

Field Evaluation of Different Aubergine Cultivars against Infestation of Brinjal Shoot and Fruit Borer

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Abstract : Response of different aubergine cultivars against Brinjal shoot and fruit borer (*Leucinodes orbonalis* Guenee.) was evaluated at research farm of PMAS, Arid Agriculture University, Rawalpindi, during 2013. Field trials were conducted in randomized completed block design with four replications for the screening of five cultivars of Brinjal (*Solanum melongena* L) (Short Purpal, Singhnath 666, Brinjal long 6275, Round Brinjal 86602, Round Egg Plant White). Cultivar Round White Brinjal showed maximum fruit infestation (54.44%) followed by Singhnath 666 (53.19%), while minimum fruit infestation was observed in Round Brinjal 86602 (42.39%). Cultivar Short Purpal showed maximum larval population (0.43) followed by Round White Brinjal (0.39), while the minimum larval population was observed in Round Brinjal 86602 with (0.27). It was observed that Round Brinjal 86602 cultivar showed comparatively minimum (*L. orbonalis*) larval population per leaf. The correlation of Brinjal fruit infestation and larval population of (*L. orbonalis*) with the different environmental factors showed that, the average relative humidity was positively and significantly correlated with fruit infestation on cultivars average precipitation showed positive but non-significant correlation on all the cultivars except Singhnath 666 with the value of (0.79) which was positive and significant. The average temperature showed non-significant and negative correlation with Brinjal long 6275, Round Brinjal 86602 and Singhnath 666, but significant negative correlation with Short Purpal and Round White Brinjal. Maximum temperature also showed the significant and negative correlation on all the five Brinjal cultivars which were significant and highly significant. Minimum temperature showed negative correlation and not significant correlation with all the cultivars. Consequently, based on the (*L. orbonalis*) larval density and Brinjal fruit infestation, the Round Brinjal 86602 proved least susceptible and Short Purpal highly susceptible cultivar.

Keywords : evaluation, Brinjal (*Solanum melongena* L), Cultivars, *L. orbonalis*

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