

ABSTRACT

Egi Lela Yunisa. 24020119120010. **Riparian Vegetation Structure of Way Krui River in Way Krui District Pesisir Barat Regency, Lampung.** Under the guidance of Sri Utami and Lilih Khotimperwati.

Riparian vegetation is a plant community along riverbanks that plays an important role in maintaining environmental quality, characterized by high biodiversity as it is composed of various aquatic and terrestrial plant species. However, land-use changes due to increased human activity along the Way Krui River in Way Krui District, West Pesisir Regency, Lampung, have threatened the diversity of riparian vegetation. This study aims to assess the structure of vegetation and the stability of the riparian ecosystem along the Way Krui River. The research was conducted from February to April 2024 in Way Krui District, Lampung, and at the Ecology and Biosystematics Laboratory, Department of Biology, FSM Undip. Data collection at the research stations used the quadrat plot method, with subplot sizes of 1x1 m for herbs, 5x5 m for shrubs, and 10x10 m for trees, totaling 25 plots across 5 stations. Results indicated that the riparian zone of the Way Krui River contained 175 plant species from 62 families: 76 herb species, 37 shrubs, and 62 tree species. The dominant herb species with the highest IVI were lender tuft grass (*Pogonatherum crinitum*), giant sword fern (*Nephrolepis biserrata*), dumb fane (*Dieffenbachia seguine*), Asian spike moss (*Selaginella plana*), and nut-grass sedge (*Cyperus rotundus* L.). The shrub habitat is dominated by touch me not (*Mimosa pudica* L.), siam weed (*Chromolaena odorata*), harendong (*Melastoma malabathricum* L.), soapbush (*Clidemia hirta* L.), and pink morning glory (*Ipomoea carnea* Jacq.). Tree habitats are dominated by Java dammar (*Shorea javanica* K.&V.), cluster fig (*Ficus racemosa* L.), and coconut (*Cocos nucifera* L.). The low similarity index between stations indicated a low overlap in vegetation composition. The diversity index (H') was moderate, reflecting moderate species diversity and distribution, while the high evenness index (E) suggested an even abundance of species, indicating a moderately stable community.

Keywords: Vegetation composition and structure, riparian ecology, land use change, ecosystem stability, species diversity