

A New Species of *Sporotrichum*

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During the monsoon season of 1969 an interesting saprophytic fungus forming dark tan colonies on a moist wooden door was collected from Jabalpur (India). The fungus first colonises the wood forming small somewhat pink spots which later grow into round colonies of 1—2.5 cm. diameter. In older colonies concentric zonations of dark tan to reddish brown spore masses are seen to form. The fungus was identified as *Sporotrichum*.

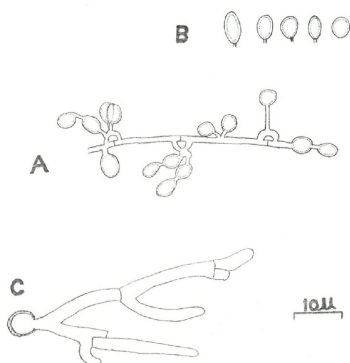


Fig. A. Mycelium showing clamp connection and conidiophore, bearing conidia
B. Conidia
C. Germination of Conidia.

Mycelium is well developed, profusely branched, hyaline, upto 4μ thick, septate and showing the presence of clamp connections (Fig. A). The branches usually arise from the clamp connections although ordinary branching may also take place. Conidiophores are long or short, hyaline, $2-6.5 \mu$ long bearing conidia laterally as well as terminally. Sometimes a complete branch may be transformed into a

conidial chain. Conidia are at first hyaline, later light brown and finally reddish brown to dark brown in colour, single celled, globose to subglobose (3.8—5.8 μ , average 4.9 μ), obovoid to elliptical (5—6.7 \times 3.3—4.9 μ) Fig. B). Usually the upper part of the conidiophores remains attached to the base of the conidia when they are detached. On germination the conidia produce a germ tube bearing clamp connections (Fig. C).

Mycelium bene evolutum ex hyphis irregulariter ramosis, hyalinis usque ad 4 μ crassis, septatis compositum; conidiophora hyalina, 2—6.5 μ longa, conidia ad latera et in apice producentia; conidia primum hyalina, postea pallide brunnea, tandem rubro-brunnea vel obscure brunnea, continua, globosa vel subglobosa, 5—6.7 \times 3.3—4.9 μ .

So far the genus *Sporotrichum* has been reported only from soils in India. *S. roseum* Link, *S. epigaeum* Brunard var. *terrestre* Daszew, *S. carthusioviride* Rai and Mukerji, Syn. *Beauveria sulfurescens* (V. Beyma) J. J. Taylor comb. nov. and *S. dehradunense* Sarbhoy & Saksena have been reported by Subramanian (1952), from Madras, Saksena and Mehrotra (1952) from Allahabad, Rai and Mukerji (1962) from Lucknow and Sarbhoy and Saksena (1965) from Dehradun soils respectively.

The present fungus differs from the known species of *Sporotrichum* in the presence of: (a) Clamp connections — a character of basidiomycetes; (b) in the size of the conidiophores and conidia; and (c) in habit.

It is, therefore, being described here as a new species, ***Sporotrichum xylophila***.

Sporotrichum xylophila Agarwal & Singh sp. nov.

Mycelium est auctum apte, profuse divisione hyaline ramosum. Fot quater 4 μ crassum, partitum et monstrans praesentian clamp — connectionum — Rami, quamquam usitatus dividens etiam fiat, conidiophores Congae Vel breves, hyaline 2—6.5 μ ; conidia continue etiam Fermine ferens, fere clam-connectionibus surgunt. Subinde ramus integer in cataenam conidiale convertat, Conidia primo hyaline, et deinde levis brunnea et ultime rubra-brunnea Fot nigra brunnea colore, unicellularis, globosa (3.8—5.8 μ ; average 4.9 μ); ovoidea vel elliptica 5—6.7 \times 3.8—4.9 μ) germinatio conidia germen unum tubum ferentem clamp-connectiones producent.

The type specimen has been deposited in the Herb. I. M. I., Kew, No. 134433.

A c k n o w l e d g e m e n t

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specimen and to F. Petrak for rendering the diagnosis of the new taxon into Latin.

References

1. Rai, J. N. & Mukerji, K. G. *Sporotrichum carthusio-viride* Rai & Mukerji, a new species from Indian soils. *Mycopath. et mycol. appl.* **18** : 122—126.
2. Saksena, R. K. & Mehrotra, B. S. 1952. Fungus flora of Allahabad soil. *Proc. Nat. Acad. Sci., India.* **22** (B) : 22—43.
3. Sarbhoy, A. K. & Saksena, R. K. 1965. A new species of *Sporotrichum*. *Sydowia*, **19** : 198—199.
4. Subramanian C. V. 1952. Fungi isolated and recorded from Indian soils. *J. Madras Univ.* **22** (B) : 206—222.

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