Sutia Ningsih, 651414052. Sifat sensori dan kimia kue kolombengi dengan subtitusi tepung beras merah sebagai upaya diversifikasi olahan makanan tradisional. Skripsi, Jurusan Ilmu Teknologi Pangan, Fakultas Pertanian, Universitas Negeri Gorontalo; Pembimbing 1 Zainudin Antuli dan Pembimbing II Suryani Une.

Penambahan tepung beras merah pada kue kolombengi dapat meningkatkan nilai gizi kue kolombengi sebagai makanan tradisonal serta dapat menekan ketergantungan penggunaan tepung terigu. Tujuan dari penelitian ini adalah mengetahui formulasi terbaik kue kolombengi dengan subtitusi tepung beras merah dan mengetahui sifat sensori dan kimia kue kolombengi dengan subtitusi tepung beras merah. Penelitian ini menggunakan metode Rancangan Acak Lengkap (RAL) dengan empat perlakuan dan tiga kali ulangan dan parameter yang diuji adalah organoleptik, kadar proksimat, serat kasar, dan antosianin. Data dianalisis dengan uji statistik *Analisis of Variance* (ANOVA) pada taraf $\alpha = 5\%$ menggunakan program *Microsoft Excel 2013*, bila terdapat perbedaan nyata antara perlakuan, maka dilanjutkan dengan uji beda Duncan *Multiple Range Test* (DMRT).

Hasil penelitian menunjukkan bahwa hasil uji sensori dari empat formulasi kue kolombengi yang memperoleh nilai tertinggi adalah dengan formulasi 30% tepung beras merah dan 70% tepung terigu. Pada aspek warna 5,5, tekstur 5,17, aroma 5,27 dan rasa 5,2. Hasil analisis proksimat meliputi kadar air 18,40%-16,11%, kadar protein 7,14%-7,6%, kadar abu 0,67%-0,94%, kadar lemak 6,38%-5,31%, karbohidrat, 64,07%−70,03%, dan nilai kadar serat pada kue kolombengi yaitu 0,19%−0,26%,dan nilai antosianin pada kue kolombengi beras merah 0mg-21.83mg. Perubahan nilai sensori dan kimia kue kolombengi disebabkan adanya perbedaan formulasi pada empat perlakuan. Semakin banyak tepung beras yang ditambahkan nilai serat dan nilai antosianin semakin tinggi.

Kata Kunci : *Makanan Tradisional, Kue Kolombengi, Tepung Beras Merah, Antosianin, serat kasar.*

ABSTRACT

SutiaNingsih, 651414052. Sensory and Chemical Characteristics of *Kolombengi* Cake through Substitution of Red Rice Flour as Diversification Effort of Traditional Food Processed. Skripsi. Department of Food Technology, Faculty of Agriculture, State University of Gorontalo. The principal supervisor is Zainudin Antuli, and the co-supervisor is Suryani Une.

As additional to the *kolombengi* cake, red rice flour could improve nutrition value of the traditional food and press dependency of use of wheat flour. The research was aimed to find out the best formulation and sensory and chemical characteristics of *kolombengi* cake through substitution of red rice flour. It applied Completely Randomized Design with four treatments and three replications as well as the observed parameters were organoleptic, proximate content, crude fiber, and anthocyanin. Research data were analyzed by using Analysis of Variance (ANOVA) as statistical test at significance level $\alpha = 5\%$ by applying Microsoft Excel 2013 program. If the significant difference were found among treatments, the research would be continued to Duncan Multiple Range Test (DMRT).

The research finding found that the highest value of the sensory test of four formulations of the *kolombengi* cake was formulation of red rice flour for 30% and wheat flour for 70%. As additional data, aspects of color was 5,5, the texture was 5,17, aroma was 5,27, and the taste was 5,2. Then, result of proximate analysis that comprised water content was 18,40%-16,11%, protein content was 7,14%-7,6%, ash content was 0,67%-0,94%, fat content was 6,38%-5,31%, carbohydrate was 64,07%-70,03%, and fiber content was 0,19%-0,26% as well as anthocyanin value of the red rice the *kolombengi* cake was 0 mg-21,83 mg. Formulation difference in four treatments caused the changing of sensory and chemical characteristics of the *kolombengi* cake. The more rice flour was added, the higher value of fiber and anthocyanin would be gained.

Keywords: *Traditional Food, Kolombengi Cake, Red Rice Flour, Anthocyanin, crude fiber*