

## RINGKASAN

Tuna merupakan komoditas unggulan kedua pada sektor ekspor hasil perikanan di Indonesia. Ikan segar sangat rentan terhadap penurunan mutu karena adanya proses kerusakan baik fisik, kimia, dan mikrobiologi. Permasalahan tersebut menyebabkan penanganan pascapanen ikan perlu dilakukan segera setelah ikan ditangkap agar dapat mempertahankan mutunya selama penyimpanan. Aplikasi *edible coating* dengan penambahan bahan pengawet alami dapat menjadi solusi alternatif dalam menghambat penurunan mutu *fillet* tuna sirip kuning. Tujuan dari penelitian ini adalah mengetahui pengaruh aplikasi *edible coating* dengan penambahan ekstrak bunga kecombrang terhadap mutu *fillet* tuna sirip kuning selama penyimpanan. Penelitian dilaksanakan di Laboratorium PT. Perikanan Indonesia Unit Bitung, Sulawesi Utara. Penelitian dilaksanakan dari bulan Agustus 2023 hingga bulan Maret 2024. Penelitian ini menggunakan Rancangan Acak Kelompok (RAK) dengan faktor yang diteliti yaitu konsentrasi ekstrak bunga kecombrang sebesar 2, 3, dan 4% serta lama waktu penyimpanan yaitu 3 dan 6 hari. Variabel yang diuji meliputi nilai pH dan nilai warna serta analisis sensori berupa diskolorasi, dehidrasi, bau, dan tekstur. Hasil pengujian dianalisis menggunakan ANOVA dan uji lanjut *Duncan's Multiple Range Test* pada tarat kepercayaan 95%. Hasil pengujian menunjukkan bahwa lama waktu penyimpanan berpengaruh signifikan terhadap perubahan mutu *fillet* tuna sirip kuning. Aplikasi *edible coating* ekstrak bunga kecombrang pada *fillet* tuna tidak berpengaruh signifikan terhadap nilai pH, intensitas warna, dan sensori (diskolorasi, dehidrasi, dan bau) tetapi berpengaruh signifikan terhadap atribut sensori tekstur. Aplikasi *edible coating* ekstrak bunga kecombrang 4% menghasilkan mutu *fillet* tuna terbaik berdasarkan analisis nilai kemiringan perubahan mutu selama penyimpanan.

## SUMMARY

*Tuna is the second leading commodity in the export sector of fishery products in Indonesia. Fresh fish is highly susceptible to quality deterioration due to physical, chemical, and microbiological damage. These issues necessitate immediate post-harvest handling of the fish after it is caught to maintain its quality during storage. The application of edible coating with the addition of natural preservative can be an alternative solution to inhibit the quality degradation of yellowfin tuna fillets. The aim of this study is to determine the effect of applying edible coating with the addition of kecombrang flower extract on the quality of yellowfin tuna fillets during storage. This research was conducted at the laboratory of PT. Perikanan Indonesia Unit Bitung, North Sulawesi. The study took place from August 2023 to March 2024. This research used a Randomized Block Design (RBD) with the factors being the concentration of kecombrang flower extract at the level of 2%, 3%, and 4%, and the storage duration of 2 and 6 days. The variables tested included pH value and color value, and sensory evaluation in terms of discoloration, dehydration, odor, and texture. The test results were analyzed using ANOVA and Duncan's multiple range test at a 95% confidence level. The test results showed that the storage duration significantly affected the quality of yellowfin tuna fillets. The application of edible coating with kecombrang flower extract on the tuna fillets did not significantly affect pH value, color intensity and sensory attributes (discoloration, dehydration, and odor), but it did significantly affect the sensory parameter (texture). The application of a 4% kecombrang flower extract edible coating results in the best quality tuna fillet based on slope analysis of quality changes during storage.*