ABSTRAK

Segara Anakan Timur merupakan kawasan mangrove yang berpotensi besar dalam menyerap dan menyimpan karbon. Akan tetapi, kawasan mangrove di Segara Anakan Timur mengalami degradasi sehingga berakibat pada terlepasnya karbon yang tersimpan di vegetasi mangrove serta berpengaruh terhadap perubahan bentuk *landscape* mangrove. Tujuan penelitian ini adalah untuk mengetahui nilai kerapatan, biomassa, dan potensi karbon, serta mengetahui analisis *landscape* berdasarkan potensi karbon dan kerapatan mangrove di Segara Anakan Timur. Metode yang digunakan adalah metode *survey* yang terdiri dari 15 stasiun dengan teknik pengambilan sampel yaitu *stratified sampling*. Analisis data dilakukan menggunakan deskriptif kuantitatif. Pengukuran vegetasi mangrove dilakukan dengan metode *non destructive* dengan menggunakan persamaan allometrik untuk mendapatkan nilai biomassa dan potensi karbon mangrove. Hasil penelitian menunjukkan nilai rata-rata kerapatan mangrove sebesar 2.698 ind/ha dan termasuk dalam kategori baik. Kawasan mangrove Segara Anakan Timur memiliki nilai rata-rata biomassa sebesar 134,44 ton/ha dan rata-rata potensi karbon sebesar 62,74 ton C/ha. Besaran nilai rata-rata potensi karbon pada *landscape* mangrove kategori kerapatan sangat baik, kerapatan baik, kerapatan sedang, dan kerapatan jarang secara berurutan yaitu 83,92 ton C/ha; 69,69 ton C/ha; 34,96 ton C/ha; 12,56 ton C/ha.

Kata kunci : *biomassa, kerapatan, landscape, potensi karbon, Segara Anakan Timur*

ABSTRACT

East Segara Anakan is a mangrove area that has great potential to absorb and store carbon. However, mangrove areas in East Segara Anakan are degraded, resulting in the release of carbon stored in mangrove vegetation and affecting changes in the shape of the mangrove landscape. The purpose of this study was to determine the value of density, biomass, and carbon potential, and to determine landscape analysis based on carbon potential and mangrove density in East Segara Anakan. The method used is a survey method consisting of 15 stations with a sampling technique that is stratified sampling. Data analysis was carried out using descriptive quantitative. Mangrove vegetation measurements were carried out by non destructive methods using the allometric equation to obtain the value of mangrove biomass and carbon potential. The results showed an average mangrove density value of 2,698 ind/ha and included in the good category. East Segara Anakan mangrove area has an average biomass value of 134.44 tons/ha and an average carbon potential of 62,74 tons C/ha. The magnitude of the average value of carbon potential in the mangrove landscape of very good density, good density, medium density, and sparse density categories are respectively 83,92 tons C/ha; 69,69 tons C/ha; 34,96 tons C/ha; 12,56 tons C/ha.

Keywords: *biomass, density, landscape, carbon potential, East Segara Anakan*