* J.). During the monsoon months of 1978 and 1979, a severe outbreak of sooty mould was observed on *Q. acutissima* in tasar farms of this Research Station, in Manipur and Nagaland as well as in natural plantations. The disease is reported for the first time in oaks in India.

The disease appears first as greenish black lines on either side of the mid ribs and veins on the dorsal surface of the leaf. In advanced stages, the infected areas gradually enlarge and coalesce ultimately, covering the entire dorsal surface of the leaf, petiole and bark of the young shoot as a black crust. Both young and old leaves were found to be susceptible to the infection thus rendering them unsuitable for feeding of the silkworm. The presence of aphids was observed in the infected leaves, which sustained the growth of the fungus with secreted honey dew.

The specimen has been identified as *Chaetophoma quercifolia* Cke. and deposited in herbarium of CMI under the accession No. IMI 235960.

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FLORAL ANATOMY OF *STEGNOSPERMA HALIMIFOLIUM* BENTH.

C. SUVARTHA AND L. L. NARAYANA
Department of Botany, Kakatiya University
Vidyananyapuri, Warangal 506 009

The genus *Stegnosperra* was included in Phytolaccaceae by Bentham and Hooker¹, Engler and Prantl², Rendle³ and Cronquist⁴. Hutchinson⁵ separated it into an independent family, Stegnospermataceae and included it under the order Pittosporales. So far, there is no published account on the floral anatomy of the monogeneric Stegnospermataceae. The present study deals with the floral anatomy of *Stegnosperra halimifolium* Benth.

The pedicellate, pentamerous, pentacyclic and hypogynous flowers are borne on terminal racemes. The calyx is gamosepalous and the corolla is polypetalous. The free limbs of the calyx and the petals show quincuncial aestivation (Figs. 9–11, 17). The androecium consists of ten basally connate stamens with dorsifixed anthers which are of two heights, the antipetalous being shorter (Figs. 14–17). The perianth and the androecium show adnation forming a short hypanthium (Figs. 6–11). The gynoecium is 5-carpellary syncarpous, superior, 5-locular at the base (Figs. 10–14) and unilocular above due to incomplete fusion of the septa at the centre. (Fig. 15) Each locule bears a single subbasal, amphitropous ovule (Figs. 10–14). The styles are free (Figs. 16, 17) and the bilobed stigmas bear glandular hairs. The inner basal part of the hypanthium is lined by deep staining cells which extend along the inner side of the staminal tube upto the level where the filaments separate from the staminal tube (Figs. 5–10).

The pedicel shows a ring of vascular tissue (Fig. 1) which expands in the thalamus. The sepal traces and the common sepal lateral, petal and antipetalous staminal traces arise in close succession in the thalamus (Figs. 2–5). Thus the sepals are 3-traced and the petals and stamens are single traced. The traces for the antisepalous stamens arise independently from