

A new species of *Spicaria* from phyllosphere at Aurangabad

By Deshpande K. B. & Deshpande K. S.

(Botany Department Marathwada University, Aurangabad, India)

With 4 fig. in the text.

During the study of the leaf surface mycoflora of three plants at Aurangabad (Deshpande & Deshpande 1965), a species of *Spicaria* was isolated in December 1964 and January 1965 from leaves of both *Polyalthea longifolia*. B. & H. and *Bougainvillea spectabilis* Willd. The morphological characters of this species were compared with already described species of this fungus and it was found that this fungus can be described as new to science.

Spicaria asymmetrica sp. nov.

Colony yellow when young, later becoming dirty gray, powdery, fast spreading on PDA; hyphae septate, hyaline, branched, $4.6\text{--}5\text{ }\mu$ in diameter; conidiophores hyaline, smooth, erect, irregularly branched, $34.5\text{--}174.5 \times 4.6\text{ }\mu$; conidial apparatus asymmetrical, consisting of metulae and phialides; metulae cylindrical to fusoid, sometimes two-celled, sometimes absent, specially when phialides are terminal, $11.5 \times 4\text{ }\mu$; phialides, cylindrica, tapering abruptly into a treadlike process, usually single, sometimes in clusters, sometimes one phialide elongated to produce another series of phialides, $11.5\text{--}17.5 \times 2.3\text{ }\mu$; conidia in chains, spindle-shaped or oblong, dirty yellow, smooth, $5 \times 3\text{ }\mu$.

Spicaria asymmetrica K. B. et K. S. Deshpande sp. nov.

Caespites primo lutei, postea sordide grisei, pulveracei, in PDA valde accrescentes; hyphae septatae, hyalinae, ramosae $4.6\text{--}5\text{ }\mu$ latae; conidiophoris hyalinis, levibus erectis, irregulariter ramulosis, $34.5\text{--}174.5 \times 4.6\text{ }\mu$, plerumque, metulas, phialidesque gerentibus; metulae cylindratae vel fusoidae, interdum bicellulares vel etiam nullae, $11.5 \times 4\text{ }\mu$; phialides cylindratae, abruptiuscule filiformiter attenuatae, plerumque singulae, interdum cumalatae vel elongatae, tunc iterum phialides producentes, $11.5\text{--}17.5 \times 2.3\text{ }\mu$; conidia oblonga, utrinque plus minusve, attenuata, tunc fusiformia, obscure lutea, $5 \times 3\text{ }\mu$.

Altogether 32 species of *Spicaria* have been described so far. On the basis of the nature of the substratum, these species can be divided into three groups. They are 1) Entomogenous 12, 2) Soilborne 10, 3) Pathogenic to plants 10.

This species was found associated with the leaf surface of the plant and recorded for the first time from phyllosphere. Species of this fungus so far recorded from India are 5 and that too from Soil (Gillman 1959 and Rao 1965).

This fungus resembles *Spicaria divaricata* in having conidiophores irregularly branched, but differs from it in the colour of the colony, length of the conidiophores and colour of the conidium. It also shows similarity with *Spicaria sylvatica*, but differs from it not only in colour of colony but also in the length of the phialides, shape, size and colour of the conidia. It also differs from *S. fusispora* in similar characters.

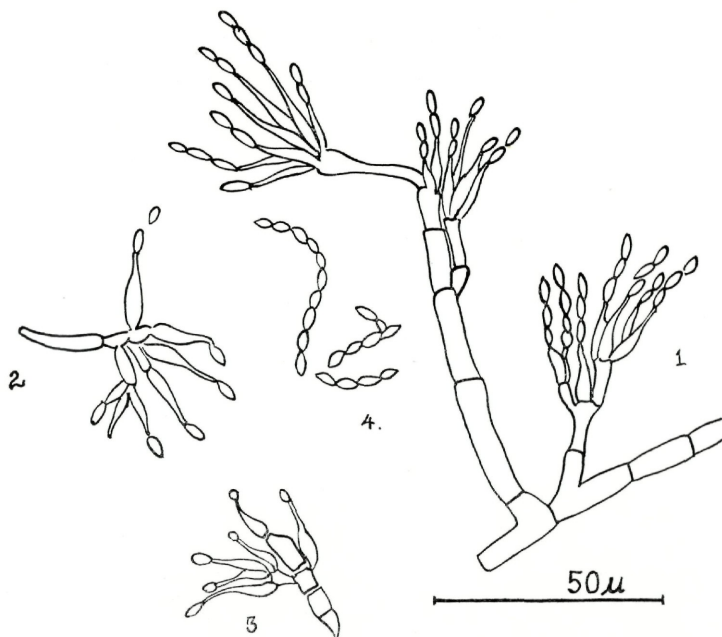


Fig. 1. A part of hypha, conidiophore and conidia. — Fig. 2. Conidial apparatus in young colony. — Fig. 3. Conidial apparatus in old colony. — Fig. 4. Chains of conidia.

The conidial apparatus of the new species is asymmetrical, because in some cases phialide is present singly whereas in others it is in clusters. Sometimes metulae are present and sometimes they are absent. Hence the specific name *asymmetrica*.

Summary.

A new species of *Spicaria*, *Spicaria asymmetrica*, isolated from the leaf surface flora of two trees has been described in this paper. The peculiarity of the conidial apparatus, shape and colour of the conidia, are some of the characters on the basis of which new species of this fungus has been erected.

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