

INTISARI

SETIYONINGSIH, T.W., 2018, PENENTUAN KADAR LOGAM TIMBAL (Pb) PADA KERANG HIJAU (*Perna viridis*) DAN KERANG DARAH (*Anadara granosa*) SECARA SPEKTROFOTOMETRI SERAPAN ATOM (SSA), KARYA TULIS ILMIAH, FAKULTAS FARMASI, UNIVERSITAS SETIA BUDI SURAKARTA.

Kerang adalah makanan yang digemari masyarakat di Indonesia. Kerang juga memiliki banyak kandungan gizi seperti Protein, Vitamin A, vitamin C, Kalsium, Zat besi, Vitamin B12, Vitamin B6, dan Karbohidrat. Penelitian ini bertujuan untuk mengetahui adanya kandungan logam Timbal (Pb) pada kerang hijau dan kerang darah.

Penelitian dilakukan dengan menggunakan metode Spektrofotometri Serapan Atom, dimana sampel kerang harus dilakukan destruksi basah untuk memisahkan logam timbal (Pb) dengan senyawa organik pada sampel tersebut. Hasil destruksi dengan HNO₃ pekat kemudian dicuci dengan HNO₃ 10% sebanyak 2kali dan dikeringkan kemudian larutkan dengan aquabides. Larutan sampel kemudian dibaca pada panjang gelombang 217nm. Absorbansi sampel yang didapat kemudian dimasukkan kedalam persamaan regresi linier yang telah dibuat $y = 0,0266 x + 0,0008$ untuk mengetahui kadar logam timbal (Pb) pada sampel.

Hasil analisis kadar logam timbal (Pb) pada sampel yaitu kerang hijau sebesar 0,2537 mg/kg, kerang darah sebesar 0,1867 mg/kg. Kadar logam timbal (Pb) pada kerang masih aman dikonsumsi tidak melewati batas ambang yang telah ditetapkan. Berdasarkan SNI 7387-2009 batas maksimum cemaran logam timbal pada kerang sebesar 1,5 mg/kg.

Kata Kunci : kerang, logam timbal (Pb), destruksi, spektrofotometri serapan atom

ABSTRACT

SETIYONINGSIH, T.W., 2018, DETERMINATION OF LEAD (Pb) METAL AMOUNT IN GREEN CLAMS (*Perna viridis*) AND BLOOD CLAMS (*Anadara granosa*) BY USING ATOMIC ABSORPTION SPECTROPHOTOMETRY, SCIENTIFIC PAPER, FACULTY OF PHARMACY, UNIVERSITAS SETIA BUDI SURAKARTA.

Clams are the food liked by people in Indonesia. Clams also contain much nutrition such as protein, vitamin C, calcium, iron, vitamin B12, vitamin B6, and carbohydrate. This research aims to determine the content of lead (Pb) metal in green clams and blood clams.

The research was done by using the atomic absorption spectrophotometry, in which the clam samples must be wetly destructed to separate the lead (Pb) metal with the organic compound in those samples. The destruction result with concentrated HNO₃ was then washed with 10% of HNO₃ for two times, dried, and dissolved with aqua bides. The sample solution was then read in the wavelength of 217 nm. The absorbency sample obtained was then put inside the linier regression equity that had been made which is $y = 0,0266 x + 0,0008$ to determine the amount of lead (Pb) metal in the sample.

The analysis results of the lead (Pb) metal amount in the samples are 0,2537 mg/kg and 0,1867 mg/kg for the green clams and blood clams respectively. The amount of lead (Pb) metal in the clams are still safe to be consumed as long as it does not exceed the threshold amount set. Based on SNI 7387-2009, the maximum amount of lead (Pb) metal amount in the clams safe to be consumed is 1,5 mg/kg.

Keywords : Clams, Lead Metal (Pb), Destruction, Atomic Absorption Spectrophotometry