

ABSTRACT

Oil palm plantations are monoculture systems that are susceptible to pest attacks. Caterpillar is an important pest that most often appears in oil palm plantations due to its potential to reach a peak attack point. This study aims to determine the distribution pattern of bagworm pests and parasitization of larval parasitoids of bagworm pests in oil palm agroecosystems. The research was conducted in PTPN III Oil Palm Plantation Tanah Raja and in the Laboratory of Faculty of Agriculture, Malikussaleh University. This research was conducted in February 2024. Determination of sample plants includes the phase of plants that have produced (TM) taken 25 plants. The caterpillar species found were *Metisa plana* and *Mahasena corbetti* with *Metisa plana* found a total of 684 individual while *Mahasena corbetti* 106 individual. *Metisa plana* experienced an increase in population density. Estimating the distribution pattern of leaf-eating pests on oil palm plants by observing and counting the number of pests from each sample plant. The distribution pattern of *Metisa plana* was distributed in clusters and *Mahasena corbetti* was uniformly distributed. And the parasitoids obtained after being identified in the laboratory were the family Ichneumonidae subfamily Ichneumoninae.

Keywords: bagworm, oil palm, parasitoids