

ABSTRACT

Fitriani, Fina. 2015. Insect Diversity in Tea Plant (*Camellia sinensis* L.) in Plantation Tea PTPN XII Bantaran Blitar. Thesis, Department of Biology, Faculty of Science and Technology, State Islamic University (UIN) Maulana Malik Ibrahim Malang. Supervisor I: Dwi Suheriyanto, MP Advisor II: Dr. H. Ahmad Barizi, M.A.

Keywords: diversity, the role of insects, tea, PTPN XII, Blitar

Tea plantation PTPN XII Bantaran Blitar is one of the agricultural sub-sectors that have the potential to be a mainstay of food agro-industry. Insects are animals with the largest number of all species on this earth, has a wide variety of roles and its presence is everywhere, making the insect is very important in the ecosystem, especially for the agricultural sector as well as on the tea plantation PTPN XII Bantaran Blitar that require insects which act as pollinators such as butterflies and insects act as predators. Insect diversity in some places may vary. The study aims to determine the diversity of insects and insect families dominant in the tea plantation PTPN XII Bantaran Blitar.

The study was conducted on a tea plantation PTPN XII Bantaran Blitar. Identification of insects is done in Laboratory Optical Laboratory of Ecology and Department of Biology, Faculty of Science and Technology of the State Islamic University (UIN) Maulana Malik Ibrahim Malang in March to April 2014. The study using exploratory methods, namely direct sampling and retrieval using a *fly net*. Data were analyzed using the program past 3:01, while identification using books Borror et al., (1992), Siwi (1991) and *BugGuide.net* (2014).

The results showed the tea plantations obtained 8 orders, 18 families and 1269 individuals. At station 1 comprises 6 orders and 13 families with a total of 220 individuals, including Formicidae, Encyrtidae, Tenthredinidae, Phyrrocoridae, Cicadellidae, Muscidae, Micropezidae, Tachinidae, Syrphidae, Stratiomyidae, Sciaridae and Acrididae, 3 families as predators, 7 families as herbivores, 1 family as pollinators and 2 families as parasitoids. At station 2 consists of 7 orders and 15 families with a total of 414 individuals, including Formicidae, Encyrtidae, Tenthredinidae, Phyrrocoridae, Cicadellidae, Muscidae, Micropezidae, Curtonotidae, Tachinidae, Syrphidae, Stratiomyidae, Acrididae, Mantidae, Coccinellidae, and Cryshomelidae, 4 family as predators, 8 families as herbivores, 1 family as pollinators and 2 families as parasitoids. While on station 3 consists of 7 orders 13 families with a total of 572 individuals, including Formicidae, Tenthredinidae, Phyrrocoridae, Cicadellidae, Muscidae, Micropezidae, Curtonotidae, Syrphidae, Sciaridae, Acrididae, Coccinellidae, Cryshomelidae and Pieridae, 3 families as predators, 6 families as herbivores, 2 family as pollinators and 0 families as parasitoids. Diversity index (H') cumulatively at station 1 the highest of 1.73 from the station 2 is 1.51 and and at station 3 is 1.05, while the proportion of insect family is highest at station 3 with a value of 0.92 ie of the order hymenoptera family Formicidae.