

ABSTRACT

THE REDUCTION OF CHOLESTEROL LEVELS IN WHITE MICE (*Mus musculus*) ON ADMINISTRATION GLUCOMANNAN STANDARDIZED PORANG POWDER (*Amorphophallus oncophyllus*) AND KONJAC POWDER (*Amorphophallus konjac*)

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The major component of *porang* and *konjac* powder from *porang* tuber (*Amorphophallus oncophyllus*) and *konjac* powder (*Amorphophallus konjac*) was glucomannan. Glucomannan can reduce cholesterol level by forming gel and expanding in the stomach, thus results in the slow lipid absorption and reduce cholesterol levels. *Porang* and *konjac* powder that had been standardized with its level of glucomannan was used as sample. The level of glucomannan obtained *porang* powder was $53,33 \pm 0,74$ (%b/b) while glucomannan level of *konjac* powder was $61,24 \pm 0,61$ (%b/b). This study consisted of 8 treatment groups contained male mice aged 2-3 months. Those mice were induced with mixture of high-cholesterol diet (lard: duck egg yolk) and PTU 0,1% and the cholesterol level was checked 3 days after the induction (pretest) and continue to be checked up to 21 days. Treatment groups consisted of negative control (CMC Na 0,3%), positive control (Simvastatin), 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. The treatment was administered up to 21 days with cholesterol checking in day 7, 10, 14 and 21. The results were analyzed with oneway ANOVA (significant value of 5%). The analyzed results indicated that glucomannan standardized *konjac* powder with dose of 250 mg/kg body weight can reduce cholesterol levels in mice significantly after 7 days of administration (sig<0,05).

Keyword: (*Amorphophallus oncophyllus*), (*Amorphophallus konjac*) *cholesterol*, glucomannan, *porang*, *porang* tuber, *konjac*, *konjac* tuber.