Authorization

I, **Dr. Jewel Dey**, confirm of authenticity of all the works in this report. All the information collected from books, national and international journals, websites and other references **have** been acknowledged accordingly.

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The Author
September 2022

LIVE WEIGHT, BLOOD PARAMETERS AND CARCASS QUALITY OF BROILER FED DRY AND FERMENTED LEMON PEELS AND OLIVE LEAVES

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This is to certify that we have examined the above Master's thesis and have found that is complete and satisfactory in all aspects, and that all revisions required by the thesis examination committee have been made

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LP	=	Lemon peels
OL	=	Olive leaves
BCRDV	=	Baby Chick Ranikhet Disease Vaccine
IBD	=	Infectious Bursal Disease
ME	=	Metabolizable energy
CP	=	Crude protein
CF	=	Crude fibre
DM	=	Dry matter
EE	=	Ether extract
CVASU	=	Chattogram Veterinary and Animal Sciences University
HDL	=	High density lipoprotein
LDL	=	Low density lipoprotein
Cfu	=	Colony forming unit
Kg	=	Kilogram
Et al.	=	And his associates
FAO	=	Food and Agriculture Organization
SEM	=	Standard error of mean
FCR	=	Feed conversion ratio
G	=	Gram
%	=	Percentage
<	=	Less than
>	=	Greater than
MRS	=	De Man, Rogosa and Sharp agar
YM	=	Yeast Malta Agar

Abstract

To determine the combined effects of lemon peels and olive leaves feed on broiler growth performance, carcass characteristics, serum parameters, meat composition, and oxidative stability of meat, a 35-day feeding trial was conducted. A total of 144 day old Cobb 500 chicks was assigned to six treatment groups: Control (Basal diet), D1 (Basal diet + 0.8% Dry lemon peels and olive leaves on DM basis), D2 (Basal diet + 1.2% Dry lemon peels and olive leaves on DM basis), F1 (Basal diet + 0.8% Fermented lemon peels and olive leaves on DM basis), F2 (Basal diet + 1.2% Fermented lemon peels and olive leaves on DM basis) and AB (Basal diet+ Antibiotics) having 3 replications consisting of 8 birds each in a completely randomized design. The results indicated that all treatment groups differed significantly ($P<0.05$) from the control in the overall average daily gain (ADG). There is no significant difference in average daily feed intake among all dietary groups. The results indicated that all treatment groups differed significantly ($P<0.05$) from the control in the overall FCR. In terms of crude protein, ether extract and ash, there were significant ($P<0.05$) changes in the chemical composition of meat in the treatment group. All treatment groups showed a significant ($P<0.05$) decrease in serum cholesterol, LDL and triglyceride levels when compared to the control group. In all treatment groups compared to control group from 0 day to third weeks, the oxidative stability of meat as determined by thiobarbituric acid reactive substances (TBARS) had significantly ($P<0.05$) decreased. The net profit from treatment supplemented group differed significantly ($P<0.001$) than control. Lemon peels and olive leaves increased ADG, net profit and decreased FCR, serum LDL, triglyceride level and TBARS of meat. Hence, lemon peels and olive leaves meal showed beneficial effects on broiler and can be a potential source to be used as feed additive in broiler.

Keywords: Broiler, Lemon peels, Olive leaves, Probiotiocs, Growth performance, TBARS.