Occurrence of a Fungal Disease on Brown Planthopper of Rice

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During the survey of microbial diseases of rice pests, the nymphs and adults of brown planthopper (*Nilaparvata lugens* Stal.) were found dead in rearing cages due to fungal infection. The mycelium of the fungus emerged through the intersegmental membranes of the abdomen and the joints of the legs. The network of the white mycelium developed all over the body. The insects were found either sticking to the leaf sheath or floating on standing water, being overgrown by a white mass of spores. The fungus was isolated and purified on Sabouraud's dextrose agar with yeast extract medium (SDA+Y). The fungus was identified as *Fusarium moniliforme* var *intermedium* Neish and Leggett (IMI No.330804).

The average natural mortality was 8.20 per cent with a range of 4.80 to 15.80 per cent during the cooler months and almost negligible during the summer months. High relative humidity (85%) favoured the fungus growth. Pathogenicity was proved by releasing 5 day old healthy nymphs on caged rice plants after giving a uniform spray coating of spores on the leaf sheath. Mean mortalities of 38.7 (21.0-60.0) and 69.2 (40.0-91.3) per cent respectively were recorded at 5 and 10 days after application. In another test, where 5 day old nymphs were allowed to crawl on fungal mat, 33.3-53.3, 66.7-80.0, 72.8-77.8 per cent mortality were recorded when exposed for 15,30 and 60 minutes, respectively. The same fungus was reisolated from the infected insects on the SDA medium. This is the first record of *Fusarium moniliforme* Var. *intermedium* on rice brown planthopper in India.