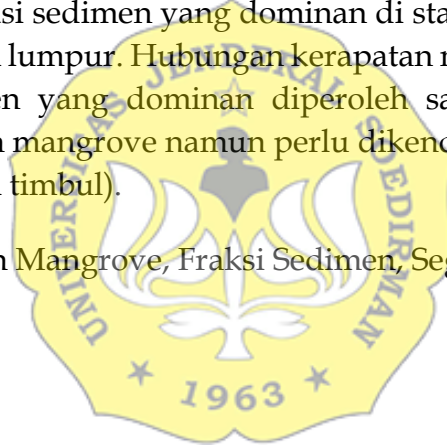


## ABSTRAK

Penelitian ini berjudul Pemetaan kerapatan mangrove berdasarkan fraksi sedimen permukaan di kawasan mangrove Segara Anakan Bagian Timur, Cilacap. Kawasan mangrove Segara Anakan merupakan kawasan mangrove yang terluas di Pulau Jawa. Eksistensi mangrove tersebut diduga didukung oleh fraksi sedimen. Tujuan penelitian ini yaitu untuk mengetahui kerapatan mangrove dan fraksi sedimen di Segara Anakan Bagian Timur Cilacap serta mengetahui hubungan antara keduanya. Metode survei ini terbagi menjadi dua yaitu pengambilan data lapang untuk mengetahui kerapatan mangrove dan data sedimen dan metode pengolahan data citra satelit untuk mengetahui kerapatan mangrove berdasarkan nilai NDVI. Data kerapatan mangrove dipetakan dengan software GIS. Fraksi sedimen dianalisis granulometri dan gravimetri. Kerapatan mangrove di Segara Anakan Bagian Timur Cilacap berdasarkan nilai NDVI dikategorikan jarang dan sedang. Jenis Sedimen diperoleh 3 jenis lanau berlumpur, lanau berpasir dan lumpur berlanau. Fraksi sedimen yang dominan di stasiun 1 dan 2 diperoleh lanau dan di stasiun 3 adalah lumpur. Hubungan kerapatan mangrove berdasarkan NDVI dengan fraksi sedimen yang dominan diperoleh sangat kuat. Sedimen sangat mendukung kerapatan mangrove namun perlu dikendalikan karena menyebabkan kerapatan baru ( tanah timbul).

**Kata Kunci:** Kerapatan Mangrove, Fraksi Sedimen, Segara Anakan.



## ABSTRACT

This study is entitled Mapping of mangrove density based on surface sediment fraction in the eastern Segara Anakan mangrove area, Cilacap. Segara Anakan mangrove area is a large forest area in java, it is suspected that the existence of mangrove vegetation is related to the sediment fraction in the Segara Anakan mangrove area in the eastern part of Cilacap. The purpose of this study were to determined the density of mangroves and sediment fraction in Segara Anakan, eastern part of Cilacap and determine the relationship between them. The research used in this study were divided into two methods, satellite image data processing methods and survey methods. The satellite data that has been obtained is then processed with mapping application software, while the sediment fraction data is processed by sieve analysis and hydrometer analysis, then the results of the mangrove density profile and grain size analysis are obtained. The results of the mangrove density profile and grain size analysis were then analyzed descriptively. The result of this research is that the density of mangroves in Segara Anakan in the eastern part of Cilacap is categorized as rare. In the area of magrove density is dominated by 3 types of sediment, namely clayey silt, sandy silt and silty clay. The relationship between mangrove density and sediment fraction is the size of the mangrove density value, it does not affect the sediment fraction, the mangrove density value is more influenced by other factors, but the sediment fraction is thought to affect the distribution of mangrove species.

**Keywords:** Density of Mangrove, Sediment Fraction, Segara Anakan