

ABSTRAK

Haya Yumna Azzahra (Dibimbing oleh: Junianto dan Eri Bachtiar). 2023. Pengaruh Penambahan Ekstrak Daun Kemangi Terhadap Mutu Filet Ikan Nila Pada Penyimpanan Suhu Rendah (5 – 10°C).

Riset ini bertujuan untuk menentukan tingkat konsentrasi ekstrak daun kemangi yang paling efektif dalam pengawetan filet ikan nila pada suhu rendah (5 – 10°C) untuk mendapatkan masa simpan yang optimal. Riset ini dilaksanakan di Laboratorium Sentral dan Laboratorium Pengolahan Hasil Perikanan, Fakultas Perikanan dan Ilmu Kelautan, Universitas Padjadjaran pada bulan Juni – Oktober 2022. Metode riset yang digunakan yaitu metode eksperimental dengan empat perlakuan secara duplo. Filet ikan diberi perlakuan berupa perendaman ekstrak daun kemangi dengan konsentrasi 0%, 20%, 25%, dan 30% selama 30 menit kemudian disimpan pada suhu rendah (5 – 10°C). Pengamatan dilakukan pada hari ke- 1, 3, 5, 7, 8, dan 9 untuk filet ikan nila dengan konsentrasi 0% sedangkan perlakuan ekstrak daun kemangi dengan konsentrasi 20%, 25%, dan 30% dilakukan pada hari ke-1, 3, 5, 7, 8, 9, 10, 11, dan 12. Parameter yang diamati dalam riset ini meliputi perhitungan jumlah total bakteri (TPC), derajat keasaman (pH), susut bobot, dan uji organoleptik. Hasil riset menunjukkan bahwa penggunaan ekstrak daun kemangi dengan konsentrasi 25% merupakan konsentrasi yang paling efektif karena mampu memperpanjang masa simpan hingga hari ke-11 dengan jumlah bakteri sebesar $4,4 \times 10^5$ cfu/g, nilai pH sebesar 6,65, susut bobot sebesar 15,15%, kenampakan mulai berubah warna, aroma netral mulai sedikit tengik, tekstur agak lembek dan kurang elastis.

Kata Kunci: daun kemangi, filet nila, masa simpan, suhu rendah

ABSTRACT

Haya Yumna Azzahra (Supervised by: Junianto and Eri Bachtiar). 2023. The Effect of Addition of Basil Leaves Extract on the Quality of Nile Tilapia Fillet at Low Temperature Storage (5 – 10°C).

This research aims to determine the most effective concentration level of basil leaves extract in preserving Nile tilapia fillet at low temperatures (5 – 10°C) to obtain optimal shelf life. This research was conducted at the Central Laboratory and Fishery Products Processing Laboratory, Faculty of Fisheries and Marine Sciences, Padjadjaran University started from June until October 2022. The research method used was an experimental method with four treatments by duplo. Fish fillets were treated by soaking basil leaves extract with concentrations of 0%, 20%, 25%, and 30% for 30 minutes and stored at low temperature (5 – 10°C). Observations were made on days 1st, 3rd, 5th, 7th, 8th, and 9th for Nile tilapia fillets with a concentration of 0% while treatment of basil leaves extract with concentrations of 20%, 25%, and 30% was carried out on days 1st, 3rd, 5th, 7th, 8th, 9th, 10th, 11th, and 12th. The parameters observed in this research included the calculation of the total number of bacteria (TPC), degree of acidity (pH), weight loss, and organoleptic tests. The results showed that the use of basil leaves extract with a concentration of 25% was the most effective concentration because it was able to extend the shelf life until the 11th day with the number of bacteria 4.4×10^5 cfu/g, pH value of 6.65, weight loss value of 15.15%, the appearance begins to change color, the aroma is neutral starting to get a little rancid, the texture is rather soft and less elastic.

Keywords: *basil leaves, tilapia fillet, shelf life, low temperature*