

REACTION OF BT COTTON HYBRIDS AGAINST SUCKING INSECT PESTS IN MALWA REGION OF MADHYA PRADESH

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Abstract: The experiment was undertaken on medium black cotton soil in *Kharif* season of 2015 at College of Agriculture Farm, Indore in randomized block design with nine selected cotton hybrids in three replications with the plot size of 3 x 3 m and plant to plant spacing of 0.6 x 0.6 m. Hybrids were sown on July 1, 2015. These hybrids were ACH-1BG-II, ACH-104-2 BG-II, ACH-152-2BG-II, ACH-115-2BG-II, ACH-1133-2BG-II, ACH-1199-2BG-II, RCH- 2 BG-II (standard check), ACHB-90-1BG-II and MRC-7918 BG-II (standard check). The population of aphid, jassid, thrips and whitefly, were recorded at 20, 30, 40, 50, 60, 70, 80, 90, 100, and 110 days after germination (DAG) on 5 observational tagged plants from two lower, two middle and two upper leaves per plants. The cotton yield was recorded on whole plot basis and converted into kg per hectare. All the received data were analysed statistically. On the basis of overall mean of all the intervals the minimum jassid population was noted in ACH-1199-2BG-II (5.85) and found at par with standard Check MRC-7918 BG-II (6.29). The continuous increasing trend from first to last observation was observed for whitefly, aphid and thrips. The mean whitefly population was recorded least in ACH-1199-2BG-II (8.04) and found at par with standard check MRC-7918BBG-II (8.51) and standard check RCH-2BGII (8.53). In relation to aphid, standard check RCH-2BG-II (17.57) showed minimum population and found at par with ACH-1199-2BG-II (17.83). The least thrips population was noted in ACH-1199-2BG-II (15.17) and found to be at par with standard check MRC-7918BBG-II (15.93), ACH1133-2BG-II (16.01) and standard check RCH-2BG-II (16.37). The Highest seed cotton yield was observed in ACH-1155-2BG- II (2669kg/ha) and showed no significant difference with ACH-1199-2BG-II (2602 kg/ha), ACH-152-2BG-II (2262 kg/ha) and other hybrids.

Keywords: Bt cotton, Hybrids, Aphid, Leafhopper, Thrips, Whitefly, Reaction

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