Effect of probiotic feed additives on broiler chickens health and performance
Antibiotics were very important pieces of the puzzle that enabled the poultry production to move from a backyard flock to an industrial one. However, the use of antibiotics in conventional poultry production has been increasingly criticized because of the development of antibiotic-resistant bacteria. Probiotics, on the other hand, are microorganisms that have been shown to provide health benefits. In this study, we evaluated the effect of probiotics on the performance and health of broiler chickens. 16000 broiler chickens were assigned in two experimental groups: treatment (10^9 cfu/kg of feed of Pediococcus acidilactici MA18/5M) and control. In each group 8000 broiler chickens were allocated in two replicates of 4000 chickens each. The results showed that dietary treatment had a significant effect on weight gain (p≤0.01). The weight gain of broiler chickens in the treatment group was significantly higher than that of the control group (6.56 vs. 6.51). The numbers of white blood cells were significantly affected by dietary treatment (p≤0.01).

Key words: Probiotic, Broiler chickens, Health and Performance of production

Utilization of Leucaena (Leucaena leucocephala) leaf meal as partial replacement for fishmeal in the diet of broiler chickens

A six-week experiment was conducted to assess the response of cobb broiler chicks to diets containing varying levels (0%, 5%, 10%, and 15%) of Leucaena leaf meal (LLM) in the diet. The results showed that the inclusion of LLM in diets for broiler chickens did not affect their health status, but depressed their growth. The reduction in weight gain was most pronounced at the highest level of LLM inclusion (15%). The levels of serum albumin and globulin were significantly lower in birds fed the LLM diets than those fed the control diet.

Key words: Feed cost, Haematology, Leucaena leaf meal, Performance, Serum biochemistry

Anti-nutritional factors in sorghum: chemistry, mode of action and effects on livestock and poultry

Sorghum basically contains two major anti-nutritional factors; tannin, a polyphenolic compound located in the grain and, dhurrin a cyanogenic glucoside located mainly in the aerial parts of the plant. Tannins are known to be toxic to ruminants and non-ruminants alike. They have been shown to affect the availability and digestibility of nutrients, growth and reproduction of livestock and poultry. Making fodder into hay or silage however, destroys the poison.

Key words: Tannin, Dhurrin, Sorghum, Livestock, Poultry

Breed, Sex And Ambient Temperature Effects on Duration of Behavioural Traits of Rabbits (Oryctolagus Cuniculus)

The effect of breed, sex and ambient temperature on the duration of various behavioural traits were studied in this experiment. The duration of feed and water intakes, standing and lying down of rabbits were measured in the laboratory. The results showed that there were significant (P < 0.01) phenotypic correlation between duration of feed intake and duration of standing (r_p = 0.10), duration of feed intake and duration of lying down (r_p = -0.46), duration of water intake and duration of standing (r_p = 0.09), duration of water intake and duration of lying down (r_p = -0.29), ambient temperature and duration of water intake (r_p = 0.64), duration of standing and duration of lying down (r_p = -0.51) and between ambient temperature and duration of lying down (r_p = -0.42).

Key words: Ambient Temperature, Behavioural Trait, Diurnal, Ethology, Nocturnal, Rabbit, Stress, Test Period, Thermoneutrality

Nutrient digestibility, carcass characteristics and plasma metabolites in kids fed diets supplemented with chromium methionine

The effect of dietary chromium methionine on nutrient digestibility, carcass characteristics and plasma metabolites was studied in this experiment. The results showed that dietary chromium methionine significantly increased nutrient digestibility and improved carcass characteristics. The plasma metabolites also showed significant improvements, with decreases in glucose and insulin levels and increases in cholesterol and HDL levels.
ABSTRACT: This study was carried out to evaluate the effects of different levels of chromium methionine (CrMet) on nutrient digestibility, carcass characteristics and peripheral glucose utilization in goat kids. It could be improved nutrient digestibility, carcass characteristics and peripheral glucose utilization in goat kids.

