

Research Article

Stem Rot of Chrysanthemum Incited by *Sclerotium Rolfsii*: A New Occurrence and Its Management

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Abstract

Chrysanthemum, the golden flower, is one of the beautiful and oldest commercial flower crops grown in different countries of the world. A roving survey was carried out during 2019-20 in six districts of Karnataka indicated 2.00 to 31.04 per cent. The infected plant exhibits yellowing and wilting as typical symptom. Further, the disease is also characterized by presence of white mycelial growth at color region and root rotting. The infected plants will dry in the advanced stages. The pathogen associated with this disease was isolated on PDA and identified as *Sclerotium rolfsii* through morphology and cultural characteristics. The association of pathogen with host was confirmed through artificial inoculation and re-isolation. The identity of pathogen was further confirmed through sequencing of ITS region. To manage the disease, 12 different fungicides were screened through poisoned food technique and the best three fungicides viz., Captan 50 % WP @ 0.3%, Tebuconazole 25.9 % EC @ 0.1%, and Pyraclostrobin 133 g L⁻¹ + Epoxiconazole 50 g L⁻¹ SC @ 0.1% were also evaluated under poly house conditions through artificial inoculation methods. The fungicide Tebuconazole 25.9 % EC @ 0.1% would reduce the stem rot diseases effectively.

Key words: Chrysanthemum, ITS and PCR, *Sclerotium rolfsii*

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