PERSETUJUAN PEMBIMBING SKRIPSI

ANALISIS KANDUNGAN GIZI DAN TOTAL BETA KAROTEN SUSU JAGUNG MANIS (Zea Mays) DENGAN FORTIFIKASI SARI WORTEL (Daucus carota L.)

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Oleh Abd Gafur M Nur Telah di pertahankan di depan dewan penguji

Hari/Tanggal: Rabu/ 16 Mei 2018

Waktu

: 08:00 - 09:00

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ABSTRACT

Abd Gafur M Nur, 651414127. 2018. Nutritional Content Analysis and Total Beta Carotene Sweet Corn Milk (Zea Mays) With Fortification Carrot Sari (Daucus Carota L.). Proposal, Department of Food Science, Faculty of Agriculture, State University of Gorontalo; Supervisor 1 Musrowati Lasindrang and Advisor II Zainudin Antuli.

This study aims to determine the effect of fortified carrot extract to total beta carotene and panelist favorability on sweet corn milk fortified with carrot juice. The treatment conducted in this research is the fortification of carrot extract of 0%, 5%, 10% and 15%. In corn milk as much as 1 liter. The design used in this study is Completely Randomized Design (RAL) one factor that is the fortification of carrot juice in sweet corn milk with 4 treatments and two replications. Based on organoleptic test, the best treatment was treated with P4 with fortified carrot essence of 15%, which obtained the mean values of taste and color parameters (5.7), while the aroma parameter (5.3). The proximate test results obtained the results of protein content of 0.52%, 0.64%, 0.82%, and 0.78%, fat content of 0.73%, 0.79%, 0.59% and 0.84%, water content of 96.13%, 96.05%, 96% and 96.02 %, ash content of 0.13%, 0.16%, 0.16%, and 0.165%, carbohydrate treatment levels P1, P2, P3 and P4 respectively 2.48%, 2.35%, 2.5%, and 2.19%, crude fiber content of 0.17 %, 0.17%, 0.17%, 0.15%, and for beta carotene content of 60.25 ppm, 92.0625 ppm, 113.185 ppm, and 133.55 ppm.

Keywords: carrot juice, sweet corn milk, proximate, beta carotene

ABSTRACT

Abd. Gafur M. Nur, 651414127. 2018. The Analysis of Nutrition Content and Total Beta-carotene in Sweet Corn (Zea Mays) Milk with Carrot (Daucus carota L.) Extract Fortification. A Proposal, Department of Food Science and Technology, Faculty of Agriculture, State University of Gorontalo. The principal supervisor is Musrowati Lasindrang, and the co-supervisor is Zainudin Antuli.

The study aims at investigating the influence of carrot extract fortification towards total beta-carotene and panelist preference level on sweet corn milk. The treatments are 0%, 5%, 10%, and 15% carrot extract on 1 liter of sweet corn milk. It applies Completely Randomized Design using one factor namely carrot extract fortification on sweet corn milk with 4 treatments and 2 repetitions. Based on the organoleptic test, the best treatment is P4 with 15% carrot extract fortification by having an average score of taste and color parameters is 5.7, and an average score of aroma parameter is 5.3. The proximate test result on the four treatments obtains, respectively, the protein content for 0.52%, 0.64%, 0.82%, and 0.78%, fat content for 0.73%, 0.79%, 0.59%, and 0.84%, water content for 96.13%, 96.05%, 96%, and 96,02%, dust content for 0.13%, 0.16%, 0.16%, and 0.165%, carbohydrate content for 2.48%, 2.35%, 2.5%, and 2.19%, fiber content for 0.17%, 0.17%, 0.17% and 0.15%, and beta-carotene content for 60.25 ppm, 92.0625 ppm, 113.185 ppm, and 133.55 ppm.

Keywords: carrot extract, sweet corn milk, proximate, beta-carotene