

**Efektivitas Ekstrak Limbah Batang Tembakau Sebagai Antimikroba  
Terhadap Masa Simpan Salak (*Salacca zalacca*)**

*(The Effectiveness of Tobacco Stem Waste Extract as an Antimicrobial for the  
Shelf Life of Snake Fruit (*Salacca zalacca*))*

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***ABSTRACT***

*Snake fruit is a tropical and non-climacteric fruit. Its shelf life is relatively short, necessitating post-harvest technological innovation. The chosen post-harvest technology is coating. Tobacco is a leading commodity in Jember Regency, but tobacco stems are often leftover waste and are underutilized. Tobacco stem waste was chosen because it contains active compounds such as flavonoids, alkaloids, and phenolics, which can act as antimicrobials and antioxidants. This study aimed to determine the antimicrobial effectiveness of tobacco stem extract as a coating additive, thereby extending the shelf life of snake fruit. The antimicrobial content of tobacco stems was demonstrated through several tests, including flavonoids, total phenolics, Minimum Inhibitory Concentration (MIC), and Minimum Bactericidal Concentration (MBC). Estimation of the shelf life of snake fruit can be seen from several factors, namely the Accelerated Shelf Life Test (ASLT) Arrhenius model with storage temperatures of 8°C, 25°C and 50°C, Yeast Mold Number (AKK) and sensory tests including observations of color, odor and texture. Testing is carried out from day 0 until the product is unfit for consumption at each storage temperature. The results of the study on snake fruit with the addition of tobacco stem extract coating stored at a temperature of 8°C have a shelf life of 13.5854 days, at a temperature of 25°C has a shelf life of 3.7487 days and at a temperature of 50°C storage has a shelf life of 2.0192 days.*

**Keywords :** *Snake Fruit, Tobacco Stem Extract, Antimicrobial, Shelf Life.*