The Effect of Probiotics Lactococcus plantarum and Prebiotic Purple Sweet Potato (Ipomoea batatas sp.) on Performance and Cholesterol Meat of Local Ducks

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Abstract : The present study was conducted to evaluate the effects of probiotics-fermented purple sweet potato (PPSP) on performance and cholesterol meat of local ducks. One hundred two weeks old male local ducks placed in 4 treatment doses for ten weeks. The treatments were the dosage of PPSP, i.e., 0, 1, 2 and 3 grams of PPSP/bird/week. One gram PPSP contains 1.3 x 108 colony form unit. Data were analyzed statistically using SPSS and DMRT. The results showed that PPSP administration in local ducks did not affect intestinal villi height and fed consumption (P > 0.05), but highly significant (P < 0.01) increasing duodenum thickness, body weight, carcass yield and reducing both feed conversion and cholesterol meat content. The difference in PPSP dosage (1.2 and 3 grams) had the same effect on body weight gain. However, it has a different impact on feed conversion and meat cholesterol levels. The higher the PPSP dose given, the lower the feed conversion and meat cholesterol levels. The higher the PPSP can improve performance and reduce cholesterol levels of local duck meat. Giving PPSP as much as 3 grams per bird every week has provided the best results.

Keywords : cholesterol, local duck, performance, probiotics, purple sweet potato

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