

## ABSTRACT

### **THE ACUTE TOXICITY OF GLUCOMANNAN STANDARDIZED *PORANG* (*Amorphophallus onchophyllus*) AND *KONJAC* (*Amorphophallus konjac*) POWDER ON WHITE RATS (*Rattus novergicus*)**

Debi Ambarwati

The purpose was to determine the effects of acute toxicity of glucomannan standardized *Porang* powder (*Amorphophallus onchophyllus*) and *Konjac* powder (*Amorphophallus konjac*) as well as the lethal dose for 50% of the white rats (*Rattus novergicus*) population tested. *Porang* powder (*Amorphophallus onchophyllus*) and *konjac* powder (*Amorphophallus konjac*) both contain glucomannan fiber which has the effect of lowering cholesterol and blood sugar, reducing weight, and improving digestive and immune health. However, in *porang* powder and *konjac* powder there are calcium oxalate crystals which may form kidney stones and cause itching as well as irritation, therefore a toxicity study is necessary. The method used in this research was randomized post control group method. The experimental animals were male white rats (*Rattus novergicus*). Nine treatment groups, each consisting of six experimental animals, were administered different doses (175; 542,5; 1681,8; and 5213,4 mg / kg body weight) of each *porang* and *konjac* powder. The observed parameters were LD50 value (lethal dose) or mortality in experimental animals. The LD50 values were determined using three methods, namely Thomson and Weil method, the linear equation method, and the Graph Miller and Tainter method. The results of acute toxicity tests for 24 and 48 hours did not cause mortality in white rats, showed no toxicity signs, with each LD50 value greater than 5213,4 mg / kg body weight.

Keywords: Acute toxicity, glucomannan, *Amorphophallus onchophyllus*, *Amorphophallus konjac*, LD<sub>50</sub>, *Rattus novergicus*