

Short Communication | Published: 13 January 2021

Identification of *Fusarium oxysporum* as causative agent of rhizome rot disease in seed ginger rhizomes in Wayanad, Kerala

K. Harsha, Aswati R. Nair 🖾 & G. Tejaswini

Indian Phytopathology (2021) Cite this article

11 Accesses | Metrics

Abstract

Rhizome rot was reported by ginger farmers of Wayanad, Kerala as a major productivity problem being faced in current growing year (2019–2020). The etiological agent was a fungus with a hyphal growth rate of 83.75 ± 3 mm after 5 doi. Subsequent morphological and molecular characterization by elucidating the fungal colony, conidial morphology, ITS sequencing and phylogenetic analysis identified the isolates as *Fusarium oxysporum*. Koch's postulates were fulfilled after inoculating healthy rhizomes with the isolates (1 × 10⁵ conidia/ml), obtained from symptomatic rhizomes collected from field. Typical rot symptoms were visible after 4 days of infection (doi). Present study identifying the etiological agent provides information to farmers in selecting appropriate disease control measures to prevent further financial loss and opens research avenues for developing sustainable solutions.