The Utilization of Mung Bean Bran in Broiler Diets

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ABSTRACT

The objectives were to determine the physical and chemical characteristics of mung bean bran, metabolizable energy, and the effect of mung bean bran level on physical characteristics of diets, growth performance, and nutrient utilization in broilers. Mung bean bran derived from vermicelli manufacturers. Mung bean bran had low bulk density, containing 9.96±0.08% moisture, 10.86±0.06% crude protein, 0.51±0.03% fat, 29.08±0.13% crude fiber, and high level of water insoluble non-starch polysaccharides (NSPs). The metabolizable energy was 1,844.71 kcal/kg. The results of mung bean bran level at 0, 5, 10, and 15% in broiler diets showed that energy consumption and pellet durability indexes (PDI) of mung bean bran diets were decreased compared with those of the control diet (P<0.001). Starter chicks (1-17 days) fed mung bean bran diets had lower body weight gain (P<0.05) and higher feed conversion ratio (P<0.001) compared with those of the control group, but not for

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grower and finisher chicks (18-42 days). The utilization of dry matter and fiber were decreased as mung bean bran level increased (P<0.05). Thus, mung bean bran used in diet should not over 5%.

Key words: Broiler, Mung bean bran, Pelleted diet, Growth performance, Nutrient utilization

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