<table>
<thead>
<tr>
<th>Research Title/ Field</th>
</tr>
</thead>
<tbody>
<tr>
<td>Article (Abstract)</td>
</tr>
<tr>
<td>Download</td>
</tr>
<tr>
<td><strong>EFFECT OF DIETARY SUPPLEMENTATION OF</strong> and <strong>Aloe vera</strong></td>
</tr>
</tbody>
</table>
Original Research, B1
A. Farahi, M. Kasiri, M. Sudagar, M. Soleimani Iraei, S.M.J. Zorriezhahra

Online J. Anim. Feed Res.

ABSTRACT: This was conducted to investigate the effect of feeding lemon balm (Melissa officinalis) and Aloe (Aloe vera) on growth performance, hematological parameters and oxidative stability of rainbow trout. 360 uniform rainbow trout were randomly divided into four equal groups (control and supplemented groups). The results indicated that there were no significant differences (p>0.05) in RBC and Hb in treatments. However, any significant differences (p>0.05) were not observed in RBC and Hb in treatments (p>0.05). Results of oxidative stability showed that the ecosystem system had a significant (p<0.05) protective effect against lipid peroxidation in fish meat during chilling storage (4°C, 7 days).

Key words: Lemon balm (Melissa officinalis), Aloe (Aloe vera), plants supplementation, Rainbow trout (Oncorhynchus mykiss)

Original Research, B2
Y. H. Elhashmi, A. El Amin, F. A. Omer

Online J. Anim. Feed Res.
ABSTRACT: This study was conducted to evaluate the growth pattern of muscles, bones and fat of guinea fowl. Eighteen day old chicks were used in this study and were divided into three groups with six birds in each group. The results were statistically analyzed with ANOVA and Duncan’s multiple range tests. The results showed that there was a significant difference in the growth pattern of different body regions. The thorax and hind limb had the highest growth rate when compared with the pelvis, wing, neck and flank. The key words are carcass yield, body regions, serial slaughter.

EFFECT OF SALT CONCENTRATION LEVEL AND SEASON ON CHEMICAL COMPOSITION OF WET-SALTIED FERMENTED FISH SPECIES

Original Research, B3
Hassan Mohammed Adam Sulieman and Omyia Ahmed Mohammed Khamis

ABSTRACT: The study was conducted to investigate the effect of salt concentration level and season on chemical composition of wet-salted fermented product (local name; fassiekh) processed from new two fish species (Labeo spp, local name; Debs, Schilbe spp local name; Shilbaya) compared with popular fassiekh fish species (Hydrocynus spp, local name: Kass), in reducing the over fishing and use of Alestes and Hydrocynus spp in fassiekh production in the Sudan.

A assorted of 12 Kgs of each of three fassiekh fish species group, consisted of Hydrocynus spp; (25-30 cm in total length). The second group were Schilbe spp and Shilbaya spp respectively at the same salt concentration level of treatment and season time.

Keywords: salt concentration levels, season, chemical, composition, wet-salted Fermented, fish species.
ANTI-NUTRIENT FACTORS, GROWTH PERFORMANCE AND SERUM BIOCHEMISTRY OF BROILER CHICKS FED RAW AND FERMENTED ALCHORNEA CORDIFOLIA SEEDS

Original Research, B4
Emenalom, O.O., Obiora, A.B., Okezie, U.N.

Online J. Anim. Feed Res.
ABSTRACT: This study was carried out to determine some anti-nutrient factors in differently processed Christmas bush (Alchornea ... raw seed meal before fermentation improved the feeding value of the seeds for broilers at 10% replacement for maize.

Keywords: Alchornea seed; Anti-nutrients; Broilers; Fermentation

SURVEY OF PRODUCTION AND USE OF POULTRY LITTER IN KHARTOUM STATE, SUDAN

ABSTRACT: A survey of chicken litter production was undertaken by hand submitted questionnaire. The survey covered 219 farms out of 1,300. The farms were located in three provinces (Khartoum, Khartoum-North and Omdurman). However, there are no significant differences on other chemical compositions.

Key words: Poultry litter, survey, chemical composition.
**ABSTRACT:** In this research, linear regression models were improved for estimation of body weight using various linear body measurements such as heart girth, height at wither and height at hip. The model including the most appropriate measurements was the best fitted model for estimation of body weight in Sudanese Shugor sheep in this study.

