

## ABSTRAK

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**Program Studi** : Teknologi Industri Pertanian  
**Judul** : Pendugaan Umur Simpan Manisan Basah Kolang Kaling (*Arenga pinata*)  
**Dosen Pembimbing** : 1. Ir. Muhami, MS., IPM  
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Penambahan warna pada manisan kolang kaling dilakukan untuk menambah daya tarik. Pengolahan Manisan basah kolang kaling menggunakan pewarna ekstrak bunga telang sangat prospektif untuk dikembangkan. Permasalahannya, belum ada informasi tentang umur simpan manisan basah kolang kaling. Penelitian ini bertujuan untuk menduga umur simpan manisan basah kolang kaling yang diberi pewarna ekstrak bunga telang. Penelitian ini dilakukan dua tahap yaitu penelitian pendahuluan dan penelitian utama. Rancangan percobaan dalam penelitian ini adalah Rancangan Acak Kelompok (RAK) yang terdiri atas dua faktor. Faktor A adalah suhu penyimpanan yang terdiri atas 3 taraf, yaitu  $a_1 = 15^{\circ}\text{C}$ ,  $a_2 = 25^{\circ}\text{C}$ , dan  $a_3 = 35^{\circ}\text{C}$ . Faktor B adalah waktu penyimpanan yang terdiri atas 5 taraf, yaitu  $b_1 = 0$  hari,  $b_2 = 7$  hari,  $b_3 = 14$  hari,  $b_4 = 21$  hari, dan  $b_5 = 28$  hari. Pengulangan penelitian dilakukan dua kali. Analisis produk meliputi analisis kualitatif yaitu pengamatan warna, aroma dan tekstur; dan analisis kuantitatif yaitu analisis kadar gula, angka lempeng total serta total kapang dan khamir. Metode pendugaan umur simpan yang digunakan adalah metode *Accelerated Shelf Life Test* (ASLT) dengan pendekatan arrhenius melalui ordo nol. Berdasarkan hasil analisis pendugaan umur simpan, diperoleh umur simpan Manisan basah kolang kaling menggunakan pewarna ekstrak bunga telang adalah 28 hari pada suhu  $15^{\circ}\text{C}$  dengan warna ungu tua beraroma kolang kaling dan bertekstur kenyal dengan total kadar gula  $45,5^{\circ}\text{brix}$ , kapang khamir  $4,78 \times 10$  koloni/g dan angka lempeng total  $4,57 \times 10^4$  koloni/g semua hasil analisis mikrobiologi masih di bawah standar mutu manisan basah SNI 7388:2009.

**Kata Kunci** : bunga telang, kolang kaling, umur simpan

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*The addition of color to the candied kolang kaling is done to add to the appeal. Processing of kolang kaling wet candied with telang flower extract dye is very prospective to be developed. The problem is, there is no information about the shelf life of the kolang kaling wet candied. This study aims to estimate the shelf life of fresh candied kolang kaling which is dyed with telang flower extract. This research was carried out in two stages, namely preliminary research and main research. The experimental design in this study was a Randomized Block Design (RAK) which consisted of two factors. Factor A is the storage temperature which consists of 3 levels, namely  $a_1 = 15^{\circ}\text{C}$ ,  $a_2 = 25^{\circ}\text{C}$ , and  $a_3 = 35^{\circ}\text{C}$ . Factor B is storage time which consists of 5 levels, namely  $b_1 = 0$  days,  $b_2 = 7$  days,  $b_3 = 14$  days,  $b_4 = 21$  days, and  $b_5 = 28$  days. The research was repeated twice. Product analysis includes qualitative analysis, namely observation of color, aroma and texture, and quantitative analysis, namely the analysis of sugar content, total plate number and total mold and yeast. The shelf life estimation method used is the Accelerated Shelf Life Test (ASLT) method with an arrhenius approach through zero order. Based on the results of the analysis of the estimated shelf life, the shelf life of the kolang kaling wet candied with telang flower extract coloring is 28 days at a temperature of  $15^{\circ}\text{C}$  with a dark purple color with a kolang kaling aroma and chewy texture with a total sugar content of  $45.5^{\circ}$  brix, yeast mold  $4.78 \times 10$  colonies/g and a total plate number of  $4.57 \times 10^4$  colonies/g all the results of microbiological analysis are still below the quality standard of wet candied SNI 7388:2009.*

**Keywords:** *telang flower, kolang kaling, shelf life*