

**STUDY OF MAKING GLUCOMANNAN FLOUR FROM PORANG
(*Amorphophallus oncophyllus*) MECHANICALLY**

ABSTRACT

By

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This study aims to determine the effect of the height of the disc mill pipe on the glucomannan content of porang (*Amorphophallus oncophyllus*) flour. This study was arranged in a completely randomized design (CRD), 1 meter (P1), 2 meters (P2), 3 meters (P3), 4 meters (P4), 5 meters (P5), and 6 meters (P6). Each treatment was repeated 3 times. This research was conducted by making glucomannan flour using a disc mill. The data obtained was then tested for homogeneity with the Barlett test, and additional data was tested with the Tuckey test. Data were analyzed by means of variance to determine whether or not there was a treatment effect on the observed parameters and to determine differences between treatments, a BNT follow-up test was carried out at the 5% level. Disc mill pipe height of 1 meter produced the highest glucomannan content (93.22%), loss on drying (6%), water holding capacity (67.31%), viscosity (41 515 cP), chloride (0.014%), metal Pb (1.68 mg/kg), starch content (0.93%), crude fiber content (2.97%), protein content (0.90%), and particle size ≤ 100 mesh.

Keywords: Glucomannan, *Amorphophallus oncophyllus*, mechanical

KAJIAN PEMBUATAN TEPUNG GLUKOMANAN PORANG (*Amorphophallus oncophyllus*) SECARA MEKANIS

ABSTRAK

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Penelitian ini bertujuan untuk mengetahui pengaruh ketinggian pipa *disc mill* terhadap kadar glukomanan tepung glukomanan porang (*Amorphophallus oncophyllus*). Penelitian ini disusun dalam Rancangan Acak Lengkap (RAL), perlakuan 1 meter (P1), 2 meter (P2), 3 meter (P3), 4 meter (P4), 5 meter (P5), dan 6 meter (P6). Setiap perlakuan diulang sebanyak 3 kali. Penelitian ini dilakukan dengan cara membuat tepung glukomanan dengan menggunakan *disc mill*. Data yang diperoleh kemudian diuji kehomogenannya dengan uji Barlett, dan penambahan data diuji dengan uji Tuckey. Data dianalisis dengan sidik ragam untuk mengetahui ada atau tidaknya pengaruh perlakuan terhadap parameter yang diamati dan untuk mengetahui perbedaan antar perlakuan dilakukan uji lanjut BNT pada taraf 5%. Ketinggian pipa *disc mill* 1 meter menghasilkan kadar glukomanan tertinggi sebesar (93,22%), *loss on drying* (6%), daya ikat air (67,31%), viskositas (41 515 cP), klorida (0,014%), logam Pb (1,68 mg/kg), kadar pati (0,93%), kadar serat kasar (2,97%), kadar protein (0,90%), dan ukuran partikel ≤ 100 mesh.

Kata kunci: Glukomanan, *Amorphophallus oncophyllus*, mekanis