

### **ABSTRACT**

**DINDA PUTRI LESTARI. 2023. MICROALGAE DIVERSITY IN SITU LENGKONG PANJALU CIAMIS AS A BIOLOGI LEARNING RESOURCE.**  
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*Situ Lengkong is a natural tourist attraction located in Panjalu Village, Ciamis Regency and has biodiversity. One of the organisms is microalgae, microalgae can be used as a bioindicator to measure the quality of Situ Lengkong waters. This research aims to analyze the diversity of microalgae in Situ Lengkong Panjalu Ciamis as a source of biology learning. This research uses a quantitative approach with exploratory descriptive methods and observation techniques. Determination of research stations is carried out using purposive sampling, so 3 research stations were determined, namely station 1 on the edge of Nusa Pakel, station 2 in the middle part of Situ, and station 3 near the fish cages. Each station has 3 observation points, namely the surface, middle and bottom. Sampling was carried out at 3 repetitions, namely morning (07.00 – 09.00 WIB), afternoon (11.00 – 13.00 WIB), and afternoon (15.00 – 17.00 WIB). Environmental parameters measured include depth, brightness, water color, temperature, acidity (pH), and oxygen solubility (DO). Meanwhile, the ecological indices used in this research are the abundance index, diversity index, species uniformity index, and dominance index. The identification results were found to be spread across 4 kingdom, 6 phylum, 10 class, 22 order, 27 family, 36 genus, and 48 species. The microalgae abundance index at station 1 was 3295 Ind/ml, station 2 was 1427 Ind/ml, and station 3 was 226 Ind/ml. Overall, the diversity index value for all stations is 1.42 so it is in the medium category or moderately polluted water quality, the species uniformity index value is 0.42 so it is in the medium category or uniformity between species is even, and the dominance index is 0.51 so it is in the category while there are species that dominate so conditions are unstable. The results of this research are learning resources that are published in the form of booklet, Can be used at university level in Cryptogamae Botany courses.*

**Keywords: Diversity, Microalgae, Situ Lengkong, Biology Learning Resources.**