RINGKASAN

Aryanti Indah Setyastuti.K2F 005 335. Perubahan Kualitas Ikan Tongkol (*Euthynnus affinis*) Asap Menggunakan Asap Cair Tempurung Kelapa dan Asap Cair Sekam Padi Selama Penyimpanan Dingin (**Fronthea Swastawati dan Sumardianto**)

Sekam padi dan tempurung kelapa merupakan limbah hasil pertanian yang memiliki potensi untuk diolah menjadi asap cair dan dapat diterapkan pada pengasapan ikan. Ikan asap dapat mengalami perubahan kualitas selama penyimpanan dingin.

Tujuan penelitian ini adalah untuk mengetahui karakteristik fisikokimia terutama protein larut garam dan pH ikan Tongkol asap. Kualitas organoleptik, protein, abu dan air dilakukan untuk melengkapi penelitian ini dengan perlakuan menggunakan asap cair tempurung kelapa dan sekam padi selama penyimpanan dingin.

Materi yang digunakan dalam penelitian ini adalah ikan Tongkol sebanyak 10 kg dengan panjang rata-rata 40-50 cm, berat rata-rata 1500 g. Asap cair sekam padi dan tempurung kelapa 3%, serta larutan garam 5%.

Rancangan percobaan yang digunakan adalah rancangan *split plot in time* dengan pola dasar rancangan acak kelompok, dimana jenis asap cair (sekam padi dan tempurung kelapa) sebagai *main plot* dan lama penyimpanan dalam suhu dingin (0, 6, dan 12 hari) adalah *sub plot*. Masing-masing perlakuan diulang sebanyak tiga kali. Parameter yang diamati adalah protein larut garam, pH, kadar protein, kadar air, kadar abu, dan organoleptik. Untuk parameter protein larut garam dan pH dianalisis dengan uji ANOVA dan Beda Nyata Jujur.

Hasil penelitian menunjukkan bahwa perbedaan jenis asap cair selama penyimpanan memberikan pengaruh yang sangat nyata ($P<0,01$) terhadap nilai protein larut garam dan pH. Nilai protein larut garam ikan Tongkol asap menggunakan asap cair tempurung kelapa lebih rendah daripada mengunakan asap cair sekam padi selama penyimpanan (LS_1H_0: 9,4707; LS_1H_6: 9,3832; LS_1H_{12} 8,0097; LS_2H_0: 10,3161; LS_2H_6: 9,6523; LS_2H_{12}: 8,7749). Nilai pH dengan menggunakan asap cair tempurung kelapa lebih rendah dibandingkan menggunakan asap cair sekam padi (LS_1H_0: 6,1267; LS_1H_6: 5,9267; LS_1H_{12} 5,9033; LS_2H_0: 6,2667; LS_2H_6: 6,1167; LS_2H_{12}: 5,9867). Hasil uji Beda Nyata Jujur menunjukkan interaksi yang positif antara perbedaan asap cair dengan lama penyimpanan, sehingga memberikan pengaruh yang sangat nyata ($P<0,01$) terhadap protein larut garam dan pH.

Kata kunci: Perubahan Kualitas, Ikan Tongkol, Asap Cair, Sekam Padi, Tempurung Kelapa.

SUMMARY

Aryanti Indah Setyastuti. K2F 005 335. Quality Changes of Smoked Eastern Baby Tuna (*Euthynnus affinis*) Processed by Coconut Shell Liquid Smoke and Paddy Chaff Liquid Smoke During Chilled Storage (**Fronthea Swastawati and Sumardianto**)

Paddy chaff and coconut shell are waste of agricultural products which have a potential to be processed into liquid smoke and can be applied to smoke fish. Smoke fish can be experienced the quality change during chilled storages.

The aim of this research is to find the physicochemical characteristics by salt soluble protein, pH, organoleptic, protein contents, ash, and moisture of Eastern Little Tuna treated with coconut shell and paddy chaff liquid smoke during chilled storage.

The materials used in this study are as much as 10kg Eastern Little Tuna with an average length of 40-50 cm and average weight of 1500g. The Liquid smoke paddy chaff and coconut shell 3% and 5% of salt solution.

The experimental design is *split plot in time* based on group randomized design, where the type of liquid smoke (paddy chaff and coconut shell) as a *main plot* and storage time in chilled temperatures (0, 6, and 12 days) is the *sub plot*. Each treatment was repeated three times. The parameters used were protein soluble salts, pH, protein content, moisture content, ash content, and organoleptic. For the parameters of pH and salt soluble proteins were analyzed by ANOVA and Honestly Significant Differences.

The result of this experiment showed that differences in types of liquid smoke during storage gave significantly difference ($P < 0.01$) of salt soluble protein values and pH. Salt soluble protein values smoked Eastern Little Tuna using coconut shell liquid smoke were lower than using liquid smoke paddy chaff during storage(LS_1H_0: 9,4707; LS_1H_6: 9,3832; LS_1H_{12} 8,0097; LS_2H_0: 10,3161; LS_2H_6: 9,6523; LS_2H_{12}: 8,7749). pH values by using coconut shell liquid smoke were lower than using liquid smoke from paddy chaff (LS_1H_0: 6,1267; LS_1H_6: 5,9267; LS_1H_{12} 5,9033; LS_2H_0: 6,2667; LS_2H_6: 6,1167; LS_2H_{12}: 5,9867). The result of Honestly Significant Differences showed the positive interaction between the difference of liquid smoke during storage, so that gives significantly different ($P<0,01$) to salt soluble protein and pH.

Keywords: Quality Changes, Eastern Little Tuna Fish, Liquid Smoke, Paddy Chaff, Coconut Shell.