

ABSTRAK

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KARAKTERISTIK *COOKIES* TEPUNG MOCAF DENGAN SUBSTITUSI TEPUNG PISANG DAN PENAMBAHAN BAYAM SEBAGAI FORTIFIKASI ZAT BESI

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(xiv + 114 halaman; 39 gambar; 15 tabel; 14 lampiran)

Cookies umumnya dibuat dengan tepung terigu dan penambahan bahan lainnya, seperti gula dan butter yang akan di proses dengan oven. Dalam upaya mengurangi penggunaan tepung terigu serta meningkatkan penggunaan bahan baku lokal, dapat digunakan ubi kayu dan pisang dalam bentuk tepung sebagai bahan pengganti tepung terigu. Tujuan penelitian ini adalah untuk menghasilkan *cookies* yang terbuat dari tepung mocaf dan tepung pisang dengan penambahan ISP untuk meningkatkan kadar protein dan kualitas tekstur *cookies* serta penambahan bayam sebagai fortifikasi zat besi. Penelitian dibagi menjadi dua tahap, Tahap I bertujuan untuk mengetahui pengaruh rasio tepung mocaf dan tepung pisang serta penambahan ISP terhadap karakteristik fisik, kimia dan organoleptik *cookies* serta menentukan formulasi terbaik untuk digunakan pada tahap II. Penelitian tahap II bertujuan untuk mengetahui pengaruh penambahan konsentrasi bayam terhadap karakteristik fisik, kimia dan organoleptik *cookies* serta menentukan formulasi terbaik pada tahap II untuk dilakukan uji lanjut. Faktor penelitian tahap I di bagi menjadi dua, yaitu rasio tepung mocaf : tepung pisang (60 : 40, 40 : 60, 50 : 50, 80 : 20, dan 20 : 80) dan konsentrasi ISP (5%, 10%, dan 15%). Formulasi *cookies* yang terbaik pada tahap I akan digunakan pada penelitian tahap II. Faktor penelitian tahap II, yaitu konsentrasi bayam (5%, 10%, 15%, 20%, 25%, dan 30%). *Cookies* yang memiliki formulasi terbaik pada penelitian tahap I adalah *cookies* dengan rasio tepung mocaf : tepung pisang (20:80) dan konsentrasi ISP 15%. *Cookies* terbaik pada penelitian tahap II adalah *cookies* dengan penambahan konsentrasi bayam 20%. *Cookies* dengan penambahan konsentrasi bayam 20% memiliki nilai kadar air sebesar 5,63%, kadar abu sebesar 2,35%, kadar protein sebesar 13,44%, kadar lemak sebesar 22,77%, kadar karbohidrat sebesar 55,87%, kadar serat pangan sebesar 10,41%, dan kadar zat besi sebesar 1,92 mg/100g.

Kata Kunci : *Cookies*, tepung mocaf, tepung pisang, ISP, konsentrasi bayam

Referensi : 47 (1992-2020)

ABSTRACT

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CHARACTERISTICS OF MOCAF FLOUR COOKIES WITH BANANA FLOUR SUBSTITUTION AND SPINACH ADDITION AS IRON FORTIFICATION

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Cookies are generally made with wheat flour and the addition of other ingredients, such as sugar and butter that will be processed in the oven. In an effort to reduce the use of wheat flour and increase the use of local raw materials, cassava and bananas can be used in the form of flour as a substitute for wheat flour. The purpose of this study was to produce cookies made from mocaf flour and banana flour with the addition of ISP to increase protein content and texture quality of cookies and the addition of spinach as iron fortification. The research was divided into two stages, Phase I aimed to determine the effect of the ratio of mocaf flour and banana flour as well as the addition of ISP on the physical, chemical and organoleptic characteristics of cookies and to determine the best formulation to be used in phase II. Phase II research aims to determine the effect of adding spinach concentration to the physical, chemical and organoleptic characteristics of cookies and to determine the best formulation in phase II for further testing. Phase I research factors were divided into two, namely the ratio of mocaf flour: banana flour (60: 40, 40: 60, 50: 50, 80: 20, and 20: 80) and the concentration of ISP (5%, 10%, and 15). %). The best cookie formulation in phase I will be used in phase II research. Phase II research factors, namely the concentration of spinach (5%, 10%, 15%, 20%, 25%, and 30%). Cookies that had the best formulation in the first phase of the research were cookies with a ratio of mocaf flour: banana flour (20:80) and an ISP concentration of 15%. The best cookies in the second phase of the research were cookies with the addition of 20% spinach concentration. Cookies with the addition of 20% spinach concentration have a water content value of 5.63%, ash content of 2.35%, protein content of 13.44%, fat content of 22.77%, carbohydrate content of 55.87%, dietary fiber is 10.41%, and iron content is 1.92 mg/100g.

Keywords : Cookies, mocaf flour, banana flour, ISP, spinach concentration

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