

ABSTRAK

Kiki Darmojo. 2014. Skripsi. "Potensi Nilai Biomassa Mangrove Spesies *Ceriops tagal* (Perr.) C.B. Rob Di Wilayah Pesisir Desa Trikora Kecamatan Popayato Kabupaten Pohuwato. Jurusan Biologi, Fakultas Matematika Dan IPA. Universitas Negeri Gorontalo. Pembimbing I Dr. Dewi K. Baderan, M.Si, Pembimbing II Abubakar Sidik Katili, S.Pd, M.Sc.

Penelitian ini bertujuan untuk mengetahui potensi nilai biomassa mangrove spesies *Ceriops tagal* (Perr.) C.B. Rob di wilayah pesisir Desa Trikora Kecamatan Popayato Kabupaten Pohuwato. Pengambilan data dilakukan menggunakan metode *Point Centre Quarter Metode* (PCQM) dengan mengukur nilai biomassa atas permukaan (batang), biomassa bawah permukaan (akar), dan karbon tanah. Nilai biomassa batang dan akar dihitung berdasarkan persamaan allometrik, dengan kandungan karbon dihitung sebagai 50% dari biomassa. Kandungan karbon tanah dilakukan analisis laboratorium dengan menghitung berat jenis tanah dan persentase karbon organik tanah. Pada lokasi pengamatan tercatat 16 pohon yang ditemukan dengan nilai kerapatan seluruh spesies 139,3 pohon/2ha. Dari hasil perhitungan diperoleh potensi nilai biomassa mangrove spesies *Ceriops tagal* (Perr.) C.B. Rob di wilayah pesisir Desa Trikora Kecamatan Popayato Kabupaten Pohuwato menyerap karbondioksida sebesar 25.466,54 kg dan menyimpan karbon sebesar 7050,31 kg. Potensi nilai biomassa mangrove *Ceriops tagal* (Perr.) C.B. Rob terbesar terdapat pada kemampuan mangrove *Ceriops tagal* dalam menyerap karbondioksida, kemudian nilai biomassa (13.878,22 kg), kandungan karbon dalam biomassa (6939,11 kg), dan kandungan karbon tanah (11.119,73 g/cm²).

Kata kunci : Potensi nilai biomassa, Biomassa, *Ceriops tagal* (Perr.) C.B. Rob

ABSTRACT

Kiki Darmojo. 2014. Thesis. "Potential Value of Biomass Mangrove *Ceriops tagal* (Perr.) C.B. Rob in Coastal Trikora Village, Popayato Subdistrict, Pohuwato Regency. Department of Biology, Faculty Mathematic and Natural Science, Gorontalo State University. At Leat by Dr. Dewi K. Baderan, M.Si, and Abubakar Sidik Katili, S.Pd, M.Sc.

The objectives of this research were knowing potential value of biomass mangrove *Ceriops tagal* (Perr.) C.B. Rob in coastal trikora village, popayato subdistrict, pohuwato regency. Collection data were using point centre quarter method (PCQM) to measure the value of the surface biomass (stems), subsurface biomass (roots), and soil carbon. Stem and root biomass value is calculated based on the allometric equation, the carbon content is calculated as 50% of the biomass. Carbon content of the soil laboratory analysis by calculating the percentage weight of soil type and soil organic carbon. At the location of the observations recorded 16 trees were found with a density value of the entire species of 139.3 trees/ 2ha. From the calculation, the potential value of the biomass of mangrove species *Ceriops tagal* (Perr.) CB Rob in coastal trikora village, popayato subdistrict, pohuwato regency absorb carbondioxide 25.466.54 kg and store carbon 7050.31 kg. The highest potential value of biomass mangrove *Ceriops tagal* (Perr.) C.B. Rob in coastal trikora village, was found ability to absorb carbondioxide, then the value of biomass (13.878.22 kg), the carbon content in the biomass (6939.11 kg), and the carbon content of the soil (11.119,73 g/cm²).

Keywords: Potential value of biomass, Biomass, *Ceriops tagal* (Perr.) C.B Rob