

SURVEY AND SURVEILLANCE OF MAJOR INSECT-PESTS OF BASMATI RICE IN WESTERN UTTAR PRADESH (INDIA)

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ABSTRACT

A survey was conducted on the insect-pests incidence in Basmati rice ecosystem in western Uttar Pradesh of India. In Western U. P. mainly Pusa Basmati-1121, Pusa Basmati-1, Pusa Basmati-6, Pusa Basmati-1509 and Vallabh-22 Basmati varieties are cultivated in which about 60 % area is covered by PB-1121. The crop is infested by many insect-pests which play a significant role in limiting Basmati rice production. Insect-pests infest all parts of the plant at all growth stages, and a few transmit viral diseases such as leafhoppers and plant hoppers. In Basmati rice ecosystem some defender *viz.* dragon fly, spiders and praying mantis also were noticed. In Western Uttar Pradesh some other insect-pests as gundhi bug, rice hispa, brown plant hopper, grasshopper etc. were also found at Rice field. During the survey it was observed that the leaf folder and stem borer were found to be at significance level. A large number of insecticides have been tried for insect-pests management; indiscriminate use of pesticides has led to severe ecological consequences, residues in consumable products and ultimately resistance to the pesticides. The increasing concern for environmental safety and global demands for pesticide residue free food evoked keen interest in pest control through eco-friendly methods.

KEYWORDS: Basmati rice, Survey, Insect-Pests, Residue and Pesticides