Conference Abstract

Physiological studies of the pathogen *Sclerotium rolfsii*

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Abstract

Sclerotium rolfsii is one of the devastating soil-borne, facultative, phytopathogenic fungal pathogen, causes severe damage and heavy yield loss in many crop varieties. It is predominantly distributed throughout tropical and sub-tropical regions, causes diseases such as root rot, collar rot, stem rot and blight, wilt etc. It forms white, fan-shaped aerial mycelium with no spore production and leads to the formation of sclerotia. Sclerotia are asexual, multicellular resting structures. Teleomorph of the pathogen is reported as hymenial masses which are white to ochraceous stromata found sparsely or aggregated irregularly.

It has variations in morphological, biological and immunological characteristics and also differ in pathogenicity or resistance. Present investigation was conducted to analyse the physiological factors which favour the pathogenic growth. *S.rolfsii* was isolated from the collar rot diseased brinjal (*Solanum melongena L.*) commonly called as eggplant, belongs to the family-Solanaceae infected with collar rot disease. Pathogenic growth was observed at the temperature range of 15°C to 35°C and a wide range of pH 3 to 9. Low temperature (<10°C) and high (>50°C) temperature were not suitable to the growth of this pathogen.

Keywords: *Sclerotium rolfsii*, Sclerotia, Hymenial masses, Collar rot, pH, Temperature

References

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