Research Paper

Molecular Analysis of *Coxiella Burnetii* by Isocitrate Dehydrogenase Gene Sequence-Based Typing and PCR-RFLP in Isfahan, Iran.

Nokhodian Z, Khalili M, Ataei B, Feizi A, Moradi A, Rostami S and Yaran M.

ABSTRACT

In the recent years, considerable advances have been made in the detection and genotyping of Coxiella burnetii, the causative agent of Q fever. The selection of appropriate genotyping method has enabled description of the clonal diversity of C. burnetii around the word. Since, in the place of study, C. burnetii genotyping has not been done, the icd gene Restriction fragment length polymorphism (RFLP) and sequence-based typing for differentiation between the genomic detected C. burnetii from the various sources and compared the two methods is used. In a observational study, a total of 15 genomic positive cases of C. burnetii infection from different sources in Isfahan province (Central Iran) were enrolled and underwent two genotyping methods: the icd gene PCR-RFLP and icd gene sequence-based typing. The degree of similarity between the icd gene sequences was high (98.3-100%). In compare with C. burnetii Nine Mile icd gene sequence, the nucleotide sequences were different at 11 positions, which resulted in 7 differences in the amino acid sequences. After digesting the 370 bp amplified icd gene fragments all the samples indicated only one band of 370bp, while amplified C. burnetii Nine Mile strain icd gene were digested into two bands with sizes of 221bp and 149bp. The results of two genotyping methods matched together. Used methods in present study were cheaper and easier than new methods and they can used for detection of acute and chronic phases of
infection.

**Keywords**: *Coxiella burnetii*, Isocitrate dehydrogenase, Iran, Restriction fragment length polymorphism, Sequence-based typing

The Protective Role of Date Palm (*Phoenix Dactylifera* Seeds) against Aflatoxicosis in Broiler Chickens Regarding Carcass Characteristics, Hepatic and Renal Biochemical Function Tests and Histopathology.

Abdel-Sattar WM, Sadek KM, Elbestawy AR and Mourad DM.

ABSTRACT

Harmful effects caused by aflatoxin (AF) directed researchers towards to find out new strategies for its control and detoxification increasing the safety of poultry feed. The aim of the present work was to study the protective role of date pits (*Phoenix dactylifera*) seeds against aflatoxicosis regarding carcass traits, biochemical function tests and histopathology of both liver and kidney in broiler chickens. 210 one-day old Arbor Acres broiler chicks were allotted into 7 equal groups as the first control (G1) supplemented by the basal diet, G2 had the basal diet with date pits supplementation 2%, G3 fed on the basal diet with date pits 4%, G4 was fed a basal diet containing 100µg aflatoxin/kg (100 ppb). G5 fed on a basal diet containing Hydrated Sodium Calcium Aluminum Silicates (HSCAS) 0.3% plus aflatoxin, (G6) fed a basal diet containing date pits 2% plus aflatoxin and finally G7 fed a basal diet containing date pits 4% plus aflatoxin. The aflatoxin supplemented to the broiler ration from first day to the end of experiment at 35 days. Aflatoxins supplementation significantly increased relative liver and small intestine weight, affect liver and kidney biochemical function tests and induced histopathological changes as fatty degeneration of hepatocytes, and interstitial nephritis with mononuclear cell infiltrations in both liver and kidney, respectively. However, addition of date pits (2% and 4%) and HSCAS (0.3%) to broiler's diet partially ameliorated these harmful effects of aflatoxins, indicating their protective effect against aflatoxicosis and this protection is dose-related. Addition of date palm seed (2% and 4%) gave a better results regarding carcass traits, biochemical parameters and histopathological examination of liver and kidney, finally concluding that date palm seed powder could be used as an effective feed additive to control aflatoxicosis in poultry with avoiding harmful effect of chemical mycotoxin binders (HSCAS). Keywords: Aflatoxins, Broilers, Biochemical traits, Carcass characteristics, Date palm, Histopathological changes.
Potency of Sansevieria masoniana Extract against Antimicrobial Resistant Bacteria

became necessary because of some bacteria resistant against several antibiotics. This study

DOI: 10.36380/scil.2019.wvj10

Proteus sp (40.31%), Pseudomonas sp.

method, and SM extract using minimum inhibitory concentration test. The isolated bacteria were

commercial antibiotics. The minimum concentration of SM extracts that potential to inhibit the

Enterobacter cloacae

Salmonella enterica arizonae (96.89%),

Isolated from Faeces of Pet – Reptile. Reptile plays an essential role in human life and act as a reservoir of pathogenic bacteria. It

proved that SM extract potential to inhibit the colonisation of the isolated bacteria from faeces of

(55.03%), and

Escherichia coli

ABSTRACT

aimed to evaluate the potency of

(82.17%), (32.55%),

Keywords: bacteria from the faeces of pet-reptile. A total of 129 fresh faecal samples were collected from

the reptile communities in Surabaya on February 2018 until January 2019. The faeces obtained

(76.74%),

Enterococcus sp colonisation of both resistant and susceptible isolated bacteria was 62.5 mg/mL. This study

Kurnianto A, Puspitasari, Widyaningrum LY, Widiyono I and Prakoso YA.

hairline crack eggs of young flocks were better than old flocks due to a better quality of eggs

shell. The chicks from normal eggs were also significantly better than chicks from hairline crack

eggs in terms of mortality, feed intake, weight gain and FCR. The hairline crack eggs are the

