

Bioefficacy of new insecticides against onion Thrips (*Thrips tabaci* L.) in Uttar Pradesh

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ABSTRACT : Onion is a major bulb crop among the cultivated vegetables for vegetarian and non-vegetarian society in our country. The studies were carried out at Department of Vegetable Science, Kalyanpur, Chandra Shekhar Azad University of Agriculture and Technology, Kanpur during *rabi* season 2012-13 and 2013-14. The experiment laid out in a randomized block design (RBD), consisting of ten treatments and each replicated thrice. The insecticides/botanicals *viz.*, imidacloprid (0.005%), thiamethoxam (0.005%), acetamiprid (0.004%), cypermethrin (0.01%), dimethoate (0.03%), triazophos (0.04%), profenophos (0.05%), NSKE (5.00%) and azadirachtin (0.5%) along with untreated control were evaluated. The insecticides were sprayed in the third week of February and again fifteen days after the first application. The population of *Thrips tabaci* was recorded from the base of the newly emerged leaves in the lower center of the neck a day before spraying and 1,3,7,10 and 14 days after spraying. The average population was calculated. The average thrips population was significantly low in all insecticides/botanical treatments. In case of first spray, 1st day after application of imidacloprid (0.10 thrips/plant) were found most effective, followed by thiamethoxam (0.15 thrips/plant) and dimethoate (0.18 thrips/plant); these treatments were statistically at par to each other. The treatments of NSKE proved as least effective, followed by azadirachtin. The total yield was found to be in the range of 230.36 to 268.14 q/ha in comparison to 202.95 q/ha in untreated control.

Key Words : *Allium cepa* L., thrips (*Thrips tabaci* L.), bioefficacy, insecticides/botanicals.