

PENGARUH PENAMBAHAN MINYAK ATSIRI PALA DAN LAMA PENYIMPANAN SUHU RUANG TERHADAP KUALITAS FISIK, SENSORIS, DAN TOTAL BAKTERI SE'I DAGING SAPI

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INTISARI

Penelitian ini bertujuan untuk mengetahui pengaruh penambahan minyak atsiri pala dengan konsentrasi berbeda terhadap kualitas fisik, kualitas sensoris, dan total bakteri se'i sapi kemasan *retort pouch* yang disimpan pada suhu ruang. Bahan utama yang digunakan adalah daging sapi, bumbu *curing*, minyak atsiri pala, dan asap kesambi cair. Konsentrasi minyak atsiri pala terdiri dari 1.000, 2.000, dan 3.000 ppm. Penyimpanan dilakukan pada pekan ke-0, 2, 4, 6, dan 8. Parameter yang diuji adalah kualitas fisik (pH, DIA, warna, dan keempukan), kualitas sensoris (rasa, aroma, warna, tekstur, dan daya terima), dan total bakteri (*Total Plate Count*). Data dianalisis menggunakan analisis variansi pola faktorial 5x4 dan dilanjutkan dengan uji *Duncan Multiple Range Test*. Hasil analisis rerata data menunjukkan penambahan minyak atsiri pala berpengaruh nyata ($P < 0,05$) terhadap nilai pH, DIA, *lightness* (L^*), *redness* (a^*), *yellowness* (b^*), *firmness*, *toughness*, sensoris warna, dan total bakteri se'i sapi. Lama penyimpanan berpengaruh nyata ($P < 0,05$) pada nilai pH, DIA, a^* , *firmness*, *toughness*, sensoris rasa, daya terima, dan total bakteri se'i sapi. Interaksi keduanya berpengaruh nyata ($P < 0,05$) pada nilai sensoris rasa, warna, daya terima, dan total bakteri se'i sapi. Berdasarkan parameter yang signifikan, penambahan minyak atsiri pala 1.000 ppm selama penyimpanan 8 minggu menurunkan kualitas fisik pH, DIA, dan a^* paling sedikit dari kontrol, namun menaikkan L^* , b^* , *firmness*, dan *toughness*, menjaga kualitas sensoris, serta menurunkan total bakteri.

Kata kunci: Se'i daging sapi, Minyak atsiri pala, *Retort pouch*, Total bakteri, Kualitas fisik, Kualitas sensoris, Penyimpanan

THE EFFECT OF ADDITION OF NUTMEG ESSENTIAL OILS AND STORAGE TIME AT ROOM TEMPERATURE ON THE PHYSICAL, SENSORY, AND TOTAL BACTERIAL QUALITIES OF SMOKE BEEF

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ABSTRACT

This study aims to determine the effect of adding nutmeg essential oils in different concentration on physical quality, sensory quality, and the total bacteria in smoke beef packaged using retort pouch packaging on room temperature. The main ingredients used are beef, seasonings, nutmeg essential oils, and kesambi liquid smoke. The different concentration consists of 1.000, 2.000, and 3.000 ppm nutmeg essential oils. Storage time was carried out in weeks 0, 2, 4, 6, and 8. The parameters tested were physical quality (pH, WHC, color, and tenderness), sensory quality (taste, aroma, color, texture, and acceptability), and total bacteria (Total Plate Count). The data obtained were analyzed using a 5x4 factorial variance analysis and continued by Duncan Multiple Range Test. The results of data analysis averagely showed that the addition of nutmeg essential oils had significant effect ($P < 0.05$) on the value of pH, WHC, lightness (L^*), redness (a^*), yellowness (b^*), firmness, toughness, sensory based on color, and total bacteria of smoke beef. Storage time had significant effect ($P < 0.05$) on the value of pH, WHC, a^* , firmness, toughness, taste, acceptability, and total bacteria. The interaction had significant effect ($P < 0.05$) on the value of taste, color, acceptability, and total bacteria of smoke beef. The addition of 1.000 ppm nutmeg essential oils had the lowest decrease again control among the physical qualities such as pH, WHC, and a^* , but increased the value of L^* , b^* , firmness, and toughness, tend to maintain sensory quality remains stable, and decrease the bacterial growth during storage time.

Key words: Smoke beef, Nutmeg essential oils, Retort pouch, Total bacteria, Physical quality, Sensory quality, Storage