**Keywords:** Linear body measurements, Body weight, regression analysis, Shugor sheep, Sudan.
**APPARENT DIGESTIBILITY COEFFICIENTS OF PELLETED FISH FEED INCORPORATED WITH WATER HYACINTH (Echhornia crassipes)**

Original Research, B7

M.E. A-Rahman Tibin, A.B. Abol-Munafi, A. Mat Amiza, Tahir Hamid, H.M. Adam Sulieman


**ABSTRACT:**

The objective of this study was to determine the apparent digestibility coefficients (ADC) of dry matter, protein, gross energy and fiber of five pelleted fish feed incorporated with different levels of water hyacinth (10, 15, 20, 25 and 30%). Results indicated that the ADC of dry matter, gross energy, and fiber decreased significantly with increasing levels of water hyacinth incorporation while protein ADC increased. The protein ADC of the control diet was 87.1%, while the ADC of protein of the feed with 15% water hyacinth was 93.7%. Therefore, the apparent digestibility of all the treatments was decreased significantly. The results of the current study are significant for the aquaculture industry and for the management of the E. crassipes. It is recommended to use the appropriate moisture content of the feed and to maintain the quality of the fish meal to get high-quality feeds.

Keywords: Apparent digestibility, pelleted, water hyacinth and fish

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**EFFECT OF FROZEN Daphnia magna DIET MIXED WITH PROBIOTIC PROTEXIN ON GROWTH AND SURVIVAL OF RAINBOW TROUT (Onchorhynchus mykiss) FRY REARED UNDER CONTROLLED CONDITIONS**

Original Research, B8

Sharareh Ahmadvand, Hojattollah Jafaryan, Amin Farahi, and Sheyda Ahmadvand


**ABSTRACT:**

Effect of probiotic Protexin was experimentally tested on growth and survival of rainbow trout fry reared under controlled conditions. Experiments to determine the effect of different levels of probiotic (2×10^4 (T1), 2×10^5 (T2), and 2×10^6 (T3) CFU/g) on growth and survival rates of rainbow trout in comparing with those of control diet containing no probiotic were conducted. The results indicated that dietary inclusion of probiotic in the diet had a significant effect on growth traits, where the highest growth rates were observed in the groups fed T2. There was no effect of probiotic supplementation on survival at the end of experiment in T1 and T3, but survival rate in T2 was higher than other groups, significantly (P<0.05). Viability against high temperature stress was affected by dietary inclusion of probiotic, where the highest viability was observed in the group fed T2. The results of this study revealed that probiotic may be beneficial in improving growth and survival of rainbow trout fry. Therefore, it is recommended to use probiotic as a growth promoter in fish feed, especially in feeding high temperature stress conditions.

Keywords: Probiotic, growth, survival, rainbow trout (Oncorhynchus mykiss)

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**Relationships between haemoglobin (Hb) type and productive and reproductive performance of Rahmani ewes and lambs**

Original Review, B9

M. Abd-Allah, H. A. Hassan and M.A. Al-Baroady


**ABSTRACT:**

Two hundred Rahmani ewes and seventy-one lambs were used to study the relationship between the type of haemoglobin and some productive and reproductive traits. Distribution of Hb types and allelic frequencies were higher for type AA of ewes, while for lamb's type BB was higher than type AB and (½ C ½ R). Lambs with Hb AB had the lowest value of daily gain at all periods studied than lambs with Hb AA or Hb BB.

Keywords: haemoglobin type, Rahmani ewes, reproductive performance

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**GROWTH Performance of desert sheep under grazing conditions in NORTH KORDOFAN STATE**

Original Research, B10

M.A.M. Tibin, I.M. Tibin, and I. Bushara


**ABSTRACT:**

The experiment was conducted to study the effect of changing the nomadic husbandry practices during summer with feed supplementation at the range land of North Kordofan State. The results indicated that body linear measurements and weight gain of the experimental groups were significantly higher than the control group. It was concluded that the use of concentrate ration in conjunction with the current grazing management practices will probably reflect positively on the performance of Hamari sheep under range conditions.

