

Effect of Adding Broccoli (*Brassica Oleraceae L.*) on the Physicochemical and Organoleptic Characteristics of Catfish Brain
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ABSTRACT

Otak-otak is a snack made from minced fish mixed with spices and wrapped in banana leaves. This study explored the development of fish otak-otak using catfish with the addition of broccoli at various percentages. This study aims to determine the effect of broccoli addition on the physicochemical and sensory properties of catfish otak-otak. The study was conducted using a non-factorial Complete Randomized Design (CRD). Data were analyzed using ANOVA and followed by the DMRT test. In this study, six levels of broccoli addition were used: P1 (0% broccoli), P2 (4% broccoli), P3 (8% broccoli), P4 (12% broccoli), P5 (16% broccoli), and P6 (20% broccoli). The observed parameters included firmness, L*a*b* color values, moisture content, protein content, and crude fiber content, as well as sensory tests, hedonic tests, and hedonic quality tests, with attributes of taste, color, aroma, and texture. The results showed that the addition of broccoli to catfish brains had a significant effect on texture, red color intensity (a*), yellow color intensity (b*), moisture content, protein content, crude fiber content, hedonic color, aroma, taste, texture, and hedonic quality of color, taste, and texture, but had no significant effect on brightness (L) and hedonic quality test for aroma. The best treatment for catfish brains with added broccoli was treatment P5 (20% broccoli) with a firmness value of 1.79N. The value for lightness (L*) was 67.2, the red color value (a*) was -2.55, and the yellow color value (b*) was 10.25. The moisture content of the fish brains was 79.91%, the protein content was 12.37%, and the crude fiber content was 3.95%. The hedonic test scores were as follows: color 3.28, aroma 3.28, taste 3.90, and texture 3.65. Meanwhile, the hedonic quality score for color is 3.67, for aroma is 1.52, for taste is 3.16, and for texture is 4.55.

Keywords: Catfish, Otak-otak, broccoli, physicochemical and organoleptic