Key words: Chromium-methionine, Mahabadi goat kid, Digestibility, Plasma metabolites, Glucose.
Comparison of three approaches of estimating protein b2 and b3 degradation rates in the rumen

ABSTRACT:

Gravimetric method, Cornell, In situ, Degradation rate, Curve peeling

Comparison of three approaches of estimating protein b2 and b3 degradation rates in the rumen

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Current status, challenges and opportunities of rabbit production in Botswana

ABSTRACT:

Challenges, Cholesterol, Manure, Opportunities, Rabbits

Use of *Sida acuta* and *stylosanthes hamata* as sole feeds for rabbits

ABSTRACT:

Manure, *Sida acuta*, *stylosanthes hamata*
**ABSTRACT:**

A 42-day feeding trial was conducted to determine whether Stylosanthes hamata and Sida acuta could be used as sole feeds in rabbit nutrition. The study was conducted in two different treatments, one with stylosanthes and the other with a combination of stylosanthes and southern grasses, with forage fed ad libitum. Growth performance and meat quality parameters, including blood indicators, were compared. The results showed that the growth performance of rabbits fed Stylosanthes as sole feed was equivalent to that of rabbits fed the combination of stylosanthes and southern grasses. However, the meat quality of rabbits fed stylosanthes as sole feed was affected, as indicated by the decrease in growth performance and meat quality parameters. It was concluded that although stylosanthes could improve growth performance and meat quality, it was not as effective as the combination of stylosanthes and southern grasses. In conclusion, the results of this study suggest that stylosanthes could be used as a sole feed in rabbit nutrition, but further research is needed to improve its effectiveness.

**Key words:** Blood indicators, Growth performance, Meat quality, Sida spp., Stylosanthes spp.

**Nutritive profiles in different size groups and body parts of common whelk (calliostoma gatunum) from Paphos, southern Cyprus**

**ABSTRACT:**

The aim of this study was to determine the nutritive profiles in different size groups and body parts of the common whelk (calliostoma gatunum) from Paphos, southern Cyprus. The results showed that the nutritive profiles varied significantly among the different size groups and body parts. The digestive systems were the most nutritious parts, followed by the gills, mantle, and shell. The results also showed that the nutritive profiles were affected by the size groups, with larger individuals having a higher nutritive profile. The results of this study provide important information for the development of strategies for the sustainable use of the common whelk in the Mediterranean region.

**Key words:** Common whelk, Fatty acids, Mollusc, Nutritional composition, Paphos, southern Cyprus.

**Biochemical effect of ginger on some blood and liver parameters in male Newzeland rabbits**

**ABSTRACT:**

The aim of the present study was to investigate the effects of ginger rhizome treatments on hepatic oxidative stress and blood parameters in male Newzeland rabbits. The results showed that the ginger treatments had a significant effect on liver function, with the hot extract having the most significant effect. The results also showed that the ginger treatments had a significant effect on some blood parameters, with the hot extract having the most significant effect. The results of this study suggest that ginger could be used as a natural antioxidant and could be useful in the treatment of oxidative stress-related diseases.

**Key words:** Ginger, Cholesterol, Malondialdehyde, Glutathione.

**Effect of growth stages and range systems on vegetation attributes, carrying capacity, stocking rate and forage productivity, North Kordofan, Sudan**

**ABSTRACT:**

The range vegetation attributes, carrying capacity, stocking rates and forage productivity were studied in close and open range systems at the flowering and seed setting stages during the September and November 2010, respectively, in El Rosa (El-khuwei locality). The results showed that the vegetation attributes were higher in the close range system during the flowering stage, while the carrying capacity, stocking rates and forage productivity were higher in the open range system during the seed setting stage. The results of this study provide important information for the sustainable use of the range vegetation in North Kordofan, Sudan.

**Key words:** Biomass, Cover, Density, Bare Soil, Litter and Frequency, Forage Productivity, Carrying Capacity, Stoking Rates.

ABSTRACT:
The present study was conducted to investigate the effects of parity number, season and year of calving of Sudanese Zebu cows on body weight, daily milk yield and lactation length. A total of 120 cows from three different parities were selected and followed through 280 days of lactation. The results revealed that the cows that calved in year 1997 and 2000 had the lowest (P<0.01) rate of decrease in milk yield, weekly and total yields.

Key words: Butana, Parity Number, Season of Calving, Lactation Curve, Milk Yield


ABSTRACT:
The effect of parity (PA) on live body weight, daily milk yield and lactation length of Sudanese Kenana cattle breed were studied. Data were collected from 120 cows with four parities (PA1, PA2, PA3 and PA4) during the study period from 2006 to 2011. Data were statistically analyzed using one-way ANOVA when daily milk yield (DMY), Live body weight (LBwt) and lactation length (LL) as response and parity numbers (PA1, PA2, PA3 and PA4) as independent (P≤0.05). The results revealed that parities had a significant effect on all quantitative parameters. Therefore, parities were used as factors for estimation of quantitative parameters with relatively high accuracy in Sudanese Kenana cattle breed.

Key words: Parity, Live body weight, Daily Milk Yield, Lactation length, Kenana Cattle, Sudan