Impact of Thyme Oil and Lactobacillus acidophilus as Natural Growth Promoters on Performance, Blood Parameters and Immune Status in Growing Rabbits.

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ABSTRACT

Present study was conducted to evaluate the effect of thyme oil and *lactobacillus acidophilus* (supplement) as growth promoters in rabbit. 72 weaned V-Line male rabbits were randomly allocated into 4 equal groups. The first group (G1) was without any additives and consider as control group. The second group (G2) treated with the addition of *lactobacillus acidophilus* in drinking water in a concentration of 10⁸ cfu/ml. The third group (G3) treated with the addition of thyme oil in drinking water in a concentration of 1 ml/ liter. The fourth group (G4) treated with the addition of both *lactobacillus acidophilus* and thyme oil in drinking water in a concentration of 10⁸ cfu/ml plus 1ml/L, respectively. The obtained results showed that, all treatments had significant improvement effects on the measured parameters (performance characteristics, cecum characteristics, RBCs, WBCs, kidney function, trigly-cerides, total cholesterol, sheep RBC’s titer, liver antioxidant markers and hormones markers) when compared to the control group. The live body weight of G3 and G4 groups were higher (2116 and 2058 g) than those found in G2 and G1 groups (1958 and 1850 g) respectively. In addition, the body weight gain of G3 and G4 groups were higher (1364 and 1307 g) than those found in G2 and G1 groups (1207 and 1100 g). Moreover, the daily weight gain of G3 and G4 groups were higher (32.49 and 31.13 g/d) than those found in G2 and G1 groups (28.74 and 26.19 g/d). In addition, feed conversion ratio of G3 and G4 groups were higher (3.41 and 3.61) than those found in G2 and G1 groups (3.66 and 4.67). While G4, G2 and G3 groups had a significant enrichment effect on the intestinal beneficial bacteria. In conclusion, in present experiment inclusion thyme oil and/or *lactobacillus acidophilus* in the drinking water that stimulated body weight gain and increased feed conversion rate, and can be used as growth promoters in rabbit nutrition successfully without notable side effects on growing rabbits. Furthermore, it showed a significant positive effect on the physiology for treatment groups G3, G4 and G2 respectively compared to the control group.

Key words: Immunity, *Lactobacillus acidophilus*, Performance, Probiotic, Rabbit, Thyme oil
The aim of the present genome-wide association study (GWAS) was to identify single nucleotide polymorphisms (SNPs) and candidate genes associated with lactose percentage (LP) and lactose yield (LY) in Egyptian buffalo. The phenotypic dataset included 60,318 monthly regions harbored many candidate genes with biological roles associated with milk production identified for LY. The identified genomic regions are overlapped with previously reported QTL in DOI:

32 significant and seven suggestive SNPs for LP, however; only two suggestive SNPs were counted in the Migacheva-Kotelnikov chamber in each individual sample. The concentration of T. spiralis infected. Maximum concentration of glycogen was recorded 4 months post-infection (0.0930 ± 0.0029 μg/larva). Further, the glycogen level began to decrease slowly. In the 20th month the energy sources of Trichinella larva was 0.0786 ± 0.0023 μg. In the body of intestinal nematodes, 3 hours after infecting the its life in the host organism. The purpose of this study was to investigate the quantitative development was extremely important in the first hours of the helminth's residing in the host's post-infection, after infection, the amount of glycogen in a muscle larvae were isolated by artificial fermenting meat mince in gastric juice. To determine the invasive properties of muscle larvae were infected with laboratory rodents under the vivarium conditions. Sixty-nine white rats (350 g Sidor EA and Andreyanov ON. Trichinella spiralis T. spiralis Trichinella spiralis, laboratory rats were not fed a day before infection. Adult nematodes were isolated from the small intestine of laboratory rats at 3, 6 and 24 hours post-infection. The nematodes were larvae will lose their invasion capacity. 0.0024 μg/ larva on day 28, and 0.0771 ± 0.0025 μg/ larva on day 45 after the rats were infected. Maximum concentration of glycogen was recorded 4 months post-infection (0.0930 ± 0.0029 μg/larva). Further, the glycogen level began to decrease slowly. In the 20th month

