

RINGKASAN

Universitas Jenderal Soedirman (Unsoed) ditetapkan sebagai pusat pelayanan Pendidikan dalam Rencana Detail Tata Ruang Kota (RDTR) Kawasan Perkotaan Purwokerto Tahun 2014-2034. Oleh karena itu, Unsoed memerlukan ruang terbuka hijau untuk menunjang aktivitas. Beragamnya vegetasi pada ruang terbuka hijau memacu serangkaian penelitian, namun belum ada penelitian mengenai keanekaragaman vegetasi dan profil vegetasi di Universitas Jenderal Soedirman. Penelitian ini bertujuan untuk mengetahui keanekaragaman tumbuhan penyusun vegetasi serta profil vegetasi di Universitas Jenderal Soedirman. Penelitian dilakukan di Universitas Jenderal Soedirman Purwokerto dengan metode kuadrat yang ditentukan secara *purposive sampling*. Penelitian ini menggunakan variabel terikat berupa keanekaragaman tumbuhan dengan parameter spesies tumbuhan dan jumlah individu serta profil vegetasi dengan variabel tinggi pohon, tinggi bebas cabang, dan lebar tajuk. Variabel bebas berupa faktor lingkungan dengan parameter pH tanah, kelembapan tanah, suhu tanah, suhu udara, dan kelembapan udara. Data keanekaragaman tumbuhan dianalisis menggunakan indeks keanekaragaman indeks nilai penting, indeks *evenness*, dan Shannon-Wiener. Data profil habitat di analisis secara deskriptif.

Berdasarkan hasil penelitian ditemukan tumbuhan sebanyak 669 individu/0,14014 hektare yang terdiri dari 59 spesies. Tumbuhan yang didapatkan dapat dikelompokkan ke dalam 39 familia, 26 spesies tumbuhan bawah dan 33 spesies pohon. Pohon yang paling banyak dijumpai adalah glodokan tiang (*Monoon longifolium*) dengan indeks nilai penting 18,43% dan dapat ditemukan di tiga lokasi. Adapun spesies pohon yang paling jarang ditemukan adalah kelapa sawit (*Elaeis guinensis*) dan (*Cocos nucifera*) dengan indeks nilai penting 5% dan 2,35%. Tumbuhan bawah yang paling banyak dijumpai *Axonopus compressus* atau rumput gajah mini dengan indeks nilai penting 152,32% dan dapat ditemukan di sebelas lokasi penelitian.

Profil vegetasi menunjukkan tinggi pohon di empat belas lokasi penelitian bervariasi pada kisaran 5-30 meter. Pohon terendah yang ditemukan adalah manggis (*Garcinia mangostana*) di Fakultas Pertanian dengan tinggi 5 meter. Pohon tertinggi ditemukan di LPPM yaitu kedoya (*Didymocheton gaudichaudianus*) dengan tinggi 30 meter.

Kata kunci: keanekaragaman, profil vegetasi, Universitas Jenderal Soedirman, vegetasi

SUMMARY

The Detailed Spatial Plan (RDTR) for the Purwokerto Urban Area for the period 2014–2034 designates Jenderal Soedirman University (Unsoed) as an educational service center. Consequently, Unsoed requires green open spaces to support its activities. The diversity of vegetation within these green open spaces has stimulated various studies; however, no research has yet been conducted on the diversity and profile of vegetation at Jenderal Soedirman University. This study aims to examine the diversity of plant species constituting the vegetation and to describe the vegetation profile at Jenderal Soedirman University.

The research was conducted at Jenderal Soedirman University, Purwokerto, using a quadrat method determined through purposive sampling. The dependent variables consisted of plant diversity—with parameters including plant species and the number of individuals—and vegetation profile—with parameters including tree height, height to the first branch, and crown width. The independent variables comprised environmental factors, with parameters including soil pH, soil moisture, soil temperature, air temperature, and air humidity. Plant diversity data were analyzed using diversity indices, including the Importance Value Index, Evenness Index, and Shannon–Wiener Index. Habitat profile data were analyzed descriptively.

The results of the study recorded a total of 669 individual plants belonging to 59 species. These species were classified into 39 families, comprising 26 species of understory plants and 33 species of trees. The most frequently encountered tree species was *Monoon longifolium* (glodokan tiang), with an Importance Value Index of 18.43%, found in three locations. In contrast, the least frequently encountered tree species were *Elaeis guineensis* and *Cocos nucifera*, with Importance Value Indices of 5% and 2.35%, respectively. The most abundant understory species was *Axonopus compressus* (dwarf carpet grass), with an Importance Value Index of 152.32%, recorded in eleven research locations.

The vegetation profile revealed that tree heights in the fourteen research locations ranged from 5 to 30 meters. The shortest tree recorded was *Garcinia mangostana* (mangosteen) in the Faculty of Agriculture area, with a height of 5 meters. The tallest tree was *Didymocheton gaudichaudianus* (kedoya), found at the Institute for Research and Community Service (LPPM), with a height of 30 meters.

Keywords: *biodiversity, Jenderal Soedirman University, vegetation, vegetation profile*