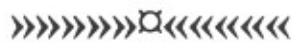


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ARABIC SUMMARY

LIST OF ABBREVIATIONS



A/G : Albumin / globulin ratio.

ALT : Alanine aminotransferase (u/l).

AP : Alkaline phosphatase (u/100ml).

AST : Aspartate aminotransferase (u/l).

* : Significant (significant at 0.05 probability).

** : Highly significant (significant at 0.01 probability).

*** : Very highly significant (significant at 0.001 probability).

SUMMARY



One hundred and eighty broiler chicks were used in the experiment, were divided into equal nine groups, each group consists of 20 chicks.

First and second groups feed with *Ascophyllum nodosum* 1 kg / ton feed and 2 kg / ton feed respectively from one day to 7 weeks old chickens. Third and fourth groups feed with *Aspergillus* extract 1.5 kg / ton feed and 3 kg / ton feed respectively from one day to 7 weeks old chickens. Fifth group feed with *Ascophyllum nodosum* 1 kg / ton feed from one day to 7 weeks and Maduramicin 500 gm/ton feed from one day to 6 weeks old chickens. Sixth group feed with *Aspergillus* extract 1.5 kg / ton feed from one day to 7 weeks and Maduramicin 500 gm / ton feed from one day to 6 weeks old chickens. Seventh group feed with *Ascophyllum nodosum* 1 kg/ton feed from one day to 7 weeks old chickens and addition of Spectinomycin 10 mg/kg body weight in drinking water from one day to 5 days and from 28 to 32 days old chickens. Eighth group feed with *Aspergillus* extract 1.5 kg / ton feed from one day to 7 weeks old chickens and addition of Spectinomycin 10 mg/kg body weight in drinking water from one day to 5 days and from 28 to 32 days old chickens. The ninth group used as control without any addition.

The clinicobiochemical results for liver function tests in groups 1, 2, 3 and 4 compared with normal control showed a significant increase in serum AST activity in group 2 after the 7th week old chickens. ALT activity showed a significant increase in group 4 after the 5th week, while ALT showed a significant increase in groups 2, 3 and 4 after the 7th week old chickens. Serum AP activity showed a significant increase in groups 1 and 2 after the 5th week and highly significant increase in the same groups after the 7th week old chickens. Serum total proteins showed a significant increase in group 2 after the 3rd week, while total proteins showed highly significant increase in groups 1, 2 and 4 after the 5th week old chickens and highly significant increase in all groups after the 7th week old chickens. Serum globulins showed a significant increase in group 2 after the 5th week, while globulins showed a significant increase in all groups after the 7th week old chickens. Glucose showed a significant increase in group 2 after the 3rd week, while glucose showed highly significant increase in groups 1, 2 and 4 after the 5th week and showed highly significant increase in all groups after the 7th week old chickens. Serum albumin, A/G ratio, total lipids, cholesterol and triglycerides showed non significant changes in all groups at all periods.

The clinicobiochemical results for kidney function tests in groups 1, 2, 3 and 4 compared with normal control showed a significant increase in serum uric acid in group 4 after the 5th week old chickens. Also uric acid showed a significant increase in groups 2, 3 and 4 after the 7th week old chickens. Serum calcium and magnesium showed a significant increase in groups

3 and 4 after the 5th week old chickens. Calcium and magnesium showed a significant increase in groups 2, 3 and 4 after the 7th week old chickens. Serum phosphorus showed a significant increase in groups 3 and 4 after the 5th week, while phosphorus showed highly significant increase in groups 2, 3 and 4 after the 7th week old chickens. Serum creatinine, potassium, sodium and chloride showed non significant changes in all groups at all periods.

The body performance results in groups 1, 2, 3 and 4 compared with normal control showed a significant increase in body weight in group 2 after the 2nd week old chickens. Body weight showed highly significant increase in all groups after the 3rd and 4th weeks, while body weight showed highly significant increase in groups 2 and 4 after the 5th week old chickens. Body weight showed very highly significant increase in all groups after the 6th and 7th weeks old chickens. Body gain showed a significant increase in groups 2 and 4 after the 3rd week old chickens. Body gain showed highly significant increase in groups 2 and 4 after the 5th week, while body gain showed highly significant increase in all groups after the 6th week old chickens. Feed intake and feed conversion rate were improved in all groups at all periods.

The clinicobiochemical results for liver function tests in groups 5, 6, 7 and 8 compared with group 1 and 3 showed a significant increase in serum AST and ALT activities in groups 7 and 8 after the 5th week old chickens.

Summary

Serum total proteins and albumin showed highly significant decrease in groups 7 and 8 after the 5th week old chickens. Serum AP, globulins, A/G ratio, glucose, total lipids, cholesterol and triglycerides showed non significant changes at all periods.

The clinicobiochemical results for kidney function tests in groups 5, 6, 7 and 8 compared with group 1 and 3 showed a significant increase in serum uric acid and creatinine in groups 7 and 8 after the 5th week old chickens. Serum calcium showed a significant decrease in all groups after the 5th week old chickens. Serum phosphorus showed a significant increase in all groups after the 5th week old chickens. Serum magnesium level showed a significant decrease in groups 5 and 6 after the 5th week old chickens. Serum potassium showed a significant decrease in groups 5 and 6 after the 5th week, while potassium showed a significant increase in groups 7 and 8 after the 5th week old chickens. Serum sodium and chloride showed non significant changes in all groups at all all periods.

The body performance results in groups 5, 6, 7 and 8 compared with group 1 and 3 showed non significant changes in body weight in all groups at all periods. Body gain showed a significant increase in groups 7 and 8 after the 5th week old chickens. Feed intake and feed conversion rate were improved in groups 7 and 8 after the 5th week old chickens.

CONCLUSION



From the present work we could concluded that :-

- 1-Although double recommended doses of *Ascophyllum nodosum* and *Aspergillus* extract gave body performance results better than the recommended doses, but they had mild effects on some liver enzymes and some kidney functions, so we prefer the use of the recommended doses.
- 2-Addition of anticoccidial drug Maduramicin with natural ration additives gave good results without side effects. So, it could be added to the ration.
- 3- Addition of the prophylactic dose of antibiotic Spectinomycin with natural ration additives produced some changes in liver and kidney functions, so we prefer the use of another antibiotic.