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

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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

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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.
Sansevieria masoniana Extract against Antimicrobial Resistant Bacteria Isolated from Faeces of Pet – Reptile

Keywords: Antibiotic, Pet – reptile, Reservoir, Resistance, Sansevieria masoniana.

Potency of Sansevieria masoniana Extract against Antimicrobial Resistant Bacteria Isolated from Faeces of Pet – Reptile

ABSTRACT

Research Paper

Keywords: Potency, Sansevieria masoniana, Extract, Antimicrobial Resistant Bacteria, Faeces, Pet – reptile.
group (S1), hens drank saline well water and fed diet containing 2 % zeolite. The 3

Laying Hens Drinking Saline Well Water in South Sinai.

The 2

Saccharomyces cerevisiae yeast treatment didn't effect on digestibility and nutritive value of growing rabbits.

Aldosterone hormone was significantly decreased in the hens of S group compared to other treatments. In conclusion, under group (S2), hens drank saline well water and fed diet containing 4 % zeolite. Red blood cells aspartic transaminase and creatinine were significantly increased in the hens of S group compared to them in T, T1 and T2 groups. Egg weight significantly increased in the hens of T1, T2 and S2 compared to hens in T, S and S1 groups. Hens of T1, T2 and S2 groups had significantly improved feed conversion compared to hens of S group. Hens of S group had significantly decreased shell thickness compared to other treatments. DOI: 10.36380/scil.2019.wvj14

The current study investigated the effect of replacement of Untreated Orange Pulp (UOP) and Treated Orange Pulp (TOP) protein by basal diet protein on growth performance, digestion coefficients, some blood constitute of rabbits and economic efficiency of growing rabbit diets. Experimental design and feeding trial of growing New Zealand White rabbits (6-14 weeks of age) fed treated orange pulp by Saccharomyces cerevisiae yeast. Total lipid of plasma was significantly differences (P˂ 0.05) in groups fed experimental diets were T1, control diet without OP; T2, 5%UOP; T3, 5% TOP; T4, 10%UOP and T5, 10%TOP. The results indicated that TOP by

Research Paper


Keywords: Heat stress, HSP70, Physiological responses, Productive and reproductive performance, Rabbits

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 at 3, 25, 60, 3+25 and 3+25+60 days of age, respectively. HSP70 expression and Conception rate was higher in the does of T5 than that in T3, T4 and T6. Litter traits, productive


DOI: 10.36380/scil.2019.wvj14

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

Mechanism to mobilize lipid

Lipid droplets

Parasites from each groups

PROBIOTICS

Potential Ameliorative Effect of Bee’s Honey on Experimentally Induced Melamine Formed-Urea Toxicity in Male Albino Rats

2.5 gms/kg B. w

Melamine 0.9 g

Melamine 1000 ppm

Melamine 5000 ppm

Melamine 10000 ppm

5 Male albino rats

5 Male albino rats

5 Male albino rats

No remarkable toxic effects

Reduced toxic effects

Bachene MS, Temim S, Ainbaziz H and Bachene A.

World Vet. J.

Keywords:

Melamine, Vital assets toxicity, Bee’s honey, White albino rats

Biological additives, Productive performance, Reproduction, Milk, Barki sheep

Infection, Lipid, Parasitic, Role

In this work seven animal groups (five rats for each), group 1; negative control, while groups 2, 4, 6 received melamine-formaldehyde orally at dose 0.9 g/kg b.w and 10, 50 and 100 mg/kg b.w respectively for 45 days. Results indicated that melamine was toxic to the liver, lung, heart and intestine. Rats treated showed oxidative, biochemical, hematological changes as well as pathological alterations in vital assets especially liver and urinary system. As distension of the urinary bladder, crystals deposition and stone formation were detected with variable degrees in melamine treated rats. Melamine is considered as one of urea derivatives. Recently it is added to feed stuffs for industrial purposes (falsely elevate its protein contents), however addition of melamine resulted in severe changes depending upon the dose of melamine. Interestingly, rats treated with melamine Formaldehyde showed significant increased oxidative, biochemical, hematological changes as well as pathological alterations in vital assets, especially liver and urinary system. As distension of the urinary bladder, crystals deposition and stone formation were detected with variable degrees in melamine treated rats.