

Research in Survey and Diagnosis of Ginger Rhizome Soft Rot and Bacterial Diseases in Taitung

Chih-Wei Wang¹ and Shu-Jen Tsai²

Abstract

Rhizome rot diseases of ginger are mainly caused by *Pythium myriotylum* (soft rot) and *Ralstonia solanacearum* (Bacterial wilt). Those two diseases are the major restriction factors for ginger cultivation. Huge economic losses when diseases outbreak. Ginger rhizome diseases can be diagnosed either by symptoms or molecular methods. We used two primer sets, Pmy5/ITS2 and 759f/760r, to detect pathogen DNA in diseased ginger rhizomes or isolated pathogens. We collected samples from 12 different ginger farms in Taitung between 2019 and 2020. After pathogen isolation and PCR detection, we concluded that 3 of them were infected by *P. myriotylum*, 5 farms were infected by *R. solanacearum*. There are evidences to show 3 out of the 12 farms infected by both pathogens, still another proposed to be infected by other pathogens.

Keywords: Soft rot disease, Bacterial wilt disease, Ginger

¹Assistant Researcher of Taitung DARES, COA.

²Associate Researcher and Chief of Taitung DARES, COA.