

STACHYBOTRYS ATRA CORDA VAR. *MICROSPORA* MATHUR & SANKHLA,
ANTAGONISTIC AGAINST *ASPERGILLUS FUMIGATUS*

During the study of soil fungi of *Brassica* fields, in one of the petridishes (Pl. 1, Fig. 3) a small blackish colony appeared, which inhibited the growth of *Aspergillus fumigatus* on Czapek Dox Agar, and also showed antagonism against *Neosaurtoria fischeri*, the perfect state of *A. fumigatus* (Pl. 1, Figs. 4 & 5). The fungus is slow growing, attaining a diameter of 2-3 cm in one month old culture at $30 \pm 1^\circ\text{C}$ on Czapek Dox Agar, moist, with very little surface mycelium, pinkish to yellowish-brown with a central blackish area. The fungus shows slight variation in conidial morphology which are spherical and larger $7.4\text{--}12.3 \mu\text{m}$ in the present strain (Pl. 1, Figs. 1 & 2), as compared to elliptical conidia $6.4\text{--}8.0 \mu\text{m} \times 2.4\text{--}3.2 \mu\text{m}$ of the strain described by MATHUR AND SANKHLA (1966). A subculture has been deposited at Commonwealth Mycological Institute, Kew, under the accession number IMI 132132. BUTT AND GHAFAR (1972) observed inhibition of the growth of many fungi, actinomycetes and bacteria by *Stachybotrys atra* Corda even being highly fungistatic, it can not be used as antimicrobial agent, because of its phytotoxic effects on cotton. Antagonistic nature of *S. atra* var. *microspora* is being reported for the first time. Though its phytotoxicity is not known, it can be used to check the growth of *Aspergillus fumigatus* in decaying material so that it may not pollute the working environments.

Aspergillus fumigatus has been described as a health hazard in working environments in Mysore (JAYAPRAKASH & RAMALINGAM, 1981) and stored bagasse, Coffee dust, grain and wood chips were traced as sources. MARSH *et al.* (1979) reported it from the air over self-heating organic matter.

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K. WADHWANI AND S. K. DUDEJA
Department of Botany, University of Lucknow, Lucknow-226 007

EXPLANATION OF PLATE 1

- 1—5. *Stachybotrys atra* Corda var. *microspora* Mathur & Sankhla on Czapek Dox Agar.
1, 2. Conidiophore morphology of the fungus, 1×580 ; 2×500 .
3. Fungus (denoted by arrow) showing antagonism against *Aspergillus fumigatus* as it occurred in the original petriplate.
4—5. Showing antagonism against *Aspergillus fumigatus* and *Neosaurtoria fischeri*, respectively.