

SOME LOCULOASCOMYCETES FROM MAHARASHTRA

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DURING the survey of Loculoascomycetous fungi two species of the genus *Mycosphaerella* Johanson were collected which have been established as new to science. They are *Mycosphaerella kankeshwarensis* and *M. mangiferae*. The specimens have been deposited in the herbarium, at the University Campus (LFM No. 11 and 12).

The genus was placed in the family Mycosphaerellaceae by Lindau¹ under sphaeriales. Bessey² and Gaumann³ treat this family under the order pseudosphaeriales. Luttrell⁴ placed it in Dothideaceae of Dothideales. Barr⁵ placed it in Dothideaceae. Von Arx and Müller⁶ placed it under family Mycosphaerellaceae of order Dothideales.

The fungus is described below: *Mycosphaerella kankeshwarensis* sp. nov. (figure 1).

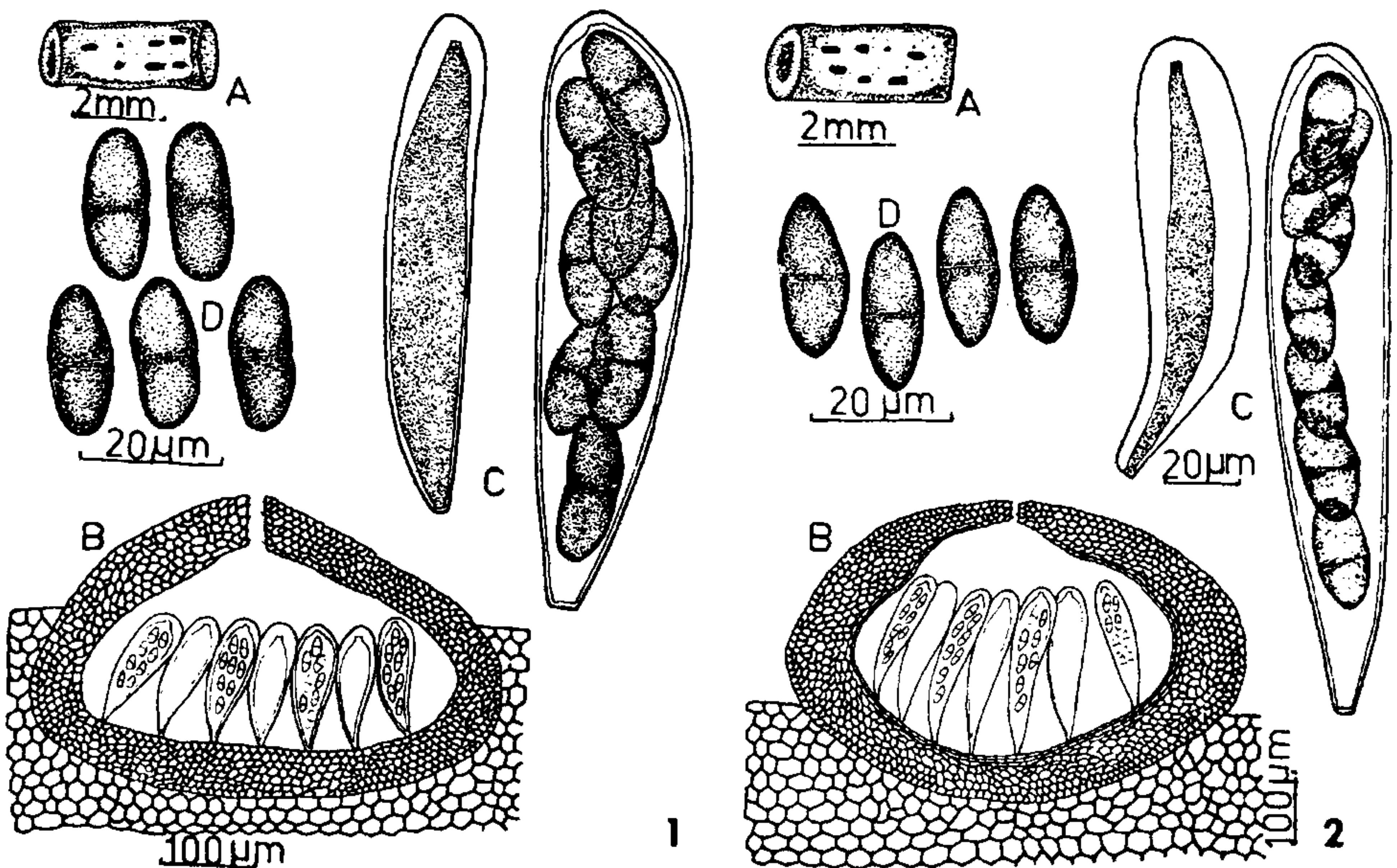
Ascocarpia (pseudothecia) dispersa, immersa, nigra, globosi, 579 μm \times 579 μm cum ostiolis erumpentibus; muri pseudotheci compositi e 2-3 striatis cellularum atrobrunnearum, cum muris crassis et polyedricis; pseudoparaphyses desunt. Asci obovoidei, bitunicati, 8 spori, 98-125.8 μm \times 7.8-15.6 μm . Ascospores conglomeratae, leviter clavatae, cum apicibus rotundis, uniseptatae, hyalinae 23.4-27.3 μm \times 3.9-5.8 μm .

