

**CHEMICAL AND SENSORY CHARACTERISTIC OF TORTILLA CHIPS WITH THE ADDITION OF SNAKEHEAD FISH BONE FLOUR (*Channa striata*)**

**ABSTRACT**

**By**

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*This study aims to determine the effect of adding snakehead fish bone flour to the chemical and sensory properties of tortilla chips and to obtain the best tortilla chips. The study was arranged in a Completely Randomized Block Design (CRBD) with a single factor using 6 levels of concentration of the addition of snakehead fish bone flour, F0 (0%); F1 (5%); F2 (10%); F3 (15%); F4 (20%); F5 (25%). The research consisted of the process of making snakehead fish bone flour, making tortilla chips, sensory testing including parameters of color, aroma, texture, taste, and overall acceptance and chemical testing including water content, to get the best treatment which was then tested for ash content, fat content, content protein, carbohydrate and calcium levels. The data obtained were analyzed statistically using the Bartlett and Tuckey test and then continued with the ANOVA test and the 5% HSD test. The results showed that the addition of snakehead fish bone meal in the manufacture of tortilla chips had a significant effect on the chemical properties of tortilla chips including water content and sensory properties such as color, aroma, texture, taste and overall acceptance. The best treatment is F5 (15%) with sensory characteristics of brownish yellow color, very chewy texture, aroma, taste and overall acceptance of liking, has a water content of 3.64%, ash content of 11.11%, protein content of 11.97%, fat content is 25.64%, carbohydrate content is 53.94% and calcium content is 24.2% and is in accordance with SNI 2885:2015 extrudate food quality requirements.*

**Keywords:** *tortilla chips, fish bone flour, snakehead fish*

# **KARAKTERISTIK KIMIA DAN SENSORI *TORTILLA CHIPS* DENGAN PENAMBAHAN TEPUNG TULANG IKAN GABUS (*Channa striata*)**

## **ABSTRAK**

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Penelitian ini bertujuan untuk mengetahui pengaruh penambahan tepung tulang ikan gabus terhadap sifat kimia dan sifat sensori *tortilla chips* dan mendapatkan *tortilla chips* terbaik. Penelitian disusun dalam Rancangan Acak Kelompok Lengkap (RAKL) dengan faktor tunggal menggunakan 6 taraf konsentrasi penambahan tepung tulang ikan gabus, F0 (0%); F1 (5%); F2 (10%); F3 (15%); F4 (20%); F5 (25%). Penelitian terdiri dari proses pembuatan tepung tulang ikan gabus, pembuatan *tortilla chips*, pengujian sensori meliputi parameter warna, aroma, tekstur, rasa, dan penerimaan keseluruhan dan uji kimia meliputi kadar air, untuk mendapatkan perlakuan terbaik yang selanjutnya diuji kadar abu, kadar lemak, kadar protein, kadar karbohidrat dan kadar kalsium. Data yang diperoleh dianalisis secara statistik dengan menggunakan uji Bartlett dan Tuckey lalu dilanjutkan dengan uji ANOVA dan uji BNJ taraf 5%. Hasil penelitian menunjukkan bahwa penambahan tepung tulang ikan gabus dalam pembuatan *tortilla chips* berpengaruh nyata terhadap sifat kimia *tortilla chips* diantaranya kadar air serta sifat sensori berupa warna, aroma, tekstur, rasa dan penerimaan keseluruhan. Perlakuan terbaik F5 (15%) dengan karakteristik sensori warna kuning kecoklatan, tekstur sangat kenyal, aroma, rasa dan penerimaan keseluruhan suka, memiliki kadar air sebesar 3,64%, kadar abu sebesar 11,11%, kadar protein sebesar 11,97%, kadar lemak sebesar 25,64%, kadar karbohidrat sebesar 53,94% dan kadar kalsium sebesar 24,2% dan telah sesuai dengan SNI 2885:2015 tentang syarat mutu makanan ekstrudat

**Kata kunci :** *Tortilla chips*, tepung tulang ikan, ikan gabus