

**KUALITAS HABITAT MANGROVE *SILVOFISHERY*  
PADA TIGA TAHUN TANAM  
DI KAWASAN MANGROVE KUTAWARU CILACAP**

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**INTISARI**

Hutan mangrove sangat berperan bagi kehidupan baik secara ekologis, sosial maupun ekonomis. Perum Perhutani sebagai pengelola merubah orientasi yaitu tidak hanya pada hasil hutan kayu tetapi juga pada sumberdaya mangrove sebagai suatu ekosistem yang dikelola bersama-sama masyarakat guna menjamin keberlanjutan fungsi dan manfaat mangrove. Pendekatan yang ditempuh dengan mengajak masyarakat di sekitar hutan berpartisipasi aktif membangun hutan melalui program *silvofishery* dengan pola empang parit yang dikembangkan pada mangrove hasil rehabilitasi tahun tanam 1982, 1995 dan 1999. Penelitian ini bertujuan untuk mengetahui Kerapatan Vegetasi, Kepadatan dan Indeks Keragaman jenis biota perairan serta faktor fisik-kimia perairan ( DO, Salinitas, Bahan Organik, Suhu dan pH) areal *silvofishery* tahun tanam 1982, 1995, 1999. Mengetahui perbedaan antara Kerapatan Vegetasi, Kepadatan dan Indeks Keragaman jenis biota perairan serta faktor fisik-kimia perairan (DO, Salinitas, Bahan Organik, Suhu dan pH) pada areal *silvofishery* tahun tanam 1982, 1995, 1999.

Metode yang digunakan dalam pengambilan data Kerapatan Vegetasi menggunakan inventarisasi dengan Intensitas Sampling 100%. Pengambilan data sifat fisik kimia dan biota perairan menggunakan petak ukur 1m x 1m, bahan organik dengan mengambil sampel lumpur dan dianalisis di laboratorium. Pengukuran Kepadatan dan Indeks Diversitas biota, nekton dihitung langsung di lapangan sedangkan plankton dengan mengambil sampel air dan dianalisis di laboratorium. Selanjutnya data diolah dengan SPSS rancangan CRD ( *Completely Random Design* ) yang kemudian dianalisis secara statistik dengan Analisis Varians, sedangkan untuk membandingkan perbedaan antara variabel digunakan LSD. Dari hasil olah data tersebut bisa diketahui signifikansi baik parameter fisik, kimia dan biologik dari ketiga tahun tanam tersebut.

Hasil penelitian menunjukkan bahwa diantara ketiga tahun tanam tidak banyak yang menunjukkan perbedaan yang signifikan. Di antara ketiga tahun tanam, parameter yang menunjukkan adanya perbedaan yang signifikan adalah Oksigen Terlarut, Suhu dan Bahan Organik. Perbedaan yang signifikan diantara ketiga tahun tanam terjadi karena adanya Kerapatan Vegetasi atau optimalisasi penutupan tajuk yang agak berbeda sehingga berakibat pada suplai seresah, produksi oksigen dan panas yang diterima air akan berbeda.

Kata kunci : Mangrove, Kualitas habitat, *Silvofishery*.

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**HABITAT QUALITY OF SILVOFISHERY MANGROVE  
AT THE THREE YEARS PLANTING  
IN MANGROVE REGION KUTAWARU CILACAP**

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**ABSTRACT**

Ecologically, socially or economically mangrove woods have an important role for life. Perum Perhutani as performer had changed the orientation of mangrove woods not only as woods production but also their capacity as ecosystem which performed together so their function and advantages could be guaranteed. The approach used was gaining the neighborhood societies to develop them actively through silvofishery program. This program included performing canal fish pond design which has been developed in planting year of 1982, 1995 and 1999. This research was conducted to know Vegetation Solidity, Solidity and Diversity Indeks of aquatic biota and aquatic physical factor (DO, Salinity, Organic Matter, Temperature and pH) of silvofishery area in the planting year of 1982, 1995 and 1999. The differences for the variables mentioned above were also examined.

Method used for solidity vegetation data collection was inventarisation with Sampling Intensity of 100%. Data collection for physic and chemist characteristic of aquatic biota were using measurement square of 1 m x 1m. Data collection for organic matter was using mud sampling than analyzed in laboratory. There two kind of samples for solidity measurement and biota Diversity Indeks. They were nekton and plankton. Nekton was counted directly in the research field, and plankton was gained from aquatic sample than analyzed in laboratory. Data collected were analyzed with Completely Randomized Design (CRD) and than the mean differences were tested with LSD. From those tested designed there would be known the significances for physical, chemical, biological characteristics from those three planting years.

The results showed that between those three planting years there were no significant differences for most variable measured. The significant variables were Dissolved Oxygen, Temperature and Organic Matter. Those significant differences performed because of the differences for Vegetation Solidity and optimal locked extension and those two reasons would product differences of litter supply, oxygen and heat production into water.

Keywords : Mangrove, Habitat quality, Silvofishery

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