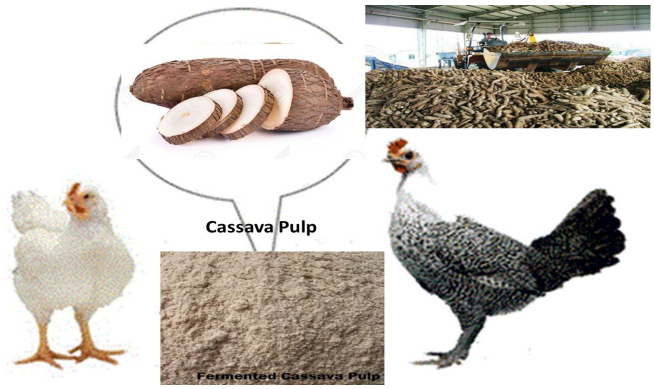
Previous issue | Next issue | Archive

Volume 9 (1); March 25, 2019 [Booklet] [EndNote XML for Agris]



Sugiharto S (2019). **A Review on Fungal Fermented Cassava Pulp as a Cheap Alternative Feedstuff in Poultry Ration.** *J. World Poult. Res.,* 9 (1): 01-06. http://jwpr.science-line.com

Review

A Review on Fungal Fermented Cassava Pulp as a Cheap Alternative Feedstuff in Poultry Ration.

Sugiharto S.

J. World Poult. Res. 9(1): 01-06, 2019; pii: S2322455X1900001-9

DOI: https://dx.doi.org/10.36380/jwpr.2019.0

ABSTRACT

In order to reduce the production cost, cassava pulp has been incorporated in chicken diets as an energy source. However, the use of such agro-industrial by-product may be confined by its higher fibre and lower protein contents. Improving the nutritional characteristics (lowering fibre and increasing protein content) through fungal solid state fermentation may be conducted to increase the inclusion level of cassava pulp in chicken rations. Apart from an energy source, fungal fermented cassava pulp (FCP) may also exert a beneficial effect on intestinal health of chickens, although further studies are needed to explore the functional benefit of FCP on chicken health.

Keywords: Chicken diet, Energy source, Fermented tapioca by-product, Fungal solid-state fermentation

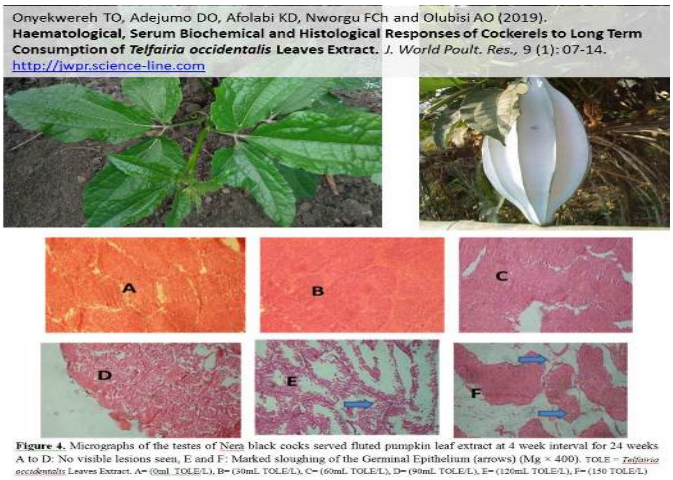


Figure 4. Micrographs of the testes of Nera black cocks served fluted pumpkin leaf extract at 4 week interval for 24 weeks A to D: No visible lesions seen, E and F: Marked sloughing of the Germinal Epithelium (arrows) (Mg × 400). TOLE = *Telfairia occidentalis* Leaves Extract. A= (0ml TOLE/L), B= (30mL TOLE/L), C= (60mL TOLE/L), D= (90mL TOLE/L), E= (120mL TOLE/L), F= (150 TOLE/L)

Research Paper

Haematological, Serum Biochemical and Histological Responses of Cockerels to Long Term Consumption of *Telfairia occidentalis* Leaves Extract.

Onyekwereh TO, Adejumo DO, Afolabi KD, Nworgu FCh and Olubisi AO.

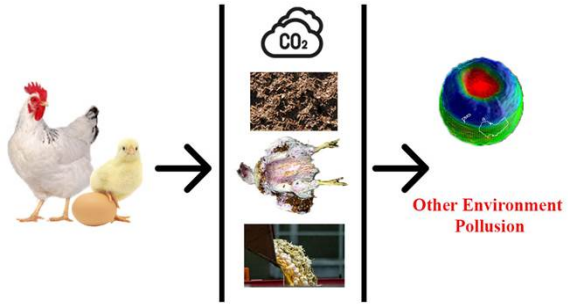
J. World Poult. Res. 9(1): 07-14, 2019; pii: S2322455X1900002-9

