

**ABSTRACT****THE REDUCTION OF CHOLESTEROL LEVELS  
IN RAT (*Rattus novergicus*) ON ADMINISTRATION  
GLUCOMANNAN STANDARDIZED  
PORANG POWDER (*Amorphophallus oncophyllus*)**

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The major component of *porang* tuber powder was glucomannan. Glucomannan is a heteropolysaccharide composed of D-glucose and D-mannose that was connected by  $\beta$ -1,4-glicosidic bonds. It can not be absorbed by intestine because enzyme  $\alpha$ -amylase in the intestine can not break down that bonds. Glucomannan can reduce cholesterol level by forming gel when contact with gastric fluid. Then, it fill the stomach, which may result delaying lipid absorbtion and reduce cholesterol level. The level of glucomannan in *porang* powder was used as sample had been standardized and the level was  $52.33 \pm 0.74$  (%b/b). The purpose of this study was to determined the value of cholesterol level of rat after gift *porang* powder standard glucomannan. This study consisted of 5 treatment groups, containing 6 rats per group aged about 3 months. This group consist of negative control (CMC-Na 0,3%), positive control (simvastatin), *porang* powder standard glucomannan dose I, II, III (59.5; 115.5; 175 mg/body weight of rat). All treatment groups were induced with high-cholesterol diet (duck egg and lard) and PTU 0.005%. The cholesterol level was checked 5 days after induction (pretest). The treatment was administered up to 27 days with cholesterol level checking in day 7, 10, 13, 20, and 27. The result of cholesterol level were analyzed with one way ANOVA (significant value 5%). The analyzed result indicated that *porang* powder standard glucomannan dose 175 mg/kg body weight of rat was the best dose which can reduce cholesterol levels in rat.

Keyword : *Amorphophallus oncophyllus*, cholesterol, glucomannan, *porang*, *porang* tuber.