ABSTRACT

Setyasa, Ighfir Rivia. 2011. Thesis. Threshold Determination Full Ladybug Chocolates (*Riptortus anulicornis*) on Soybean Plants (*Glycine max* (L.) Merrill) Varieties Wilis. Advisor: Dwi suheriyanto M.P, Ir. Yuliantoro Baliadi M.S, Ahmad Barizi, M.A. Department of Biology, Faculty of Science and Technology, Islamic University of Malang.

Keywords: Ladybug brown (*Riptortus anulicornis*), Soybean, Threshold Control.

In the Qur'an mentioned about the plant diversity that is "And if they do not pay attention to the earth, how much we grow in the earth that various kinds of plants, good? Verily in this is there really a sign of God's power and most of them do not believe "(Surat ash-Syu'araa '; 7-8) Determination of Threshold Control in pest based on the level of loss of a wise step to reduce the risk of high cost of production and the environment. Calculating the value of control threshold based on the principle of chocolate ladybugs breakeven pest control, namely the equal worth of cost control and loss of crops saved by pest control measures.

This study aimed to know To know the value of control threshold R. anulicornis on soybean plants. This research was conducted in April-September 2010 at Entomological Laboratory Plant Research Nuts and Tuber (BALITKABI) Malang, using Completely Randomized Design (CRD), five treatments with four replications, treatments were tested are five levels adult population R . annulicornis ie, P0 = no infestation or 0 pairs of adult R. annulicornis as a control, P1 = 1 pair adult infestations R. annulicornis, P2 = infestations 2 pairs of adult R. annulicornis, P3 = infestations 3 pairs of adult R. annulicornis and P4 = infestation 4 pairs of adult R.annulicornis/10 clump soybean. Variables measured is the level of attack R.anulicornis on the number of pods, number of seeds and seed weight, the rate of loss of yield, control threshold value R. anulicornis on soybean plants.

The results showed that soybean yield losses due to infestation of brown ladybugs expressed by the regression equation Y = 15.24 x - 10.98 and the value of R2 = 0.946 [y = yield losses (%); x = population of ladybugs chocolate (ekor/10 grove]. This implies that the attack imago has a very strong relationship with the loss of which 94.6% are caused by the attack and the rest imago R. anulicornis yield losses is influenced by the presence of factors outside of treatment. In the range of 0-4 pairs of brown ladybug populations / 10 families, the higher the population, the higher the yield losses. conclusion, based on data and formulas to calculate the threshold control, pest control threshold value R. anulicornis can be determined, ie an average of 1.3 or the same family pasang/10 2.6 tails / 10 clusters.