



## Intisari

### KUALITAS AIR DAN KERAGAMAN MANGROVE BAROS DESA TIRTOHARGO KABUPATEN BANTUL

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Mangrove merupakan ekosistem yang terdapat di perairan estuari. Penelitian telah dilakukan untuk mengetahui kualitas air, keragaman, dan kondisi mangrove yang ada di Dusun Baros, Desa Tirtohargo, Kecamatan Kretek, Kabupaten Bantul. Penelitian dilaksanakan pada bulan Juni 2013 hingga Januari 2014. Pengamatan dan pengambilan sampel kualitas air dilakukan pada 6 stasiun setiap minggu selama 5 minggu, pada pukul 07.00 WIB. Pengamatan mangrove dilakukan dengan metode plot dan transek. Data mangrove diambil pada 6 stasiun yang terdiri dari 1 transek per stasiun. Setiap transek terdiri dari 2 plot berukuran 5x5 meter. Berdasarkan hasil penelitian dapat disampaikan kesimpulan bahwa kualitas air kawasan mangrove di Dusun Baros, Tirtohargo, Kretek, Bantul mempunyai salinitas sebesar 0,4 ‰; fosfat 0,32 ppm; dan nitrat 0,97 ppm, yang termasuk sesuai untuk pertumbuhan mangrove. Keragaman mangrove yang ditemukan sebanyak 5 spesies, yaitu *Rhizophora apiculata*, *Avicennia lanata*, *Avicennia marina*, *Bruguiera* sp., dan *Nypa fruticans*. Kerapatan mangrove di Baros sebanyak 18 tegakan/ha. *Rhizophora apiculata* memiliki indeks penting tertinggi sebesar 116,64 %, yang menunjukkan spesies tersebut memiliki peranan paling besar dalam ekosistem tersebut. Indeks diversitas mangrove sebesar 0,58 yang menunjukkan keanekaragaman mangrove di Baros memiliki kriteria sedang.

Kata kunci: Baros, ekosistem, kualitas air, mangrove, perairan



## *Abstract*

### WATER QUALITY AND MANGROVE DIVERSITY IN BAROS TIRTOHARGO BANTUL

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Mangrove ecosystems found in estuarine waters. Dynamic current flow patterns and activities in mangrove areas affect the quality of water, plants, animals, and various nutrients in the direction of land and sea. Dynamic pattern of current flow and activity in the region have an influence on water quality, plants, animals, and a variety of nutrients to the sea towards the land and through the mangroves. This research aims to determine the water quality, diversity of mangrove species, and condition of the existing mangroves in Baros, Tirtohargo, Kretek, Bantul. The research conducted in June 2013 to January 2014. Data collection was performed a total of six stations water quality every week, for 5 weeks at 07.00 am. Data collection was performed using the mangrove transect method. Data mangrove taken by five stations composed of five transects and each transect consisted of two plots measuring 5x5 meters. Based on research on water quality and mangrove biodiversity in Baros, Tirtohargo, Kretek, Bantul, which has be concluded that salinity of 0,4; 0,32 ppm of phosphate; and 0,97 ppm of nitrate which describes water quality in the waters of the mangrove areas for both Baros and support the growth of mangrove ecosystem. Mangroves found as many five species are *Rhizophora apiculata*, *Avicennia lanata*, *Avicennia marina*, *Bruguiera* sp., and *Nypa fruticans*. Mangrove density in Baros is 18 stalks / ha. *Rhizophora apiculata* has a highest important index is 116,64 % which indicates that the species has the greatest role for mangrove ecosystem in Baros. Mangrove diversity index is 0,58 shows the diversity of mangroves in Baros has a moderate criteria.

Keywords: Baros, ecosystem, mangrove, water quality