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 \textit{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 \textit{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 \textit{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 \textit{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.

\textbf{Key words}: Immunity, \textit{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 genomic loci associated with lactose traits in Egyptian buffalo. The phenotypic dataset included 60,318 monthly records of lactose percentage (LP) and lactose yield (LY) in Egyptian buffalo. The GWAS revealed significant associations for LP and LY with several genomic regions on the bovine genome. The identified genomic regions are overlapped with previously reported quantitative trait loci (QTL) in buffalo and cattle. The identified SNPs and genomic loci could be useful for further genetic studies and selection programs to improve lactose traits in Egyptian buffalo.

Key words: Genome-wide association study, lactose, Egyptian buffalo, lactose traits.
Key words: were determined by Agar Gel Precipitation Test (AGPT), Counter Immune Electrophoresis (CIE) were vaccinated in Chorio-Allantoic-Membranes (CAM) from 10-days-old embryonated-chicken.

Sheep and goats in different governorates in 2017 during outbreaks in Egypt using the gene RP030 gene and real-time-PCR considered sensitive, rapid, and reliable methods for DNA extraction from clinical samples and positive CAM with pox lesions using DNA slandered Skin Disease Virus (LSDV) are three members of the Capripox virus genus of Poxviridae family.

PCR based RNA polymerase gene RP030 and the real-time qPCR showed 15 positive with percentage 27.77% differentiating SPPV and GTPV from AGPT and CIE in CAM or in clinical samples without post-processing steps.

Rapid Detection and Differentiation between Sheep Pox and Goat Pox Viruses by Real-Time qPCR and Conventional PCR in Sheep and Goat in Egypt.

Skin biopsy samples

DNA extraction by Microwave methods

RT-qPCR

C-PCR


ABSTRACT

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Stillbirth in pig has been studied worldwide, but, its situation in Vietnam has never been reported. Therefore, present study aimed to investigate effects of herd, parity, gestation length, birth litter size and farrowing duration on stillbirth at sow level in swine farms in Vietnam.

Data were analyzed using logistic regression. The actual data recorded during three trimesters according to the curved crown-anus measurement system are recorded. The incidence of stillbirth was 4.2% in this study. The odds ratios of risk factors were calculated and the significant risk factors for stillbirth were identified by logistic regression.

CI=1.33-2.64), a gestation length <114 days (OR=1.80, 95%CI=1.23-2.65), a birth litter size ≥9 piglets (OR=1.64, 95%CI=1.04-2.61) and a farrowing duration ≥5 hours (OR=1.48, 95%CI=1.05-2.09) were risk factors for stillbirth. This study indicated that stillbirth was common issue to be dealt with in swine farms in Vietnam.

Key words:

 destined to be used as an indicator of the herd health status. Typical risks factors, such as herd management practices, nutrition, and environmental conditions were evaluated.

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Biochemical components including Total Protein (TP), albumin, globulins, cholesterol, triglycerides, lipoproteins, creatinine, Na, K, Cl, Ca and inorganic-P were measured in cattle Amniotic Fluid (AF) and Maternal Serum (MS) during the first, second and third trimesters of pregnancy, and in Fetal Serum (FS) at birth. At birth AF, MS and FS were collected. Maternal blood samples and gravid uteri were collected after accidental slaughter. The actual data recorded during three trimesters according to the curved crown-anus measurement system are recorded.

Our results indicated an active transport for Ca and P. The TP, albumin, globulins, cholesterol, triglycerides, lipoproteins, creatinine, Na, K, Cl, Ca and inorganic-P were significantly higher than the AF during the first trimester of pregnancy in cattle and Fetal Serum (FS) at birth. At birth AF, MS and FS were collected. Maternal blood samples and gravid uteri were collected after accidental slaughter. The actual data recorded during three trimesters according to the curved crown-anus measurement system are recorded.

Comparison between Biochemical Analysis of Cattle Amniotic Fluid and Maternal Serum Components during Pregnancy.

These components are important diagnostic criteria for checking the fetuses health and gestational age. Typically, research papers have used these components to check the health status of maternal, fetal and neonatal diseases.


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Lately, human have become more apprehensive for the health and their food relationship. Egg considered a cheap source of animal protein. Eggs are rich in various essential nutrients that contribute to the quality of human diet. But its cholesterol can contribute with some human serious diseases. The current study examines the hypothesis that assumed addition of antioxidant such as CAX, SS, B or their mixtures to the diet can produce functional egg from Fayoumi hens at 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 lowering effect on yolk total cholesterol. This could lead to produce functional eggs which have positive effects on human health and favorable for those suffering from heart syndromes.

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

ABSTRACT
S. equi subspecies equi, causing strangles in equine, is characterized by comprising a major virulence factor called M-like protein or SeM protein. This study aimed to extract SeM protein from 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

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 CLM 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.


Quantitative real-time PCR analysis for gene expression profile

Melatonin


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