

**ENTOMOLOGICAL INVENTORY AND ITS ECOLOGICAL ASPECT IN
THE AREA OF SILOKEK GEOPARK ECOTOURISM, SIJUNJUNG
REGENCY**

UNDERGRADUATE THESIS

By:

NADIRA NURUL FATHIYAH

NIM. 1910422033



**BIOLOGY DEPARTMENT
FACULTY OF MATHEMATICS AND NATURAL SCIENCES
ANDALAS UNIVERSITY
PADANG
2023**

**ENTOMOLOGICAL INVENTORY AND ITS ECOLOGICAL ASPECT IN
THE AREA OF SILOKEK GEOPARK ECOTOURISM, SIJUNJUNG
REGENCY**

UNDERGRADUATE THESIS

By:

NADIRA NURUL FATHIYAH

NIM. 1910422033

SUPERVISOR:

1. DR. HENNY HERWINA

2. PROF. DR. DAHELMI

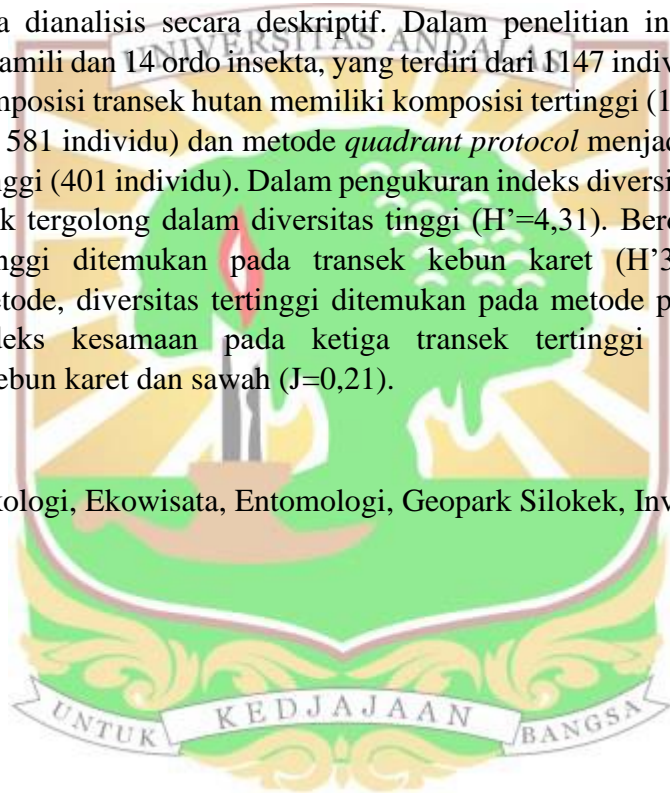


**BIOLOGY DEPARTMENT
FACULTY OF MATHEMATICS AND NATURAL SCIENCES
ANDALAS UNIVERSITY
PADANG
2023**

ABSTRAK

Daerah Ekowisata Geopark Silokek, Kabupaten Sijunjung merupakan lokasi ekowisata baru di Sumatera Barat dengan karakteristik utama berupa bukit batuan karst dan masih belum dieksplorasi secara mendalam, terutama pada aspek entomologi. Penelitian mengenai “Inventarisasi Entomologi dan Aspek Ekologi di Daerah Ekowisata Geopark Silokek, Kabupaten Sijunjung” telah dilakukan pada bulan Maret sampai September 2023 di Laboratorium Taksonomi Hewan Invertebrata, Jurusan Biologi, Fakultas Matematika dan Ilmu Pengetahuan Alam, Universitas Andalas, Padang. Tujuan dari penelitian ini adalah menentukan inventarisasi entomologi serta menganalisis aspek ekologi dan pengaruhnya terhadap insekta di daerah Ekowisata Geopark Silokek. Penelitian ini menggunakan metode suvey dan eksplorasi, serta dianalisis secara deskriptif. Dalam penelitian ini ditemukan 233 spesies dari 91 famili dan 14 ordo insekta, yang terdiri dari 1147 individu. Berdasarkan pengukuran komposisi transek hutan memiliki komposisi tertinggi (10 ordo, 53 famili, 112 spesies dan 581 individu) dan metode *quadrant protocol* menjadi metode dengan komposisi tertinggi (401 individu). Dalam pengukuran indeks diversitas secara umum, Geopark Silokek tergolong dalam diversitas tinggi ($H' = 4,31$). Berdasarkan transek, diversitas tertinggi ditemukan pada transek kebun karet ($H' = 3,81$), sedangkan berdasarkan metode, diversitas tertinggi ditemukan pada metode pan trap di sawah ($H' = 3,37$). Indeks kesamaan pada ketiga transek tertinggi ditemukan pada perbandingan kebun karet dan sawah ($J = 0,21$).

Kata Kunci : Ekologi, Ekowisata, Entomologi, Geopark Silokek, Inventarisasi.



ABSTRACT

The Ecotourism Area of Silokek Geopark in Sijunjung Regency is a new ecotourism location in West Sumatra with its main characteristic being karst rock hills that have not been extensively explored, especially in the entomological aspect. The research on "Entomological Inventory and Its Ecological Aspect in the Area of Silokek Geopark Ecotourism, Sijunjung Regency" was conducted from March to September 2023 at the Laboratory of Invertebrate Animal Taxonomy, Department of Biology, Faculty of Mathematics and Natural Sciences, Universitas Andalas, Padang. The aim of this research is to determine the entomological inventory insects and analyze the ecological aspects and their influence on insects in the Silokek Geopark Ecotourism Area. The survey and exploration method were employed, and the data were analyzed descriptively. In this research, 233 species from 91 families and 14 orders of insects were found, comprising a total of 1147 individuals. Based on transect composition measurements, the forest transects showed the highest composition (10 orders, 53 families, 112 species, and 581 individuals), and the quadrant protocol method exhibited the highest composition (401 individuals). Overall, Silokek Geopark is classified as having high diversity ($H' = 4.31$) based on diversity index measurements. Regarding transects, the highest diversity was found in the rubber plantation transect ($H' = 3.81$), while based on methods, the highest diversity was observed using the pan trap method in the rice fields ($H' = 3.37$). The highest similarity index among the three transects was found in the comparison between the rubber plantation and rice fields ($J = 0.21$).

Keyword: Ecology, Ecotourism, Entomology, Geopark Silokek, Inventory.

