RESEARCH NOTE

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FRUIT ROT OF SPONGE GOURD (LUFFA CYLINDRICA) BY MUCOR PIRIFORME IN PAKISTAN

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Fruit rot of sponge gourd was found at Faisalabad during July-August, 1986. The diseased fruit was brought to the Mycology laboratory and symptoms of the disease were observed. The organism associated with fruit rot was isolated, identified and its pathogenic nature was studied. The results are presented below:

SYMPTOMS:

Diseased fruits appeared water soaked, which were covered later on by white cottony growth of the fungus. Fruit rottening appeared from one end in the beginning, which gradually affected the whole fruit. The fruits became shrivelled showing dry rot appearance.

ISOLATION AND IDENTIFICATION

The fungus associated with diseased fruit was isolated on malt-extract agar. Growth of the fungus on agar medium was very rapid and it sporulated within 5-6 days after incubation. The pure culture of the fungus was identified (Zycha et al., 1969) as Mucor piriforme. Following morphological characters were recorded.

Colonies pale, olive grey with aroma, 30-45 mm high Sporangiophores exhibiting two kinds of length, tall and short and 30-40 μ in diameter. Columellate, columellae variable in shape. Larger one obvoid and smaller pyrifrom or subglobose, 200 x 140 μm in size. Sporangiospores ellipsoid, hyaline, wall smooth, 6-10 x 4-7 μm in size.

PATHOGENICITY OF THE FUNGUS:

Sponge gourd fruit in three different stages of ripening were tested for the pathogenic nature of the fungus.

i) Immature (Pre-ripening stage)
II) Mature (Ripened stage)
iii) Over mature (Fully ripened stage)

The injured (pin-pricked) and uninjured fruits of all the above stages were inoculated with pure culture of the isolated fungus and incubated at 25°C for two days. Symptoms of fruit rot appeared on injured fruits first on over mature, then on mature and lastly on the immature fruits (Fig. 1). But in case of uninjured fruits, symptoms did not appear, which indicated the weak nature of the pathogen. The fungus was reisolated and found to be the same.

Fruit rot of sponge gourd by Mucor piriforme

This fungus Mucor piriforme has been reported first time in Pakistan on sponge gourd as weakparasite. Smith et al., (1978) isolated the same fungus causing post harvest decay peaches, nectarines and tomato. Singh et al., (1974) recorded fruit rot of ridge gourd caused by Mucor circinelloides, from Ludhiana, India.

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