

ABSTRACT

DAMAGES CAUSED BY COFFEE BERRY BORER (*Hypothenemus hampei* Ferrari) AND TWIG COFFEE BORER (*Xylosandrus* sp.) ON COFFEE CULTIVATED IN AGROFORESTRY SYSTEMS IN WEST LAMPUNG

By

Suharyanto

The objective of this study was to examine and to compare percentages of crop damages caused by coffee berry borer (*Hypothenemus hampei* Ferrari) and twig coffee borer (*Xylosandrus* sp.) on coffee cultivated in two different agroforestry systems i.e complex vs simple agroforestry system. The study was conducted on July to October 2011 by observing small holder coffee fields in Talang Bodong, Sukajaya Village, District of Sumber Jaya, West Lampung. On each agroforestry system, five fields were surveyed to determine the damage percentages on coffee berry and plants caused by the two insect pests. Results of the survey showed that the practices of agroforestry systems influenced the percentages of coffee berry damages on coffee fields. The damage in coffee crops at the complex agroforestry system were 81%, significantly lower compared to 91,8% in the simple agroforestry system. The percentages of coffee berry borer damage, however were not significantly different (P value = 0,05). There was also no significant difference (P value = 0,05) between damages caused by the twig coffee borer and the scale insects in simple and complex agroforestry systems. Shade tree species diversity was negatively correlated ($r = -0,87$) with the intensity of coffee berry borer damage.

Key words : *Hypothenemus hampei* Ferrari, coffee berry borer, *Xylosandrus* sp twig coffee borer, coffee-based agroforestry based.