



RESEARCH PAPER

Seasonal incidence of major sucking pests of Bt cotton and their natural enemies with relation to weather parameters

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Abstract : Study on population dynamics of major sucking pests infesting Bt cotton showed that aphid, jassid, whitefly and thrips initiated from 28th SMW (2nd week of July), 28th SMW (2nd week of July), 29th SMW (3rd week of July) and 27th SMW (1st week of July), respectively. Peak infestation of aphid (21.20 aphid per 3 leaves) observed during 1st week of December (49th SMW). Jassid population observed highest in 40th SMW (14th WAS) with 9.88 jassid per 3 leaves, while the maximum whitefly population was observed during 43rd with 11.84 whitefly per 3 leaves. Population of thrips reached its peak during 34th SMW (8th WAS) with 15.32 thrips per 3 leaves. The peak population of lady bird beetles (4.52 grubs and adults per plant) was recorded during 43rd SMW (17th WAS) and the peak population of spider was recorded during 34th SMW (8th WAS) *i.e.* 1.36 spider per plant. Among the different abiotic environmental factors, jassid and whitefly had significant positive correlation with maximum temperature. Significant positive correlation was showed by thrips with minimum temperature. Morning relative humidity and evening relative humidity showed non-significant negative correlation with all sucking pest except thrips. Rainfall had non-significant positive correlation with jassid, whitefly and thrips. Bright sunshine had non-significant positive correlation with all sucking pests except thrips.

Key Words : Population, Bt Cotton, Bharuch, Sucking pests complex

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