

ABSTRAK

Nurul Aminin. 2024. Penyusunan *E-Ensiklopedia* Berbasis Penelitian Keanekaragaman Vegetasi Lantai di Sekitar Sumber Mata Air Plalar Madiun. Skripsi. Program Studi Pendidikan Biologi, FKIP, Universitas PGRI Madiun. Pembimbing (I) Nurul Kusuma Dewi, S.Si., M.Sc. , (II) Ir. Ani Sulistyarsi, M.M., M.Si.

Penggunaan teknologi elektronik terbaru telah menghasilkan banyak media informasi modern dan kompleks. *E-ensiklopedia* dapat membantu dalam mendokumentasikan pengetahuan hasil penelitian vegetasi lantai di sekitar Sumber Mata Air Plalar. Sumber Mata Air Plalar Berada di Dusun Gligi, Desa Kepel Kecamatan, Kecamatan Kare, Kabupaten Madiun, Jawa Timur. Penelitian ini merupakan penelitian kuantitatif yang menggunakan metode plot ganda dalam pengamatan dan untuk identifikasi spesies tumbuhan yang menyusun vegetasi lantai. Penelitian dilakukan di area sekitar Sumber Mata Air Plalar dengan luas area pengamatan kurang lebih 250 m² dengan peletakan plot sejumlah 25 plot berukuran 2 m x 2 m (4 m²) secara acak atau *random sampling*. Vegetasi lantai yang hidup di sekitar Sumber Mata Air Plalar terdiri dari *growth form* herba, paku, terna, semak, liana, lumut, rumput, dan perdu. Delapan *growth form* vegetasi lantai tersebut terdiri dari 28 famili dan terdapat 48 spesies. Indeks Nilai Penting (INP) tertinggi untuk spesies pada *growth form* semak, lumut, dan terna secara berturut-turut adalah: *Dendrocnide stimulans* (L.f.) Chew dengan INP sebesar 16,51%, *Rhizogonium distichum* dengan INP sebesar 14,31%, *Homalomena pendula* (Blume) Bakh.f. dengan INP sebesar 11,95%. *Growth form* semak memiliki peranan penting dalam menyimpan dan mengelola air. Rata-rata faktor lingkungan di sekitar Sumber Mata Air Plalar adalah suhu udara 26,44°C, kelembaban udara 76,24%, pH tanah 6,8, kelembaban tanah 61,8%, dan intensitas cahaya 881,36 lx, rata-rata hasil faktor lingkungan ini masih tergolong normal dan ideal untuk pertumbuhan vegetasi lantai. *E-ensiklopedia* disusun berdasarkan hasil analisis vegetasi lantai di sekitar Sumber Mata Air Plalar, memperoleh persentase 87,7% dari validator media dan materi dengan kriteria sangat baik dan angket respon siswa memperoleh persentase 81% dengan kualifikasi sangat baik, sehingga dapat dikatakan bahwa *e-ensiklopedia* ini layak digunakan sebagai bahan ajar siswa di sekolah untuk menunjang pembelajaran berdasarkan penelitian kearifan lokal.

Kata kunci: *E-ensiklopedia*, Vegetasi Lantai, Faktor Lingkungan

ABSTRACT

Nurul Aminin. 2024. Preparation of an E-Encyclopedia Based on Research on Floor Vegetation Diversity Around the Plalar Madiun Spring Source. Thesis. Biology Education Study Program, FKIP, PGRI Madiun University. Supervisor (I) Nurul Kusuma Dewi, S.Si., M.Sc. , (II) Ir. Ani Sulistyarsi, M.M., M.Si.

The use of the latest electronic technology has resulted in many modern and complex information media. *The e-encyclopedia* can be helpful in documenting the knowledge of the results of the floor vegetation research around the Plalar Spring Source. The source of Plalar Spring is located in Gligi Hamlet, Kepele Village, Kare District, Madiun Regency, East Java. This study is a quantitative research that uses a double plot method in observation and for the identification of plant species that make up floor vegetation. The research was conducted in the area around the Plalar Spring Source with an observation area of approximately 250 m² with the placement of 25 plots measuring 2 m x 2 m (4 m²) randomly or *random sampling*. The floor vegetation that lives around the Plalar Spring Source consists of *herbaceous growth forms*, ferns, terna, shrubs, lianas, mosses, grasses, and shrubs. The eight *growth forms* of floor vegetation consist of 28 families and there are 48 species. The highest Important Value Index (INP) for species in the *growth form* of shrubs, mosses, and terna respectively were: *Dendrocnide stimulans* (L.f.) Chew with an INP of 16.51%, *Rhizogonium distichum* with an INP of 14.31%, *Homalomena pendula* (Blume) Bakh.f. with an INP of 11.95%. *The growth form* of shrubs has an important role in storing and managing water. The average environmental factors around the Plalar Spring Water Source are air temperature 26.44°C, air humidity 76.24%, soil pH 6.8, soil moisture 61.8%, and light intensity 881.36 lx, the average results of these environmental factors are still classified as normal and ideal for the growth of floor vegetation. The e-encyclopedia was compiled based on the results of the analysis of floor vegetation around the Plalar Spring Source, obtained a percentage of 87.7% from media and material validators with very good criteria and a student response questionnaire obtained a percentage of 81% with very good qualifications, so it can be said that *this e-encyclopedia* is suitable for use as a teaching material for students in schools to support learning based on local wisdom research.

Keywords: E-encyclopedia, Floor Vegetation, Environmental Factors