KUALITAS FISIK GLUKOMANAN HASIL EKSTRAKSI TEPUNG PORANG (*Amorphopallus oncophillus)* DENGAN PERLAKUAN AWAL PENCUCIAN MENGGUNAKAN ETANOL

INTISARI

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Glukomanan adalah salah satu bahan tambahan pangan, untuk mendapatkannya dilakukan dengan ekstraksi tepung porang. Etanol bersifat non polar sehingga dapat melarutkan pengotor yang ada pada tepung porang melalui proses pencucian. Penelitian ini bertujuan untuk mengetahui pengaruh tingkat pencucian awal tepung porang secara bertahap terhadap kualitas tepung porang siap ekstraksi dan glukomanan. Tepung porang dicuci menggunakan etanol 96% selama 5 menit dan dilakukan variasi tingkat pencucian, yaitutanpa pencucian (P0), pencucian 1 kali (P1), pencucian 2 kali (P2), dan pencucian 3 kali (P3). Tepung porang tersebut diekstraksi hingga diperoleh glukomanan. Hasil penelitian antara lain whiteness tepung porang 52,763 – 56,205; kadar air tepung porang 11,762 – 11,930%; rendemen glukomanan 49,00 – 56,00%; whiteness glukomanan 69,916 – 74,238; waktu kelarutan glukomanan 17,12 – 18,14 menit, pH larutan glukomanan 7,007 – 7,013, viskositas larutan glukomanan 11155,5 – 15066,7 m.Pas; flow indeks larutan glukomanan 0,686 – 0,720; kadar air glukomanan 7,017 – 8,814 %. Variasi tingkat pencucian awal tepung porang memberikan perbedaan nyata terhadap kualitas tepung porang (sig. < 0.05). Pengaruh variasi tingkat pencucian berbeda nyata terhadap kadar air gukomanan, sedangkan terhadap whiteness, pH, rendemen, waktu kelarutan, dan viskositas larutan glukomanan tidak berbeda nyata. Perlakuan terbaik dipilih variasi tanpa pencucian, karena sebagian besar pemberian variasi pencucian tidak berbeda nyata terhadap kualitas glukomanan.

Kata kunci : tepung porang, glukomanan, pencucian bertingkat, etanol, kualitas

PHYSICAL PROPERTIES OF GLUCOMANNAN AS A RESULT OF PORANG(*Amorphopallus oncophillus)* FLOUR EXTRACTION BY THE INITIAL LEACHING TREATMENT USING ETHANOL

ABSTRACT

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Glucomannan is one of the additional food ingredients, which to obtain it needs to be extraction of porang flour. Ethanol is non polar so that it can dissole the existing impurities on the porang flourthrough the leaching process. The objective of this research is to know the influence of preliminiray leaching rate of porang flour gradually to the quality of porang powder that ready for extraction and glucomannan. Porang flour was washed with 96% ethanol for 5 minutes and variation of leach level, including without leaching (P0), leaching once (P1), leaching 2 times (P2), and leaching 3 times (P3). The porang flour is extracted until glucomannan is obtained. The result of the research were whiteness of porang flour is 52,763 – 56,205; water content of porang flour is 11,762 – 11,930%; rendemen of glucomannan is 49,00 – 56,00%; whiteness of glucomannan is 69,916 – 74,238; glucomannan solubility time 17,12 – 18,14 min; pH of glucomannan solution 7,007 – 7,013; viscosity of glucomannan 11155,5 – 15066,7 m.Pas; flow index of glucomannan solution 0,686 – 0,720; glucomannan water content of 7,017 – 8,814%; The variation of initial wash level of porang flour gave significant difference to the quality of porang flour (sig.< 0.05). The effect of leaching level variation gave a signification difference to the water conten of the glucomannan , whereas for the whiteness, pH, rendemen, time of olubility, and viscosity of glucomannan solution were not significantly different. The best treatment chosen was variation without washing, since most washing variations were not significantly diffferent from glucomannan quality.

Keywords : porang flour, glucomannan, multilevel washing, ethanol, quality