DOI: https://dx.doi.org/10.36380/jwpr.2019.1

ABSTRACT

Haematological, serum biochemical and haematological histological responses were studied in cockerels undergoing a long-term supplementation with *Telfairia occidentalis* Leave Extract (TOLE). Haematological and serum biochemical parameters investigated included haemoblobin, white blood cells, red blood cells, lymphocytes, heterophils, monocytes, eosinophils, total protein, aspartate aminotransferase, aspartate amino transferase and triglyceride. Histological changes associated with
Telfairia occidentalis
leaves extract on the kidney, liver, spleen and testes were also examined. Result showed that birds on TOLE has higher values for most of the haematological parameters studied which were significantly ($P < 0.05$) higher than the control. Also the total protein, globulin and alanine aminotransferase were significant ($P < 0.05$) for birds on TOLE having higher values while for triglycerides birds on the control treatment had the higher values which was significant. There were no significant changes in the albumin and aspayrtate aminotransferase. Histological changes showed mild to severe congestion in the spleen and testes of birds that received 120 and 150mL TOLE/L of water that also showed reduced germinal epithelium height and sloughing of the germinal epithelium respectively. Long term supplementation of TOLE for cockerel production should not exceed 60mL of TOLE per liter of water as the administration in excess of this can bring about tissue breakdown and reduced fertility. Animals suffering from

blood loss can benefit from the administration of fluted pumpkin leaves extract as the extract increased erythron production.
KeywordS: Cockerels, Haematology, Serum biochemistry, Organ histology, *Telfairia occidentalis* , leaf extract



Sarwar Inam AKM, Suzauddula Md and Kearney J (2019). **Ecological Aspects and Policy Impact on Expansion of Poultry Production in Ireland (1995-2014).** *J. World Poult. Res.,* 9 (1): 15-23. http://jwpr.science-line.com

Review

Ecological Aspects and Policy Impact on Expansion of Poultry Production in Ireland (1995-2014).

Sarwar Inam AKM, Suzauddula Md and Kearney J.

J. World Poult. Res. 9(1): 15-23, 2019; pii: S2322455X1900003-9

DOI: https://dx.doi.org/10.36380/jwpr.2019.2

ABSTRACT

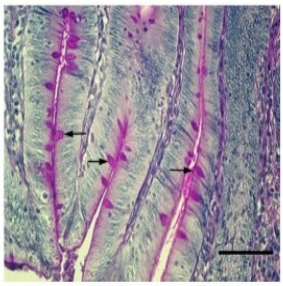
Poultry meat is very popular in Ireland because of low cholesterol level. Ireland is in the top position for the consumption of poultry meat in whole Europe. Ireland emits 3.3 kg CO2-equivalent per kg of poultry for the poultry meat production which is the lowest amount among all the other European countries. To expand this sector with respect to environmental concern some issues need to be considered very carefully such as effective poultry feed production system, energy consumption in both poultry production and processing area, manure management system, wastewater and odour management systems. If these issues are not handled carefully, several types of harmful effect will occur in both living and environment cycle such as water borne diseases, global warming and ozone layer depletion. The objective of this report is to give an overview of the current situation of poultry production in Ireland, policies and legislation related to poultry production and to show the way to expand this sector in Ireland in line with current ecological concern.

Keywords: Ecological and policy, Management of poultry-waste, Poultry and environment, Poultry production

Gulmez M, Gulmez N, Bingol S, Deprem T and Koral Tasci S. (2019). **Effect of dietary inclusion of probiotics on growth and intestinal morphology of broiler chickens.** *J. World's Poult. Res.*, 9 (1): 24-31.

Effect of probiotic (Smart ProLive) on growth parameters during 42 days of rearing period of broiler chickens (mean±SE).

Tests \ Weeks	1	2	3	4	5	6
Feed intake; Probiotic	89 ±6	407 ±14	930 ±22	1734 ±40	2270 ±75*	4134 ±112*
Feed intake; Control	89 ±6	396 ±24	954 ±30	1780 ±72	2979 ±76	4472 ±137
Bodyweight gain; Probiotic	121 ±6	369 ±12	722 ±15	1235 ±27*	1879 ±47*	2537 ±62*
Bodyweight gain; Control	112 ±6	338 ±18	689 ±21	1175 ±45	1796 ±47	2424 ±67
Feed conversion rate; Probiotic	0.39 ±0.03	0.99 ±0.08	1.23 ±0.06	1.37 ±0.04*	1.45 ±0.04*	1.61 ±0.07*
Feed conversion rate; Control	0.42 ±0.01	1.05 ±0.02	1.32 0.05	1.48 0.05	1.64 0.01	1.83 0.01



Duodenum of the experimental group of broiler chickens after 42 days of rearing period. Arrows: Goblet cells, 40x. Periodic Acid Schiff (PAS). Bar: 50 µm.

Previous Article Volume 9 Issue 1 Archive Publication Ethics e-Print