

**Keragaman dan Kelimpahan Populasi Musuh Alami Kepik Pengisap
Buah Kakao *Helopeltis* spp. (Hemiptera: Miridae) di Perkebunan Kakao
PT. Pagilaran, Samigaluh, Yogyakarta**

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ABSTRAK

Helopeltis spp. merupakan salah satu serangga hama utama pada tanaman kakao yang menyebabkan penurunan produksi buah kakao sebesar 50-60%. Upaya pengendalian hama ini telah dilakukan menggunakan insektisida kimia, insektisida nabati, dan musuh alami, namun penelitian mengenai musuh alami hama ini jumlahnya masih sangat terbatas. Tujuan penelitian ini adalah mengetahui jenis musuh alami *Helopeltis* spp., tingkat keragaman serta kelimpahan populasi musuh alami tersebut di perkebunan kakao PT. Pagilaran, Samigaluh, Yogyakarta. Penelitian dilakukan di Laboratorium Entomologi, Fakultas Biologi, Universitas Gadjah Mada dan Laboratorium Entomologi, Bidang Zoologi Pusat Penelitian Biologi, LIPI. Prosedur kerja pada penelitian ini yaitu penentuan stasiun, koleksi serangga, pengawetan, identifikasi spesies, dan analisis data menggunakan rumus indeks keragaman Shannon-Wiener dan rumus kelimpahan populasi. Hasil penelitian menunjukkan bahwa serangga yang berpotensi sebagai musuh alami *Helopeltis* spp. terdiri atas 22 spesies yang tergolong dalam kelompok predator yaitu *Orthetrum sabina*, *Diplacodes trivialis*, *Crocothemis servillia*, dan *Neurothemis ramburii* yang merupakan anggota Ordo Odonata, *Pseudomantis* sp. dan *Gyromantis occidentalis* yang merupakan anggota Ordo Mantodea, *Harpactor sericans*, *Sycanus collaris*, *Astinus euagoras*, dan *Dindymus rubiginosus* yang merupakan anggota Ordo Hemiptera, *Odontoponera* spp., *Diacamma* spp., *Odontomachus* sp., *Polyrhachis* spp., *Dolichoderus thoracicus*, *Vollenhovia* sp., *Monomorium* sp., dan *Pheidole* sp. yang merupakan anggota Ordo Hymenoptera. Serangga yang berpotensi sebagai musuh alami *Helopeltis* spp. memiliki tingkat keragaman yang tinggi. Semut *D. thoracicus* (Hymenoptera: Formicidae) merupakan serangga yang berpotensi sebagai musuh alami *Helopeltis* spp. dengan kelimpahan populasi paling tinggi.

Kata kunci: Keragaman, Kelimpahan Populasi, Musuh Alami, *Helopeltis* spp.

**The Diversity and Population Abundance of Natural Enemies of
Cocoa Sucking Bugs *Helopeltis* spp. (Hemiptera: Miridae)
in PT. Pagilaran Cocoa Plantation, Samigaluh , Yogyakarta**

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ABSTRACT

Helopeltis spp. is one of the main insect pest on cocoa that caused declining of cocoa pod production as many as 50-60%. The controls of this pest had been conducted using chemical insecticides, botanical insecticides and natural enemies. Yet, researches about natural enemies of this pest were still very restricted. The aim of this research were to know species, the diversity index and population abundance of natural enemies of *Helopeltis* spp. in PT. Pagilaran cocoa plantation, Samigaluh, Yogyakarta. This research had been conducted in Laboratory of Entomology, Faculty of Biology, Gadjah Mada University and Laboratory of Entomology, Zoology Division of Research Center for Biology, Indonesian Institute of Sciences. The working procedures of this research were station determining, insect collecting, preservation, species identification, and data analysis using the diversity index of Shannon-Wiener and the population abundance formulation. The result of this research showed that potential insect as natural enemies of *Helopeltis* spp. consist of 22 predatory species namely *Orthetrum sabina*, *Diplacodes trivialis*, *Crocothemis servillia*, and *Neurothemis ramburii* which were members of Odonata Order, *Pseudomantis* sp. and *Gyromantis occidentalis* which were members of Mantodea Order, *Harpactor sericans*, *Sycanus collaris*, *Astinus euagoras*, and *Dindymus rubiginosus* which were members of Hemiptera Order, *Odontoponera* spp., *Diacamma* spp., *Odontomachus* sp., *Polyrhachis* spp., *Dolichoderus thoracicus*, *Vollenhovia* sp., *Monomorium* sp., and *Pheidole* sp. which were members of Hymenoptera Order. Potential insect as natural enemies of *Helopeltis* spp. had high diversity index value. *D. thoracicus* (Hymenoptera: Formicidae) was potential insect as natural enemy of *Helopeltis* spp. with the highest population abundance.

Key words: Diversity, Population Abundance, Natural Enemies, *Helopeltis* spp.