

ABSTRAK

Lidya Octavia Sitinjak 5181240006: Analisis Produk Daging Analog Dengan Penambahan Air Sikkam (*Bischotia javanica Blume*). Skripsi. Fakultas Teknik Universitas Negeri Medan. 2023

Daging analog adalah daging tiruan yang dibuat untuk memenuhi kebutuhan protein bagi vegetarian. Bahan dasar pembuatan daging analog adalah jamur tiram serta menggunakan penambahan air sikkam sebagai pewarna alami. Penelitian ini bertujuan untuk mengetahui hedonik, mutu hedonik, kandungan zat gizi pada formula terbaik daging analog dengan penambahan air sikkam. Penelitian ini dilaksanakan di Program Studi Gizi Universitas Negeri Medan dan Balai Standarisasi dan Pelayanan Jasa Industri kota Medan selama bulan Maret – April 2023. Penelitian ini bersifat eksperimen dengan metode Rancangan Acak Lengkap (RAL) dengan faktor tunggal yaitu konsentrasi air sikkam yang digunakan dengan 4 formula F1 = 0 ml, F2 = 20 ml, F3 = 40 ml, F4 = 60 ml. Uji organoleptik dilakukan di laboratorium organoleptik Universitas Negeri Medan dan untuk analisis zat gizi dilakukan di laboratorium Balai Standarisasi dan Pelayanan Jasa Industri (BSPJI) Medan. Uji organoleptik berupa uji hedonik dan mutu hedonik. Teknik pengumpulan data menggunakan kuisioner organoleptik hedonik dan mutu hedonik. Hasil penelitian dianalisis menggunakan metode uji ANOVA dengan uji lanjut *Duncan*. Daging analog terbaik ditentukan menggunakan MPE (Metode Perbandingan Eksponensial).

Hasil penelitian uji organoleptik formula terbaik adalah F3 dengan penambahan air sikkam sebanyak 40 ml. Secara mutu hedonik F3 diketahui memiliki kategori warna (merah gelap), aroma (segar), tekstur (berserat), dan rasa (sangat terasa daging). Hal itu dibuktikan berdasarkan nilai signifikan pada uji Kruskal Wallis dan uji lanjut Mann Whitney dimana nilai ($p > 0,05$). Hasil analisis kandungan gizi daging analog terpilih adalah protein (23,9%), lemak total (10,9%), karbohidrat (12,9%), serat kasar (17,9%), kadar air (51,3%), dan kadar abu (1,00%).

ABSTRACT

*Lidya Octavia Sitinjak 5181240006: Analysis of Analog Meat Products with the Addition of Sikkam Water (*Bischotia javanica* Blume). Thesis. Medan State University Faculty of Engineering. 2023*

Analog meat is artificial meat made to meet the protein needs of vegetarians. The basic ingredients for making analog meat are oyster mushrooms and using the addition of sikkam water as a natural coloring. This research aims to determine hedonics, hedonic quality, nutritional content in the best analogue meat formula with the addition of sikkam water. This research was carried out at the Medan State University Nutrition Study Program and the Center for Standardization and Industrial Services in the city of Medan during March – April 2023. This research was experimental in nature using a Completely Randomized Design (RAL) method with a single factor, namely the concentration of sikkam water used with 4 formulas. $F1 = 0 \text{ ml}$, $F2 = 20 \text{ ml}$, $F3 = 40 \text{ ml}$, $F4 = 60 \text{ ml}$. Organoleptic tests were carried out at the Medan State University organoleptic laboratory and nutrient analysis was carried out at the Medan Center for Standardization and Industrial Services (BSPJI) laboratory. Organoleptic tests include hedonic tests and hedonic quality. Data collection techniques used hedonic organoleptic and hedonic quality questionnaires. The research results were analyzed using the ANOVA test method with Duncan's continuous test. The best meat analogue is determined using MPE (Exponential Comparison Method).

The results of the organoleptic test research showed that the best formula was $F3$ with the addition of 40 ml of sikkam water. In terms of hedonic quality, $F3$ was found to have the categories of color (dark red), aroma (fresh), texture (fibrous), and taste (very meaty). This was proven based on the significant value in the Kruskal Wallis test and the Mann Whitney advanced test where the value was ($p > 0.05$). The results of the analysis of the nutritional content of selected analogue meat were protein (23.9%), total fat (10.9%), carbohydrates (12.9%), crude fiber (17.9%), water content (51.3%) , and ash content (1.00%).