SHORT COMMUNICATION

EMERGENCE OF A NEW WILT DISEASE ON COTTON CAUSED BY ASPERGILLUS JAPONICUM VAR. ACULEATUS IN PAKISTAN

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ABSTRACT

Cotton wilt diseases caused by Aspergillus japonicum var. Aculeatus is reported from Derra Ghazi Khan, Pakistan.

Key-words: Cotton, wilt, *Aspergillus japonicum* var. *aculeatus*, Pakistan.

The Cotton plants in Chief Leghari State Distt Zareen, D.G.Khan, Pakistan after gaining a height of 3-4' was found wilting in September 2006 and 2007. The green leaves changed color and dried, the bolls were also not opened as normal and the fibers coagulated. The disease initially appeared into small patches and then spread into whole field killing the plants. The plants were uprooted and roots were cut and plated on Agar media and incubated for fungal growth at 25°C. The growing funguses were transferred to PDA slants. About 90% of the sample produced pure colonies of *Aspergillus* sp. in both the years. Colony was black with light purple shade, circular, texture, granular, purple shade, circular, texture, granular, margins smooth and somewhat irregular, reverse light yellow, Conidial heads: globose to radiate, 250-300μm in dia, pigmented, uniseriate, Vesicles: 40-60μm, ³/₄ fertile area, Phialides: 7.5-10x4.5μm, Conidia globose echinulate, 3.5-4μm. The fungus was identified to be *Aspergillus japonicum var. aculeatus* (Raper and Fennell, 1965 and Al-Musallum, 1980). The Specimen (FCBP-782) was deposited in the fungal Culture Bank, Department of Mycology and Plant pathology, University of Punjab, Lahore.

This appears to be a new report of cotton wilt disease caused by *Aspergillus japonicum var. aculeatus* in Pakistan.



Field view with a diseased cotton plant showing coagulated fibers.

REFERENCES

Al-Musallam, A. (1980). *Revision of the Black Aspergillus Species*. Dissertation. Utrecht, Netherlands:University of Utrecht.

Raper, K.B. and D.I. Fennell (1965). The Genus Aspergillus Baltimore, Maryland: Williams and Wilkins.

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