

Papaya Leaf in Broiler Chicken Feed Reducing Lipid Peroxidation of Meat

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Abstract : Lipid peroxidation is a main reason of low quality in meat and meat products. The free radical chain reaction is the major process of lipid peroxidation and reactive oxygen species (ROS) such as hydroxyl radical and hydroperoxyl radical are the main starter of the chain reaction. Papaya leaf contains several secondary metabolites which can be used as a potential antioxidant in broiler feed. Hence, this research was carried out to evaluate the potential of papaya leaf to prevent lipid peroxidation and enhance the antioxidant activity of breast meat of broiler chicken. The results showed that supplementation of papaya leaf at 5%, significantly ($p < 0.05$) reduced the lipid peroxidation compared to control group. The supplementation of papaya leaf prevented from lipid peroxidation and enhanced the antioxidant activity of the broiler breast meat significantly ($p < 0.05$) after different storage periods. Papaya leaf reduced the lipid oxidation of meat during storage with strong free radical-scavenging ability. In conclusion, supplementation of papaya leaf in broiler diet to have high quality meat is recommended.

Keywords : antioxidant activity, papaya leaf, breast meat, lipid peroxidation

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