



ChemTech

International Journal of ChemTech Research

CODEN (USA): IJCRGG, ISSN: 0974-4290, ISSN(Online):2455-9555
Vol.13 No.02, pp 61-68, 2020

Diversity and Abundance of Insects on Pineapple (*Ananas comosus* (L.) Merr.) Plantation at Bolaang Mongondow District

Juliet Merry Eva Mamahit¹

¹Plant Protection Study Program, Faculty of Agriculture, Sam Ratulangi University,
Manado North Sulawesi 95115, Indonesia

Abstract : Bolaang Mongondow District is one of the centers of pineapple production in Indonesia that reside in province North Sulawesi, Indonesia. This research was aimed to know diversity and abundance of insect in pineapple plantation, detect species evenness of insect in to type agroecosystem of pineapple with polyculture and monoculture systems. This research was carried out at pineapple plantation on Lobong village, Bolaang Mongondow District. Insect diversity was observation in pineapple plants will be done by using pith fall traps. The trapping was put in two land research locations that have different system that's polyculture and monoculture agroecosystem. The sample from trapping was putted into the sample bottle was sorted and identified. The analysis was done to detect diversity of insect with measures index of diversity Shannon and index of evenness Shannon-Wiener. The result showed that biodiversity of insect on pineapple plant that applies cultivation polyculture system more various from in cultivation monoculture system. Total family of insect that found at polyculture land that were 17 families with totals 1614 individuals and monoculture 12 families with totals 1450 individuals. The Shannon and Evenness diversity index in plants with polyculture systems were 0.664 and 0.571 higher than in monoculture systems (0.571 and 0.206). All types of insects that were found both in pineapple plantations were polyculture and monocultures have almost the same level of evenness ($E < 1$). The both of system agriculture for apply system polyculture also monoculture was found family Formicidae in the order Hymenoptera be insect dominate of the area pineapple plantations.

Keywords : diversity, abundance, evenness, insect, *Ananas comosus*, pineapple.

Juliet Merry Eva Mamahit/International Journal of ChemTech Research, 2020,13(2): 61-68.

DOI= <http://dx.doi.org/10.20902/IJCTR.2019.130208>
