

Incorporation of Tulsi (*Ocimum sanctum*) Leaf Powder in diet of broilers for quality meat production

R. D. Lanjewar*, A. A. Zanzad, B. N. Ramteke, Lalmanpuii, P.E. Taksande and R. B. Patankar

Department of Animal Nutrition,
Nagpur veterinary College, Nagpur.

(Maharashtra Animal and Fishery Sciences University, Nagpur –6, India)

* Corresponding author email: rucha_lanjewar@yahoo.co.in

Abstract

An experiment was conducted to study the effect of dietary supplementation of tulsi (*Ocimum sanctum*) leaf powder on meat cholesterol and serum lipid profile of broiler from day old to 42nd day of age. One hundred fifty day old chicks were distributed into three experimental groups of 50 birds which were further divided into five replicates of 10 birds each. The control (T1) group was fed with standard broiler diet and T2 and T3 were fed standard broiler diet plus tulsi leaf powder at the rate of 0.5% and 1% respectively. All the birds were reared under standard managemental conditions. The observations were recorded for cholesterol content of meat and serum lipid profile of broilers. Supplementation of tulsi leaf powder at the rate of 1% for 42 days showed the significant decrease ($P<0.01$) in breast muscle and thigh muscle cholesterol. Group T2 showed the significant reduction in thigh muscle cholesterol but not in breast muscle cholesterol. The average serum total cholesterol was reduced significantly ($P<0.01$) in T3 group but not in T2. The average serum HDL cholesterol was increased significantly ($P<0.01$) in T2 and T3. The average serum triglycerides were significantly reduced in T2 and T3. But higher reduction obtained in birds fed with 1% tulsi leaf powder in diet. The average serum LDL cholesterol was significantly reduced ($P<0.01$) in T3 followed by T2 group. The study concluded that supplementation of tulsi leaf powder at the rate of 1% in broiler diet for 42 days reduced meat and blood cholesterol levels of broiler.

Key words: Broiler, Tulsi, Serum lipid profile, Meat cholesterol.