The Royal Agri-Horticultural Society of India, Calcutta, has been good enough to afford garden facilities and laboratory accommodation.

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SOME ADDITIONS TO INDIAN SOIL FUNGI

During the course of investigation of rhizosphere mycorrhiza of some medicinal plants the following fungi were isolated. Their diagnostic characters are as follows:


Colonies on oat-meal agar produce creeping mycelium, at first hyaline becoming brownish due to the formation of pycnidia. Pycnidia superficial formed in abundance, at first light brown becoming dark brown at maturity, varying in shape from globose, subglobose, angular to bean-shaped, 240-300 × 165-240 μ with setae on all sides; setae septate, brown, downward black and opaque, upward lighter, curved and coiled at tips, coiling in circinate manner, 36-66 × 4.5-6 μ; spores extruded in mass by irregular rupturing of pycnidium, aseptate, subglobose to elliptical, slightly dark or olive colour, 5-6 × 3 μ.

The fungus was isolated from rhizosphere of Withania somnifera Linn. in September 1966.


Colonies on Czapek's agar broadly spreading brown to black-coloured consisting of aerial and submerged hyphae, conidiophore erect, simple, often curved and geniculate, dark brown, septate 55-75 × 6 μ; conidia single at the apex, long cylindrical, tapering toward the ends, septa five to eight, light brown, 24-48 × 6-9 μ.

The fungus was isolated from rhizosphere of Datura alba Nees. in September 1966.


Sporodochia disc-shaped, subglobose, dark brown to black, 300 μ in diameter, with rigid, dark-coloured, long marginal setae arising from the base, 108-240 × 6 μ; Conidiophore dense, hyaline or olivaceous in colour, 18-20 × 3 μ; Conidia hyaline, fusiform, falcate, 18-24 × 3-3.5 μ.

The fungus was isolated from rhizosphere of Withania somnifera Linn. in October 1966.


Colonies on Czapek's agar broadly spreading, grayish-brown with superficial whitish aerial mycelium in old cultures, reverse dark brown. Sporodochia subglobose, 300-400 μ in diameter, dark brown to black, with long, septate, dark-coloured setae arising from the base, setae 150-210 × 5-6 μ; Conidiophore cylindrical, subhyaline 24-30 × 3-4 μ; Conidia hyaline, falcate, fusoid 25-30 × 2.5-3 μ.

FIGS. A-D. Fig. A. Amorosporium applanatum Berk. et Curt. (1) Pycnidium; (2) Seta; (3) Pycniospores. Fig. B. Helminthosporium accedens Syd. (1) Conidiophore; (2) Conidia. Fig. C. Volutella allii Paters. (1) Sporodochium; (2) Conidia; (3) Seta. Fig. D. Volutella acalyphae Atk. (1) A part of sporodochium. (2) Conidia; (3) Seta.

The fungus was isolated from rhizosphere of Withania somnifera Linn. in November 1966.

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