

LEAF AND STEM BLIGHT OF JAPANESE MENTHA CAUSED BY
CORYNESPORA CASSIICOLA (BERK. & CURT.) WEI.

Japanese mentha plants (*Mentha arvensis* L. var. *piperascens*) grown at Kalady in Kerala were found to dry up in large numbers during June 1967. The disease was found to persist throughout the year.

The leaves as well as the stem of the plant were affected by the disease and on both those structures the symptoms first appeared as tiny brown spots. The spots on the leaves were circular to oval ranging from 0.5mm. to 2mm. in diameter. They were initially light brown in colour but subsequently turned black. In advanced cases the spots were found to coalesce covering considerable area of the leaf leading to its withering. The spots on the stem also enlarged till the entire stem became discoloured. The plants infected in this manner usually died.

The infected leaves and stems, when cultured, yielded *Corynespora cassiicola* (Berk. & Curt.) Wei. The fungus grew and sporulated well on potato dextrose-agar medium. Conidia were formed in this medium in five days. The conidiophores and conidia were initially hyaline but subsequently turned brown on ageing. The conidia were produced terminally on the conidiophores either singly or in chains acropetally. Two to five conidia were generally present in a chain. They were obclavate or cylindrical and 5 to 14 septate (usually 7 to 10 septate). The length of the conidia ranged from 85.0 μ to 247.5 μ and the breadth from 4.25 μ to 13.2 μ , the

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average length and breadth being 150.22 μ and 6.7 μ respectively. The conidiophores were simple straight and mostly septate. The wall of the conidiophore was thickened at the apex with characteristic bulging. The conidiophores measured 70 μ to 320 μ x 3.5 μ to 7.5 μ . Thick walled chlamydospores were observed in old cultures. The taxonomic characters of the organism were similar to those described by Wei (1950) and Gopalan (1963) for *Corynespora cassiicola* (Berk. & Curt.) Wei.

The pathogenicity of the organism was determined by spraying potted mentha plants with a suspension of spores taken from a culture of the fungus. The inoculated plants were covered by bell jar for 48 hours to provide moist atmosphere. All the inoculated plants developed characteristic symptoms of the disease within four days. The organism was reisolated from the infected plants.

C. cassiicola is known to produce leaf spots on a large number of cultivated and other plants. The occurrence of the organism on mentha was, however, noted for the first time.

Reference

Gopalan, N. 1963. Studies on *Corynespora cassiicola* (Berk. & Curt.) Wei., M.Sc. (Agri) thesis, University of Kerala 1963 (Unpublished)

Wei, C. T. 1950. Notes on *Corynespora* Mycological paper No. 34. Commonwealth Mycological Institute, Kew, 10 pp.

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