ANALISIS MUTU DAN DAYA TERIMA PRODUK *FROZEN FOOD* AYAM KALASAN YOGYAKARTA

INTISARI

Oleh:

NABILATUL MUAZAROH

20/463688/TP/12966

Frozen food merupakan salah satu bentuk diversifikasi produk Ayam Kalasan untuk memperpanjang umur simpan produk. Namun, proses pembekuan dapat menurunkan mutu produk sehingga dapat mempengaruhi respon konsumen. Oleh karena itu, penelitian ini dilakukan untuk menganalisis mutu *frozen food* Ayam Kalasan sehingga dapat mengidentifikasi daya terima konsumen. Penelitian dilakukan dengan pengujian nonsensoris dan sensoris dengan 3 faktor, yaitu ketebalan kemasan vakum (polos 80 mikron dan embos 90 mikron), *vacuum time* (30 dan 45 detik), dan lama waktu pembekuan (7 dan 14 hari) dengan sampel Ayam Kalasan ungkep *fresh* (tanpa perlakuan). Pengujian nonsensoris dilakukan dengan Rancangan Acak Lengkap (RAL) Tiga Faktorial dengan 3 kali pengulangan dengan parameter pH, kadar air, *water holding capacity*, *drip loss*, dan keempukan. Uji sensoris dilakukan secara hedonik oleh panelis tidak terlatih dengan skala likert 1 – 6 berdasarkan atribut rasa, aroma, warna, tekstur, dan *overall*. Pengolahan data pada uji nonsensoris dilakukan secara statistik parametrik menggunakan *Multivariate Analysis of Variance* dan *Three-way Analysis of Variance* dengan uji lanjut *Tukey Test.* Sedangkan, pengolahan data pada uji sensoris dilakukan secara statistik nonparametrik menggunakan *Friedman Test.* Pengolahan data dilakukan dengan tingkat signifikansi 95% pada *software* R Studio. Berdasarkan analisis MANOVA, didapatkan bahwa terdapat pengaruh nyata terhadap perubahan seluruh parameter mutu pH, kadar air, WHC, *drip loss*, dan keempukan. Analisis *Three Way* ANOVA menunjukkan bahwa pengaruh ketebalan kemasan vakum serta lama waktu pembekuan berpengaruh nyata terhadap parameter pH, kadar air, WHC, *drip loss*, dan keempukan, tanpa adanya interaksi antar faktor. *Friedman Test* menunjukkan bahwa sampel terdapat pengaruh nyata terhadap parameter mutu sensoris rasa, tekstur, dan *overall.* Sampel dengan ketebalan kemasan vakum 80 mikron, *vacuum time* 30 detik, dan lama waktu pembekuan 14 hari (A1B1C2) memiliki daya terima dengan skor tertinggi, yaitu 4,67. Hasil uji sensoris sesuai dengan adanya perbedaan nyata pada sampel tersebut dari hasil analisis MANOVA pada uji nonsensoris.

Kata Kunci: Ayam Kalasan, daya terima, *frozen food*, mutu, vakum

QUALITY AND ACCEPTABILITY ANALYSIS OF FROZEN FOOD AYAM KALASAN PRODUCT YOGYAKARTA

ABSTRACT

By:

NABILATUL MUAZAROH

20/463688/TP/12966

Frozen food is a diversification to extend the shelf life of Ayam Kalasan products. However, freezing process can reduce the product quality and affect to consumer response. Therefore, the aim of this study is to analyze the quality of frozen food Ayam Kalasan and identify the consumer acceptability. The study is conducted by nonsensory and sensory test with 3 factors, there are the thickness of vacuum packaging (smooth 80 and embossed 90 micron), vacuum time (30 and 45 second), and the freezing time (7 and 14 days) with *fresh* sample (without treatment). The nonsensory test was using Three-Factorial Complete Randomized Design (CRD) with 3 repetitions with parameters of pH, moisture content, water holding capacity, drip loss, and tenderness. The sensory test used hedonic test by untrained panelists on a likert scale of 1 – 6 based on taste, aroma, color, texture, and overall. Data analysis on nonsensory test used statistically parametric Multivariate Analysis of Variance and Three-way Analysis of Variance then continued by Tukey Test. Meanwhile, data analysis on sensory test used statistically nonparametric Friedman Test. Data analysis was conducted at a significance level 95% using R Studio. Based on MANOVA's analysis, it found that there was a significant influence on changes in all quality parameters of pH, moisture content, WHC, drip loss, and tenderness. Three Way ANOVA analysis showed that the thickness of vacuum packaging and freezing time had significant effects on the parameters of pH, moisture content, WHC, drip loss, and tenderness, without any interaction between factors. The Friedman test showed that the sample had significant effects on the sensory quality parameters of taste, texture, and overall. Samples with a vacuum packaging thickness of 80 microns, a vacuum time of 30 seconds, and a freezing time of 14 days (A1B1C2) had the highest acceptability score, which is 4.67. This result of sensory test related with the nonsensory test based on MANOVA analysis that showed the sample had significant effects.

Keywords: acceptability, Ayam Kalasan, frozen food, quality, vacuum