

Studies on three foliicolous hyphomycetous fungi

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This paper deals with three foliicolous hyphomycetous fungi collected from different localities of West Bengal during the year 1985-1987. These fungi are *Cercospora puttemansii*, P. Hennings, *Cladosporium sphaespermum* Penz. and *Drechslera sacchari* (Butter) Subram & Jain, causing leaf spot disease on *Nyctanthes arbor-tristis*, *Bambusa arundinacea* and *Penri-setum* sp. respectively.

Key words : Hyphomycetes, *Cercospora*, *Cladosporium*, *Drechslera*

Description of the species

Cercospora puttemansi P. Hennings, Hedwigia 41 : 117 (1902).

Leaf-spots prominent, amphigenous, more prominent on the ventral surface, circular to subcircular, often forming shot-hole, greyish white centre surrounded by brownish margin on the upper surface, deep brownish centre surrounded by blackish brown margin on the lower surface, 2-5 mm in extent; caespituli hypophyllous, sparsely distributed over the spots; stroma not well developed, consisting of only few brownish spherical hyphal cells; conidiophores fasciculate, fascicles not dense, mostly 1-10 stalks in a divergent fascicle, pale to mid brown, slightly paler and narrower towards the tip, pluriseptate (0.6 septa) simple, occasionally branched, straight or 1-5 times abruptly geniculate, distinct spore scar present, 2.00-3.00 μ m in diam., number of spore scars 1-6, mostly a medium spore scar at the subtruncate tip, 4.00-5.50 x 19.00-170.00 μ m; conidia acicular, hyaline, straight to curved, pluriseptate, septa indistinct, tip subacute, base truncate, 2.00-3.00 x 15.00-105.00 μ m.

Specimen studied : On *Nyctanthes arbor-tristis* Linn. (Fam. Oleaceae), Bagnan, Howrah, West Bengal, India, PCC 3351 (=IMI 309158), leg, T. K. De, 3 March, 1985.

Cladosporium sphaerospermum Penz., *Michelia*, 2 : 473 (1882).

Spots formed on lamina, amphigenous, subcircular, mostly marginal, grey in the centre surrounded by reddish brown margin, colour uniform on ventral surface, 2-12 mm in extent ; caespituli amphigenous, thickly and uniformly distributed over the spots, circular to subcircular, brownish black, stroma absent, only a few brownish cells ; conidiophores solitary to fasciculate, in fascicles of 2-8 divergent stalks, often emerging through the stomata, pale to mid olivaceous brown, paler towards the apex, straight to flexuous, usually simple but occasionally once branched, thick-walled, smooth, pluriseptate (2-9 septa), sometimes more septate 3.50-5.00 x 35.00-95.00 μ m ; ramo-conidia present, 0-3 septate, smooth or verruculose, 3.00-5.00 x 7.00-25.00 μ m ; conidia solitary or in chains of 2-6, globose, subglobose, ellipsoidal, cylindrical, mid to dark olivaceous brown, thick-walled, smooth to verruculose, 0-3 septate, 3.00-4.50 x 7.50-25.50 μ m.

Specimen studied : On *Bambusa arundinacea* Willd. (Fam : Poaceae), Adisaptagram, Hooghly, West Bengal, India, PCC 4999 (=IMI 312497), leg, T. K. De, 29 August, 1986.

Drechslera sacchari (Butler) Subram. & Jain, *Curr. Sci.*, 35 : 354 (1966).

Synonym : *Helminthosporium sacchari* Butler, apud Butler & Khan, *Mem. Dep. Agric. India, bot. ser.*, 6 (6) : 204-208 (1913).

Incidence in early winter, spots formed on lamina, amphigenous, circular to irregular, sometimes coalescent, greyish white centre surrounded by deep brownish margin, 2-7 mm, in extent ; caespituli amphigenous, deep brownish ; stroma absent ; conidiophores arising from small fascicles or solitary, emerging from stomata, simple, straight to flexuous, thick-walled, smooth, dark brown, paler towards the apex, geniculate (1-4), pluriseptate (2-5 septa mostly), swollen at the base, prominent spore scars on the conidiophores, scar 3.5-4.50 μ m in diam, scar 1-5 in number, lying at the tip or at the point of geniculations 4.50-8.00 x 75.00-180.00 μ m ; conidia cylindric or fusiform, dark smoky brown to golden brown, generally widest in the middle, ends cells sometimes paler than others, occasionally straight, generally curved in the middle, pseudosepta 4-9, 10.00-19.00 x 38.00-90.00 μ m.

Specimen studied : On *Pennisetum* sp. (Fam : Poaceae), Chinsurah, Hooghly, West Bengal, India, PCC 4897, leg. T. K. De, 18 October, 1987.

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