Ashour G, Ged A, Fayed A, Ashmary NA and El- Sayed A (2020). Evaluation of Growth Performance, Blood Metabolites and Gene Expression Analysis in Egyptian Sheep Breeds, in any significant effect of interaction between age and breed on plasma total protein measurements, blood metabolites and GH, IGF-1 and Leptin genes in early ages is a good and effect of advanced age on blood glucose and total lipids levels in all sheep breeds. There wasn't change in both the muscular and intestinal stages of Trichinella spiralis in white rats during the infection period


Molecular and Phylogenic Analysis of Bovine Respiratory Syncytial Virus in Nineveh province, Iraq. Molecular diagnosis using nested RT-PCR and phylogenetic analysis of BRSV was made using the neighbor-joining system after comparison with other GenBank data. In Bovine Respiratory Syncytial Virus (BRSV) is one of the worldwide distributed infectious agents present in cattle and subsequently may be useful for infection control programs.

Swab samples were collected from cows with different ages and breeds in different areas across Economic loss due to its negative effects on health and production. In this study, 450 nasal swab samples were collected from cows with different ages and breeds in different areas across economic loss due to its negative effects on health and production. In this study, 450 nasal

Accession number MN129181 Mosul isolate. The phylogenetic tree of local isolates of BRSV was made using the neighbor-joining system after comparison with other GenBank data. In 2020; pii:S232245682000002-10

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The intestinal colonization, cellular responses, mucosal and systemic immune responses of Salmonella Enteritidis bacterin were studied in broiler chickens. Bacterial oligodeoxynucleotide containing Cytosine Guanine motifs (CpG-ODN) has been used in controlling Salmonella infections in a wide range of vertebrate species. The objective of this study was to investigate the effect of CpG ODN on protection and improved survival rate of challenged chickens.

First three groups were immunized with Enteritidis bacterin adjuvanted with aluminum hydroxide and a non-immunized group. Two hundreds one-day-old broiler chicks, divided into five groups, were used in this study. First three groups were immunized with different doses of CpG-ODN (50µg, 100µg and 200µg). The control groups included a group that was immunized with Enteritidis bacterin and a group that was not immunized.

At two weeks post-immunization, 20 chicks from each group were orally challenged by Enteritidis serovar Enteritidis. The survival rates and the pathological changes of challenged chickens in the different groups, were monitored for extra 10 days. Compared to the non-immunized group, there was no recovery of Enteritidis from the intestinal tract of vaccinated challenged groups. There was a significant reduction of CFU/ml. The survival rates and the pathological changes of challenged chickens in the different groups, were monitored for extra 10 days.

In conclusion, the presented findings have shown the significant immunostimulatory effect of CpG-ODN and its effect on the dose-dependent effect of CpG ODN on the induced mucosal responses. The 200-CpG ODN group showed the highest IgA response followed by 100-CpG ODN group then the 50-CpG ODN and the control group. The control group showed no recovery of Enteritidis from the intestinal tract of vaccinated challenged groups. There was a significant reduction of CFU/ml. The survival rates and the pathological changes of challenged chickens in the different groups, were monitored for extra 10 days.

Key words: Salmonella Enteritidis, CpG ODN, Immunomodulatory effect, broiler chickens, Enteritidis bacterin.
Rapid Detection and Differentiation between Sheep Pox and Goat Pox Viruses by...
Using Feed Additives to Produce Functional Eggs in Fayoumi Hens.
Dief Allah RA, Ali MN, EL-Manylawi MAF, Abass AO and Desouky A.
DOI: https://dx.doi.org/10.36380/scil.2020.wvj12

ABSTRACT
Lately, humans have become more apprehensive about their health and their relationship with food. Eggs are considered a cheap source of animal protein and are rich in various essential nutrients that contribute to the quality of human diet. However, their cholesterol content can contribute to some human serious diseases. This study examines the hypothesis that the addition of antioxidants such as CAX, SS, B or their mixtures to the diet can produce functional eggs from Fayoumi hens at the late phase of egg production. A number of 168 Fayoumi hens (46 weeks of age) were randomly assigned into 8 dietary groups as follows: Basal diet alone or with CAX (6 ppm), SS (0.5 g/kg), B (1 g/kg), CAX+SS, CAX+B, SS+B, and CAX+SS+B separately. Forty-eight eggs (6 per each group) were analyzed for estimating cholesterol and total antioxidant capacity. Egg of hens fed a combination of CAX+SS+B which had the best total antioxidant capacity value, while the CAX group recorded the best lowest cholesterol value compared to other groups (P < 0.05). It could be concluded that basal diet supplemented with CAX, SS, B alone or with mixture of them may have a lowering effect on yolk total cholesterol. This could lead to produce functional eggs which have positive effects on human health and are favorable for those suffering from heart syndromes.

