

THE EFFECT OF HABITAT MODIFICATION WITH TRAP CROP TREATMENT OF FLOWERING PLANT ON POLLINATOR INSECT VISITATION ON CHILLIES

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ABSTRACT

In addition to affecting insect pests, trap crop treatment with flowering plants was also reported to affect pollinator insect visitation. Therefore, the purpose of this study was to analyze the effect of habitat modification by trap crop treatment of flowering plants (kenikir and sun) on the visitation of pollinator insects on chili plantations. This experimental research was conducted in the experimental garden of the Faculty of Agriculture UGM in Banguntapan, Bantul. The independent variable of this research is the type of trap crop, namely kenikir flower and sunflower. Each treatment consisted of 5 replicate plots, with a uniform plot area (4m²). As a control is a plot without a trap crop. Random plot placement. When chili plants began to flower, for 7 days the dependent variable was observed, namely the diversity of pollinator insects that visited chili plants and trap crops, and their longevity. All observations were made for each plot. When the chili plants are harvested, the wet weight of chili fruit per plot is calculated as the yield. Analysis of diversity data with the Shannon-Wiener Diversity Index formula. Different tests were carried out using ANOVA to determine whether there were differences between treatments for pollinator insect visitation. The results showed that the trapcrop treatment with kenikir flowers had the highest diversity index and evenness index of pilinator insects that visited chili plant flowers compared to other treatments. However, kenikir flowers were more attractive to pollinators than chili plants, so the diversity index, evenness and the number of individual insects that visited kenikir flowers were higher than pollinators which visited chili flowers.

Kata Kunci: *trap crop, visitation, pollinator insects, chilli crop*