

SPECIES DIVERSITY, INFESTATION INTENSITY AND MANAGEMENT OF FLEA BEETLE ON CABBAGE

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Executive Summary

The experiment was conducted in the experimental farm of Sher-e-Bangla Agricultural University, Bangladesh during the period from October 2017 to March 2018 to find out the available species of flea beetles, their infestation intensity and management practices in the cabbage. It was laid out in a Randomized Complete Block Design with three replications. Nine treatments, viz. T₁= Sevin 85WP @ 2.0 g L⁻¹ of water at 7 days interval, T₂= Decis 2.5 EC @ 1.0 mL L⁻¹ of water at 7 days interval, T₃= Voliam flexi @ 0.5 mL L⁻¹ of water at 7 days interval, T₄= Ripcord 10EC @ 1.0 mL L⁻¹ of water at 7 days interval, T₅= Dursban 20 EC @ 1.0 mL L⁻¹ of water at 7 days interval, T₆= Tobacco leaf extract @ 3.0 g L⁻¹ of water at 7 days interval, T₇= Neem seed kernel extract @ 3.0 g L⁻¹ of water at 7 days interval, T₈= Bioneem plus 1EC @ 1.0 mL L⁻¹ of water at 7 days interval and T₉= untreated control were used. Stripped flea beetle (*Phyllotreta striolata*) and white-spotted flea beetle (*Monolepta signata*), these two species of flea beetle were found in the experimental field. Flea beetles caused on an average 37.41% leaf infestation of cabbage in the untreated control field. Among all the treatments T₄ (Ripcord 10 EC) performed the best in managing flea beetles based on the lowest percentage of leaf infestation (5.84%), lowest no. of holes per plant (6.13), lowest percentage of head infestation by number (18.04) and highest percentage of infestation reduction over untreated control on all parameters at vegetative stage of plant. Again, the lowest leaf infestation intensity (5.73%), lowest number of holes per infested head (14.00), lowest percentage of infestation of head by number (6.69) were achieved at harvesting stage from the same treatment (T₄) whereas the highest values of all these parameters were achieved from untreated control treatment (T₉). T₄ treatment provided the best performance in yield where yield was increased (112.51%) over control, giving maximum yield 75.76 tons ha⁻¹. Bioneem plus 1EC (T₈) performed the best among the biopesticides while the neem seed kernel extract showed less effectiveness against flea beetle.

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