

ABSTRAK

Mangrove merupakan karakteristik dari bentuk tanaman pantai, estuari atau muara sungai, dan delta di tempat yang terlindung daerah tropis dan sub tropis. Jenis sedimen ini penting dikaji untuk mengetahui jenis sedimen yang disukai oleh habitat *Ceriops tagal*. Tujuan penelitian ini untuk mengetahui jenis sedimen yang ditumbuhi oleh mangrove *Ceriops tagal* dan kerapatannya di kawasan mangrove Desa Langgundi Kabupaten Bangkalan Jawa Timur. Penelitian ini dilakukan pada bulan Oktober-Desember 2023. Penelitian ini menggunakan metode purposive sampling menggunakan traksek 10x10 m² dengan pengambilan sampel dilakukan berdasarkan kelas kerapatan (padat ≥ 1500 pohon/ha, sedang $\geq 1000 - < 1500$ pohon/ha, dan jarang < 1000 pohon/ha.). Analisa sedimen menggunakan metode Buchanan yaitu analisa kering dan basah. Analisa data menggunakan uji normalitas Shapiro-Walk dan uji korelasi menggunakan Spearmen. Kerapatan mangrove tertinggi pada mangrove jenis *Ceriops tagal* yang mendapatkan total 7300 ind/Ha. Nilai indeks penting tertinggi pada jenis mangrove *Ceriops tagal* mendapatkan nilai 300%. Hasil sedimen yang didapatkan pada penelitian ini yaitu pasir liat dan pasir. Terdapat hubungan korelasi hubungan antara clay dengan kerapatan *Ceriops tagal*

Kata Kunci : Ekosistem mangrove, Karakteristik sedimen, Kerapatan jenis, Indeks Nilai Penting (INP)

ABSTRACT

The mangrove is a characteristic of coastal, estuarine or river mouth, and delta vegetation in sheltered tropical and subtropical regions. This type of sediment is important to study to determine the type of sediment preferred by the *Ceriops tagal* habitat. The purpose of this study was to determine the type of sediment overgrown by the *Ceriops tagal* mangrove and its density in the mangrove area of Langgundi Village, Bangkalan Regency, East Java. This research was conducted in October-December 2023. This research used the purposive sampling method using a 10x10 m² transect with sampling based on density classes (dense $\geq$ 1500 trees/ha, medium $\geq$ 1000 - < 1500 trees/ha, and sparse < 1000 trees/ha). Sediment analysis used the Buchanan method, namely dry and wet analysis. Data analysis used the Shapiro-Wilk normality test and Spearman correlation test. The highest mangrove density was found in the *Ceriops tagal* mangrove, totaling 7300 ind/Ha. The highest important value index for the *Ceriops tagal* mangrove species was 300%. The sediments obtained in this study were clayey sand and sand. There was a correlation between clay content and *Ceriops tagal* density. In conclusion, *Ceriops tagal* is the dominant mangrove species in the mangrove area of Langgundi Village, Bangkalan Regency, East Java, and the supporting sediment type is clayey sand and sand. The correlation between clay content and *Ceriops tagal* density indicates that sediment with sufficient clay content is a suitable habitat for the growth of *Ceriops tagal* mangrove.

Keywords: Mangrove ecosystem, Sediment characteristics, Species density, Index of importance (INP)