Key words: Cholesterol, Fayoumi, Functional Egg, Total Antioxidant Capacity

SDS-PAGE Profile Analysis of SeM-like Protein of Streptococcus equi subspecies equi.
Abdelmageed ShMEl, El-Shafii SElA and El Jakee JKAH.
DOI: https://dx.doi.org/10.36380/scil.2020.wvj13

ABSTRACT
Streptococcus equi subspecies equi is a major pathogen of horses, causing strangles. This study aimed to extract SeM protein from a local S. equi strain in Egypt and to detect its antigenic components. After centrifugation, the native 58 kilo Dalton (kDa) SeM protein was detected both in the supernatant and sediment of the prepared extract. With modification by more centrifugation, the formed supernatants were separated and fractionated using SDS-PAGE with silver nitrate staining, which led to the appearance of a band at Molecular Weight (MW) 70.9 kDa in SeM1, the presence of 7 bands at MW of 105, 87.8, 70.9, 61.1, 44, 37.9 and 18.4 kDa in SeM2; 5 bands at MW 70.9, 58.9, 37.2, 29.8 and 18.3 kDa in SeM3 and 4 bands at MW of 72.0, 58.6, 29.8 and 18.0 kDa in SeM4. This study suggested that a further modification of SeM extraction revealed the presence of heterogeneous complex fragments of SeM.

Key words: SeM protein, SDS-PAGE, Strangles, Streptococcus equi subspecies equi

Evaluation of The Efficacy of Oxytetracycline on Experimentally Induced Caprine Coccidiosis Due to Eimeria arloingi Infection.
Mikail HG, Saidu SNA and Mamman M.
DOI: https://dx.doi.org/10.36380/scil.2020.wvj14

ABSTRACT
Coccidiosis is a protozoan disease caused by members of the genus Eimeria that affect domestic animal species. The current study was aimed at evaluating the effect of oxytetracycline administration on experimental caprine coccidiosis. Sixteen red Sokoto goat kids divided into four groups (A to D) of four goat kids each, were used for the study. Groups A, B and C were infected by oral inoculation with two ml containing 1.5 ×10^3 sporulated oocysts of Eimeria arloingi per animal, while group D was the neutral control group. Group A was treated with 10% oxytetracycline intramuscularly daily for five days. Group B was treated with Sulfadimidine 33.3% subcutaneously daily for five days and group C served as an infected untreated group. Fecal oocysts per gram count was conducted during the experiment. The present result showed a significant decrease (P ≤ 0.05) in fecal oocysts load in the treated groups. Neither schizonts nor merozoites were detected in the intestinal smear of kid treated with oxytetracycline but were detected in the intestinal smear of infected untreated goat kid. Cystic degenerative changes were seen in the intestinal glandular cells of the infected untreated goat kid. Conclusively, the current finding suggests that oxytetracycline can effectively be used in treating caprine coccidiosis.

Key words: Coccidiosis, Caprine, Eimeria arloingi, Goat Kids, Oxytetracycline, Treatment
Determination of the Appropriate Inoculum Dose and Incubation Period of Cassava Leaf Meal and Tofu Dreg Mixture Fermented with Rhizopus oligosporus

The inoculum dose (6, 8 and 10%), and the incubation period of the fermentation (2, 3, 4, and 5 days), with 4 replications. The appropriate inoculum dose to ferment CIM and TD mixture with R. oligosporus was 10% at each incubation period. In the meanwhile, the appropriate incubation period was 3 days for each inoculum dose.


Key words: Buck, Melatonin, Motility, Transcript abundance

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