ABSTRACT

THE EFFECT OF CONCENTRATION OF REDESTILLATED DRIED BANANA LEAVES LIQUID SMOKE AND IMMERSION TIME OF CATFISH (*Clarias sp.*) TO CHARACTERICTICS OF SMOKED CATFISH

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The purpose of this study was to determine the concentration and immersion time of liquid smoke of dried banana leaves on the characteristics of smoked catfish and to determine the interaction between concentration and immersion time of liquid smoke. The study was arranged in a Completely Randomized Block Design (CBRD) with two factors and three replications. The first factor is the concentration of liquid smoke, 10% (v/v), 15% (v/v), and 20% (v/v). The second factor is the immersion time, 5 minutes, 15 minutes, and 25 minutes. The data obtained were tested for the similarity of variance with the Bartlett test and the additivity of data was tested with the Tuckey test. Furthermore, the data were analyzed of variance and to determine the effect between treatments, the data was further analyzed with the Duncan Multiple Range Test with at 5% rate level. The observation parameters consisted of banana leaf charcoal ash content, total plate count of smoked catfish, moisture content of smoked catfish and triangle test of liquid smoked catfish with commercial smoked catfish with parameters of color, flavor, texture, and appreance. The result showed that the banana leaf charcoal ash content was 26.40%. The results of further analyzed DMRT showed that the concentration of liquid smoke 20% (v/v) and immersion time of 25 minutes was the best treatment with total plate count of 2.29×10^4 and 2.34×10^4 with water content 30.65% and 31.27%. The triangle test resulted in the K_3L_3 treatment

being a treatment that was close to the characteristics of color, taste, aroma, and texture with commercial smoked catfish. The interaction between concentration of liquid smoke and immersion time of redestilled dried banana leaves liquid smoke has a very significant effect on the value of water content and total plate number to smoked catfish product.

Keyword : Catfish, dried banana leaves, liquid smoke, smoked fish, smoking process, redestilled

ABSTRAK

PENGARUH KONSENTRASI ASAP CAIR DAUN PISANG KERING REDESTILASI DAN LAMA PERENDAMAN IKAN LELE (*Clarias sp.*) TERHADAP KARAKTERISTIK IKAN LELE ASAP

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Tujuan dari penelitian ini adalah untuk mengetahui konsentrasi dan lama perendaman asap cair daun pisang kering redestilasi terbaik terhadap karakteristik ikan lele asap serta mengetahui interaksi antara konsentrasi dan lama perendaman asap cair. Penelitian disusun dalam Rancangan Acak Kelompok Lengkap (RAKL) dengan dua faktor dan tiga ulangan. Faktor pertama yaitu konsentrasi asap cair yaitu 10% (v/v), 15% (v/v), dan 20% (v/v). Faktor kedua ialah lama perendaman yaitu 5 menit, 15 menit, dan 25 menit. Data diperoleh diuji kesamaan ragamnya dengan uji *Bartlett* dan kenambahan data diuji dengan uji *Tuckey*. Selanjutnya data dianalisis sidik ragam dan untuk mengetahui pengaruh antar perlakuan, data diuji lanjut dengan uji *Duncan Multiple Range Test* dengan taraf 5%. Parameter pengamatan terdiri dari kadar abu arang daun pisang, angka lempeng total ikan lele asap, kadar air ikan lele asap dan uji segitiga ikan lele asap cair dengan ikan lele asap komersil dengan parameter warna, rasa, aroma, dan tekstur. Hasil penelitian menunjukkan kadar abu arang daun pisang sebesar 26,40 %. Hasil uji lanjut DMRT menunjukkan bahwa konsentrasi asap cair 20% (v/v) dan lama perendaman 25 menit merupakan perlakuan terbaik dengan nilai angka lempeng total berturut-turut $2{,}29\times10^4$ dan $2{,}34\times10^4$ serta kadar air berturut-turut 30.65% dan 31,27%. Uji segitiga menghasilkan perlakuan K_3L_3 menjadi perlakuan yang mendekati karakteristik warna, aroma, rasa, dan kenampakan dengan ikan lele

asap komersil. Interaksi antara konsentrasi asap cair dan lama perendaman asap cair daun pisang kering redestilasi berpengaruh sangat nyata terhadap nilai kadar air dan angka lempeng total pada ikan lele asap.

Kata kunci : Asap cair, daun pisang kering, ikan asap, ikan lele, pengasapan, redestilasi