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

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**Research Paper**

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.

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Isolated from Faeces of Pet – Reptile. Research Paper proved that SM extract potential to inhibit the colonisation of the isolated bacteria from faeces of 

\textit{Escherichia coli} colonisation of both resistant and susceptible isolated bacteria was 62.5 mg/mL. This study commercial antibiotics. The minimum concentration of SM extracts that potential to inhibit the antibiotics. 

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

\textit{Enterobacter cloacae} (53.48%). Those isolated bacteria indicated various resistance patterns against several 

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

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

\textit{Salmonella enterica arizonae} pet-reptile, even though, several of those isolates resistant against several commercial 

system. All the isolated bacteria were tested against several antibiotics using disc diffusion 

DOI: 

\textit{World Vet. J.} (96.89%), 

\textit{ABSTRACT} Potency of \textit{Sansevieria masoniana} Extract against Antimicrobial Resistant Bacteria 

\textit{Proteus sp} (48.83%), 

\textit{ABSTRACT} The Influence of Hairline Crack Eggs on Hatchery Parameters and Chicks Performance. 


ABSTRACT 

Potency of \textit{Sansevieria masoniana} Extract against Antimicrobial Resistant Bacteria Isolated from Faeces of Pet – Reptile 


ABSTRACT 

Keywords: Antibiotic, Pet – reptile, Reservoir, Resistance, \textit{Sansevieria masoniana}. 

Candling, Dead in shell, Hairline crack, Hatchability, Water loss 

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


This study conducted to investigate the effects of dietary zeolite on egg production, egg quality and physiological responses of laying hens under drinking saline well water. 180 hens were randomly divided into six equal groups (30 hens/group) and fed with basal diet containing different levels of zeolite (2% and 4%) and drinking tap water or saline well water. Egg weight, albumen height, shell thickness, aspartic transaminase and creatinine were significantly increased in the hens of T2 compared to them in T, T1 and T2 groups. Egg weight significantly increased in the hens of S group compared to other treatments. Aldosterone hormone was significantly decreased in the hens of S group compared to other treatments. Hens of S group (T1) had the highest value for total lipid of plasma. Red blood cells and hemoglobin were significantly lower in the hens of S compared to other treatments. Hens of S group showed a significant improvement in egg production and egg quality compared to other treatments. In conclusion, under drinking saline well water, addition of zeolite to laying hens’ diets at levels 4% might improve water and feed consumption, as well as egg production and quality. The best digestibility for CP%, DCP and economic efficiency was achieved in the rabbits fed with experimental diets containing 5% TOP.
A Review on the Role of Lipid in Selected Apicomplexan, Anaerobic, Kinetoplastid and Intestinal Parasitic Infections.

**ABSTRACT**

Productive and Reproductive Performance and Metabolic Profile of Barki Ewes

**ABSTRACT**

Prevalence of Rabbit Coccidia in Medea Province, Algeria.

**ABSTRACT**

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