

The Effect of Some Microorganisms from Gastrointestinal Tracts on the Nutritive Value of Broiler Diets

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Abstract : A 2x2 factorial experiment was carried out to determine the effects of two levels of diet supplemented with and without microorganisms in combination with and without feed sterilisation on the nutritive value of broiler diets with four replications in each treatment. Some microorganisms from the gastrointestinal tracts of chickens were supplemented in commercial broiler diets. They were bacterial (BC-NA-01), actinomycetes (BI-NA-03, BC-NA-02 and BL-NA-02), *Aspergillus niger* sp.(BD-PDA-01), *Mucor* sp.(BL-PDA-02), *Rhizopus stolonifer* sp.(BI-PDA-02) and *Trichoderma* sp.(BL-PDA-02). The results of the proximate analysis revealed that the diet supplemented with microorganisms had a higher percentage of DM and CF in the starter diet(0-3 wks), grower diet(4-5wks) and finisher diet (last period) than the diet without microorganisms ($p<0.05$). Also, they were higher in the percentage of CP in the starter diet and EE in both the starter diet and grower diet than the diet without microorganisms ($p<0.05$). The sterilised diet had a higher percentage of moisture than the non-sterilized diet ($p<0.01$). Also, they were higher in the percentage of CP in the starter diet and CF in both the grower diet and finisher diet than the non-sterilized diet ($p<0.05$). The sterilized diet supplemented with microorganisms was higher in ME than the non-sterilized diet without microorganisms in the starter diet, grower diet and finisher diet ($P<0.01$).

Keywords : microorganisms, gastrointestinal tract, nutritive value, broiler diets

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