DOI: 10.36380/scil.2019.wvj11

percentage were also significantly better for normal eggs compared to hairline crack eggs. The

age and good quality eggshell. The lowest hatchability was found for SP117 which is the oldest

packaging. The defects like breakage of this packaging increase the risk of microbial

contamination. In this experiment, the crack eggs like hairline crack eggs were detected by

dead in the shell for normal and hairline crack eggs. The highest hatchability (49.07 ± 0.51b)

eighteen different breeder farms. Each group contained (n= 50,000) eggs. The hairline crack

eggs were compared with normal eggs for hatchability, candling, putrification/blasting and dead

in shell. Significant difference was found for hatchability, candling, blasting/putrification and

infertile, contaminated eggs and 3rd week mortality were found for hairline crack eggs as

hairline crack eggs was found for SSF6 f, SSF1 for the hairline crack eggs while lowest blasting was found for AP27 due to young

Sanovo STAALKAT Alpha 125 Machine number JB 11786. The eggs were collected from

Jabbar A, Hameed A, Yousaf A, Riaz A and Ditta YA (2019). The


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Alzuheir IM (2019). Epidemiological Study of Peste Des Petits Ruminants in Sheep and


Peste des petits ruminants vaccination rate in Palestine was low and not well organized, ranged

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The objective of this study was to analyze the epidemiological occurrence of Peste des petits

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reports of world organization for animal health, submitted by the general directorate of


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The blasting/putrification and dead in the shell were significantly

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Keywords:

Epidemiology, Goat, Palestine, Peste des petits ruminants, Sheep

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This study conducted to investigate the effects of dietary zeolite on egg production, egg quality, and blood constituents of laying hens. Sixty laying hens were randomly divided into three groups (S1, S2, and T) and hens drank saline well water or tap water and fed diets containing 2% or 4% zeolite. Hens in the S group had significantly increased egg weight compared to hens in the T, T1, and T2 groups. Egg number, egg mass, and egg albumen index significantly increased in the hens of S compared to them in T, T1, and T2 groups. Egg shell thickness was significantly decreased in the S group compared to other treatments. The hens of S had significantly improved feed conversion ratio compared to the hens of the S group. Moreover, alanine transaminase, aspartic transaminase, creatinine, total protein, and globulin were significantly increased in the hens of the S group compared to other treatments. Hens in the S group had significantly higher packed cell volume and total antioxidant capacity compared to other treatments. Aldosterone hormone was significantly decreased in the hens of the S group compared to other treatments. Laying hens drinking saline well water, addition of zeolite to laying hens' diets at levels 4% might improve feed efficiency and productivity. Hens in the S group showed an increase in total antioxidant capacity when compared to the hens of T1. Conception rate was higher in the does of T5 than that in T3, T4, and T6. Litter traits, productive and reproductive performances, best digestibility for CP%, DCP, and economic efficiency improved in the rabbits exposed to heat shock programs. Applying heat shock exposure programs of rabbits especially T3 levels and overall mortality rate significantly decreased in the rabbits exposed to heat shock programs. In conclusion, applying heat shock exposure programs of rabbits especially T3 levels and overall mortality rate significantly decreased in the rabbits exposed to heat shock programs. In conclusion, applying heat shock exposure programs of rabbits especially T3 levels and overall mortality rate significantly decreased in the rabbits exposed to heat shock programs.
ABSTRACT

Potential Ameliorative Effect of Bee Honey on Experimentally Induced Melamine Formaldehyde Toxicity in Male Rats.

DOI:

Keywords: Melamine, Vital assets toxicity, Bee's honey, White albino rats

ABSTRACT

The study was planned to evaluate the effect of different levels and forms of biological additives mixtures on Barki ewes productivity. The first mixture of probiotic added as liquid forms (Mixture Probiotic Liquid, MPL), and the second mixture of probiotic added as solid forms (Mixture Probiotic Powder, MPP). The number of lambs born alive was significantly higher in MPP groups [19 lambs for group 5% for G2, G3, G4 and G5, respectively, while the mortality rate increased (P<0.05) by 11% in group 2. During pregnancy and lactation stages, MPL and MPP groups recorded significantly higher weaning weights as well as average daily gain increased (P<0.05) in MPL and MPP groups. The birth and weaning weights as well as average daily gain increased (P<0.05) in MPL and MPP groups. The milk yield tended to increase in MPP then MPL groups. The birth and weaning weights as well as average daily gain increased (P<0.05) in MPL and MPP groups. The milk yield tended to increase in MPP then MPL groups.

ABSTRACT

A Review on the Role of Lipid in Selected Apicomplexan, Anaerobic, Kinetoplastid and Intestinal Parasitic Infections.

ABSTRACT

The prevalence of rabbit coccidiosis in Medea province, Algeria, among the rabbit population in Medea province, North of Algeria. As a conclusion, it seems that the prevalence of rabbit coccidiosis is high against rabbit coccidiosis than colistin and trimethoprim association (P< 0.0001, prevalence of 46.8%, 30/64) and the adult rabbits showed the lowest prevalence (36%, 18/50). In breeding and fattening rabbits, the prevalence rate (41.6%, 49/119) is higher than the adult rabbits (36%, 18/50). The results indicated that the prevalence of rabbit coccidiosis is high against rabbit coccidiosis than colistin and trimethoprim association (P< 0.0001). Eleven rabbit samples were subjected to oocyst counting and isolation. The sample was subjected to oocyst counting and isolation.