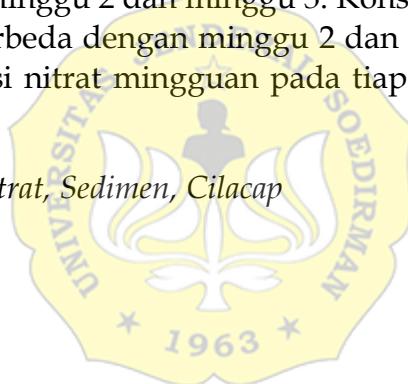


ABSTRAK

Kabupaten Cilacap merupakan kota pantai dan kota industri yang diduga memberikan dampak terhadap sedimen pantai, yaitu masuknya limbah organic juga nitrat dan fosfat dari sisa-sisa kegiatan pertambakan, permukiman dan limbah industri perikanan. Tujuan penelitian ini untuk mengetahui konsentrasi dan perbedaan fosfat dan nitrat pada sedimen permukaan wilayah pertambakan, permukiman dan lokasi perikanan di Cilacap. Metode survey ini mengoleksi sedimen pada tiap titik lokasi dan sedimen disimpan dengan metode botol gelap. Konsentrasi fosfat dan nitrat diukur menggunakan spektrofotometer dan untuk mengetahui perbedaan konsentrasi fosfat dan nitrat, data dianalisis menggunakan *oneway anova*. Konsentrasi fosfat dan nitrat rata-rata dalam sedimen permukaan menurun dari minggu ke 1 ke minggu ke 2. Konsentrasi fosfat dalam sedimen di permukiman paling tinggi dari stasiun lain, sedangkan konsentrasi nitrat pada sedimen pada lokasi perikanan (PPSC) paling tinggi dibanding stasiun lain, dan di area tambak paling rendah konsentrasinya. Konsentrasi fosfat mingguan di pertambakan tidak berbeda, namun di permukiman dan lokasi perikanan terdapat perbedaan antara minggu ke 1 dengan minggu 2 dan minggu 3. Konsentrasi fosfat pada minggu 1 pada pertambakan berbeda dengan minggu 2 dan 3 di permukiman dan lokasi perikanan. Konsentrasi nitrat mingguan pada tiap lokasi maupun antar lokasi tidak berbeda.

Kata Kunci : Fosfat, Nitrat, Sedimen, Cilacap



ABSTRACT

Cilacap Regency is a coastal and industrial city that are suspected to have an impact to coastal sediments, namely the input of organic waste as well as, nitrate and phosphate from pond, settlements and marine fisheries industrial waste. These research aims are to know the concentration and difference of phosphate and nitrate of bed sediments in pond, settlements and fisheries location in Cilacap. The survey method was collect bed sediment at the locations and sediments have been saved in black bottle metod. Phosphate and nitrate concentrations were measured using a spectrophotometer and to find out the difference of phosphate and nitrate concentrations, data were analyzed using ANOVA one-way test. The average phosphate and nitrate concentrations in surface sediments were obtained decrease from first week to second week. Concentration of phosphate sediments in settlements were found highest from other stations, while nitrate concentrations in sediments at fisheries location (PPSC) were obtained the highest compared to other stations, and in the pond area with the lowest concentration. Weekly phosphate concentrations in ponds were obtained not different, but in settlements and fisheries locations there were found difference between first week, second week and third week. Phosphate concentrations in first week in ponds were found differ from second weeks and third week in settlements and fishing locations. Weekly nitrate concentrations at each location and between locations were obtained not difference.

Keywords: Phosphate, Nitrate, Sediment, Cilacap

