

**EFFECT OF ORGANIC CONVERSION CULTIVATION TECHNIQUES
AND CONVENTIONAL TO DIVERSITY OF HERBIVORE
ARTHROPODS AND PREDATOR EDAMAME
SOYBEAN PLANTS**

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ABSTRACT

Arthropod diversity is important in pest management, because it includes herbivores, predators, and parasitoids that determine pest management techniques that use plant-based pesticides. This study aims to determine the diversity of arthropods, the Shannon-Weiner Diversity Index (H'), Dominance Index (C), and the number of pods and pod weight in organic and conventional conversion cultivation land. This research was conducted in March-May 2019 in the village of Dukuh Mencek, Sukorambi District, Jember Regency with comparing two different locations. The first location is the cultivation of organic conversion Edamame soybean using combination plant-based pesticides, solid organic fertilizer. The second location is conventional cultivation techniques using inorganic fertilizers and synthetic pesticides. Data analysis using non-parametric statistical tests using SPSS software version 25.0. The results showed that the Diversity Index in the organic conversion culture technique was 1,18, the Dominance Index was 0,53, the number of pods was 26,500, and the weight of the pod was 46,960 grams. Whereas on conventional land the Diversity Index shows 1.53, the Dominance Index is 0,38, the number of pods is 30.020, and the pod weight is 52,720 grams.

Key words: *Conventional, diversity index, number of pods, organic conversion cultivation, pod weight.*