

# **ADDITION OF HONEY BEE COLONIES (*Apis mellifera*) IN PLANT POLLINATION EDAMAME SOYBEAN**

**Aulia Devy Ragillita; M. Syarief**

Agricultural Production Department, State Polytechnic of Jember

Jalan Mastrip PO.Box 164 Jember 68121

\*Corresponding author: devyragillita@gmail.com

## **ABSTRACTS**

Diversity of pollinators is important in the process of pollination of plants which can increase the quality and quantity of edamame soybean production. This research was conducted from October to December 2019 in the village of Dukuh Mencek, Sukorambi District, Jember Regency by comparing two different locations. This study aims to determine the effect of adding honey bee colonies (*Apis mellifera*) on pollinator insect diversity, Shannon-Weiner Diversity Index ( $H'$ ), number of pods and pod weight on two cultivated lands with different treatments. The first land was treated with the addition of honey bees (*Apis mellifera*) and the second field was without the addition of *A.mellifera*. Data analysis using SPSS version 15.0 software. The results showed that the Diversity Index in the field with the addition of *A.mellifera* was 1.77, the number of pods was 20.88 pods / hill, and for pod weight was 41.66 grams / hill. Whereas on land without the addition of *A.mellifera*, the Diversity Index was 1.56, the number of pods was 29.76 pods / clump, and the weight of pods was 51.72 grams / hill.

**Keywords:** *Apis mellifera*, pod weight, pollinator diversity, edamame soybeans.