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Effect Of Combination Treatment Of Concentration Liquid Smoke, Immersion Duration, Packaging And Old Type Storage Different Levels Of Fiber And Ash Fish Tilapia Fillet (*Oreochromis niloticus*)

I Ketut Budaraga*

* Agricultural Technology Department, Faculty of Agricultural Ekasakti University, Veteran Dalam street 21b Padang City West Sumatera Indonesia

Abstract : This study aims to determine the protein content of fillet of tilapia (*Oreochromis niloticus*) given preservation with liquid smoke derived from a combination of liquid smoke treatment concentration, soaking time, types of packaging and storage time are different. This study was conducted experimentally using factorial experiment with a completely randomized design patterns (RAL) 5 x 3 x 3 x 5 with 3 replicates in order to obtain 675 experimental units. A factor consists of the concentration of liquid smoke consisting of Control (smokeless liquid / 0%), 5% and 10%, 15% and 20%; factor B consists of soaking time with liquid smoke is composed of three (3) levels ie soaking time 5 minutes, 10 minutes and 15 minutes; factor C consists of the type of packaging consists of three (3) levels ie without packaging (control), packaging polyethylene (PE) and packaging of polypropylene (PP) and factor D consists of the storage time (days) consists of 5 (five) levels ie 0, 3, 6, 9 and 12 days. The parameters measured were the levels of fiber and ash level level. Results of research on the analysis of variance showed (a) there was an interaction on the treatment difference with a long soaking period of storage of the raw fiber fillet of tilapia, as well as in a combination of three treatments, soaking time differences, differences in the concentration and duration of storage as well as a combination of soaking treatment, types of packaging and storage time subsequent to a combination of the two, three, and four other treatments showed no significant difference (no interaction), (b).there was an interaction on a combination of the two treatments soaking time difference with the storage time of the ash content of tilapia fillets, while the combination of two other treatments were not significantly different show next to the triple combination treatment of soaking time, concentration, and storage time significantly (the interaction), while the combination of the other three treatments were not significantly different (no interaction) and to the combination of four treatments of soaking, the concentration difference types of packaging, and storage time showed no significant difference (no interaction).(c). content crude fiber fillet of tilapia on a combined treatment of liquid smoke concentration of 5%, soaking time 10 minutes with storage time of 9 days on the packaging shows the results of the largest PE 17.777% while the yield crude fiber contained in the smallest liquid smoke treatment concentration of 10% (L2), soaking time 10 minutes (K2) for storage of 9 days of 0.41%. (d).the ash content of tilapia fillets at a concentration of 5% liquid smoke, a long submersion for 15 minutes at a storage time of 9 days provide the highest value (11.721%) and the smallest (6.635%) occurred in the treatment of liquid smoke concentration of 10% with 10 minutes soaking time the storage time of 12 days.

Key words: fish fillet, immersion, concentration, packaging, storage, fiber,ash.

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