

ABSTRACT

Auliya Fazriati. 2019. *Abundance and Diversity of Plankton in Situ Bagendit Garut District. Guided by Dr. H. Uus Toharudin, M.Pd., Gurnita, S.Si., M.P., and Drs. Suhara, M.Pd.,*

Situ Bagendit 2 is an ecotourism area and education as a means of research and education was only opened to the public in mid-2018. However, the area has not been managed optimally by the community and the local government, so that supporting data for ecotourism management is relatively small. This study aims to obtain abundance and diversity of plankton collected in the waters of Situ Bagendit, Garut district. The data obtained is used to add information that supports ecotourism activities in the region. This research uses a descriptive method. The research design used was a square footage in three stations, namely inlet, midlet, and outlet in Situ Bagendit 2. Sampling was done using plankton net. The results of research found in Situ Bagendit waters in Garut district showed that the number of species consisted of 56 Phytoplankton species and 51 Zooplankton species. The total number of plankton species is 107 species which are included in 10 phyla / divisions, 13 classes, 27 orders, 42 families and 58 genera. Total individuals found were 30.181 individuals. The value of phytoplankton abundance in Situ Bagendit waters ranged from 12.162.000 ind/l – 35.460.000 ind/l. The highest value of phytoplankton abundance is found in the Euglenophyceae class with an abundance value of 47.814.000 ind/l. While the lowest abundance value is found in the Chrysophyceae class with an abundance value of 54.000 ind/l. Zooplankton abundance ranges from 19.986.000 ind/l – 59.508.000 ind/l. The highest value of zooplankton abundance is found in the Monogononta class with an abundance value of 10.558.8000 ind/l. While the lowest abundance value is found in the Chaetonotidae class with an abundance of 66.000 ind/l. The average value of the phytoplankton diversity index of 2,324 and zooplankton is 2,332 which shows the diversity index in the medium category.

Keywords: *Ecotourism, Diversity, Abundance, Plankton*