EFFICACY OF LANTANA (Lantana camara L.) EXTRACTS AGAINST THE STRIPED FLEA BEETLE (Phyllotreta striolata Fabr.) IN PECHAY (Brassica rapa L.)

A Project Report

Presented to

the College of Agriculture, Resources, and Environmental Sciences

Central Philippine University

Jaro, Iloilo City

In Partial Fulfillment
of the Requirements for the Degree
BACHELOR OF SCIENCE IN AGRICULTURE

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May 2019

FLEA BEETLE (Phyllotreta striolata Fabr.) IN PECHAY (Brassica rapa L.)

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ABSTRACT

This study was conducted at the back field of the Lenwood Edge Building, Central Philippine University, Jaro, Iloilo City from April 8 to May 8, 2019. This was done to assess the efficacy of lantana aqueous crude extracts against the adults of striped flea beetle (Phyllotreta striolata Fabr.) in pechay. The treatments were composed of four concentrations of lantana aqueous extracts (1%, 3%, 5%, and 7%) and tap water as negative control. The treatments were arranged in a randomized complete block design with three replications. Each treatment used five pots planted with four seedlings/pot. Results showed that the plants treated with 7% lantana aqueous crude extract (LACE) significantly had the lowest beetle count while the plants in the control treatment had the highest count. In addition, the slightest feeding damage with a scale of 1 was also observed in this treatment. The data on the number of leaves and plant height taken at 1 WAT to 2 WAT was not significantly affected by the botanical spray at different levels. However, significant differences among treatment means were apparent at 3 WAT to 4 WAT which can be attributed to the maximum growth of pechay at this stage. Consequently, the significantly highest plant yield was recorded from those plants treated with 7% LACE. This was due to the control action of lantana that resulted in low beetle count and feeding damage. From these results, it can be concluded that lantana aqueous crude extracts can be used as bio-pesticide to control striped flea beetles on pechay.