Keywords: Desert sheep, growth performance, Body linear measurements, concentrate ration, Sudan

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**SYNERGISTIC EFFECTS OF DIETARY GLUCOSAMINE AND PLANT/ANIMAL PROTEINS ON THE GROWTH PERFORMANCE OF ASIAN CATFISH (Clarias batrachus) JUVENILES**

Original Research, B11

S. Chowdhary, P. P. Srivastava, S. Mishra, A. K. Yadav, R. Dayal, and W.S. Lakra


**ABSTRACT:**

A 84-days feeding trials was conducted to evaluate the use of animal and plant protein, in combination with glucosamine, in the diets of Asian catfish juveniles. The results indicated that the use of animal protein feeds supplemented with glucosamine resulted in the best growth performance. The highest growth performance was observed in group F6, which was fed a diet containing 30% groundnut meal, 40% fish meal and 30% soybean meal with 2% glucosamine. The survival was improved in glucosamine supplemented feeds ranging from 49 ± 3.2 to 85 ± 1.7 whereas the control showed 41 ± 1.8%. Results indicate that animal protein rich feeds were much acceptable to the catfish juveniles as supplemented diets by glucosamine revealed better and more efficient results in fish survival. Therefore, it is recommended to use glucosamine as a growth promoter for the Asian catfish in conjunction with plant and animal proteins.

Keywords: Clarias batrachus, glucosamine, animal protein, plant protein, growth
A study was made to investigate the effects of using carp pituitary extract, human chorionic gonadotropin, luteinizing hormone releasing hormone analogues (Receptal) with or without dopamine antagonists on the spawning performance parameters of silver carp. Results of the current study indicated successful induction of spawning silver carp using different spawning agents. The breeding response and fecundity were comparable among all treatment groups. Moreover, the current experiment clearly demonstrated that the combination of spawning agents could potentiate the effect of the hormones used for spawning induction together with reduction of its dose (i.e. dose of carp pituitary extract, human chorionic gonadotropin).

Meanwhile, it is well established that domperidone is preferred than metoclopramide as a dopamine antagonists for spawning induction of fish. In view of these results it is clear that not only carp pituitary extract, human chorionic gonadotropin but also the mammalian LHRH analogue (i.e. Receptal) was effective to induce spawning in silver carp. This is important because it allows for a reduction in the cost of induced breeding by using mammalian LNRH analogues in combination with a dopamine antagonist or alone.

Keywords: Silver carp, induced spawning, human chorionic gonadotropin, luteinizing hormone releasing hormone analogues, dopamine antagonists.

A 84-day feeding trial was conducted to evaluate the utilization impact of dietary omega – 3 HUFA as a dietary energy source on the growth of striped murrel fry. The results showed that the lipid from unsaturated origins could be effectively utilized by striped murrel fry with a better resultant growth.

Key words: lipid, utilization, growth, Channa striatus

A six-week feeding trial involving 180 2-week old Cobb broiler chicks was conducted to partially replace fishmeal with Moringa (Moringa oleifera) leaf meal. The birds were randomly assigned in equal numbers in a Completely Randomized Design (CRD) to four dietary treatments containing 0, 5, 10, and 15% Moringa leaf meal (MLM). Each treatment was replicated three times giving 15 birds per replicate. The parameters measured include feed intake, final weight, weight gain, feed conversion, and carcass traits. The results showed that addition of MLM does not adversely affect mortality, carcass traits and blood variables. However, addition of MLM does not improve the performance of broiler chickens. However, addition of MLM does not adversely affect mortality, carcass traits and blood variables.

KEYWORDS: Moringa, Performance, Haematology, serum biochemistry and Meat quality.

This study was conducted to determine the effect of Icacina oliviformis leaf meal (IOLM) on the growth performance of weaner rabbits. The results of this study, IOL can be used as a feed ingredient in the diet of rabbits at 5% without any detrimental effects.

