

**FRUIT CHARACTERISTICS AND MORPHOLOGY RESPONSIBLE FOR
RESISTANCE AGAINST BRINJAL SHOOT AND FRUIT BORER *LEUCINODES
ORBONALIS* GUENEE**

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Abstract: In the present study fifty four genotypes of brinjal were screened for their resistance against shoot and fruit borer *Leucinodes orbonalis* Guenee and grouped into various categories based on fruit characters. Genotypes with purple coloured fruits were most infested with 41.7 percent damaged fruits. Whereas, genotypes with white coloured fruits were least infested with 34.21 percent fruit damage. Similarly genotypes with solitary fruiting (39.56 percent), compact seed arrangement in mesocarp (40.58 percent) and round fruits with 42.55 percent fruit damage. While genotypes with fruiting in cluster, loose arrangement of seed in mesocarp and oblong fruits were least preferred. Based on observations on fruit morphology, genotypes with comparatively longer fruits (31.08 percent), larger fruit and calyx diameter (50.46 percent) were most susceptible to fruit borer than genotypes with shorter fruits, lesser fruit and calyx diameter with 30.92, 37.15 and 37.97 percent fruit damage respectively. Genotype IBR-9 with round shaped fruits, compact arrangement of seeds in the mesocarp and fruiting singly was most attacked with 61.65 percent damaged fruits as compare to least fruit damage recorded in genotype IBR-109 with oblong shaped fruits, loose arrangement of seeds in mesocarp and fruiting in cluster. Longer fruits and larger diameter of calyx and fruit were more susceptible to fruit borer attack. Correlation coefficient of fruit and calyx diameter on percent fruit damage by number was significantly positive ($r = 0.8482$)

Keywords: Brinjal, *Leucinodes orbonalis* Guenee, Shoot, Fruit borer

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