

ABSTRAK

Mangrove merupakan ekosistem yang hidup di pesisir tropis maupun sub-tropis. Pertumbuhan mangrove dipengaruhi oleh adanya sedimen dan faktor lingkungan lainnya. Penelitian ini bertujuan untuk mengetahui hubungan kerapatan mangrove (*Avicennia sp* dan *Rhizophora sp*) terhadap jenis substrat di Banyuurip Mangrove Center (BMC) Gresik. Penelitian ini dilakukan dengan beberapa tahapan, yaitu penentuan titik lokasi penelitian, pengambilan sampel substrat, pengambilan sampel mangrove, dan pengukuran kualitas perairan. Analisa sedimen menggunakan metode analisa kering dan analisa basah. Hasil indeks nilai penting (INP) mangrove *Avicennia sp.* sebesar 135,8 pada spesies *Avicennia marina* dan mangrove *Rhizophora sp* 123,1 pada spesies *Rhizophora mucronate*. *Avicennia sp.* tumbuh pada substrat berpasir dan memiliki kerapatan yang tinggi, hal tersebut dikarenakan mangrove jenis *Avicennia sp.* dapat tumbuh dengan baik pada lokasi yang memiliki substrat pasir. *Rhizophora sp.* memiliki kerapatan tinggi pada substrat berlumpur karena jumlah individu pada substrat lumpur banyak dan disebabkan oleh salah satu faktor yaitu karena mangrove *Rhizophora sp.* dapat tumbuh dengan baik pada substrat berlumpur.

Kata kunci : Mangrove, *Avicennia sp.*, *Rhizophora sp.*, Sedimen, Kerapatan, indeks nilai penting (INP), Banyuurip Mangrove Center (BMC) Gresik.

Tiara Lintang Kasih, NIM 170341100049. Relation of Substrate Type to Mangrove Density At Banyuurip Mangrove Center (BMC) Ujung Pangkah, Gresik. Supervised by Insafitri, ST.,M.Sc. Phd

ABSTRACT

Mangroves are ecosystem that live on tropical and sub-tropical coasts. Mangrove growth is influenced by the presence of sediment and other environmental factors. This study aims to determine the relationship of mangrove density (*Avicennia* sp. and *Rhizophora* sp.) to the type of substrate at Banyuurip Mangrove Center (BMC) Gresik. This research was carried out in several stages, namely measuring water quality, taking samples of mangroves and sediment samples, and analyzing sediments. Sediment analysis using dry analysis method and wet analysis. The results showed that *Avicennia* sp. mangroves live more on sand substrates and *Rhizophora* sp. species live more on clay substrates. The significance value index (INP) of *Avicennia* sp. mangrove was 135.8 on *Avicennia marina* species and mangrove *Rhizophora* sp. 123.1 on *Rhizophora mucronate* species. *Avicennia* sp. grows on sandy substrate and has a high density, this is because *Avicennia* sp. mangrove species can grow well in locations that have sand substrate. *Rhizophora* sp. has a high density on muddy substrates because the number of individuals on mud substrates is large and is caused by one factor, namely because *Rhizophora* sp. mangroves can grow well on muddy substrates.

Keywords : Mangroves, *Avicennia* sp., *Rhizophora* sp., Sediment, Density, Important Value Index (INP), Banyuurip Mangrove Center (BMC) Gresik.

