

Supplementation of Vitamin E and C in the Feed on Color, Cooking Loss and Tenderness of Muscovy Ducks Meat Stored in Room Temperature, Refrigerator and Freezer

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Author Order	of
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Abstract	<p>Research has been conducted to determine the effectiveness of antioxidant supplementation of vitamin E and C in the feed to meat quality of the Muscovy duck meat stored at room temperature, refrigerator and freezer. Eighty-four Muscovy duck tail males aged 9 weeks maintained for 5 weeks and allocated into 7 treatments with 4 replications and each replication consisted of Muscovy duck 3 heads. Completely Randomized Design was applied, in the which treatments were vitamin E and vitamin C supplementation to the basal feed containing 21% protein and 3100 kcal / kg administered metabolic energy into seven groups namely E0C0: basal feed without Vit E and Vit C, E400: basal feed plus 400 IU of vitamin E, E600: basal feed plus 600 IU of vitamin E, C400: basal feed plus 400 mg / kg feed vitamin C, C600: basal feed plus 600 mg / kg feed as much vitamin C, E200C200: basal feed plus 200 IU vitamin E and 200 mg / kg feed vitamin C, and E300C300: basal feed plus 300 IU of vitamin E and 300 mg / kg feed of vitamin C. The parameters measured were the color of meat that includes the value of L* (lightness), a* (Redness) and b* (yellowness), tenderness and cooking losses. The data obtained and the analysis of variance followed honestly significant difference test. Muscovy duck meat that vitamin E-supplemented feed brightness levels did not differ ($P > 0.05$) with non-supplemented, otherwise Muscovy duck meat that feed supplemented vitamin C or a combination of vitamin E and C levels of brightness up to 3 days either at room temperature or stored the refrigerator is still high. Supplementation of vitamin E and C was highly significant ($P < 0.01$) against redness (a*) meat stored in different storage means. Muscovy duck meat that feed not supplemented vitamin E and C redness (a*) did not differ ($P > 0.05$) between the age of 0 hours with that stored in the refrigerator or freezer. B* value of Muscovy duck meat that feed not given vitamin E and C as well as different combinations ($P < 0.05$) with Muscovy duck meat that feed supplemented with vitamin C or a combination of vitamins E and C. The Muscovy duck meat that feed supplemented vitamin E, C or a combination of vitamins E and C if stored at room temperature or refrigerator up to 3 days the value of L* and a* is still high, but the b* low.</p>
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