

INTISARI

STUDI FISIS UNTUK MENENTUKAN KARAKTERISTIK (KUALITAS) AIR RAWA PENING

Oleh:

BUDI SANTOSA
10/300848/PA/13387

Telah dilakukan penelitian untuk menentukan kualitas air Rawa Pening. Pada penelitian ini sampel diambil dari lima titik lokasi yaitu lokasi I (daerah wisata Bukit Cinta), lokasi II (rumah makan Rawa Apung), lokasi III (daerah pembuatan pupuk kompos, Asinan), lokasi IV (tempat Budidaya ikan karamba jaring apung, Tuntang) serta lokasi V (inlet sungai Galeh). Untuk menentukan kualitas air sampel dari kelima titik lokasi tersebut maka dilakukan pengujian terhadap beberapa karakteristik fisis dan karakteristik kimiawi yang meliputi: suhu, warna, bau, kekeruhan, total zat padat terlarut, daya hantar listrik, tanggap panas, tegangan permukaan, indeks bias, viskositas, derajat keasaman (pH), kesadahan, nitrat, nitrit, fosfat, BOD, COD, serta logam berat timbal (Pb) dan kadmium (Cd). Hasil pengujian tersebut kemudian dibandingkan dengan standar baku mutu air yang ada. Dalam penelitian ini diperoleh hasil bahwa air Rawa Pening telah mengalami penurunan kualitas dan dalam kondisi tercemar dengan pencemaran terbesar berada pada lokasi II, hal ini ditandai dengan adanya penyimpangan pada beberapa karakteristik air yang diukur, antara lain adalah: kekeruhan, viskositas, indeks bias, kandungan nitrit, kandungan fosfat, BOD dan COD.

Kata kunci : air Rawa Pening, kualitas perairan, karakteristik fisis air, karakteristik kimia air

ABSTRACT

PHYSICAL STUDY FOR DETERMINING THE CHARACTERISTIC (QUALITY) OF WATER AT RAWA PENING

By

BUDI SANTOSA
10/300848/PA/13387

A Research had been conducted to determine the water quality of Rawa Pening. In this study the samples were taken from five locations which are located at Location I (tourism area of Bukit Cinta), Location II (Rawa Apung restaurant), Location III (composting Center, Asinan), Location IV (floating-net fish cultivation, Tuntang) and the location V (Galeh river inlet). To determine the water quality of the samples from these locations, several physical and chemical tests had been conducted, including temperature, color, odor, turbidity, total dissolved solids, electrical conductivity, heat responsive, surface tension, refractive index, viscosity, acidity (pH), hardness, nitrate, nitrite, phosphate, BOD, COD, and heavy metals lead (Pb) and cadmium (Cd). Subsequently, the test results are compared with the standard of existing water quality standards. It is found that the water Rawa Pening has deteriorated and in polluted conditions with the greatest pollution is at the Location II, it is marked by irregularities in some of the characteristics of the water that are measured: turbidity, viscosity, and refractive index, nitrite, phosphate, BOD and COD.

Keywords: water of Rawa Pening, quality of water, water physical characteristics, water chemical characteristics