

ABSTRACT

Santi Nurfalih. 2016. Correlation of Base Sediment with Seagrass Community Structure in Sindangkerta Beach Tasikmalaya District. Under Guided Drs. Yusuf Ibrahim, M.Pd., M.P. as a First Conselor and Drs. Suhara, M.Pd. as a Second Conselor.

The seagrass are spermatophyt plants can have adapted to grown in sea water. This plant has important contribution in the marine ecosystems balance. However, the research about seagrass in Indonesia's coastal is still rare, specially in Sindangkerta beach, Tasikmalaya district. The base sediments is environmental factor that affect the ability of seagrass survival. This research aim to know the correlation of base sediments with the seagrass community structure in the Sindangkerta beach, Tasikmalaya district. This research was held on April 2016. The method of this research is descriptive correlational. The measure variables is the type of base sediments and abundance of seagrass. This research used *Belt Transec-Quadrat* design and *Handsorting* sampling method. Data analysis based on the sediment grains analysis procedure by using a Sieve Shaker, Wenworth's scale, and Pyramid of Soil Class. The correlation between the abundance of seagrass with sediment type is determined by the correlation and multiple linear regression analysis by the data processor application of SPSS. The research results show that only one type of seagrass found in the littoral zone of the Sindangkerta beach, that is *Thalassia hemprichii* (Ehrenberg) Ascherson with an abundance average is 629 ind/m². The seagrass species on this beach are living in base sediments types of medium sand until very coarse sand. The results of correlation and multiple linear regression analysis showed that base sediments have a very strong positive correlation with the influence is 80,8 % and not significant to the abundance of seagrass in the Sindangkerta beach. But, the most dominated sediments to abundance of seagrass in the Sindangkerta beach is coarse sand with a very strong negative correlation with the influence is 58,902 % and not significant. For further research, suggested to measure the direction and speed of sea water flow and increase time of sediment filtration (over 15 minutes).

Keywords: Base Sediment, Community Structure, Abundance, Seagrass, *Thalassia hemprichii*