

**Comparative estimation of damage caused by *Bemisia tabaci* (Genn.) in different varieties of cotton in varmin**

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**ABSTRACT**

Different cotton varieties which in view of yield production and fiber technology have been under studies, are showed to be competent for cultivation in country. In case of pests like white fly (*Bemisia tabaci*) integrated pest mangement (IPM) has been applied. In order to protect environment from pollution preservation of biological equilibrium and reduction of pesticides consumption, it is necessary to evaluate the tolerance to pests of cotton varieties. In this experiment ten cotton varieties compared with each other in a complet randomized block design with 4 replications in Varamin region. No chemicals were applied in experimental field. Data taking were done in exprimental plots from late June to mid November with selecting 120 leaves from plots and counting adults, nymphs and puparia.

At the end of growing season manner of infestation regarding Economic Threshold Level (E.T.L) (5 Number on leaf) were statisticaly analysed on different varieties. Since the leaf area index (LAI) differs in different varities, to determine the interaction of LAI and infestation rate, the leaf area indices were mesaured in September.

Results in five years studies, showed Pak cultivar with 5.8 weeks above ETL had highest susceptibility and Okra variety during five years never reached the economic threshold level and cultivars, Sahel, Varamin and Bakhtegan were intermediate in this respect.

As a general conclusion regarding the tolerance to pests, fiber quality and adaptation of studied varieties (Varamin, Sahel, Bakhtegan and Ultan) it can be said,

they are qualitatively acceptable. As the glandless variety Pak recommended to sown in central part of Iran where the *Bemisia* is not prevalent its unsensitiveness to leafhoppers is a beneficial characteristic.

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