

EVALUATION OF IMPORTED AND EGYPTIAN FISH MEALS IN POULTRY DIETS

By

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ABSTRACT

An experiment was undertaken to evaluate the imported and Egyptian fish meal in poultry diets on 61 one day old broiler chicks based on 2 basal diets (starter and grower). Twelve percent of plant protein was replaced by the same percentage from animal protein (fishmeal) from different sources. The broiler raised to 35 days and they were classified into 4 groups. The control group raised on corn soybean meal as a basal diet where the other 3 groups raised on basal diet + fish meal from different sources which were (Peru, Yemen and locally produced type). Samples from gizzard, proventricles and intestine were examined for histopathological examination and also sera was collected for examination of T.P, albumin, creatinine, uric acid, SGPT and SGOT. There was pathological lesions on the examined organs in the groups raised on basal diet plus fishmeal, whereas, no significant differences on serum samples whereas there was significant difference in B.W., B.W.G. and feed intake in the groups raised on basal diet plus fishmeal especially locally produced type in the first three weeks and finally fish meals' especially locally prepared type is not recommended in broiler diets.

تقييم مسحوق السمك المصرى والمستورد فى علائق الدواجن

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المستخلص

أجريت رسالة لدراسة تأثير إضافة مسحوق السمك من مصادر مختلفة المنشأ على أداء النمو لبدارى التسمين واستخدام بها ٦١ كتكوت تسمين هابر عمر يوم وقسمت الكتاكيت الى أربع مجاميع الأولى غذيت على العليقة الضابطة والثانية غذيت على العليقة الضابطة + مسحوق سمك بيرو والثالثة غذيت على العليقة الضابطة + مسحوق السمك اليمنى والرابعة غذيت على العليقة الضابطة + مسحوق السمك المحلى وتم استبدال ١٢% من البروتين النباتى بالبروتين الحيوانى (مسحوق السمك) وتم أخذ عينات من المعدة الغدية والقانصة والأمعاء لدراسة تأثير مسحوق السمك عليهم وأيضاً عند اليوم ٣٥ نهاية التجربة أخذت عينات من الدم لدراسة تأثير مسحوق السمك على بروتينات الدم ووظائف الكبد والكلى.

ومن أهم النتائج: إنخفاض ملحوظ فى وزن الجسم ومعدل الزيادة اليومية للكتكوت وأيضاً كمية العليقة المستهلكة فى أول ٣ أسابيع للمجموعة الرابعة. وأيضاً تغيرات بائولوجية على الأعضاء المأخوذة كما لوحظ عدم وجود فروق معنوية لمسحوق السمك عن العليقة الضابطة لإختبارات الدم وقد خلصت التجربة إلى أنه لا يفضل استخدام مسحوق السمك وبالأخص المصنع محلياً فى علائق التسمين للدواجن.

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LIST OF ABBREVIATIONS

AA	:	Amino acids
ADP	:	Apparent digestibility of protein
Alb	:	Albumin
ANOVA	:	Analysis of Variance
AOAC	:	Association of Analytical Chemists
BG	:	Body gain
BW	:	Body weight
CP	:	Crude protein
Ca	:	Calcium
CF	:	Crude fiber
Co	:	Cobalt
Cu	:	Copper
DM	:	Dry matter
DUFA	:	Polyunsaturated fatty acids
EE	:	Ether extract
FCR	:	Feed conversion ratio
g/dL	:	Gram per deciliter
GE	:	Gross energy
HUFA	:	High unsaturated fatty acids
ME	:	Metabolizable energy
mg/dL	:	Milligram per deciliter
Mn	:	Manganese
NDF	:	Neutral detergent fiber
NRC	:	National Research Council
P	:	Phosphorus
S/C	:	Subcutaneous
Se	:	Selenium
SGOT	:	Serum glutamic oxaloacetic transaminase
SGPT	:	Serum glutamic pyruvate transaminase
TP	:	Total protein
U/L	:	Unit per liter
UK	:	United Kingdom
USA	:	United States of America
Zn	:	Zinc