Keywords: Icacina oliviformis, Rabbits, performance, apparent digestibility.
BIOSECURITY PRACTICES IN ALGERIAN POULTRY FARMS

Review Article, B16
N. Alloui, A. Ayachi
ABSTRACT:

The objective of this study was to determine the level of adoption within the Algerian poultry farms (broiler chickens, ... > 25. Class 3 and 4 regroup 45% of poultry farms and demonstrates that the number of faecal streptococci colonies /25 cm

Biochemical And Non-Specific Immune Parameters Of Healthy Nile Tilapia (Oreochromis Niloticus), Blue Tilapia (Oreochromis Aureus) And Their Interspecific Hybrid (♂ O. Aureus X ♀ O. Niloticus) Maintained In Semi-Intensive Culture System

Original Research, B17
Waleed N. El-Hawarry
ABSTRACT:

Oreochromis niloticus, Oreochromis aureus and their interspecific hybrid tilapia (♂ O. aureus x ♀ O. niloticus) maintained under semi-intensive culture system were compared in a preliminary study to explore the variations in blood biochemical and non-specific immunological parameters. Comparisons were performed after one week of acclimation (“base-line” level). Serum cholesterol, albumin, SGPT and SGOT level were significantly higher (P < 0.05) in the purebred O. aureus than the purebred O. niloticus and their crossbred hybrid. The tested genotypes showed no significant difference (P > 0.05) in total protein, globulin and urea. Additionally, the level of urea was significantly higher in the purebred O. niloticus than the purebred O. aureus and their crossbred hybrid. On the other hand, the level of creatinine was significantly higher in the purebred O. niloticus followed by the crossbred hybrid and then the purebred O. aureus but still without a significant difference (P > 0.05) between the latter two genotypes. The phagocytic activity and phagocytic index were significantly higher (P < 0.05) in the crossbred hybrid (♂O. aureus x ♀O. niloticus) than the other purebred genotypes. The differences identified suggest that hybrid families from the two species would be used to construct a segregating population for genetic analysis of immunological traits and disease resistance.

Keywords: Purebred, Oreochromis niloticus, Oreochromis aureus, inter-specific hybrid tilapia normal blood biochemical reference, phagocytic activity, phagocytic index.

Potentialities and the biochemical composition of selected duck strains:

Mini Review, B18
Adzitey F.
ABSTRACT:

Physicochemical composition of meat is an important factor in human nutrition and contributes to the choice of food by mankind. In recent times humans are much conscious of the health benefits of what they consume. Duck meat is high in protein, iron, selenium and niacin; and lower in calories compared to many cuts of beef. This mini-review reports on the production potentials of ducks and the physicochemical composition of selected duck strains. It also reports on world duck population.

Key words: Duck meat, consumption, health benefits, nutrition, physicochemical

Effect of date pits on the performance of Sudanese desert lambs

Original Research, B19
Yagoub YM, Elemam MB. 2012.
ABSTRACT:

Twelve Sudanese desert lambs with an average live weight of 20.9 kg were divided into three groups of equal number to study the effect of date pits on the performance of the lambs. The lambs were divided into three groups: a control group fed on a commercial concentrate and grass ad libitum; a date control group fed on the same concentrate and grass with date pits (250 g/day/pupil) ad libitum; and a date experimental group fed the same concentrate and grass ad libitum for 45 days. The lambs were fed on a practical diet with a daily intake of 250 g date pits. Performance of experimental lambs did not significantly influenced with introduction of date pits.

Key words: Lambs, date pits, chemical composition, performance

Estimation of live body weight from linear body measurements for Farta sheep

Original Research, B19
Yagoub YM, Elemam MB. 2012.
ABSTRACT:

Twelve Sudanese desert lambs with an average live weight of 20.9 kg were divided into three groups of equal number to study the effect of date pits on the performance of the lambs. The lambs were divided into three groups: a control group fed on a commercial concentrate and grass ad libitum; a date control group fed on the same concentrate and grass with date pits (250 g/day/pupil) ad libitum; and a date experimental group fed the same concentrate and grass ad libitum for 45 days. The lambs were fed on a practical diet with a daily intake of 250 g date pits. Performance of experimental lambs did not significantly influenced with introduction of date pits.

Key words: Lambs, date pits, chemical composition, performance
A study, to develop regression models for prediction of body weight from other linear body measurements, was conducted in Farta sheep. The data were collected from a total of 560 sheep at different ages. The study aimed to investigate how different body measurements can be used to predict body weight and to test the possibility of using different body measurements at different ages to predict weight and use for selection as well.

Key words: Farta sheep, body weight, linear body measurements, regression model