

RESEARCH PAPER

Influence of abiotic and biotic factors on the incidence of white fly, *Bemisia tabaci* (Gen.) on tomato

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The incidence of whitefly was started in the fourth week of August (1.80 / plants). The whitefly population reached to its peak (21.10 white fly / plants) in the last week of September (39th meteorological week). Average maximum (33.61 °C) and minimum (18.58°C) temperature with average morning and evening relative humidity was 74.01 and 46.42 per cent, respectively, favoured the faster multiplication of white fly. The initial incidence of *C. septempunctata* was recorded in the last week of August and attained its peak in the last week of September. The population of *C. septempunctata* was influenced by the host insect as both were at peak the same time (3.50 beetles / 21.10 whitefly). Positive and non-significant correlation was found between whitefly and maximum temperature ($r = 0.5546$) and significant positive correlation was found between minimum temperature ($r = 0.2025$). The relationship between the whitefly population and rainfall was also negative and non-significant ($r = - 0.1636$). Positive non-significant correlation was found between beetle, *C. septempunctata* and maximum temperature ($r = 0.2620$), minimum temperature ($r = 0.2990$).

Key words : *Bemisia tabaci*, Abiotic factors, *C. septempunctata*

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