

Influence of intra-crop gavage of ginger root and rosemary leaves oil extracts on blood biochemical parameters of broiler chicks

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ABSTRACT:

The effect of magnification and herbal crops by using its oil extract directly via intra-crop gavage on live performance and carcass traits of broiler were studied. 192 unsexed one day old broiler chicks (ROSS 308) were distributed into 6 treatments with three replicates per treatment (except 1st and 2nd treat. with 2 replicates) and 12 chicks per replicate, as follows; first one, was the control group without any herbs, the second was a placebo group, the chicks were given normal saline (negative control), the chicks in 3rd and 4th treatments were given rosemary oil extract, finally in the 5th and 6th treatments, chicks were given ginger oil extract. The dosages of herbal oil extract were given via intra-crop gavage twice per week in two interval periods (two days per interval) at the rate of 0.1 mL and 0.2 mL from 1st to 4th week of age and from 5th week till end of experiment at 6th week. Dosage was increased from 0.1 mL to 0.5 mL and from 0.2 to 1 mL per chick with thrice a week (with one day off), in 2nd, 3rd, 4th, 5th and 6th treatments respectively. A medicinal syringe (5 mL capacity) was used and extra 10 cm medicinal plastic pipe were added to the end of medicinal syringe to ensure reach of the oil extract directly to chick's crop.

The results of intra-crop gavage of herbal oil extracts (ginger root and rosemary leaves) revealed that hematological parameters were not affected by these treatments except significant increase in PCV of rosemary oil extract treated groups at 28 and 49 days of broiler age, meanwhile, the data analysis of plasma biochemistry were not affected by intra-crop gavage of herbal oil extracts except total protein concentration at 49 days of broiler age in the treated groups. However, the cholesterol concentration was the only one affected by intra-crop gavage of herbal oil extracts between the other lipid profiles studied in this experiment.

Keywords:

Ginger root, Rosemary, Oil extract, Intra-crop gavage, Blood parameters, Broiler.