RHIZOCTONIA BLIGHT OF AZOLLA IN RICE PADDY FIELDS IN NORTHERN IRAN

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Abstract

*Azolla filiculoides* an aquatic fern is an exotic plant introduced in 1986 from Philippine as green fertilizer for rice crop to Iran. The climatic conditions of paddy fields and other water sources such as ponds and water streams of northern Iran was optimum for its regeneration and growth (1). During summer 1999 Azola blight was observed in rice paddy field infested with rice sheath blight in Amol Rice Research Station. The blight resulted in brown patches on dens mats of *A. filiculoides*. Infected tissues were surface sterilized in 0.5% sodium hypochlorite, rinsed in sterile distilled water, blotted dry with sterile filter water, and plated on acidified PDA. The growing colonies were purified using hyphal tip method. Based on cultural and morphological characteristic including mycelia thickness, mycelial branching at the right angle and constriction at distal end of the septum, multinucleate nature using Safranin-O KOH staining and brown mycelia and dark brown sclerotia, the fungus was identified as *Rhizoctonia solani*. The pathogen recently has been reported as Rhizoctonia blight of Azolla from rice paddy fields in Korea and identified as *R. solani* AG1-1A close to rice sheath blight using rDNA ITS (2). Our isolate obtained from Azolla in rice paddy field infested with Rhizoctonia sheath blight assumed to be similar as reported from Korea. The floating nature of Azolla could distribute the pathogen via irrigation system in paddy field or other water streams.

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References
