

Komposisi Nitrat, Nitrit, Amonium dan Fosfat di Perairan Kabupaten Tegal

| | |
|-----------------------|--|
| Title | Komposisi Nitrat, Nitrit, Amonium dan Fosfat di Perairan Kabupaten Tegal |
| Author Order | 3 of 3 |
| Accreditation | |
| Abstract | <p>Nitrat, nitrit, amonia dan fosfat merupakan salah satu indikator kesuburan dan kesehatan lingkungan. Keberadaan aktivitas antropologi seperti Tempat Pelelangan Ikan, pertambakan dan wisata bahari diduga mempengaruhi konsentrasi unsur hara di perairan tersebut. Penelitian ini bertujuan untuk mengetahui konsentrasi unsur nitrat, nitrit, amonia dan fosfat di Perairan Munjung Agung. Penelitian dilakukan dengan menggunakan metode deskriptif. Penelitian dilakukan pada bulan september-november 2021. Analisis data yang digunakan adalah analisis kesesuaian ambang baku mutu yang dilakukan dengan membandingkan nilai sampel yang diperoleh dengan ambang baku mutu perairan berdasarkan Keputusan Menteri LHK No 51 Th 2004 tentang Ambang Baku Mutu Perairan. serta analisis determinasi tingkat pencemaran menggunakan metode STORET (Keputusan Menteri LHK No 115 Th 2003). Hasil penelitian dapat disimpulkan bahwa nilai nitrat, nitrit, amonia dan fosfat di Perairan Munjung Agung tidak memenuhi ambang baku mutu sesuai dengan Keputusan Menteri LHK No 51 Th 2004. Konsentrasi nitrat berkisar antara 1,21-3,80 mg/l, nitrit berkisar antara 0,01-0,35 mg/l, amonia berkisar antara 0,21-0,33 mg/l dan fosfat berkisar antara 0,12-0,22 mg/l. Nilai determinasi pencemaran di perairan masuk dalam kategori tercemar sedang-berat dengan nilai -26 s/d -32. Kondisi ini disebabkan karena aktivitas antropologi disekitar perairan tinggi, dimana digunakan sebagai lokasi tempat Pelelangan Ikan, pertambakan hingga wisata bahari.</p> <p>Nitrate, nitrite, ammonia and phosphate are indicators of fertility and water health. Anthropological activities such as fish auction sites, aquaculture and marine tourism are thought to have determined the concentration of water nutrients. This study aims to determine the concentration of nitrate, nitrite, ammonia and phosphate in Munjung Agung waters. The research was conducted using descriptive method. The research was conducted in September-November 2021. Data analysis used analysis of the suitability of the quality standard threshold, which is carried out by comparing the sample value obtained with the water quality standard threshold based on the Decree of the Minister of Environment and Forestry No. 51 of 2004 and the analysis of the determination of the level of pollution used the STORET method (Decree of the Minister of Environment and Forestry, No. 115 of 2003). The results of the study were that the values of nitrate, nitrite, ammonia and phosphate in Munjung Agung waters did not meet the quality standard threshold in accordance with the Decree of the Minister of Environment and Forestry No. 51 of 2004. The concentration of nitrate ranged from 1.21-3.80 mg/l, nitrite ranged from 0.01-0.35 mg/l, ammonia ranged from 0.21-0.33 mg/l and phosphate ranged from 0.12-0.22 mg/l. The determination of water pollution value is categorized as moderately-severely polluted with a value of -26 to -32. This condition is caused by anthropological activities around the high waters, which are used as locations for fish auctions, aquaculture and marine tourism.</p> |
| Publisher Name | Departemen Ilmu Kelautan, Fakultas Perikanan Jurusan Ilmu Kelautan, Universitas Diponegoro |
| Publish Date | 2022-05-02 |
| Publish Year | 2022 |
| Doi | DOI: 10.14710/jmr.v11i2.32389 |
| Citation | |
| Source | Journal of Marine Research |
| Source Issue | Vol 11, No 2 (2022): Journal of Marine Research |
| Source Page | 277-283 |
| Url | https://ejournal3.undip.ac.id/index.php/jmr/article/view/32389/26903 |
| Author | SESILIA RANI SAMUDRA, S.Pi, M.Si |