

## ABSTRAK

SANTI TIFANI HIDAYAT. 2023. **Studi Keanekaragaman dan Pola Distribusi Jamur Makroskopis di Kawasan Gunung Galunggung Sebagai Suplemen Bahan Ajar Biologi**. Skripsi. Jurusan Pendidikan Biologi. Fakultas Keguruan dan Ilmu Pendidikan. Universitas Siliwangi.

---

Jamur makroskopis komponen utama organisme pengdegradasi yang berperan penting dan menjadi indikator dalam setiap habitat yang dinamis. Kawasan Gunung Galunggung salah satu ekosistem dengan habitat yang mendukung pertumbuhan jamur makroskopis. Tujuan penelitian mengidentifikasi keanekaragaman jenis dan mengetahui pola distribusi jenis jamur makroskopis di kawasan Gunung Galunggung, dilaksanakan pada Juni-Juli 2022. Penelitian menggunakan pendekatan kuantitatif deskriptif bersifat eksploratif dengan teknik survei, metode pengambilan data menggunakan VES (*Visual Encounter Survey*) dengan bantuan plot  $1 \times 1$  m, luas area pengamatan  $300 \text{ m}^2$  setiap stasiun. Stasiun yang digunakan yaitu stasiun 1 kawasan Curug Panoongan Cipanas, stasiun 2 kawasan Hutan Pinus Curug Cikahuripan, dan stasiun 3 kawasan Curug Batu Blek. Perhitungan indeks ekologi meliputi indeks keanekaragaman, indeks keseragaman, indeks dominansi dan indeks morisita untuk mengetahui pola distribusinya. Hasil penelitian ditemukannya 40 *species* jamur makroskopis terdiri dari 2 *division*, 4 *class*, 9 *order*, 19 *family*, dan 29 *genus* dengan jumlah total 1088 individu. Nilai rata-rata indeks keanekaragaman 2,26 kategori sedang, nilai rata-rata indeks keseragaman 0,8 kategori tinggi, nilai rata-rata indeks dominansi 0,14 kategori rendah, dan nilai rata-rata indeks morisita 2 kategori mengelompok. Hasil temuan dipengaruhi kondisi lingkungan yang cukup baik bagi pertumbuhan jamur makroskopis dengan area pengamatan menuju sumber air curug memiliki ketinggian 773-956 mdpl, terdapat tutupan tajuk tumbuhan, substrat beragam, suhu  $21,71\text{-}25^\circ\text{C}$ , kelembapan udara 82-96%, kelembapan tanah 3,17-5,76, intensitas cahaya terendah 429 Lux, dan pH tanah 6,76-7,47. Luaran hasil penelitian berupa *booklet* suplemen bahan ajar biologi khususnya untuk materi Jamur pada tingkat SMA dan materi Jamur pada tingkat perguruan tinggi serta bagi masyarakat luas.

Kata Kunci: Keanekaragaman, Pola Distribusi, Jamur Makroskopis, Gunung Galunggung, Suplemen Bahan Ajar

## ABSTRACT

SANTI TIFANI HIDAYAT. 2023. *Study of Diversity and Distribution Patterns of Macroscopic Fungi in the Galunggung Mountain Area as a Supplement to Biology Teaching Materials*. Skripsi. Biology Education Department. Faculty of Teacher Training and Education. Siliwangi University.

---

Macroscopic fungi are the main components of degrading organisms that play an important role and become indicators in every habitat dynamic. The Galunggung Mountain area is one of the ecosystems with a habitat that supports the growth of macroscopic fungi. Research purposes identify species diversity and determine distribution patterns macroscopic mushroom species in the Galunggung Mountain area, carried out in June-July 2022. The research used a descriptive quantitative approach that was exploratory with survey techniques, data collection methods using VES (Visual Encounter Survey) with the help of a  $1 \times 1$  m plot, the area of the observation area is  $300 \text{ m}^2$  every station. The stations used were station 1 in the Panoongan Cipanas waterfall area, station 2 in the Cikahuripan Pine Forest area, and station 3 in the Batu Blek waterfall area. Ecological index calculations included diversity index, uniformity index, dominance index and morbidity index to determine distribution patterns. The results of the study found 40 species macroscopic fungi consist of 2 division, 4 class, 9 order, 19 family, and 29 genus with a total number of 1088 individuals. The average value of the diversity index was 2.26 in the medium category, the average value of the uniformity index was 0.8 in the high category, the average value of the dominance index was 0.14 in the low category, and the average value of the morisita index was 2 clumped categories. The findings were influenced by environmental conditions which were quite good for macroscopic fungal growth with the observation area towards the waterfall water source having a height of 773-956 masl, there was plant canopy cover, various substrates, temperature  $21.71\text{-}25^\circ\text{C}$ , humidity 82-96%, soil moisture 3.17-5.76, the lowest light intensity 429 Lux, and soil pH 6.76-7.47. The output of the research results is booklet supplementary biology teaching materials especially for Mushroom material at the high school level and Mushroom material at the tertiary level as well as for the wider community.

**Keywords:** Diversity, Distribution Pattern, Macroscopic Fungi, Galunggung Mountain, Teaching Material Supplements