

INTISARI

MARSAPUTRI, W.N., 2019, ANALISIS TIMBAL (Pb) DALAM BUAH PIR (*Pyrus communis* L) DENGAN METODE SPEKTROFOTOMETRI SERAPAN ATOM (SSA), KARYA TULIS ILMIAH, FAKULTAS FARMASI, UNIVERSITAS SETIA BUDI, SURAKARTA.

Logam timbal (Pb) dapat masuk ke tubuh melalui makanan yang dijual di pinggir jalan dalam keadaan terbuka dan lebih berbahaya apabila dipajangkan dalam waktu yang lama. Konsumsi buah yang mengandung timbal dapat mengakibatkan toksisitas kronis. Tujuan penelitian ini untuk mengetahui pengaruh lama waktu paparan udara yang terkontaminasi timbal terhadap kadar timbal dalam buah pir (*Pyrus communis* L.).

Sampel dalam penelitian ini adalah buah pir atau *Pyrus communis* L yang dijual di pinggir jalan Adi Sucipto Kerten Laweyan. Penentuan kadar logam timbal dapat dilakukan dengan metode spektrofotometri serapan atom. Sampel diperoleh dengan mengambil daging dan kulit buah pir yang telah dihaluskan kemudian didestruksi basah hingga larutan menjadi jernih dan ditetapkan kadar timbalnya.

Hasil penetapan kadar timbal pada buah pir dengan pemaparan 1 hari didapatkan kadar timbal $-0,2054 \pm 0,5149$ mg/kg, pemaparan 2 hari diperoleh kadar timbal $0,3979 \pm 0,2294$ mg/kg, dan pemaparan 3 hari diperoleh kadar timbal $0,8035 \pm 0,2365$ mg/kg. Berdasarkan data, kadar timbal dalam buah pir masing-masing kelompok pemaparan melebihi batas maksimum kadar timbal dalam buah menurut SNI 7387:2009 yaitu sebesar 0,5 mg/kg.

Kata Kunci : Buah Pir, Logam Timbal (Pb), Spektrofotometri Serapan Atom.

ABSTRACT

MARSAPUTRI, W.N., 2019, LEAD (Pb) ANALYSIS IN PEAR (*Pyrus communis* L) WITH THE METHOD OF ATOMIC ABSORPTION SPECTROPHOTOMETRY, SCIENTIFIC WRITINGS, THE FACULTY OF PHARMACY, SETIA BUDI UNIVERSITY, SURAKARTA.

Lead metals could enter the body through foods sold by the roadside when open and more dangerous in the long term. Consumption of fruits that contain lead cause chronic toxicity. The purpose of this study was to determine the effect of exposure duration of lead-contaminated air to the lead content in pear.

The samples in this study are pears or *Pyrus communis* L that are sold on roadside Adi Sucipto Kerten Laweyan. The removal of lead metals could be done by means of the atomic absorption spectrophotometry. Samples were obtained by picking out a pear flesh and a pear leather that was mashed, then it was to the point that the solution cleared up and designated the timbers.

The result of setting the lead in pears for 1 day's exposure is getting the iron levels $-0,2054 \pm 0,5149$ mg/kg, two day's of exposure had lead $0,3979 \pm 0,2294$ mg/kg, and three day's of exposure had lead $0,8035 \pm 0,2365$ mg/kg. based on data, the lead in the pears of each synapse group does exceed the maximum of the lead in the fruit according to SNI 7387:2009 that is 0,5 mg/kg.

Keywords : Pear, Lead Metal (Pb), Atomic Absorption Spectrophotometry.