

**ABSTRACT****Determination of Blood Glucose Level on Administration Porang (*Amorphophallus onchophyllus*) Powder and Konjak (*Amorphophallus konjac*) Standard Glucomannan In Mice (*Mus musculus*) Induced by Alloxan Monohydrate****Amanda Eka Pertiwi**

Porang (*Amorphophallus onchophyllus*) and konjak (*Amorphophallus konjac*) is a type of tuber plant that contains glukomanan Polysaccharide, which glukomanan can be used to lower blood sugar levels. In this research is to know the effect of decreasing blood sugar level given by porang powder and konjak powder standard glucomannan. Glucomannan concentration in porang powder was  $52,33 \pm 0,74$  % (w/w) and glucomannan content on konjak powder was  $61,24 \pm 0,61$  % (w/w).

The sample of this study were eight group of mice as treatment groups with six replications on 2-2,5 months of male mice strain BALB/C which had been induced by alloxan monohydrate (200 mg/ kg body weight of mice). The treatment group consist of negative control (CMC sodium 0,3%), positive control (glibenclamide 0,013 mg / 20g body weight of mice), and treatment group I, II, III, IV, V, VI with the administration of porang powder standard glukomannan dose of 85; 165; 250 mg/ kg body weight of mice and konjak powder standard glukomannan dose of 85; 165; 250 mg/ kg Body weight of mice. Treatment is given daily for 21 days with measurement of blood glucose level every three days and weight every day. The result was analyzed by *One Way ANOVA* with significant value of 5%.

The result indicated that konjak powder standard glucomannan dose of 250 mg / kg body weight of mice can decrease blood sugar level within 13 days.

**Keywords :** Glucomannan, *Amorphophallus onchophyllus*, *Amorphophallus konjac*, mice, alloxan, glucose level, diabetes mellitus