

KARAKTERISTIK FISIK DAN SENSORIS MARSHMALLOW DARI GELATIN TULANG BELIKAT KELINCI var. REX

INTISARI

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Peningkatan pemanfaatan daging dan bulu kelinci dapat menimbulkan peningkatan risiko pencemaran lingkungan dari tulang kelinci yang tidak dimanfaatkan. Dikarenakan kandungan kolagennya yang tinggi, tulang kelinci dapat dimanfaatkan sebagai bahan baku pembuatan gelatin menggunakan *pre-treatment* asam. Akan tetapi, penggunaan gelatin tulang kelinci pada suatu produk pangan dapat mempengaruhi atribut tekstur dan sensorisnya. Marshmallow adalah produk pangan berbasis gelatin yang kualitasnya sangat bergantung pada karakteristik gelatin yang digunakan. Penelitian ini bertujuan untuk mengetahui karakteristik fisik, sensoris, dan rasio gelatin tulang kelinci terbaik untuk marshmallow.

Penelitian ini mencakup ekstraksi gelatin tulang belikat kelinci Rex yang kemudian diaplikasikan pada marshmallow dengan konsentrasi gelatin tulang kelinci yang berbeda (8%, 10%, 12%). Untuk mengetahui konsentrasi terbaik, dilakukan analisis karakteristik fisik (berupa *overrun*, kadar air, tekstur, mikrotekstur, dan karakteristik termal) dan analisis karakteristik sensoris (berupa atribut *hardness*, *springiness*, *cohesiveness*, rasa asam, rasa manis, *chewiness*, dan *overall* kesukaan) dibandingkan dengan marshmallow kontrol (gelatin sapi komersial rasio 8%). Studi ini menunjukkan bahwa rasio gelatin tulang kelinci terbaik adalah 8%. Penambahan gelatin tulang kelinci berpengaruh pada karakteristik fisik berupa *overrun*, *hardness*, *cohesiveness*, dan *chewiness*. Penambahan gelatin tulang kelinci berpengaruh pada karakteristik sensori berupa *hardness*, *cohesiveness*, rasa asam, dan *chewiness*. Hasil analisis menunjukkan nilai *overrun* berada pada rentang 6,67–16,67%, kadar air 16.05–18.70%, *hardness* 12,44–45,50N, *chewiness* 11,61–41,72N, rasa asam 1,94–3,62, serta *overall* penerimaan 4.15–6.31.

Kata kunci: Gelatin, kelinci, marshmallow, fisik, sensoris

PHYSICAL AND SENSORY CHARACTERISTICS OF MARSHMALLOWS MADE FROM REX VARIANT RABBIT SCAPULA GELATIN

ABSTRACT

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Increasing rabbit meat and fur utilization may lead to an increased risk of environmental pollution from unused rabbit bones. Due to its high collagen content, rabbit bone can be used as a raw material for making gelatin using an acid pre-treatment. However, the use of rabbit bone gelatin in a food product can affect its textural and sensory attributes. Marshmallow is a gelatin-based food product whose quality is very dependent on the characteristics of the gelatin used. This research aims to determine the physical and sensory characteristics and the best ratio of rabbit bone gelatin to marshmallow.

This research includes the extraction of Rex variant rabbit scapula gelatin, which is then applied to marshmallows with different concentrations of rabbit bone gelatin (8%, 10%, and 12%). To find out the best concentration, an analysis of physical characteristics (in the form of overrun, water content, texture, microtexture, and thermal characteristics) and an analysis of sensory characteristics (in the form of attributes like hardness, springiness, cohesiveness, sour taste, sweet taste, chewiness, and overall acceptance) were compared to control marshmallows (8% ratio of commercial bovine gelatin). This study shows that the best rabbit bone-gelatin ratio is 8%. The addition of rabbit bone gelatin has an effect on the physical characteristics of overrun, hardness, cohesiveness, and chewiness. The addition of rabbit bone gelatin affects sensory characteristics in the form of hardness, cohesiveness, sour taste, and chewiness. The analysis results show value overrun is in the range of 6.67–16.67%, water content is 16.05–18.70%, hardness is 12,44–45,50N, chewiness is 11.61–41.72N, sour taste is 1.94–3.62, and overall acceptance is 4.15–6.31.

Key words: Gelatin, rabbit, marshmallow, physical, sensory