SPECIES DIVERSITY OF ECONOMIC INSECTS IN FAMILY SATURNIIDAE IN PLANT GENETIC CONSERVATION AREAS

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ABTRACT

Exploring period of 11 January – 9 September 2011, the economic saturniid insects were surveyed and collected in plant genetic conservation area of Sirindhorn Dam, Ubon Ratchathani Province. There were 2 types for survey and collection by direct survey and using light trap. Direct survey was carried on in 3 directions, the sign of insects in family Saturniidae were found : Tasar (*Antheraea* spp.) in the 2nd - and 3rd directions, Avocado caterpillar (*Cricula trifenestrata*) in the 1st direction. The majority of main host plants of insects in Saturniidae were *Shorea obtusa* and *S. siamensis* for tasar silkworm and *Anacardirm occidentale*, principal food plant for *Cricula trifenestrata*. The life cycle of *C. trifenestrata* was studied using leaf of *A. occidentale* as food plant under laboratory condition (Temp. 21-29 °C, 52-91% R.H.). The results in preliminary study showed that the avocado caterpillar could complete life cycle with complete metamorphosis. Life cycle lasted 53-71 days, egg stage 10-12 days, larva stage (1st-5th) 23-27 days, pupa stage 18-21 days, male and female moth 2-11 days. The preliminary method for yarn production from cocoon of *C. trifenestrata* was developed. Result revealed that the silk yarn was producible and this yarn was potentially to be produced textile products.