

## ABSTRAK

### **Siti Raudah Solin, Nim 4185020004 (2018), Keanekaragaman Paku Terrestrial Di Kawasan Hutan Alami Desa Bukum, Kecamatan Sibolangit, Kabupaten Deli Serdang**

Penelitian ini bertujuan untuk mengetahui jenis tumbuhan paku terrestrial, mengetahui spesies yang paling mendominasi, mengetahui keanekaragaman paku terrestrial, mengetahui habitat tumbuhan paku terrestrial, serta mengetahui tingkat kesamaan jenis paku terrestrial di kawasan hutan alami Desa Bukum, Kecamatan Sibolangit, Kabupaten Deli Serdang. Penelitian ini dilaksanakan pada bulan Juni-Agustus 2022. Jenis penelitian ini adalah penelitian deskriptif yang bersifat eksploratif. Teknik pengumpulan data dilakukan dengan metode kuadrat dan menggunakan analisis vegetasi dengan metode petak secara purposive sampling. Prosedur penelitian dilakukan dengan eksplorasi dan karakterisasi. Teknik analisis data yang diperoleh dari hasil penelitian dianalisis menggunakan rumus indeks nilai penting, indeks keanekaragaman, dan indeks kesamaan jenis (*similarity index*). Hasil penelitian diperoleh 15 jenis Tumbuhan Paku dari 9 famili yaitu *Selaginella intermedia*, *Diplazium bantamense*, *Christella siamensis*, *Diplazium crenato-Serratum*, *Cyathea recommutata*, *Christella subpubescens*, *Didymochlaena truncatula*, *Diplazium cordifolium*, *Selaginella stipulata*, *Lindsaea cultrata*, *Nephrolepis dicksonioides*, *Phymatosorus scolopendria*, *Tectaria incisa*, *Diplazium dilatatum*, dan *Cyclosorus polycarpus*. Tumbuhan Paku terrestrial yang paling mendominasi pada jalur I yaitu *Diplazium crenato-Serratum*, pada jalur II yaitu *Didymochlaena truncatula*, pada jalur III dan IV yaitu *Selaginella intermedia*. Keanekaragaman Paku terrestrial di kawasan hutan alami Desa Bukum, tergolong dalam kriteria sedang. Dimana Jalur I memiliki nilai H' sebesar 1,83. Jalur II memiliki nilai H' sebesar 2,04. Jalur III memiliki nilai H' sebesar 1,79 dan Jalur IV memiliki nilai H' sebesar 1,13. Habitat Tumbuhan Paku terrestrial di Kawasan Hutan Desa Bukum, tumbuh dibawah pohon-pohon besar, ada yang tumbuh di tepi-tepi sungai dan ada yang tumbuh di tepi jalan. Serta memiliki kondisi lingkungan dengan Suhu Udara berkisar antara 24,5°C – 27,5°C. Kelembaban Udara berkisar antara 66% - 75%. Suhu Tanah berkisar antara 21°C - 24°C. pH Tanah berkisar antara 4,5 – 7. Serta Intensitas Cahaya berkisar antara 677Lux – 9887Lux. Tingkat kesamaan jenis Tumbuhan Paku di Kawasan Hutan Desa Bukum, Kecamatan Sibolangit, Kabupaten Deli Serdang yaitu jalur 1 dan jalur 2 mencapai IS 90,90%. Kemiripan jalur 1 dan jalur 3 mencapai IS 66,66%. Kemiripan jalur 1 dan jalur 4 mencapai IS 57,14%. Kemiripan jalur 2 dan jalur 3 mencapai IS 63,15%. Kemiripan jalur 2 dan jalur 4 mencapai IS 52,63%. Dan Kemiripan jalur 3 dan jalur 4 mencapai IS 77,77%.

**Kata Kunci :** Keanekaragaman, Tumbuhan Paku, Hutan Desa Bukum

## ABSTRACT

### **Siti Raudah Solin, Nim 4185020004 (2018), Terrestrial Fern Diversity In The Natural Forest Area Of Bukum Village, Sibolangit District, Deli Serdang Regency**

This study aims to determine the types of terrestrial fern plants, find out the species that are the most dominant, know the diversity of terrestrial ferns, know the habitat of terrestrial fern plants, and find out the level of similarity of terrestrial fern types in the natural forest area of Bukum Village, Sibolangit District, Deli Serdang Regency. This research was conducted in June-August 2022. this type of research is descriptive research that is exploratory in nature. The data collection technique was carried out by the squared method and using vegetation analysis using the plot method by purposive sampling. The research procedure is carried out by exploration and characterization. Data analysis techniques obtained from the results of the study were analyzed using the formula of the important value index, diversity index, and similarity index. The results of the study produced 15 types of fern plants from 9 families, namely *Selaginella intermedia*, *Diplazium bantamense*, *Christella siamensis*, *Diplazium crenato-Serratum*, *Cyathea recommutata*, *Christella subpubescens*, *Didymochlaena truncatula*, *Diplazium cordifolium*, *Selaginella stipulata*, *Lindsaea cultrata*, *Nephrolepis dicksonioides*, *Phymatosorus scolopendria*, *Tectaria incisa*, *Diplazium dilatatum*, and *Cyclosorus polycarpus*. The fern terrestrial plants that are most dominant in path I are *Diplazium crenato-Serratum*, on line II are *Didymochlaena truncatula*, on lines III and IV are *Selaginella intermedia*. The diversity of terrestrial ferns in the natural forest area of Bukum Village, is classified as moderate criteria. Where Line I has an H' value of 1.83. Line II has an H' value of 2.04. Line III has an H' value of 1.79 and Line IV has an H' value of 1.13. Habitat Terrestrial fern plants in the Bukum Village Forest Area, grow under large trees, some grow on the banks of rivers and some grow on the roadsides. As well as having environmental conditions with Air Temperature ranging from 24.5°C – 27.5°C. Air Humidity ranges from 66% - 75%. Soil temperature ranges from 21°C - 24°C. Soil pH ranges from 4.5 – 7. As well as Light Intensity ranges from 677Lux – 9887Lux. The level of similarity of fern plant species in the Bukum Village Forest Area, Sibolangit District, Deli Serdang Regency, namely line 1 and line 2, reached IS 90.90%. The similarity of line 1 and line 3 reaches an IS of 66.66%. The similarity of line 1 and line 4 reaches an IS of 57.14%. The similarity of line 2 and line 3 reaches an IS of 63.15%. The similarity of line 2 and line 4 reaches IS 52.63%. And The similarity of line 3 and line 4 reaches IS 77.77%.

**Keywords :** Diversity, Fern plants, Bukum Village Forest