



## AKTIVITAS ANTOOKSIDAN, SIFAT FISIK DAN SENSORIS SOSIS DAGING KELINCI DENGAN PENAMBAHAN SARI BUAH NAGA MERAH (*Hylocereus polyrhizus*)

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### INTISARI

Penelitian ini bertujuan untuk mengetahui aktivitas antioksidan, sifat fisik, dan sensoris sosis daging kelinci dengan penambahan sari buah naga merah (*Hylocereus polyrhizus*). Bahan-bahan yang digunakan antara lain daging kelinci, buah naga merah, tepung tapioka, susu skim, bawang putih, lada, ketumbar, garam, air es, dan STPP. Level buah naga merah yang digunakan adalah 0; 10; 20 dan 30%, dengan empat kali pengulangan. Parameter yang diamati yaitu aktivitas antioksidan, sifat fisik (pH, Daya Ikat Air, tekstur, dan warna) dan sensoris. Hasil uji aktivitas antioksidan dan uji kualitas fisik dianalisis dengan analisis variansi Rancangan Acak Lengkap (RAL) pola searah (*One Way Anova*) dilanjutkan dengan uji *Duncan's New Multiple Range Test* (DMRT). Data sensoris dianalisis dengan uji *Kruskal-Wallis Test* dilanjutkan dengan uji *Mann-Whitney*. Penambahan buah naga merah berpengaruh nyata ( $P<0,05$ ) terhadap aktivitas antioksidan, daya ikat air, *hardness*, *springiness*, *cohesiveness*, warna  $L^*$ , warna  $a^*$ , warna  $b^*$ , warna, rasa, aroma, tekstur, kekenyalan, dan daya terima, namun tidak berpengaruh signifikan ( $P>0,05$ ) terhadap pH. Didapatkan hasil aktivitas antioksidan terbaik pada level penambahan 30% yaitu 71,46%, kualitas fisik terbaik pada level penambahan 30% pada parameter tekstur *springiness* 88,80 dan warna  $a^*$  19,65. Nilai kualitas sensoris terbaik pada level 30% yaitu warna 3,57, rasa 4,17, aroma 4,12, tekstur 4,12, kekenyalan 3,92, dan daya terima 4,23. Kesimpulan dari penelitian ini menunjukkan bahwa penambahan buah naga merah sampai level 30% menunjukkan aktivitas antioksidan tertinggi, terjadi peningkatan terhadap kualitas fisik pada parameter tekstur *springiness* dan warna  $a^*$ , serta peningkatan terhadap kualitas sensoris (warna, rasa, aroma, tekstur, kekenyalan, dan daya terima).

**Kata kunci:** Aktivitas antioksidan, Kualitas fisik, Kualitas sensoris, Sosis daging kelinci, Buah naga merah



## ANTIOXIDANT ACTIVITY, PHYSICAL AND SENSORY QUALITIES OF RABBIT MEAT SAUSAGE WITH ADDITION OF RED DRAGON FRUIT JUICE (*Hylocereus polyrhizus*)

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### ABSTRACT

This research aimed to determine the antioxidant activity, physical and sensory quality of rabbit meat sausages with addition of red dragon fruit juice. The ingredients used include rabbit meat, red dragon fruit, tapioca flour, skim milk, garlic, pepper, coriander, salt, ice water, and STPP (*sodium tripolyphosphate*). The levels of red dragon fruit used were 0; 10; 20 and 30%, with four replications. The parameters observed were antioxidant activity, physical (pH, water holding capacity, texture, and color) and sensory quality. Antioxidant activity and physical quality data was analyzed using an unidirectional Completely Randomized Design (CRD) analysis of variance followed by the Duncans New Multiple Range Test (DMRT). Sensory test data were analyzed using the Kruskal-Wallis Test followed by the Mann-Whitney test. The addition of red dragon fruit had significant effect ( $P<0,05$ ) on antioxidant activity, water-holding capacity (WHC), *hardness*, *springiness*, *cohesiveness*,  $L^*$  color,  $a^*$  color,  $b^*$  color, color, taste, aroma, texture, elasticity, and acceptability. However, it did not affect ( $P>0,05$ ) the pH value. The best antioxidant activity results were obtained at 30% addition level on 71,46%. The best physical quality results were obtained at 30% addition level in *springiness* at 88,80 and color parameters  $a^*$  at 19,65. The best sensory quality values were observed at the 30% addition level, with color at 3,57, taste at 4,17, aroma at 4,12, texture at 4,12, elasticity at 3,92, and acceptability at 4,23. The conclusion of this research indicates that the addition of red dragon fruit to the level of 30% shows the highest antioxidant activity, there was an increase in physical quality in *springiness* and color parameters  $a^*$ , as well as an increase in sensory quality (color, taste, aroma, texture, elasticity, and acceptability).

**Keywords:** Antioxidant activity, Physical quality, Sensory quality, Rabbit meat sausages, Red Dragon Fruit