

INTISARI

Daun ketela pohon memiliki kemampuan menurunkan kadar timbal darah. Penelitian ini bertujuan untuk mengetahui efektifitas serta lama waktu pemberian ekstrak etanol daun ketela pohon (*Manihot utilisima* Pohl.) dalam menurunkan kadar timbal darah tikus betina setelah pemberian Na_2CaEDTA .

Timbal asetat dipejankan dengan dosis 0,5 g/kgBB/oral/hari/tikus selama 30 hari. Na_2CaEDTA dan ekstrak etanol daun ketela pohon diberikan selama 10 hari. Ekstraksi daun ketela pohon dilakukan dengan metode sokletasi menggunakan etanol 95%. Besarnya kadar timbal darah sampel dari setiap kelompok perlakuan ditentukan dengan metode spektroskopi serapan atom pada panjang gelombang 283,3 nm. Analisis statistik yang digunakan adalah analisis nonparametrik dengan uji Kruskal-Wallis dan taraf kepercayaan 95% untuk mengetahui pengaruh pemberian ekstrak etanol daun ketela pohon setelah pemberian Na_2CaEDTA terhadap penurunan kadar timbal darah pada hari pengukuran yang sama sedangkan perbedaan kadar timbal darah pada masing-masing kelompok dianalisis dengan uji Friedman-Wilcoxon dengan signifikansi 95%.

Dari penelitian ini ditunjukkan bahwa pemberian ekstrak etanol daun ketela pohon dosis 800 mg/kgBB setelah pemberian Na_2CaEDTA dapat menurunkan kadar timbal dengan waktu pemberian selama 10 hari.

Kata kunci : Na_2CaEDTA , daun ketela pohon, ekstrak etanol, kadar timbal darah, spektroskopi serapan atom

ABSTRACT

Leaves of cassava have the ability to decrease blood lead level. This examination is directed to find out the effectiveness and duration of administration of cassava leaves ethanol extract after administered Na_2CaEDTA in decreasing blood lead level in female rats.

Lead acetate 0,5 g/kg body weight/orally/day/rat was administered for 30 days. Na_2CaEDTA was intramuscularly and ethanol extract of Cassava leaves was orally administered for 10 days after lead intoxication. Cassava leaves were extracted by Soxhlet method with ethanol 95%. The concentration of blood lead was determined by atomic absorption spectroscopic method at 283,3 nm wavelength. The results were tested with statistical analysis method with 95% of confidence interval. Kruskal-Wallis and Friedman-Wilcoxon approaches were used to determine the effectiveness of the Na_2CaEDTA and cassava leaves ethanol extract.

The result indicated that 800 mg/kg body weight combination of Na_2CaEDTA and ethanol extract of cassava leaves have ability to decrease the concentration of lead after 10 days therapy.

Key words : Na_2CaEDTA , cassava leaves, ethanol extract, blood lead level, atomic absorption spectroscopy method