Research Article

Morphological and Molecular Characterization of *Sclerotium rolfsii* Associated with Southern Blight Disease of Spine Gourd in India

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Abstract

The present study aimed to isolate and characterize the fungal pathogens causing southern blight disease of spine gourd (*Momordica dioica* Roxb.). Southern blight disease of spine gourds was observed during 2020–2022 in many spine gourd fields in the coastal Karnataka state of India. Infected spine gourds were inoculated on PDA medium to check the fungal association. Based on the morphological and molecular characteristics, the fungal isolate was identified as *Sclerotium rolfsii.* Typical disease symptoms were found on the leaves and stem of the healthy spine gourd in the pathogenicity test. The rDNA sequence also revealed 100 per cent similarity with reference sequences retrieved from the NCBI-GenBank database. *S. rolfsii* is a necrotrophic phytopathogen that attacks various crop plants. Thus, this is the first report of *S. rolfsii* associated with the southern blight disease of spine gourd in India.

Key words: *Momordica dioica,* pathogenicity, *Sclerotium rolfsii*, southern blight

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