PENGARUH LAMA WAKTU PEREBUSAN BIJI KECIPIR (*Psophocarpus tetragonolobus*) MENGGUNAKAN *PRESSURE COOKER* TERHADAP KARAKTERISTIK TEMPE KECIPIR

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Pengaruh Lama Perebusan Biji Kecipir (*Psophocarpus tetragonolobus*) menggunakan *Pressure Cooker* terhadap Karakteristik Tempe Kecipir

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ABSTRAK

Penelitian ini bertujuan untuk mengetahui pengaruh lama waktu perebusan biji kecipir (*Psophocarpus tetragonolobus*) menggunakan pressure cooker terhadap karakteristik tempe kecipir serta menentukan lama waktu perebusan terbaik untuk menghasilkan tempe dengan kualitas yang baik dari segi tekstur dan aroma. Metode penelitian yang digunakan adalah Rancangan Acak Lengkap (RAL) dengan 4 perlakuan lama perebusan, yaitu 60, 90, 120, dan 150 menit, masing-masing dengan 3 ulangan. Parameter yang diamati dalam penelitian meliputi analisis kimia (kadar air, kadar abu, kadar lemak, kadar protein, dan kadar karbohidrat), analisis fisik (kekerasan), serta analisis sensori (uji hedonik, uji deskriptif, dan uji perbandingan jamak). Hasil penelitian menunjukkan bahwa lama perebusan memberikan pengaruh nyata terhadap kadar air, kadar abu, kadar karbohidrat, dan kekerasan, namun berpengaruh tidak nyata terhadap kadar lemak dan kadar protein. Semakin lama waktu perebusan, kadar air mengalami peningkatan, sedangkan kadar abu, lemak, protein, karbohidrat, dan nilai kekerasan cenderung menurun. Perlakuan terbaik diperoleh pada lama perebusan 150 menit yang menghasilkan tempe kecipir dengan tekstur lebih lunak, aroma lebih baik, serta tingkat penerimaan panelis yang paling tinggi berdasarkan uji hedonik, deskriptif, dan perbandingan jamak. Tempe kecipir pada perlakuan tersebut memiliki kadar air 54,47%, kadar abu 1,97%, kadar lemak 2,31%, kadar protein 25,51%, kadar karbohidrat 15,73%, dan nilai kekerasan 282,33 gram force.

Kata Kunci: biji kecipir; karakteristik sensori; lama perebusan; *pressure cooker*; tempe

Effect of Boiling Duration Using A Pressure Cooker on The Characteristics of Winged Bean (*Psophocarpus tetragonolobus*) Tempe

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ABSTRACT

This study aimed to determine the effect of boiling duration using a pressure cooker on the characteristics of winged bean (*Psophocarpus tetragonolobus*) tempe and to identify the optimal boiling time to produce tempe with desirable quality in terms of texture and aroma. The experiment was conducted using a Completely Randomized Design (CRD) with four boiling time treatments, namely 60, 90, 120, and 150 minutes, each with three replications. The parameters observed included chemical analysis (moisture, ash, fat, protein, and carbohydrate contents), physical analysis (hardness), and sensory evaluation (hedonic test, descriptive test, and multiple comparison test). The results showed that boiling time had significant effects on moisture, ash, carbohydrate contents, and hardness, but no significant effects on fat and protein content. Longer boiling times increased the moisture content, while ash, fat, protein, carbohydrate contents, and hardness values tended to decrease. The best treatment was obtained at 150 minutes of boiling, which produced winged bean tempeh with softer texture, improved aroma, and the highest acceptance by panelists based on hedonic, descriptive, and multiple comparison tests. At this treatment, the winged bean tempeh had a moisture content of 54.47%, ash content of 1.97%, fat content of 2.31%, protein content of 25.51%, carbohydrate content of 15.73%, and hardness value of 282.33 gram force.

Keywords: *boiling time; pressure cooker; sensory characteristics; tempe; winged bean*