

## **ABSTRAK**

**Amelia Wibowo Putri (Dibimbing oleh: Dr. Yuniarti. MS., dan Sheila Zallesa S.Kel). 2022. Pengaruh Kualitas Perairan Terhadap Biota Asosiasi Pada Mangrove Caplok Barong Ambulu.**

Mangrove Caplok Barong salah satu ekowisata yang memiliki potensi untuk terus dikembangkan namun masih sangat kurangnya penelitian disana. Tujuan riset ini mengetahui kualitas perairannya, biota asosiasi dan struktur komintas didalamnya, dan melihat seberapa jauh pengaruh kualitas perairan terhadap biota asosiasi pada Mangrove Caplok Barong. Riset ini menggunakan metode Survei untuk mengetahui kondisi kualitas perairan dan biota yang asosiasi nya. Riset ini dilakukan secara insitu, menggunakan metode Transek Garis dimana plot nya berukuran 10x10 dan subplot nya 1x1. Kondisi perairan nya terbilang cukup stabil, dilihat dari suhu rata rata perairan mangrove nya yang berkisar 32°C. Salinitas perairan nya 24‰. Nilai DO berkisar 4 dan nilai pH berkisar 7. Pada stasiun1 nilai keanekaragaman biota asosiasi mangrove 1,4. Pada stasiun2 didapatkan nilai keanekaragaman nya 1,6, dan stasiun3 nilai keanekaragaman nya 1,1. Nilai keseragaman biota asosiasi pada Mangrove Caplok Barong Ambulu pada stasiun1 dan 3 yaitu 0,5 dan pada stasiun2 yaitu 0,6. Nilai dominansi biota asosiasi pada stasiun1 adalah 0,3. Pada staisun2 adalah 0,2 dan pada stasiun3 adalah 0,5. Hasil analisis regresi sederhana menggunakan Microsoft Excel dengan keakuratan 95%. Nilai R square pada suhu dan kelimpahan biota asosiasi 0,215(22%), untuk salinitas 0,0129(1%), untuk oksigen terlarut (DO) 0,883 (83%) dan yang terakhir untuk pH 0,212(21%).

Kata Kunci: Analisis Regresi, Biota Asosiasi, Kualitas Perairan, Mangrove Caplok Barong, Struktur Komunitas.

## **ABSTRACT**

**Amelia Wibowo Putri (Supervised by: Dr. Yuniarti. MS., and Sheila Zallesa S.Kel). 2022. Effect of Water Quality on Associated Biota in the Barong Ambulu Caplok Mangrove.**

Caplok Barong Mangrove is one of the ecotourism that has the potential to continue to be developed, unfortunately not many tourists and researchers know about the existence of Caplok Barong Mangrove, but there is still much that can be used as research in the Caplok Barong Ambulu Ecotourism area, especially regarding the ecosystem and biota of the mangrove itself. The purpose of this research is to know the condition of the water quality of the Caplok Barong Mangrove, to know the associated biota and the structure of the communities in it, also to see how much influence the water quality has on the associated biota in the Caplok Barong Ambulu Mangrove. This research uses the survey method. This survey method was carried out to determine the condition of the water quality and also to know the associated biota. This research was conducted in situ. The association biota method is assisted by the Line Transect method where the plot is 10x10 and the subplot is 1x1. The condition of the waters in the Caplok Barong Ambulu Mangrove is quite stable, judging from the average temperature of the mangrove waters which is around 32°C. The salinity obtained is around 24‰. The DO value is around 4 and the pH value is around 7. The biodiversity value of mangrove associations is obtained at station 1.4. At station 2, the diversity value is 1.6, which is categorized as moderate diversity. And station 3 the diversity value is 1.1. The value of the uniformity of association biota in the Caplok Barong Ambulu Mangrove at station 1 is 0.5. At station 2 it is 0.6 and at station 3 it is 0.5. The dominance value of association biota in the Caplok Barong Mangrove at station 1 is 0.3. At station 2 is 0, 2 and at station 3 is 0.5. To see how far the influence of water quality with associated biota using simple regression analysis using Microsoft Excel with 95% accuracy. Where the value of R square obtained at temperature and abundance of associated biota is 0.215 (22%), for salinity 0.0129 (1%), for dissolved oxygen (DO) 0.883 (83%), and the last one for pH 0.212 (21%).

**Keywords:** Mangrove Caplok Barong, Regression Analysis, Structure Community, Water Quality.