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 world. 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.
Antibiotic, Pet – reptile, Reservoir, Resistance, Sansevieria masoniana, Salmonella enteritidis, Salmonella enterica arizonae, Enterobacter cloacae, Pseudomonas sp, Escherichia coli, Enterococcus sp, Pet – reptile, even though, several of those isolates resistant against several commercial antibiotics. The minimum concentration of SM extracts that potential to inhibit the colonisation of both resistant and susceptible isolated bacteria was 62.5 mg/mL. This study

Keywords: Potency of Sansevieria masoniana Extract against Antimicrobial Resistant Bacteria

Research Paper

Isolated from Faeces of Pet – Reptile.

ABSTRACT

Research Paper


The purpose of study was to evaluate the influence of hairline crack eggs on hatchery parameters and later life of chicks. The study was conducted from October to December 2018 at Chakri hatchery Salman Poultry Pvt. Ltd Pakistan to evaluate the outcomes of hairline crack and infertile, contaminated eggs and 3rd week mortality were found for hairline crack eggs as compared normal eggs of same flocks. The highest blasting was found for AP27 due to young infertile, contaminated eggs and 3rd week mortality were found for hairline crack eggs as compared normal eggs of same flocks. The blasting/putrification and dead in the shell were significantly higher for hairline crack eggs as compared normal eggs of same flocks. The highest blasting of shell. The chicks from normal eggs were also significantly better than chicks from hairline crack

Keywords: Candling, Dead in shell, Hairline crack, Hatchability, Water loss
This study was conducted to investigate the effects of dietary zeolite on egg production, egg quality, and blood constituents of hens under drinking saline well water. 180 hens were randomly divided into groups (S), hens drank saline well water and fed basal diet. 5

Comparative analysis demonstrated that the T1, T2 and S2 groups showed significant differences (P<0.05) in egg production, egg mass, and hemoglobin compared to other treatments. Hens of S group showed significant decrease in total protein, globulin, glucose and total antioxidant capacity concentrations as compared to the hens of T and T2 groups. Alanine transaminase, aspartic transaminase and creatinine were significantly increased in the hens of S group as compared to other treatments. In conclusion, under saline drinking water, the addition of zeolite to laying hens' diets at levels 4% might improve productive performance and eggshell quality.
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A Review on the Role of Lipid in Selected Apicomplexan, Anaerobic, Kinetoplastid and Intestinal Parasitic Infections.

Lipids are a diverse class of biomolecules that play a major role as energy source, membrane permeability and fragility of host cells, support the insertion of parasite into the host cell membrane, and promote growth, invasion and optimal replication of the organism. In anaerobic infections, such as Crohn's disease and inflammatory bowel disease, lipid micelles and vesicles are associated with the pathogenesis of disease. In the trypanosomatid, the parasites for disease pathogenesis, differentiation and survival of larvae in the host tissue. This infection.

Yesuf M and Kenubih A.

The apicomplexan parasites utilized lipid particles for various purpose including changing adaptive immunity and support pathogen survival. The lipid bodies also utilized by the intestinal parasitic infections. Lipid particles are fundamentally engaged in facilitation and respiratory burst to inhibit the host immune system. The associations between parasites and the adaptive immunity and support pathogen survival. The lipid bodies also utilized by the intestinal parasitic infections. Lipid particles are fundamentally engaged in facilitation and respiratory burst to inhibit the host immune system.

El-Hawy AS, El-Bassiony MF, Abo Bakr S, Gawish HA, Badawy MT and Gado HM.

Prevalence of Rabbit Coccidia in Medea Province, North of Algeria. A total of 414 faecal samples were collected from 50 farms in six regions of the province. Each faecal sample was subjected to oocyst counting and isolation. The prevalence of coccidiosis is high among the rabbit population in Medea province, North of Algeria. As a conclusion, it seems that Coccidiosis has an economic impact for poultry and livestock. The current study examined the epidemiological situation of rabbit coccidiosis in Medea province must be taken into account.

Mohamed Sadek Bachene, Sorawi Temim, Hassina Anibaz Asma.

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

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

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

2.5 g/kg B.w

Melamine 0.5 g

Melamine 5000 ppm

Melamine 5000 ppm

5 Male albino rats

5 Male albino rats

5 Male albino rats

No remarkable toxic effects

Reduced toxic effects