

## **SIFAT KIMIA, FISIK DAN TINGKAT KESUKAAN GROWOL KERING DENGAN VARIASI METODE PEMASAKAN DAN SUHU PENDINGINAN**

### **Intisari**

Growol kering dibuat melalui tahap fermentasi, pencucian, pengepresan, pengukusan, pendinginan dan pengeringan. Kandungan karbohidrat growol cukup tinggi dengan harga yang relatif murah sehingga berpotensi digunakan sebagai pangan fungsional. Penelitian ini bertujuan untuk menghasilkan growol kering dengan sifat kimia dan fisik yang baik dan disukai. Penelitian ini menggunakan rancangan acak lengkap dengan perlakuan variasi metode pemasakan dan suhu pendinginan. Metode pemasakan yang digunakan yaitu kukus, autoklaf, pressure cooker dan suhu pendinginan temperatur kamar (27°C) dan temperatur refrigerator (4°C). Analisa yang dilakukan adalah analisa fisik, kimia growol kering dan kesukaannya setelah tanak. Data yang diperoleh dilakukan analisa varian (ANOVA) dengan tingkat kepercayaan 95%. Apabila beda nyata masing-masing perlakuan dilanjutkan dengan uji Duncan Multiple Range Test (DMRT). Hasil penelitian menunjukkan bahwa kadar pati growol kering berbeda nyata tergantung metode pemasakannya. kadar pati ubi kayu varietas meni yaitu  $19,38 \pm 1,00\%$  dengan kadar amilosa  $7,04 \pm 0,79\%$ . Kadar pati growol kering tertinggi yaitu dengan pemasakan autoklaf pada suhu pendinginan refrigerator yaitu  $86,40 \pm 0,32\%$  dengan kadar amilosa  $30,84 \pm 0,06\%$ . Variasi metode pemasakan dan suhu pendinginan berpengaruh nyata terhadap tekstur, densitas kamba dan derajat pecah growol kering. Sedangkan pada growol tanak, variasi metode pemasakan dan suhu pendinginan berpengaruh nyata terhadap kesukaan warna dan keseluruhan growol tanak tapi tidak berpengaruh nyata terhadap aroma, rasa dan tekstur growol tanak yang dihasilkan. Hampir semua growol tanak disukai oleh panelis. Perlakuan terbaik yaitu dengan pemasakan pressure cooker suhu refrigerator yang memiliki kadar pati  $77,65 \pm 0,51\%$ , amilosa  $21,38 \pm 0,06\%$ , hardness  $79,48 \pm 1,10$  N, densitas kamba  $15,3 \pm 0,45$  g/cm<sup>3</sup>, derajat pecah  $9,82 \pm 0,04\%$  dan disukai oleh panelis.

Kata kunci : Growol, Ubi kayu, Pemasakan, Pendinginan

## CHEMICAL, PHYSICAL PROPERTIES AND ACCEPTABILITY DRIED GROWOL WITH VARIATIONS OF COOKING METHOD AND COOLING TEMPERATURE

### Abstract

Dried growol is made through the stages of fermentation, washing, pressing, steaming, cooling and drying. The content of carbohydrates in growol is quite high with relatively low prices so that it has the potential to be used as functional food. The purpose of this study was to produce dried growol with acceptable and good chemical and physical properties. This study uses a completely randomized design with various treatments of cooking method and cooling temperature. Cooking methods used are steam, autoclave, pressure cooker and cooling temperature are room (27°C) and refrigerator (4°C). The analysis carried out was physical and chemical analysis and acceptability of dried growol after cooking. Data obtained were analyzed for variance (ANOVA) with a confidence level of 95%. If the real difference in each treatment continued with Duncan Multiple Range Test (DMRT). The results showed that the levels of dried growol starch were significantly different depending on the cooking method. Cassava starch content of the *Meni* variety is  $19.38 \pm 1.00\%$  with amylose content  $7.04 \pm 0.79\%$ . The highest levels starch of dried growol were by cooking autoclaves at the refrigerator temperature at  $86.40 \pm 0.32\%$  with amylose content  $30.84 \pm 0.06\%$ . Variations in the cooking method and the cooling temperature significantly affect the texture, bulk density and the degree of breakage of dried growol. Whereas the variation of cooking method in cooked growol and the cooling temperature significantly affect the color and overall compound of the cooking growol and do not significantly affect the flavor, taste and texture of growol. Most of cooked growol is preferred, the best method for produce dried growol by cooking pressure cooker at the refrigerator temperature with starch content  $77.65 \pm 0.51\%$ , amylose  $21.38 \pm 0.06\%$ , hardness  $79.48 \pm 1.10$  N, bulk density  $15.3 \pm 0.45$  g/cm<sup>3</sup>, degree of breakage  $9.82 \pm 0.04\%$  and preferred by panelists.

Keywords: Growol, Cassava, Cooking, Cooling