

STUDI SERAPAN ION TIMBAL(II) OLEH BIOMASSA GANGGANG (*Hydrilla verticillata*) DALAM AIR

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ABSTRACT: In the present work, the process of lead-ion adsorption by *H. verticillata* biomass have been investigated. This investigation intend to determinate capacity of adsorption the biomass for lead ion in water. A weight of 500 mg biomass was put ionto 300 ppm of the metal-ion solution whose pH varied from 4.0 to 6.0. Then, these solutions were stirred for 20 minutes. After filtering, the metal-ion concentration in the filtrate was determined by atomic absorption spectrometry. The amount of ion adsorbed by the biomass was taken as the difference between the initial and final concentration of the solution. Further, the same method was carried out to the varied concentration. The result showed, the optimum pH for metal-ion adsorption by the biomass is 5.0, having adsorption value 14,867 mg/g. Capacity of lead-ion adsorption was obtained by varied concentration, yielded value of 24,490 mg/g.

Key word: *H. verticillata*, biomass, adsorption, spectrometry