

RINGKASAN

MARIANA NADUASTI PENY (16383510) Hubungan Kerapatan Mangrove Terhadap Laju Transpor Sedimen di Kawasan Ekowisata Mangrove Kelurahan Oesapa Barat. Ir. Yohanes Merryanto S., M.Si, Ph.D sebagai Pembimbing 1 dan Dr. Beatrix M. Rehatta, S.Pi, M.Si sebagai Pembimbing 2. Program Studi Manajemen Sumberdaya Perairan, Fakultas Perikanan dan Ilmu Kelautan, Universitas Kristen Artha Wacana Kupang.

Mangrove memiliki berbagai manfaat, salah satunya mengendalikan transpor sedimen. Kelurahan Oesapa Barat memiliki vegetasi mangrove yang cukup luas di wilayah Kota Kupang. Tujuan penelitian untuk mengetahui hubungan kerapatan mangrove terhadap laju transpor sedimen di kawasan Ekowisata Mangrove Kelurahan Oesapa Barat.

Metode *purposive sampling* pada kondisi kerapatan tinggi dan rendah untuk menghitung kerapatan mangrove. Penempatan *sediment trap* pada bagian depan, tengah dan belakang vegetasi mangrove untuk mengetahui laju transpor sedimen. Suhu perairan, kecepatan arus dan kedalaman perairan menjadi parameter yang diukur. Analisis korelasi *Pearson* untuk mengetahui hubungan kerapatan mangrove terhadap laju transpor sedimen.

Jenis mangrove yang ditemukan yaitu *Avicennia alba*, *Lumnitzera racemose*, *Rhizophora mucronata* dan *Sonneratia alba*. Hasil penelitian menunjukkan hubungan kerapatan mangrove terhadap laju transpor sedimen bernilai -1 yang berarti kerapatan mangrove yang semakin tinggi menyebabkan laju transpor sedimen semakin rendah dan sebaliknya.

Kata kunci: Kerapatan mangrove, laju transpor sedimen, ekowisata Kelurahan Oesapa Barat.

SUMMARY

MARIANA NADUASTI PENY (16383510) The Relation of Mangrove Density to Sediment Transport Rate in the Mangrove Ecotourism Area of Oesapa Barat Village. Ir. Yohanes Merryanto S., M.Si, Ph.D as Supervisor 1 and Dr. Beatrix M. Rehatta, S.Pi, M.Si as Supervisor 2. Department of Aquatic Resources Management, Faculty of Fisheries and Marine Science, Artha Wacana Christian University Kupang.

Mangroves have various benefits, one of them is to control the movement of sediment. Oesapa Barat Village has quite large area in Kupang City. The purpose of this research was to determine the relation of mangrove density to sediment transport rate in the Mangrove Ecotourism Area of Oesapa Barat Village.

The purposive sampling method in high and low-density vegetation conditions was used to calculate the mangrove density. The placement of sediment traps was in the front, middle and back of the mangrove vegetation to determine the rate of sediment transport. Pearson correlation analysis was used to determine the relation of mangrove density to sediment transport rate.

The type of mangrove found were *Avicennia alba*, *Lumnitzera racemose*, *Rhizophora mucronata* and *Sonneratia alba*. The results showed that the relation of mangrove density to sediment transport rate was -1, which means that the higher the mangrove density, the lower the sediment transport rate and vice versa.

Keywords: Mangrove density, sediment transport rate, ecotourism in Oesapa Barat Village.