THE EFFECTS OF *Dioscorea hispida* Schlussel CRUDE EXTRACT ON *Papilio demoleus* L. LARVAE WITH NOTES ON THE DEVELOPMENTAL STAGES OF *Papilio demoleus* L.

(Lepidoptera : Papilionidae)

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by

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APPROVAL SHEET

This thesis entitled "THE EFFECTS OF Dioscorea hispida Schlussel CRUDE EXTRACT ON Papilio demoleus L.LARVAE WITH NOTES ON THE DEVELOPMENTAL STAGES OF Papilio demoleus L. (LEPIDOPTERA:PAPILIONIDAE)" prepared and submitted by Alexie B. Banaag in partial fulfillment of the requirements for the degree in Master of Science in Biology has been examined and is recommended for acceptance and approval for ORAL EXAMINATION.

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ABSRACT

This study deals with the determination of the effectivity of the crude extract of Nami (Dioscorea hispida Schlussel) on Papilio demoleus L. larvae as to whether its action is a contact poison, antifeedant or as repellent. It also provides notes on the devlopmental stages on Papilio demoleus L. Lethal dose 50 was determined as the basal concentration to obtain subconcentrations. Lethal Dose 50 concentrations are as follows: 30%,40%,45%, 53% and 60% for instars 1, 2, 3, 4 and 5, respectively. Two controls were used, endrin for positive and water for the negative controls.

Results showed the effectivity of the crude extract resulting to the death of the larvae through contact application. Higher concentration of the extract is highly significant compared to the negative control; however, positive control was always highly significant compared to other concentrations. Antifeedant activity was significantly observed on wet method which indicates that the crude extract contains substance that would deter or reduce feeding resulting to the death of the larvae which might be due to starvation or by stomach poison. Repellent action was also observed only on wet leaves for two hours which indicated that the extract contains a substance that is highly volatile.

Papilio demoleus L. takes 44 1/2 days to complete its entire life cycle. Length of the organism was measured and found out to slightly differ from the study of Apas and Domo,1990.

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