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Effects of border crops on insect pests of Cabbage with special reference to Diamond-Back Moth

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This study was carried out in the Agricultural farm of the University to assess the efficiency of Tomato, Chrysanthemum and Mustard as border crops on the management of Diamondback Moth (DBM) of cabbage.

The experiment, which was carried out in a Randomized Complete Block Design (RCBD) consisted of four treatments *viz* Tomato, Chrysanthemum and Mustard crops as border crops of cabbage with a control bordered with cabbage plants. The experiment was replicated five times. In each plot three rows of cabbage were plated at 60 X 40 cm as main crop. The number of DBM larvae, pupae and infested leaves of cabbage in each treatment were counted. Other insects on cabbage and on border crops were also observed. The experiment plots were managed according to the cultural practices recommended by the Department of Agriculture, Sri Lanka. No insecticides were applied during the period of this study.

The infestation of DBM on cabbage plants bordered with tomato and mustard was significantly ($p < 0.01$) lower than that of crops bordered with chrysanthemum and control.

In addition, high infestation of Bagrada bugs and aphids was found on mustard plants and on cabbage plants bordered by mustard. This indicates that the crop may act as an attractant for these two pests. Mealy bugs, white flies and spiders on tomato plants, and ladybird beetles on chrysanthemum were observed.

The finding of this study reveals that tomato and mustard grown as border plants are effective in preventing DBM attack on cabbage.

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