

KEANEKARAGAMAN SPESIES TUMBUHAN PENYUSUN VEGETASI DI
SEKITAR TELAGA ANYAR, DESA GUMELEM, KABUPATEN
MAGELANG, JAWA TENGAH

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ABSTRAK

Telaga Anyar merupakan salah satu telaga yang berlokasi di Desa Gumelem, Kabupaten Magelang, Jawa Tengah. Telaga ini dimanfaatkan sebagai tempat penyimpanan air untuk kebutuhan sehari-hari. Pemakaian yang berlebihan dan perawatan yang salah akan mengakibatkan terjadinya pendangkalan atau kerusakan telaga. Salah satu upaya perawatan yang dapat dilakukan adalah menggunakan vegetasi di sekitar telaga. Penelitian ini bertujuan untuk mendata spesies tumbuhan apa saja yang menyusun vegetasi di sekitar Telaga Anyar dan menganalisis kelimpahan serta indeks diversitas setiap spesies penyusun vegetasi tersebut dan kemerataannya. Metode yang digunakan dalam penelitian ini mencakup pengambilan spesimen menggunakan plot dengan metode kuadrat dan identifikasi spesies yang telah dicuplik. Analisis yang dilakukan mencakup penghitungan frekuensi, kerapatan, nilai penting, indeks diversitas, dan indeks kemerataan. Hasil penelitian menunjukkan bahwa di Telaga Anyar terdapat 66 spesies dalam 30 suku tumbuhan yang menyusun vegetasi telaga. Tumbuhan berbiji ditemukan sebanyak 63 spesies, sedangkan tumbuhan paku ditemukan sebanyak tiga spesies. Pengukuran nilai penting *growthform* paku, semak, dan pohon dengan nilai di atas 10 meliputi *Lycopodiella cernua*, *Hyptis capitata*, *Erigeron sumatrensis*, *Dysphania ambrosioides*, *Calliandra houstoniana*, dan *Colocasia esculenta*. Indeks diversitas untuk *growthform* paku, semak, dan pohon tergolong sedang dengan nilai 2,14. Indeks kemerataan untuk *growthform* paku, semak, dan pohon di atas 0,06 adalah *Lycopodiella cernua*, *Hyptis capitata*, *Dysphania ambrosioides*, *Erigeron sumatrensis*, *Colocasia esculenta*, dan *Calliandra houstoniana* yang berkategori rendah. Pengukuran nilai penting *growthform* rumput dan herba dengan nilai penting di atas 20 mencakup *Setaria barbata*, *Cyperus brevifolius*, *Ageratum conyzoides*, *Eleusine indica*, *Polygala paniculata*, dan *Centella asiatica*. Indeks diversitas untuk *growthform* rumput dan herba tergolong sedang dengan nilai 1,33. Indeks kemerataan untuk *growthform* rumput dan herba di atas 0,06 dimiliki oleh *Setaria barbata*, *Cyperus brevifolius*, *Ageratum conyzoides*, *Eleusine indica*, *Centella asiatica*, dan *Polygala paniculata* yang berkategori rendah.

Kata kunci: air, metode kuadrat, nilai penting, telaga, vegetasi

DIVERSITY OF PLANT SPECIES COMPOSING VEGETATION IN ANYAR LAKE, GUMELEM VILLAGE, MAGELANG REGENCY, CENTRAL JAVA

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ABSTRACT

Anyar Lake is a lake which can be located in Gumelem Village, Magelang Regency, Central Java. This lake is used as water supplier in daily activities. Unfortunately, water usage that exceed lake's capacity may affect the sustainability of the lake, thus silting it. To prevent the silting proses, one of the possible ways is using vegetation around the water source. This research was meant to determine how many and what kind of Spermatophyte plants which construct the vegetation around Anyar Lake, Gumelem Village, Magelang District, calculate abundance and diversity index of every species found, and analyze the evenness index of every species found. This research used a sampling method which was quadrant method and species identification. Analyses used were the calculation of frequency, density, importance value, diversity index, and evenness index. The result showed that at Anyar Lake, there are 66 species in 30 families of plants which constructed the vegetation around the lake. There were 63 species that belonged to seed-bearing plants, while three species were considered ferns. The measurement of fern, shrub, and tree growthform's importance value that was higher than 10 included *Lycopodiella cernua*, *Hyptis capitata*, *Erigeron sumatrensis*, *Dysphania ambrosioides*, *Calliandra houstoniana*, and *Colocasia esculenta*. Diversity index for fern, shrub, and tree growthform was categorized as medium with 2,14 as calculated value. Evenness index for fern, shrub, and tree growthform that were more than 0,06 includes *Lycopodiella cernua*, *Hyptis capitata*, *Dysphania ambrosioides*, *Erigeron sumatrensis*, *Colocasia esculenta*, and *Calliandra houstoniana* which categorized as low. The measurement of grass and herb growthform with importance value more than 20 were found in *Setaria barbata*, *Cyperus brevifolius*, *Ageratum conyzoides*, *Eleusine indica*, *Polygala paniculata*, and *Centella asiatica*. Diversity index of grass and herb growthform was considered medium with exact value 1,33. Evenness index of grass and herb growthform that were more than 0,06 were found in *Setaria barbata*, *Cyperus brevifolius*, *Ageratum conyzoides*, *Eleusine indica*, *Centella asiatica*, and *Polygala paniculata* with low category.

Keywords: *water, quadrant method, importance value, lake, vegetation*