

## **Influence of Litter Materials on Organs' Relative Weights, Meat Quality, Breast and Footpad Dermatitis of Broiler Chickens under Hot Humid Climate**

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**Abstract :** Wood shavings are the most common materials used as litter in commercial broiler production in many areas in Nigeria. A study was conducted to determine the effects of litter materials on organ weights, meat quality, footpad, and breast dermatitis of broiler chickens under hot humid climate. One hundred and eighty broiler chicks of marshal strains were randomly assigned to three treatments of wood shavings, maize cobs and chopped Panicum maximum as litter materials replicated four (4) times with 15 birds each in a completely randomized design. Data were collected on the relative body weights, meat quality, breast and foot pad dermatitis. The result showed that birds reared on chopped Panicum maximum had higher relative weight on the liver than those reared on wood shavings and maize cobs. Spleen and bursa of Fabricius were not significantly affected by litter materials. There was no significant effect of litter materials on meat quality. The relative weight of thigh of birds reared on chopped Panicum maximum, and Maize cobs were similar but higher than those reared on Wood shavings. Fresh breast weight of birds reared on wood shavings was higher than those reared on chopped Panicum maximum and maize cobs. It was concluded that chopped Panicum maximum could serve as a replacement for wood shavings as a litter material for broiler chickens.

**Keywords :** chickens, dermatitis, organs, litter materials

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