

ABSTRACT

RELATIVE POPULATIONS OF GRASSHOPPER COMMUNITIES IN LOWLAND VEGETATIONS IN KECAMATAN PESISIR TENGAH, WEST LAMPUNG

By

Nur Jumhar Ruanda

This research aims to study and analyze the diversity of grasshopper communities of lowland vegetations in Kecamatan Pesisir Tengah, West Lampung. The study main interest is to assess the relative population of the migratory locust (*Locusta migratoria manilensis* Meyen) (Orthoptera: Acrididae) in the grasshopper communities in costal areas . The research was conducted from April to August of 2010. A purposive sampling method was applied to survey grasshopper communities in six vegetation types, i.e. wetland rice fields, mixed dry-land crops/vegetation, monoculture plantation crops, polyculture plantation crops, agro-forestry, and grasslands. Community characteristics of grasshoppers investigated in this study were: (1) relative population of each grasshopper, (2) Shannon-Wiener Diversity Index, (3) Simpson's Diversity Index, (4) prominence value of each species, and (5) Index of Similarity. Results of the study indicate that grasshopper communities were dominated by the family of Acrididae, especially *Oxya* genus, while the relative abundance of *Locusta* was relatively low (9.22%) on grass vegetation. The highest similarity index among grasshopper communities was found between rice fields and mixed dry-land vegetations. The Shannon index value suggested that the highest diversity of grasshopper communities was found on grass vegetation and mixed dry-land vegetation while the lowest diversity of grasshopper was found on wetland rice fields where *Oxya* was the most dominant genus.