

PENGARUH LAMA PERENDAMAN DAN JENIS UMBI TERHADAP SIFAT FISIK, KIMIA, DAN TINGKAT KESUKAAN BERAS ANALOG “ARUK”

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INTISARI

Beras aruk merupakan produk pangan non beras yang mengandung karbohidrat. Beras aruk dapat mendukung ketahanan pangan Indonesia sebagai salah satu diversifikasi pangan yang berbasis karbohidrat selain beras padi. Pembuatan beras aruk dilakukan menggunakan jenis umbi singkong, ubi jalar, dan umbi garut yang memiliki kandungan gizi yang tinggi dan mudah untuk ditemukan. Beras aruk umumnya dibuat dengan prinsip umbi yang direndam, kemudian dilakukan pembutiran, penyangraian dan pengeringan dibawah terik matahari. Tujuan penelitian ini adalah untuk mengetahui pengaruh jenis umbi serta lama perendaman terhadap sifat fisik (warna dan tekstur) dan tingkat kesukaan beras aruk dan mengetahui pengaruh jenis umbi serta lama perendaman yang tepat sehingga menghasilkan beras aruk dengan sifat kimia (kadar air, kadar abu, kadar protein, kadar lemak dan kadar karbohidrat) yang memenuhi syarat dan disukai panelis.

Rancangan percobaan penelitian ini menggunakan Rancangan Acak Lengkap (RAL) dua faktor yaitu jenis umbi (singkong, ubi jalar dan umbi garut) dan lama perendaman (3 hari, 4 hari dan 5 hari). Analisa kimia beras aruk meliputi kadar air, kadar abu, kadar protein, kadar lemak dan karbohidrat. Analisa fisik meliputi warna dan tekstur. sifat organoleptik diuji berdasarkan tingkat kesukaan. Data yang diperoleh dianalisis statistika dengan tingkat kepercayaan 95% yang menggunakan metode *Univariate Analysis of Variance* dan *One Way Anova*.

Hasil penelitian menunjukkan bahwa jenis umbi dan lama perendaman berpengaruh nyata terhadap sifat kimia, sifat fisik dan tingkat kesukaan beras aruk. Beras aruk terbaik adalah beras aruk jenis umbi garut dengan waktu perendaman selama 3 hari yang memiliki sifat kimia kadar air 13,20% (bb), kadar abu 0,23% (bk), kadar protein 0,99% (bk), kadar lemak 0,47% (bk) dan karbohidrat 85,08% (bk).

Kata kunci: Beras Aruk, Singkong, Ubi Jalar, Umbi Garut, Lama Perendaman

EFFECT OF SOAKING TIME AND TYPE OF TUBER ON PHYSICAL, CHEMICAL PROPERTIES, AND PREFERENCE LEVEL OF “ARUK” ANALOG RICE

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ABSTRACT

Rice aruk is a non-rice food product that contains carbohydrates. Rice aruk can support Indonesian food endurance as a carbohydrate-based food diversification other than rice. Rice aruk is made using cassava, sweet potato, and arrowroot which have high nutritional value and are easy to find. Rice aruk is generally made with the principle of soaking tubers, then granulating, roasting and drying under the sun. The purpose of this research was to determine the effect of tuber type and soaking time on physical properties (color and texture) and favorite level for rice aruk and to determine the effect of tuber type and proper soaking time so as to produce rice aruk with chemical properties (moisture content, ash content, protein content, fat content and carbohydrate content) that meet the requirements and are liked by the panelists.

The experimental design of this research used a completely randomized design (CRD) with two factors, namely the type of tuber (cassava, sweet potato and arrowroot) and soaking time (3 days, 4 days and 5 days). Chemical analysis of aruk rice includes water content, ash content, protein content, fat and carbohydrate content. Physical analysis includes color and texture. Organoleptic properties were tested based on the level of favorite. The data obtained were statistically analyzed with a 95% confidence level using the Univariate Analysis of Variance and One Way Anova methods.

The results showed that the type of tuber and the duration of soaking had a significant effect on the chemical properties, physical properties and preference level of rice aruk. The best rice aruk is arrowroot type with soaking time for 3 days which has chemical properties of 13.20% (wb) water content, 0.23% (db) ash content, 0.99% (db) protein content, 0.47% (db) fat content and 85.08% (db) carbohydrates.

Keywords: Rice Aruk, Cassava, Sweet Potato, Garut Tubers, Soaking Time