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ABSTRAK

Tujuan dari penelitian ini adalah mengetahui pengaruh proporsi tepung sorgum dan ikan gabus, serta konsentrasi maizena terhadap karakteristik fisik dan sensoris tortilla sorgum chips, mengetahui perlakuan terbaik, dan mengetahui kandungan nutrisi pada *tortilla sorgum chips*. Desain penelitian ini menggunakan metode Rancangan Acak Lengkap. Hasil dari penelitian ini adalah bahwa proporsi sorgum dan ikan gabus berpengaruh pada kesukaan terhadap warna, aroma, rasa, dan keseluruhan, namun tidak berpengaruh terhadap tekstur. Nilai L (22,733-27,867) meningkat seiring bertambahnya konsentrasi maizena, nilai a (5,917-7,833), nilai b (30,250-37,967), serta nilai *hue* (76,262-79,477) meningkat seiring bertambahnya komposisi tepung sorgum. Komposisi tepung dan konsentrasi maizena berpengaruh pada nilai *hardness* yang berkisar 195,6679-373,7279 g. Kadar air *tortilla chips* berkisar antara 1,03-1,06%. Uji efektivitas berdasarkan data sensoris diperoleh perlakuan terbaik adalah P2A2 dengan formulasi 15% tepung maizena, 10% tepung gabus, dan 90% tepung sorgum. Kadar abu sebesar 3,00%, kadar lemak 22,03%, kadar protein 18,20%, serta aktivitas antioksidan sebesar 44,46%.

Kata kunci: *Tortilla chips*, Sorgum, Ikan gabus, Protein, Antioksidan

Nora Rahayu Ningtiyas. NIM 190331100009. *Development of Sorghum (Sorghum bicolor L. Moench) Tortilla Chips and Snakehead Fish (Channa striata) as Alternative Protein and Antioxidant Food Sources. Under the guidance Prof. Ir. Umi Purwandari, M.App.Sc.,Ph.D and Dr. Banun Diah Probawati, S.TP., M.Si.*

ABSTRACT

The objective of this study was to investigate the influence of the proportion of sorghum flour and snakehead fish, as well as the concentration of cornstarch, on the physical and sensory characteristics of sorghum-based tortilla chips. The research design employed a Completely Randomized Design. The results indicated that the proportion of sorghum flour and snakehead fish had a significant impact on color, aroma, taste, and overall preference, but did not have a noticeable effect on texture. The L-value (22.733-27.867) increased with higher concentrations of cornstarch, while the a-value (5.917-7.833), b-value (30.250-37.967), and hue value (76.262-79.477) increased with a higher proportion of sorghum flour. The composition of flour and the concentration of cornstarch had an effect on the hardness value, ranging from 195.6679-373.7279 g. The moisture content of the tortilla chips ranged from 1.03-1.06%. Based on sensory evaluation, the most effective treatment was found to be P2A2, with a formulation consisting of 15% cornstarch, 10% snakehead fish flour, and 90% sorghum flour. The ash content was determined to be 3.00%, fat content was 22.03%, protein content was 18.20%, and the antioxidant activity was measured at 44.46%.

Keywords: *Tortilla chips, Sorghum, Snakehead fish, Protein, Antioxidant*