

HOLLOW FRUIT OF BANANA : A NEW DISEASE

B.K. PRASAD and S.P. SINGH*

University Department of Botany, Magadh University, Bodh Gaya - 824234, India.

*University Department of Botany, V.K.S. University, Ara (Bhojpur), India.

A New disease, hollow fruit of banana (*Musa sapientum*), was observed and studied. This disease was caused by *Fusarium moniliforme* Sheldon.

Keywords : *Fusarium moniliforme*; Hollow fruit of banana.

Hollow fruit of banana (*Musa sapientum* L) var, Singapuri was observed in five fruits of one cluster in the Magadh University campus in October 2001. Externally white mouldy growth was observed on the faded stigma. On splitting the fruit along the length, dark brown hollow space measuring 12 mm approx. in diameter was observed in the region of placenta. The mouldy stigma and the tissue of the hollow part were plated aseptically on potato dextrose agar medium after surface sterilization with 0.1% aqueous mercuric chloride for 1 min and thorough washing with distilled water autoclaved at 15 psi for 15 min. Petri dishes were incubated at $28 \pm 1^\circ\text{C}$ for 7 days. White fungal growth that appeared was identified as *Fusarium moniliforme* Sheldon¹.

The fungus was further grown in the condition stated earlier and pathogenicity was tested taking very young undeveloped green fruits nearly of the same age as observed previously. The intact fruits with the cluster were surface sterilized as noted earlier and adhering

water was removed by soaking with sterilized dry blotter. The stigma of 10 fruits each in three clusters dried as above were inoculated using conidia in sterilized cotton swab. The clusters were covered with black polyethylene pockets for four days and then with clourless transparent polyethylene pockets internally sprinkled with sterilized water to maintain high RH for next five days. The pockets were then removed and incubation period was maintained for 15,30,45 and 60 days in the atmosphere of November and December 2001. There was no symptom of hollowness of fruits upto 30 days. Incomplete hollowness of 40% of fruits was observed on 45th day while 70% of fruits showed hollowness on 60th day of incubation. The tissue of the fruits showing hollowness during pathogenecity test was plated on potato dextrose agar medium. It was the same fungus as identified earlier.

References

1. Booth C 1971, *The Genus Fusarium*. CMI, Kew, Surrey, England pp.237.