

EFFECTS OF DIFFERENT TYPES OF LITTER MATERIAL ON BROILER PERFORMANCE

By

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ABSTRACT

This study was conducted to evaluate the effect of different types litter materials such as paddy husk, chopped newspaper, coir dust, and sand in terms of litter pH, litter moisture content and broiler performance (feed intake, body weight, weight gain, feed conservation ratio, carcass weight, heart weight, gizzard weight, cecum weight, spleen weight, dressing percentage and mortality). One hundred and ninety-two (192) day-old broiler chicks were obtained from a commercial hatchery. Then those birds were allowed to brood for one week. The chicks were grouped into four batches and each batch were contained forty-eight chicks and were randomly assigned to the four treatment litter using complete randomized design (CRD).

The moisture content in different litter materials was significant ($p < 0.05$) at different age of litter and litter types. The highest moisture content was recorded in coir dust at 5th weeks of litter aging and lowest one was recorded in sand. The pH change in different litter materials was significant ($p < 0.05$) at different litter age and between litter types. The highest pH change was recorded in coir dust at 5th weeks of litter age and lowest one was recorded in newspaper. The birds reared on different litter materials showed significant ($p < 0.05$) differences on feed conversion ratio, body weight, weight gain, spleen weight and gizzard weight. However, there was no significantly

($p > 0.05$) affected on carcass weight, dressing percentage, heart weight, cecum weight and mortality rate. According above study coir dust may best litter over other litter.

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