

RESEARCH ARTICLE

Studies on stalk rot of maize caused by *Fusarium moniliforme* Sheldon

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ABSTRACT

Stalk rot of maize caused by *Fusarium moniliforme* is one of the most damaging diseases of maize causing enormous losses. This disease has now achieved much importance in maize growing areas of Khandesh area of Maharashtra state. Therefore, the investigations were aimed at isolation, pathogenicity, identification and study of morphological characters of the pathogen along with *in vitro* evaluation of fungicides for controlling growth of the pathogen. The pathogenicity of the isolated *Fusarium* sp. was proved by sick soil method. The colonies of pathogen were circular, brilliant white, and compact with smooth margin. Macroconidia were slender, sickle shaped, pedicelate and scattered. Mostly they were septate and measured 43-46 x 3-3.5 μ m. Microconidia were in chain, white in colour and measured 5-12 x 2-4 μ m. Copper oxychloride was found most effective in retarding growth of *Fusarium moniliforme* which showed 100 per cent inhibition of fungal growth over control. It was followed by carbendazim (0.1%), thiram(0.2%), and thiophanate-methyl (0.1%) which showed 86.67, 79.52 and 71.90 per cent inhibition, respectively and these treatments found significantly different to each other.

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