ABSTRACT

Indri Lestari. 2016. Patterns Associations Between Seagrass Community with Algae in Sindangkerta Beach, Cipatujah, Tasikmalaya. Under the guided of Drs. Yusuf Ibrahim, M.Pd., M.P and Drs. Suhara, M.Pd.

Seagrass is a plant that is fully adapted to live in the marine environment. In addition, many seagrass associated with macroalgae species. Research conducted in April 2016 aims to determine patterns of association that occur between seagrass communities with macroalgae. Based on the parameters were observed at each station, including: the composition of the type, frequency, density, percent closure, and the coefficient of association. The abiotic factors (*climate factor*) covers, water temperature, water pH, salinity, DO (*Disolved Oxygen*), and a sand substrate. Methods of data collection was *Hand Sorting* and *Belt Transect* methods. The sampling was conducted at six stations, each station consists of five quadrants, each quadrant measuring 1 x 1 m^2, made up of small squares measuring 10 x 10 cm^2, housed in the littoral zone of the District Cipatujah Sindangkerta Beach, Tasikmalaya. The identification results obtained from plants seagrass consisting of one *order*, one *family*, one *genus* and one *species*. While macroalgae consist of 12 *species*, three *classes*, two *subclasses*, seven *orders*, 10 *family* and 10 *genera*. The results showed that there are 12 *species* of macroalgae associated with seagrass plants, the overall chances of negative associations is greater than the positive association with a ratio of 7 : 5. The result showed that macroalgae species that interact with seagrass communities can generally adapt better than seagrass plants. The comparison of macroalgae Indeks Nilai Penting (INP) is greater than the seagrass plants. Therefore, the negative associations are more inclined towards competition in the use of the equal and limited resources (substrates and nutrients). While the positive associations are more inclined towards first organism got benefits and the other organism is unaffected (commensalism).

Keywords: Seagrass, Macroalgae, Association Pattern, INP, Sindangkerta Beach.