## A preliminary study on the effect of *Bt* gene in brinjal against shoot and fruit borer (*Leucinodes* or *bonalis* G.)

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Abstract: Molecular analysis of transgenic eggplant (pusa purple long) developed at National Research Center on Plant Biotechnology, Indian Agricultural Research Institute, New Delhi was carried out with Cry 1Ab and npt II gene specific primers. The product amplified for cry1Ab and npt II genes were of 1 kb and 700 bp respectively, which confirmed the presence of both the genes in all tested plants. The transformed plants were further used for bioassay studies. The survival of larvae and the area damaged in fruits by first instar larvae of Leucinodes orbonalis in both Bt as well as non-Bt eggplants (70 day - old) were recorded. The area of damage was found to be less than 7.58% in 22 out of 25 Bt plants analyzed as against 84.34% in non-Bt plant and two plants showed no damage indicating the potential of Cry 1Ab gene in managing Leucinodes orbonalis.

Key words: Bioassay studies, *Leucinodes orbonalis, Bt* plants, *cry1Ab* and *npt II* genes, stability of transgene expression,