

**Keanekaragaman Tumbuhan Bawah  
Pada Berbagai Jenis Pohon Penyusun Pekarangan  
(Studi Kasus di Padukuhan Sokomoyo, Jatimulyo, Girimulyo, Kulon Progo)**

Oleh:  
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**Abstrak**

Tumbuhan bawah merupakan bagian dari komunitas hutan dan komponen penyusun agroforestri yang memiliki peranan penting dalam ekosistem. Salah satu bentuk agroforestri berupa pekarangan. Sistem tersebut diterapkan oleh masyarakat di Padukuhan Sokomoyo dengan beberapa komposisi jenis pohon penyusun. Penelitian ini bertujuan untuk mengetahui perbedaan keanekaragaman tumbuhan bawah pada berbagai jenis pohon penyusun pekarangan yang kurang terawat.

Penelitian dilakukan pada Oktober-Desember 2018. Pengambilan data komposisi jenis dilakukan dengan desain sampling berupa *stratified random sampling* yang diletakkan pada berbagai komposisi jenis pohon penyusun pekarangan yaitu lahan dengan dominasi sengon, tegakan campur dan lahan dengan dominasi kakao. Setiap plot dibuat petak ukur (2 m x 2 m) secara *systematic sampling* dengan IS 5%, analisis berupa perhitungan Indeks Nilai Penting dan Indeks Diversitas. Pengukuran biomassa dilakukan dengan metode *purposive sampling* dengan membuat 3 petak ukur (0,5 m x 0,5 m) pada masing-masing lahan, sampel dipangkas dan ditimbang berat basahanya kemudian dikeringkan ke dalam oven pada suhu 80°C sampai berat kering konstan kemudian ditimbang berat keringnya.

Hasil penelitian menunjukkan bahwa keseluruhan lahan ditemukan 82 jenis dalam 43 famili. Dari hasil tersebut, 66 jenis dalam 38 famili ditemukan pada lahan dengan dominasi sengon, 41 jenis dalam 27 famili pada lahan tegakan campur, dan 46 jenis dalam 30 famili pada lahan dominasi kakao. Indeks Keanekaragaman 1,2 pada lahan dominasi sengon, 1,15 pada lahan dominasi kakao dan 1,06 pada lahan tegakan campur, ketiga kategori termasuk dalam keanekaragaman sedang. Hasil perhitungan biomassa, 1,28 ton/ha pada tegakan campur, 0,74 ton/ha pada lahan dominasi sengon dan 1,06 ton/ha pada lahan dominasi kakao.

Kata kunci: Biomassa, Indeks Keanekaragaman, komposisi, Padukuhan Sokomoyo, tumbuhan bawah,

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**Diversity Of Understorey  
in Various Types Of Home-Garden  
(Study Case in Padukuhan Sokomoyo, Jatimulyo, Girimulyo, Kulon Progo)**

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**Abstract**

Understorey layer is the constituent component of forest community, for instance, agroforestry system and it has pivotal role in forest ecosystem. Generally, the society of Padukuhan Sokomoyo managed their lands by using several types of plant compositions. This research was aimed to observe the differences of diversity on each type of stands.

The collection of data on species composition was carried out by using stratified random sampling method, This research was conducted based on three different land compositions which are consisted of sengon-dominated stand, mixed stand, and cocoa-dominated stand. Measuring plots (2 m x 2 m) were made on each type of stands by using systematic sampling method with sampling intensity (IS) 5%. Data were analyzed using important value method and diversity index. Biomass measurement was carried out by purposive sampling method by making measuring plots (0,5 m x 0,5 m) on each stands, the samples were weighed into an oven at 80°C until the dry weight was constant and then gross weight was weighed.

The result showed that there were 82 species identified from the three types of stand compositions. The result also showed that there were 66 species in 23 families in sengon-dominated stand, 41 species in 27 families in mixed stands, and 46 species in 30 families in cocoa-dominated stand. Diversity Index of sengon-dominated stand, cocoa-dominated stand and mixed stand consecutively were 1,2; 1,15; and 1,06, the three categories included in moderate diversity. The measurement of biomass in mixed stand, sengon-dominated stand, and cocoa-dominated stand consecutively were 1,28 ton/ha, 0,65 ton/ha and 1,06 ton/ha.

**Keywords:** Composition, understorey, Diversity Index, biomass, Padukuhan Sokomoyo

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