INTISARI

Prevalensi penyakit diabetes mellitus di Indonesia terus meningkat. Pengelolaan diet untuk penyakit tersebut dibutuhkan pangan yang mempunyai indeks glikemik rendah. Menurunkan indeks glikemik beras dapat dilakukan dengan proses *parboiling* pada gabah. Aroma yang kurang disukai pada beras *parboiled* dapat diperbaiki dengan penambahan ekstrak pandan dan kari. Penelitian ini bertujuan mengetahui keberhasilan penetrasi ekstrak pandan dan kari pada konsentrasi dan suhu tertentu terhadap tingkat kesukaan, total fenol, aktivitas antioksidan, kadar pati resisten dan indeks glikemik, beras *parboiled* terfortifikasi kromium dan magnesium.

Rancangan percobaan yang dilakukan yaitu rancangan acak lengkap (RAL) pola faktorial dengan 3 faktor, yaitu perlakuan suhu perendaman (60 °C, 65 °C dan 70 °C), Jenis ekstrak (pandan dan kari), dan konsentrasi ekstrak (0%, 5%, 10% dan 15%). Perendaman dilakukan selama 2,5 jam kemudian dilakukan pendinginan pada suhu 0 ˚C selama 12 jam, pengeringan menggunakan *cabinet dryer* pada suhu 50 ˚C dan digiling. Analisa yang dilakukan meliputi uji kesukaan, total fenol, aktivitas antioksidan, pati tahan cerna (RS), indeks glikemik (IG). Hasil yang diperoleh dilakukan analisa varian pada tingkat kepercayaan 95%. Apabila beda nyata masing-masing perlakuan dilanjutkan dengan uji *Duncan Multiple Range Test*.

Hasil beras *parboiled* yang disukai panelis dan dipilih dengan penambahan esktrak pandan adalah: 5% 60 ^{o}C, 5% 65 ^{o}C, 5% 70 ^{o}C dan 10% 60 ^{o}C, sedangkan pada penambahan ekstrak kari adalah : 5% 65 ^{o}C, 10% 65 ^{o}C dan 10% 70 ^{o}C. sampel terbaik adalah penambahan ekstrak pandan 5% 65 ^{o}C dan kari 10% 65 ^{o}C dengan nilai indeks glikemik dan pati tahan cerna penambahan ekstrak pandan berturut-turut adalah (36,20 dan 8,33), nilai indeks glikemik dan pati tahan cerna penambahan ekstrak kari berturut-turut adalah (38,25 dan 13,03).

Kata kunci : beras pratanak, pandan, kari, indeks glikemik, pati tahan cerna.

EFFECT OF CONCENTRATION EXTRACTS AND SOAKING TEMPERATURE PANDAN LIKES THE LEVEL AND KARI, DIGESTIVE STARCH , GLYCEMIC INDEX DIGEST FORTIFIED CHROMIUM AND MAGNESIUM PARBOILED RICE

ABSTRACT

The prevalence of diabetes mellitus in Indonesia continues to increase. Diet management for these diseases requires food that has a low glycemic index. Reducing the glycemic index of rice can be done by parboiling on grain. The less favored aroma on parboiled rice can be improved by adding pandan extract and curry. This study aims to determine the success of penetration of pandan and curry extract at certain concentrations and temperatures against the level of preference, total phenol, antioxidant activity, levels of resistant starch and glycemic index, fortified parboiled rice with chromium and magnesium.

The experimental design was carried out in a completely randomized design (CRD) factorial pattern with 3 factors, namely the soaking temperature treatment (60 ^{0}C, 65 ^{0}C and 70 ^{0}C), extract type (pandanus and curry), and extract concentration (0%, 5%, 10% and 15%). Soaking was carried out for 2.5 hours then cooled at 0 ^{0}C for 12 hours, drying using a cabinet dryer at 50 ^{0}C and milled. The analysis carried out included test of preference, total phenol, antioxidant activity, digestive starch (RS), glycemic index (IG). The results obtained were analyzed by variance at a confidence level of 95%. If there are significant differences, each treatment is continued with the Duncan Multiple Range Test.

The results of parboiled rice were favored by panelists and were selected by the addition of extracts of pandanus: 5% 60 ^{0}C, 5% 65 ^{0}C, 5% 70 ^{0}C and 10% 60 ^{0}C, while the addition of curry extract was: 5% 65 ^{0}C, 10% 65 ^{0}C and 10% 70 ^{0}C. the best sample is the addition of 5% 65 ^{0}C pandan extract and 10% 65 ^{0}C curry with the value of glycemic index and digestive starch addition of pandan extracts respectively (36.20 and 8.33), the glycemic index value and digestibility resistant starch added extract curries are respectively (38.25 and 13.03).

Keywords: parboiled rice, pandanus, curry, glycemic index, digestive starch.