Tirzania Frannetta Sopacua (03420070119)

The Effect of Application Gelatin from Tuna (*Thunnus albacares*) Fish Bone and Skin Towards The Jelly Characteristics

Tuna’s skin and bone can be used for gelatin. Many researches have studied on making and optimization of fish gelatin however there is no research about application of fish gelatin from tuna (*Thunnus albacares*) for jelly characteristic. In this research, gelatin was extract from tuna’s bone and skin. The gelatin was evaluated for proximate analysis, gel strength, viscosity, melting point, setting point, whiteness, and pH value. The characterization of bone’s gelatin were yield 7.01%, gel strength 93.25 g.cm, viscosity 17.2cPs, melting point 27.63°C, setting point 14.93°C, and whiteness 56.28%, pH value 4.73, moisture content 8.52%, ash content 1.87%, protein content 97.13%, and fat content 3.14%. The characterization of skin’s gelatin were yield 5.81, gel strength 207.25 g.cm, viscosity 29.28 cPs, melting point 29.17°C, setting point 18.15°C, and whiteness 61.57%, pH value 45.67, moisture content 7.37%, ash content 1.93%, protein content 99.67%, fat content 3.13%. Jelly was made with different concentration of skin and bone gelatins. The gelatin concentration were 5%, 7%, and 9%. The best concentration determined based on scoring by 30 panelists. The parameters for scoring was elasticity, colour, taste, odour, likeness, and overall, there was no different between skin and bone jellies. The best concentration was 7% based on scoring result. The best jellies of skin gelatin have gel strength 234.00 g.cm and syneresis 2.58%. Jellies from bone’s gelatin have a characteristic gel strength 141.87g.cm and syneresis 22.00%. Skin gelatin has a better characteristic compared to bone gelatin.

**Keyword:** Tuna, skin’s gelatin, bone’s gelatin, jelly

**References:** 49 (1983-2010)