Typus lectus ad cortice *Murraya paniculata* Jack (Rutaceae); Kankeshwar, 8/12/83, LFM No. 11.

Etymology: Specific epithet referring to the place Kankeshwar from which the species was collected initially.

M. kankeshwarensis sp. nov. (figure 1).

Ascocarps (pseudothecia) scattered, immersed, black, globose, measuring 579 μm \times 579 μm with an erumpent ostiole; pseudothecial wall composed of 2-3 layers of dark brown, thick walled polyhedral cells. Pseudoparaphyses absent. Asci obovoid-clavate, bitunicate, 8 spored, 98-125.8 μm \times 7.8-15.6 μm . Ascospores conglomerate, weakly clavate with rounded apices, 1 septate, hyaline, 23.4-27.3 μm \times 3.9-5.8 μm .



Figures 1-2. 1. *Mycosphaerella kankeshwarensis* sp. nov. a. Habit, b. V. S. of pseudothecium, c. Asci, d. Ascospores. 2. *M. mangiferae* sp. nov., a. Habit, b. V. S. of pseudothecium, c. Asci and d. Ascospores.

On dead stem of *Murraya paniculata* Jack (Rutaceae); Kankeshwar, 8/12/83, Leg. Ramesh, LFM No. 11.

The present collection differed from other known species of *Mycosphaerella* in its morphological characters and dimensions of asci and ascospores, and hence described as new taxon.

M. mangiferae sp. nov. (figure 2).

Ascocarpia (pseudothecia) dispersa, immersa, nigra, globosi, $521 \mu\text{m} \times 560 \mu\text{m}$, cum ostiolis erumpentibus; muri, pseudotheci compositi e 2-3 stratis cellularum atrobrunnearum, cum muris crassis et polyedricis, pseudoparaphyses desunt. Asci obovoidei bitunicati, 8 spori, $157-302.3 \mu\text{m} \times 11.7-19.5 \mu\text{m}$. Ascospores conglomeratae, leviter clavatae, cum apicibus rotundaris, uniseptatae, hyalinae $35.1 \mu\text{m} \times 19.5-23.4 \mu\text{m}$.

Typus lectus ad cortice *Mangiferae indica* Linn. (Anacardiaceae); Trimbakeshwar, 4/10/83, Leg. Ramesh, LFM No. 12.

Etymology: Specific epithet referring to the host *Mangiferae* from which the species was collected initially.

M. mangiferae sp. nov. (figure 2).

Ascocarps (pseudothecia) scattered, immersed, black, globose, $521 \mu\text{m} \times 560 \mu\text{m}$, with an erumpent ostiole; pseudothecial wall composed of 2-3 layers of dark brown, thick-walled polyhedral cells. Pseudoparaphyses absent. Asci obovoid-clavate, bitunicate, 8 spored, $157-302.3 \mu\text{m} \times 11.7-19.5 \mu\text{m}$. Ascospores conglomerate, weakly clavate with rounded apices, 1 septate, hyaline, $35.1 \mu\text{m} \times 19.5 \mu\text{m}-23.4 \mu\text{m}$.

On dead stem of *Mangiferae indica* Linn. (Anacardiaceae); Trimbakeshwar, 4/10/83, Leg. Ramesh, LFM No. 12.

The present collection differs from other known species of *Mycosphaerella* in its morphological characters and dimensions of asci and ascospores, hence it is referred as a new taxon.

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A NEW LEAF SPOT DISEASE OF *SOLANUM MELANGENA* L (BRINJAL) CAUSED BY *HELMINTHOSPORIUM HALODES* DRECH

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WHILE brinjal leaf-spot disease caused by *Helminthosporium speciferum* (Bain) Nicot has been reported by Singh *et al*¹, this is the first time that *H. halodes* is being reported on *Solanum melongena* L (brinjal)^{2,3}.

The spots appeared as irregular, light to dark greyish in colour which later changed to dark brown as the leaves matured. The outer margins of the leaves presented a wrinkled appearance and at times the complete leaf was affected which subsequently droops.

Isolations were made from the affected portions of the leaves on potato-dextrose-agar plates and later transferred to PDA tubes. The fungus showed mycelium and was profusely branched and septate. Conidia and conidophores are olivaceous to brown in colour. The conidia are borne in clusters, having one end tapering with a hilum and the opposite end rounded. Conidia are 3 to 10 septate. Conidiophores measured 198.2μ in length and 5.3μ in breadth and the conidia 70.6μ in length and 15.2μ in breadth.

Pathogenicity of the fungus has tested by spraying a spore suspension on a month-old brinjal seedlings. Typical symptoms of leaf spots developed within a week.

Re-isolations of these spots on PDA plates yielded colonies of the fungus. It tallied with the description of *H. halodes* given by Drechsler⁴ and was identified as *H. halodes* Drech. The culture of this fungus has been deposited at the Type Culture Collection, IARI, New Delhi.

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