

## INTISARI

Gelatin kulit ikan tuna sirip kuning memiliki potensi yang baik menjadi bahan tambahan dalam industri pangan sebagai alternatif gelatin halal pengganti gelatin sapi. Gelatin kulit ikan tuna sirip kuning dapat diaplikasikan sebagai bahan penstabil gel dalam produk puding dan ditambahkan tepung tempe campuran (koro pedang putih dan kedelai) untuk menambah kandungan protein dan aktivitas antioksidan. Penelitian ini bertujuan untuk mengetahui pengaruh penambahan gelatin kulit tuna sirip kuning dan tepung tempe campuran (koro pedang putih dan kedelai) terhadap sifat sensoris, fisik, kimia, dan aktivitas antioksidan puding.

Penelitian menggunakan Rancangan Acak Lengkap (RAL) dengan penambahan variasi jenis gelatin dan tepung tempe campuran. Formulasi puding meliputi puding kontrol (tanpa gelatin dan tepung tempe campuran), puding gelatin sapi dengan tepung tempe campuran, dan puding gelatin kulit tuna dengan tepung tempe campuran. Analisis sensoris dengan uji hedonik meliputi warna, aroma, rasa, tekstur, *aftertaste*, dan keseluruhan. Analisis fisik meliputi warna, kekuatan gel, dan derajat keasaman (pH). Analisis kimia meliputi kadar air, abu, lemak, protein, karbohidrat *by difference*, dan aktivitas antioksidan dengan metode DPPH.

Hasil penelitian menunjukkan pada puding yang diformulasi dengan gelatin kulit ikan tuna dan tepung tempe campuran diperoleh hasil uji hedonik keseluruhan 3,63 (mendekati biasa saja), warna  $L^*$  70,45;  $a^*$  3,62;  $b^*$  12,82; kekuatan gel 53,48 g Bloom; nilai pH 6,10 ; kadar air 76,49 %bb ; kadar abu 2,62 %bk; kadar protein 13,20 %bk; kadar lemak 9,84 %bk; kadar karbohidrat *by difference* 74,30 %bk; dan aktivitas antioksidan 5,76 %.

Kata kunci: gelatin kulit tuna, puding, tepung tempe campuran.

## ABSTRACT

Yellow fin tuna skin gelatin has good potential to be an additional ingredient in the food industry as an alternative to halal gelatin instead of beef gelatin. Yellow fin tuna skin gelatin can be applied as a gel stabilizer in the pudding product and added a mixed grain tempeh powder (jack bean and soybean) to increase protein content and antioxidant activity. This study aims to determine the effect of the addition of yellow fin tuna skin gelatin and mixed tempeh flour (white sword koro and soybeans) to the sensory, physical, chemical, and antioxidant activity of the pudding.

The study used a Completely Randomized Design (CRD) with the addition of variations in the type of gelatin and mixed grain tempeh powder. Pudding formulations include control pudding (without gelatin and mixed grain tempeh powder), beef gelatin pudding with mixed grain tempeh powder, and tuna skin gelatin pudding with mixed grain tempeh powder. Sensory analysis with hedonic tests include color, aroma, taste, texture, aftertaste, and overall. Physical analysis includes the color, gel strength, and pH. Chemical analysis includes water, ash, fat, protein, carbohydrate by difference, and antioxidant activity with DPPH method.

The results showed that pudding formulated with tuna skin gelatin and mixed grain tempeh powder obtained overall hedonic test values 3.63 (close to normal), color L \* 70.45; a \* 3.62; b \* 12.82; gel strength 53,48 g Bloom; pH value of 6.10; water content 76.49% wb; ash content 2.62% db; protein content 13.20% db; 9.44% db fat content; carbohydrate levels by difference 74,30 %bk; and antioxidant activity 5.76%.

Keywords: tuna skin gelatin, pudding, mixed grain tempeh powder.