

ABSTRAK

STUDI KARAKTERISTIK KIMIA DAN SENSORI *BROWNIES CHIPS* (*BROWNCIPS*) DENGAN BAHAN DASAR BERBAGAI TEPUNG LOKAL

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Pembuatan *brownies chips* (*browncips*) dengan bahan baku beberapa jenis tepung lokal diharapkan dapat menjadi alternatif penyediaan kudapan bagi masyarakat dan turut berkontribusi dalam penganekaragaman konsumsi pangan Indonesia. Penelitian ini bertujuan untuk mengetahui karakteristik kimia dan sensori *browncips* yang dibuat dari berbagai macam tepung. Percobaan ini menggunakan rancangan acak kelompok lengkap (RAKL) dengan 5 perlakuan dan 3 atau 5 ulangan. Perlakuan berbagai jenis tepung yang digunakan sebagai bahan baku *browncips*, yaitu tepung terigu, tepung garut, tepung sorghum, pati sagu, dan mocaf (*modified cassava flour*). Karakteristik kimia yang diuji adalah kadar air, kadar abu, kadar lemak, kadar protein, dan nilai kalori. Karakteristik sensori diuji menggunakan metode hedonik. Kesukaan terhadap warna, aroma, tekstur, dan rasa produk *browncips* diujikan pada 45 orang panelis. Homogenitas dan aditifitas data diuji menggunakan uji Bartlett dan Tukey. Data kemudian diproses menggunakan analisis ragam, diikuti uji lanjut menggunakan uji BNT (beda nyata terkecil) taraf 5% untuk mengetahui perbedaan antar perlakuan. Perlakuan terbaik ditentukan menggunakan *multi criteria decision making* (MCDM) metode *composite performance index* (CPI). Hasil penelitian menunjukkan bahwa *browncips* dengan karakteristik kimia dan sensori terbaik terbuat dari pati sagu dengan kadar air 2,73%, kadar abu 1,87%, kadar protein 7,94%, kadar lemak 31%, nilai kalori 537,36 (kkal/100g). Kesukaan panelis terhadap *browncips* pati sagu untuk warna, aroma, tekstur, dan rasa berturut-turut memiliki nilai skor 3,71, 3,82, 3,98, dan 3,6 (suka).

Kata Kunci : biskuit, karakteristik kimia, karakteristik sensori, tepung lokal

ABSTRACT

CHEMICAL AND SENSORY PROPERTIES STUDY OF *BROWNIE CHIPS (BROWNCIPS)* MADE FROM LOCAL FLOURS

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Brownie chips (brownchips) made from several local flours are suggested to be alternative snacks for the community and contributing to the diversification of Indonesian food consumption. This study aimed to determine the chemical and sensory characteristics of brownie chips made from various types of flour. The experiment was carried out in a completely randomized block design with 5 treatments and three or five replications. Various types of flours, i.e., wheat flour, arrowroot flour, sorghum flour, sago starch, and mocaf (modified cassava flour) were used as raw materials for brownchips. The chemical characteristics tested included moisture content, ash content, fat content, protein content, and calorie value. Sensory attributes and consumer acceptabilities were tested using the hedonic method. Color, aroma, texture, and taste preference of brownchips products were tested on 45 panelists. Data homogeneity and additivity were tested using the Bartlett and Tukey tests. The data were subjected to analysis of variance (ANOVA), followed by LSD (least significant difference) test at 5% level to determine differences between treatments. The best treatment was determined by multi criteria decision making (MCDM) composite performance index (CPI) method. The results showed that brownchips made from sago starch had the best chemical and sensory characteristics with moisture content of 2.73%, ash content of 1.87%, protein content of 7.94%, fat content of 31%, and calorie value of 537.36 (kcal/ 100g). The panelists' preference score for sago starch brownchips for color, aroma, texture, and taste were 3.71, 3.82, 3.98, and 3.6 (like), respectively.

Keywords : biscuits, chemical characteristics, sensory characteristics, local flours