

ABSTRAK

Antonius Mula Jaya Simbolon, Preferensi Pakan Stadia Larva *Setothosea asigna* Terhadap Daun Tanaman Kelapa Sawit (*Elaeis guineensis* Jacq.). Dibimbing oleh Julaili Irni, S. Si., M. Si.

Peranan serangga sebagai hama menyebabkan kerugian bagi tanaman budidaya dan manusia. Terutama *Setothosea asigna* sebagai hama ulat pemakan daun tanaman kelapa sawit, sehingga pengendalian hama ini penting dilakukan, namun pengetahuan dalam pengendalian terkhususnya ulat pemakan daun kelapa sawit (UPDKS) yang selama ini di gunakan dalam budidaya tanaman kelapa sawit hanya berpedoman pada nilai batas ambang ekonomi tanpa memperhatikan tipe instar larva yang menyerang tanaman.

Penelitian ini bertujuan untuk mengetahui preferensi pakan stadia larva *Setothosea asigna* terhadap daun tanaman kelapa sawit (*Elaeis guineensis* Jacq.). Penelitian dilakukan di lahan percobaan Emplasmen PTPN IV unit laras desa Nagori Laras Kecamatan Bandar Huluan, Kabupaten Simalungun, Sumatera Utara. Metode yang digunakan dalam penelitian yaitu *experimental design* dan Teknik *observasi* untuk pengambilan objek penelitian. Perlakuan dalam penelitian adalah memberikan pakan daun tanaman kelapa sawit dengan 2 waktu yaitu pukul 07 :00 WIB dan pukul 19:00 WIB dan pengukuran faktor lingkungan (suhu ruang, kelembaban udara, dan intensitas cahaya). Selanjutnya data tingkat konsumsi yang diperoleh akan dianalisis menggunakan persamaan regresi linear sederhana.

Hasil pengamatan menunjukkan bahwa larva *Setothosea asigna* lebih aktif mengkonsumsi pakan di malam hari, tingkat konsumsi paling tinggi terdapat pada instar 7 larva *S. asigna*, di pagi hari sebanyak 2158 mm² dan malam hari sebanyak 2977 mm² serta hasil analisis regresi linear sederhana menunjukkan bahwa, tipe instar berbanding lurus dan berpengaruh secara langsung (positif) terhadap jumlah pakan daun tanaman kelapa sawit (*Elaeis guineensis* Jacq.)

Kata kunci: Preferensi, Tipe Instar, Pakan, Larva, Tanaman.

ABSTRACT

Antonius Mula Jaya Simbolon, Feed Preference of Setothosea asigna larva against the leaves of oil palm plants (Elaeis guineensis Jacq.). Supervised by Julaili Irni, S.Si., M.Si.

The role of insects as pests causes harm to crops and humans. In particular Setothosea asigna as a caterpillar pest that eats oil palm plant leaves, so controlling this pest is important, but knowledge in controlling especially the palm oil leaf-eating caterpillar (UPDKS) which has been used in oil palm cultivation only refers to the economic threshold value without pay attention to the type of larval instar that attacks the plant.

This study aims to determine the feed preferences of Setothosea asigna larval stage against the leaves of oil palm plants (Elaeis guineensis Jacq.). The research was conducted in the experiment area of Emplasmen PTPN IV, unit laras, Nagori Laras village, Bandar Huluan District, Simalungun Regency, North Sumatra. The method used in this research is experimental design and observation technique for taking the research object. The treatment in this study was to provide oil palm plant leaf feed with 2 times, namely 07: 00 WIB and 19:00 WIB and measurement of environmental factors (room temperature, air humidity, and light intensity). Furthermore, the consumption level data obtained will be analyzed using a simple linear regression equation.

The results showed that Setothosea asigna larvae were more active in consuming food at night, the highest level of consumption was found in instar 7 larvae of S. asigna, in the morning as much as 2158 mm² and at night as much as 2977 mm² and the results of simple linear regression analysis showed that, type instar is directly proportional to and has a direct (positive) effect on the amount of oil palm leaf feed (Elaeis guineensis Jacq.)

Keywords: Preference, Instar Type, Feed, Larva, Plants.