Nutritional evaluation and histopathological assessment of unprocessed *Senna Occidentalis* (Coffee Senna) seed meal in broiler chicks

Kontan D.D1, H.B Yusuf2, Shaahu, D.T3, Nyameh J4 and Antyev M4.

1Department of Animal Health, College of Agriculture, P.M.B 1025 Jalingo, Taraba State
2Department of Animal Science and Range management, Modibbo Adama University of Technology Yola, Adamawa State.
3Department of Animal Production, University of Agriculture, P.M.B, 2373, Makurdi, Benue State
4Department of Animal Production, College of Agriculture, P.M.B 1025, Jalingo, Taraba State

**Corresponding Author:** dicksondicknwi@gmail.com **Phone No.:** 08066017859

**Abstract**

A 21 days feeding trial was conducted to evaluate the effect of unprocessed *Senna occidentalis* seed meal on gross lesions in broiler chickens. One hundred and twenty (120) day-old Anak (2000) broiler chicks were weighed and randomly allotted to four dietary treatments in the deep litter system, replicated 3 times with 30 birds each. *Senna occidentalis* seeds were collected from the environment of Taraba state University Jalingo in Ardo-kola Local Government Area. They were allowed to dry, cleaned of dirt and milled for the feeding trial. Four experimental diets were formulated T1 (0%) contained no *Senna* seed and served as the control while T2, T3 and T4 contained 5, 10 and 15% *Senna* seed. The results of birds fed with 15% unprocessed *Senna occidentalis* showed inflammation in the bursa of fibricious, congestion in the intestine and ulceration, congestion in the caeca and the intestine were pale and distended. The results also showed a decrease in relative weight of bursa of fabricious (P<0.05) and spleen (P<0.05). Based on the results, *Senna occidentalis* was toxic to chicks. Hence, the need to detoxify the phytochemical properties of the plant in order to enhance its usage in poultry feeds.

**Keywords:** Histopathological, *Senna occidentalis*, broiler chickens, Phytochemical, unprocessed.