

## **UTILIZATION OF JUICE STAR FRUIT (*Averhoabilimbi*) TO KEEP FRESHNESS QUALITY OF TILAPIA (*Oreochromis niloticus*)**

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### **ABSTRACT**

*One kind of plant that is used to keep freshness quality of tilapia (*Oreochromis niloticus*) is star fruit (*Averhoa bilimbi*) due to its antibacterial compounds such as flavonoids, which is the largest group of phenolic compounds. The aims of this study is to know the effect and best time storage due to star fruit extract to the freshness quality of tilapia (*Oreochromis niloticus*). This research was conducted at the Laboratory of Bioscience and Analysis, State Polytechnic of Jember from August 2015 until October 2015. The method used is an experimental method with a completely randomized design (CRD) factorial and multiple linear regression 4 treatments consist of (P1 = 55% juice star fruit, P2 = 57% juice star fruit, P3 = 60% juice star fruit and P4 = 61% juice star fruit) and 3 repetitions. Parameters of this research are Organoleptic Test and Total Plate Count (TPC). The results showed that the preservation of tilapia using star fruit extract can inhibit the growth of bacteria during storage time with the number of bacteria on the clock the 3rd, 6th hour, 9th and 12th hours in a row, that is  $11,2 \times 10^5$ ,  $1,2 \times 10^5$ ,  $1,2 \times 10^5$  and  $1,1 \times 10^5$  at a concentration of tilapia with 61% of juice star fruit.*

*Keywords: Freshness Quality of the fish, Star fruit, Tilapia*