

FIELD SCREENING OF DIFFERENT VARIETIES OF TOMATO AGAINST FRUIT BORER, *HELICOVERPA ARMIGERA* (HUBNER)

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Abstract: A field experiment was undertaken at research farm of Raj Mohini Devi College of Agriculture and Research Station Ambikapur, Surguja of Indira Gandhi Krishi Vishwavidyalaya Raipur (Chhattisgarh) during 2016-17 on twelve tomato varieties on fruit borer, *Helicoverpa armigera* (Hub.). Tomato varieties viz. JK Ratan, JK. 25, JK Nandni, prabhav, Nirmal 2530, N.S. 962, NS 592, Siddharth, Amrita, Bhagya, Kapila and Pusa-Ruby were tested for resistance against *Helicoverpa armigera* infestation under field conditions. The varieties JK 25 and Prabhav had minimum fruit weight loss (1.57% and 3.26%) as well as minimum number of infested fruits (1.85% and 3.79%) respectively by the *Helicoverpa armigera*. These variety also had minimum *Helicoverpa armigera* larval population, i.e. 0.14, and 0.22 larvae/plant, respectively. The variety Pusa-Ruby and Amrita had maximum loss in fruit weight (30.41% and 21.67%) as well as maximum number of infested fruit (30.85% and 23.28%) with larval population of 1.05 and 0.68 larvae/plant. Pusa-Ruby was categorized as susceptible genotypes with fruit infestation (30.85%) and larval population per plant (1.05%). Variety Bhagya, JK Ratan, Siddharth, NS 592, and Amrita (20.21%, 20.51%, 21.10%, 21.44% and 23.28%) was categorized as moderately susceptible. Variety JK Nandini, Kapila, NS 962 Nirmal 2530 (14.70%, 15.62%, 15.81%, and 19.51%) was categorized as moderately resistant. Variety JK 25 and Prabhav (1.85% and 3.79%) and declared as resistant variety to tomato fruit borer.

Keywords: Screening, Tomato varieties, Fruit borer, Vegetable

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