

ABSTRAK

Taman Wisata Alam Mangrove Angke merupakan kawasan wisata dan pelestarian yang dimanfaatkan untuk kegiatan wisata alam khususnya dalam kegiatan ekosistem hutan mangrove. Tingginya kegiatan antropogenik pada wilayah Angke seperti aktivitas pelayaran, budidaya, dan industri berpotensi menyebabkan perubahan kualitas lingkungan khususnya perairan di sekitar Muara Angke. Aktivitas tersebut dapat menimbulkan potensi pencemaran logam berat Cd di ekosistem mangrove. Tujuan dari penelitian ini adalah menganalisis nilai akumulasi dan tingkat pencemaran logam berat Cd pada sedimen dan vegetasi mangrove serta menganalisis kualitas perairan di ekosistem mangrove TWA Angke. Metode yang digunakan yaitu metode *random sampling* dimulai dari penentuan lokasi, penentuan stasiun, lalu pengambilan data ekosistem mangrove (bagian akar) dan sedimen dilakukan bersamaan dengan pengambilan data parameter air. Hasil nilai akumulasi logam berat Cd tertinggi terdapat pada Stasiun 1 memiliki nilai 0,64 mg/kg berjenis mangrove *Rhizophora mucronata* dengan rata-rata 0,54 mg/kg, tingkat pencemaran logam berat Cd berdasarkan nilai BCF (*Bio-Concentration Factors*) masuk dalam kategori sebagai bioakumulator tinggi yang terdapat pada pohon *Rhizophora mucronata*. Konentrasi logam berat Cd pada sedimen mangrove rata-rata 0,54 mg/kg, sehingga berdasarkan baku mutu sedimen termasuk kedalam kategori belum tercemar.

Kata kunci: Kadmium; Logam berat; Mangrove; Sedimen; TWA Angke.

ABSTRACT

Angke Mangrove Nature Park is a tourism and conservation area that is utilized for nature tourism activities, especially in mangrove forest ecosystem activities. The high anthropogenic activities in the Angke region such as shipping, aquaculture, and industrial activities have the potential to cause changes in environmental quality, especially the waters around the Angke Estuary. These activities can lead to potential Cd heavy metal pollution in mangrove ecosystems. The purpose of this study was to analyze the accumulation value and level of Cd heavy metal pollution in sediments and mangrove vegetation and to analyze the water quality in the mangrove ecosystem of TWA Angke. The method used is the random sampling method starting from determining the location, determining the station, then collecting mangrove ecosystem data (root part) and sediments carried out simultaneously with data collection of water parameters. The results of the highest Cd heavy metal accumulation value found at Station 1 has a value of 0,64 mg/kg of Rhizophora mucronata mangrove type with an average of 0,54 mg/kg, the level of Cd heavy metal pollution based on the value of BCF (Bio-Concentration Factors) is included in the category as a high bioaccumulator found in Rhizophora mucronata trees. The concentration of heavy metal Cd in mangrove sediments averaged 0,54 mg/kg, so that based on the quality standards of sediments included in the category unpolluted.

Keywords: Cadmium; Heavy Metals; Mangrove; Sediment; Angke Mangrove Nature Park.

