

STUDIES ON POPULATION DYNAMICS OF SUCKING INSECT PESTS OF MUSTARD CROP (*BRASSICA CAMPESTRIS*)

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ABSTRACT

An experiment on population dynamics of sucking insect pests of mustard crop was conducted. Six varieties of mustard crop viz. Yellow sarsoon, Brown sarsoon, Dark green leaves, Torya Early, Raya Anmol and Ria S-9 were cultivated. Results indicated that sucking insect pests such as *Bemisia tabaci*, (Genn). *Lipaphis erysimi* (Kalt). and *Bagrada picta* (F). appeared from seedling till harvest of the crop. Two peaks in the population of *B. tabaci* and one peak in the population of *L. erysimi* and *B. picta* were recorded. The over all means showed that the maximum (6.71 ± 0.98) per leaf population of *B. tabaci* was recorded on Yellow sarsoon followed by Dark green leaves (6.30 ± 0.61), Brown sarsoon (6.19 ± 0.63), Raya Anmol (5.40 ± 0.55), Torya Early (5.38 ± 0.57) and Rai S-9 (3.79 ± 0.50). The population of *L. erysimi* in descending order was (9.27 ± 2.12), (8.09 ± 1.81), (7.93 ± 1.76), (6.37 ± 1.35), (6.13 ± 1.41) and (2.07 ± 0.36) recorded on Yellow sarsoon, Brown sarsoon, Dark green leaves, Raya Anmol, Torya Early and Rai S-9, respectively. The highest (5.38 ± 0.57) population of *B. picta* was recorded on Torya Early and least on S-9 (3.79 ± 0.50). The analysis of variance showed significant difference in the populations of all sucking insect pests on all six varieties. However, LSD showed non-significant difference in the population of *B. picta* on varieties Yellow sarsoon and Dark green leaves; Torya Early and Raya Anmol. For the population of *L. erysimi* non-significant differences were recorded between Brown sarsoon and Dark green leaves; Torya Early and Raya Anmol. Similar difference was also recorded in the population of *B. picta* on Torya Early and Raya Anmol; Brown sarsoon and Dark green leaves, Yellow sarsoon and Rai S-9. The predators such as spiders, Coccinellids, *Coccinella septempunctata*, *Menochilus sexmaculatu*, Lacewing *chrysopa carnea* and Minute pirate bug *Orius tristicolor* were found active on these insect pests. However, maximum activities were recorded on the varieties having maximum insect pest activities.

Keywords: Mustard, *Bemisia tabaci*, *Lipaphis erysimi*, *Bagrada picta* and predators.