INTISARI

De Ornay, T. C. 2021. Efektifitas Pelarut Abu Sekam Bakar Dalam Mengurangi Kadar Sianida (CN^-) Pada Umbi Gadung (*Dioscorea hispida* Rhizoma). Program Studi D4 Analis Kesehatan, Fakultas Ilmu Kesehatan, Universitas Setia Budi.

Umbi gadung (*Dioscorea hispida* Rhizoma) pengganti makanan pokok mengandung zat karbohidrat, memiliki zat anti makan yakni sianida (CN^-). Sianida (CN^-) dapat mengakibatkan keracunan bahkan kematian. Pengunaan konsentrasi abu sekam bakar sebagai penyerap racun secara alami. Dalam menngetahui ada atau tidaknya kadar sianida (CN^-) pada umbi gadung sebelum dan sesudah perlakuan serta mengetahui pengaruh efektifitas penurunan kadar sianida (CN^-) pada umbi gadung (*Dioscorea hispida* Rhizoma).

Metode eksperimen laboratorium dengan perlakuan perendaman umbi gadung pada larutan konsentrasi abu sekam bakar dua tahap analisis. Tahap kualitatif mengukur kadar filtrat perendaman 3 jam umbi gadung sebelum perlakuan dengan pengukuran kadar menggunakan sperktofotometer uv-vis dan tahap kuantitatif pengukuran filtrat umbi gadung setelah perlakuan abu variasi presentasi (0%, 1%, 3%, 5%, 7%) setelah perendaman 3 jam kadar filtrat dianalisis dengan spektrofotometer uv-vis.

Hasil pengukuran analisis kuantitatif sebelum perlakuan pada umbi gadung (*Dioscorea hispida* Rhizoma) memiliki kadar sianida (CN^-) 4,57 ppm. Hasil pengukuran analisis kuantitatif sesudah perlakuan pada umbi gadung (*Dioscorea hispida* Rhizoma) pada konsentrasi (0%, 1%, 3%, 5%, 7%). Penurunan kadar sianida (CN^-) secara signifikan diketahui adalah pada konsentrasi 7% terjadi penurunan kadar sianida (CN^-) dengan nilai pengukuran 0% atau 0,00 ppm. Abu sekam bakar efektif mengurangi kadar sianida (CN^-) dalam umbi gadung (*Dioscorea hispida* Rhizoma).

Kata kunci : umbi gadung, sianida (CN^-), abu sekam padi

ABSTRACT

De Ornay, T. C. 2021. *Effectiveness of Burned Husk Ash Solvent in Reducing Cyanide (CN−) Levels in Gadung Tubers* (*Dioscorea hispida* Rhizoma). D4 Health Analyst Study Program, Faculty of Health Sciences, Setia Budi University.

Gadung tubers (*Dioscorea hispida* Rhizoma) substitute for staple foods contain carbohydrates, have anti-eating substances, namely cyanide (CN−). Cyanide (CN−) can cause poisoning and even death. The use of burnt husk ash concentration as a natural poison absorber. In knowing the presence or absence of cyanide levels (CN−) in gadung tubers before and after treatment and knowing the effect of reducing cyanide levels (CN−) in gadung tubers (Dioscorea hispida Rhizoma).

Laboratory experiment method with soaking gadung tubers in a solution of burnt husk ash concentration in two stages of analysis. The qualitative step measured the levels of gadung tuber filtrate soaking 3 hours before treatment by measuring the levels using a UV-vis spectrophotometer and the quantitative step was measuring the gadung tuber filtrate after treatment with various ash presentations (0%, 1%, 3%, 5%, 7%) after soaking. 3 hours of filtrate levels were analyzed by uv-vis spectrophotometer.

Results of quantitative analysis measurements before treatment on gadung tubers (*Dioscorea hispida* Rhizoma) had cyanide levels (CN−) of 4.57 ppm. Measurement results of quantitative analysis after treatment on gadung tubers (*Dioscorea hispida* Rhizoma) at concentrations (0%, 1%, 3%, 5%, 7%). It is known that a significant decrease in cyanide (CN−) levels is at a concentration of 7% there is a decrease in cyanide (CN−) levels with a measurement value of 0% or 0.00 ppm. Burnt husk ash is effective in reducing cyanide (CN−) levels in gadung tubers (*Dioscorea hispida* Rhizoma).

Keywords : gadung tuber, cyanide (CN−), rice husk ash