

## ABSTRAK

### KOMPOSISI DAN STRUKTUR KOMUNITAS MANGROVE DI EKOWISATA MANGROVE DESA BUDENG, KABUPATEN JEMBRANA, BALI

Hutan mangrove merupakan ekosistem vital yang memegang peranan penting dalam menjaga keseimbangan berbagai siklus ekologi terutama di kawasan pesisir. Mangrove yang ada di Desa Budeng selain tumbuh pada areal kawasan hutan milik negara juga tumbuh pada areal yang merupakan milik masyarakat. Metode analisis vegetasi mangrove menggunakan metode *line transectplot*. Struktur vegetasi mangrove yang berada di Desa Budeng menunjukkan jenis *Rhizophora mucronata* memiliki nilai kerapatan 21%, dominasi relatif 61,08% dan tingkat frekuensi di lokasi penelitian sebesar 1.00%. Tingkat dominasi tersebut menunjukkan jenis *Rhizophora mucronata* sangat berpengaruh dalam struktur ekosistem mangrove Desa Budeng. Pada uji kualitas perairan di ekosistem mangrove di peroleh nilai salinitas, ph, suhu dan do yang berfluktuasi. Kisaran nilai salinitas berkisar antara 33,0 – 38,8 ppt. Komposisi mangrove di Desa Budeng terdiri dari tujuh jenis yang berbeda yaitu *Rhizophora mucronata*, *Rhizophora apiculata*, *Sonneratia alba*, *Avicennia marina*, *Avicennia rumphiana*, *Bruguiera gymnorrhiza*, dan *Xylocarpus granatum*. Nilai indeks keanekaragaman pada ekosistem mangrove di Desa Budeng berkisar 0,57-1,95 yang menunjukkan nilai produktivitas cukup dan kondisi ekosistem cukup seimbang.

Kata kunci: analisis vegetasi kulialitas air mangrove, indeks ekologi mangrove budeng

## **ABSTRACT**

### **COMPOSITION AND STRUCTURE OF THE MANGROVE COMMUNITY IN THE MANGROVE ECOTOURISM OF BUDENG VILLAGE, JEMBRANA DISTRICT, BALI**

Mangrove forests are vital ecosystems that play an important role in maintaining the balance of various ecological cycles, especially in coastal areas. Mangroves in Budeng Village in addition to growing in the area of state-owned forest areas also grow in areas that are owned by the community. Mangrove Vegetation analysis method using Line Transect Plot method. The structure of vegetation in Budeng Village shows that the *Rhizophora mucronata* species has a density value of 21%, a relative dominance of 61.08% and a frequency level at the study site of 1.00%. The level of dominance shows the type of *Rhizophora mucronata* is very influential in the structure of the mangrove ecosystem of Budeng Village. In the water quality test in the mangrove ecosystem, the values of salinity, ph, temperature and do fluctuate. The range of salinity values ranged from 33.0 - 38.8 ppt. Mangrove composition in Budeng Village consists of 7 different species namely *Rhizophora mucronata*, *Rhizophora apiculata*, *Sonneratia alba*, *Avicennia marina*, *Avicennia rumphiana*, *Bruguiera gymnorrhiza*, *Xylocarpus granatum*. The value of the diversity index in the mangrove ecosystem in Budeng Village ranges from 0.57-1.95 which shows the value of productivity is sufficient and the condition of the ecosystem is quite balanced.

Key words: vegetation analysis, mangrove water quality, Budeng mangrove ecological index