The effect of hulled white lupine on the carcass and meat quality of broilers

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Abstract
An experiment was carried out in our Institute with 480 Ross 308 female broiler chickens in 3 storey batteries. Control feed did not contain lupine, experimental feeds contained 10; 15 and 20 p.c. lupine. Experimental feeds were fed from 22 days of age. Crude protein contents of starter, rearing and finishing diets were 22.0; 20.0 and 18.0 p.c, ME contents were 12.40 MJ/kg; 12.85 MJ/kg and 13.19 MJ/kg.

Average body weights at 5 weeks of age were 1711.3 g (control), 1730.0 g (10 p.c. lupine), 17172.1 g (15 p.c.) and 1715.1 g (20 p.c.), there were no significant differences. Chickens (10 per group) were slaughtered at 6 weeks of age. Breast and thigh ratio was higher in groups fed with lupine, than in control, but difference was not significant. There were no significant differences in dry matter and ash content of breast and thigh meat between groups. Thigh meat of lupine groups had significantly lower fat content than of control group, the crude protein content did not show clear trend.

In conclusion, we can state that hulled white lupine can be used in broiler feeds even at 20 per cent without any negative effect on carcass composition or meat quality.