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Articles

Fungi associated with rice sheath rot in Lampung, Indonesia

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Abstract

Rice sheath rot caused by some pathogens. It occurs in the upper leaf sheath that wraps the rice panicle, its major features are rotting, discoloration, sometimes affecting rice grain production. Lampung is an important rice-producing area in Indonesia. Currently, rice sheath rot in the area is reportedly caused by *Fusarium sulawesiense* and *Fusarium hainanense*. This study aimed to identify the rice sheath rot pathogen accurately by sampling locations at varying altitudes, plant ages, and varieties in Lampung Sampling was conducted in Lampung, infected plants were collected and the pathogen isolates were molecularly characterized on the basis of DNA sequence data for the internal transcribed spacer and translation elongation factor 1-α. Pathogenicity test results showed that 16 fungal isolates caused rice sheath rot. These isolates were identified as *Sarocladium oryzae*, *Fusarium bubalinum*, *F. hainanense*, *Setophoma poaceicola*, *Curvularia geniculata*, and *Alternaria padwickii*. This study is the first to report that *S. poaceicola* is a pathogen of rice sheath rot.

Keywords: *Alternaria padwickii* | *Curvularia geniculata* | FIESC | *Sarocladium oryzae* | *Setophoma poaceicola*

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