

## **ABSTRAK**

Telah dilakukan penelitian mengenai konsentrasi gelatin tulang ikan tuna dan perbandingan antara sukrosa dengan sirup jagug. Tujuan dari penelitian ini adalah untuk mendapatkan gelatin dari tulang ikan tuna yang tepat terhadap karakteristik marshmallow dan perbandingan antara sukrosa dan sirup jagung yang tepat terhadap karakteristik marshmallow.

Penelitian ini meliputi penelitian pendahuluan dan utama. Pada penelitian pendahuluan dilakukan pembuatan gelatin dari tulang ikan tuna. Pada penelitian utama digunakan Rancangan Acak Kelompok (RAK) yang terdiri dari 2 faktor yaitu faktor A (konsentrasi gelatin tulang ikan tuna) yang terdiri 3 taraf yaitu  $a_1$  (8%),  $a_2$  (10%),  $a_3$  (12%) dan faktor B (perbandingan antara sukrosa dan sirup jagung) yang terdiri dari 3 taraf yaitu  $b_1$  (1:2),  $b_2$  (1:1),  $b_3$  (2:1). Respon pada penelitian utama meliputi respon kimia (kadar air dengan metode deanstract dan kadar gula reduksi dengan metode luff schoorl) dan respon organoleptik (aroma, rasa, tekstur).

Gelatin tulang ikan tuna yang digunakan pada penelitian utama memiliki kadar air 83,818%, kadar abu 1,591%, pH 3,30, viskositas 1,5 cP, dan kekuatan gel 2,895 g *force*. Hasil penelitian utama menunjukkan bahwa konsentrasi gelatin tulang ikan tuna dan perbandingan antara sukrosa dan Sirup Jagung serta interaksinya tidak berpengaruh nyata terhadap respon organoleptik pada atribut rasa, aroma dan tekstur. Perbandingan antara sukrosa dan sirup jagung berpengaruh terhadap kadar gula reduksi marshmallow, sedangkan interaksi antara konsentrasi gelatin tulang ikan tuna dan perbandingan antara sukrosa dengan sirup jagung berpengaruh terhadap kadar air marshmallow.

Kata kunci: Gelatin Tulang Ikan Tuna, Sukrosa, Sirup Jagung, , Marshmallow

## **ABSTRACT**

*The research has been conducted between tuna bone gelatin concentration and the ratio between sucrose with corn syrup. The purpose of this research was obtained gelatin from the bones of tuna appropriate to the characteristics of marshmallow and comparison between sucrose and corn syrup were appropriate to the characteristics of marshmallow.*

*This research includes primary and main research. In the primary research conducted by making gelatin from the bones of tuna. In the main research used a randomized block design (RBD), which consists of two factors: factor A (concentration of tuna bone gelatin) comprising three levels, that is a1 (8%), a2 (10%), a3 (12%) and factor B (ratio between sucrose and corn syrup), which consists of three levels that is b1 (1: 2), b2 (1: 1), b3 (2: 1). The primary research response include chemical response (moisture with deanstract methods and reducing sugar with luff schoorl method) and organoleptic response (smell, taste, texture).*

*Tuna bone gelatin used in the primary research had moisture content 83.818%, ash content 1.591%, pH 3.30, viscosity 1.5 cP and gel strength 2,895 g force. The primary research results showed that the concentration of tuna bone gelatin and comparison between sucrose and corn syrup as well as the interaction did not significantly affect the response organoleptic attributes of flavor, aroma and texture. Comparison between sucrose and corn syrup effect on reducing sugar marshmallow, while the interaction between bone gelatin concentration of tuna and comparison between sucrose with corn syrup affect the water content of marshmallow.*

*Keywords:* *Tuna Fish Bone Gelatin, Sucrose, Corn Syrup, Marshmallow*