Research Paper

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
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.

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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 100 µg 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.
Antibiotics Isolated from 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 from the reptile were tested against several antibiotics using disc diffusion method, and SM extract using minimum inhibitory concentration test. The isolated bacteria were able to colonise both resistant and susceptible isolated bacteria was 62.5 mg/mL. This study proved that SM extract potential to inhibit the colonisation of the isolated bacteria from faeces of pet-reptile, even though, several of those isolates resistant against several commercial antibiotics. The purpose of study was to evaluate the potency of SM extract against the isolated bacteria from faeces of pet-reptile.

The Influence of Hairline Crack Eggs on Hatchery Parameters and Chicks Performance.

The purpose of study was to evaluate the influence of hairline crack eggs on hatchery parameters and chicks performance. The study was conducted from October to December 2018 at Chakri hatchery Salman Poultry Pvt. Ltd Pakistan to evaluate the outcomes of hairline crack eggs. The hairline crack eggs of young flocks were better than old flocks due to a better quality of eggs and good quality eggshell. The lowest hatchability was found for SP117 which is the oldest flock having thin egg shells. The blasting/putrification and dead in the shell were significantly higher for hairline crack eggs compared to normal eggs for SSF5 flock. The water loss, chick yield and culling chicks at Chakri hatchery Salman Poultry Pvt. Ltd Pakistan to evaluate the outcomes of 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 dead in shell for normal and hairline crack eggs. The highest hatchability (49.07 ± 0.51b) for normal eggs was found for SSF6 flock, while for hairline crack eggs was found for AP27 due to young age and good quality eggshell. The lowest hatchability was found for SP117 which is the oldest flock having thin egg shells. The blasting/putrification and dead in the shell were significantly higher for hairline crack eggs compared to normal eggs. The water loss, chick yield and culling chicks were also significantly better for normal eggs compared to hairline crack eggs. The appropriate data recording, improving owner awareness, expand the use of the Peste des petits ruminants vaccine and a systematic disease monitoring program are required to control the spread of the disease.
Effect of Zeolite Dietary Supplementation on Physiological Responses and Production of Laying Hens Drinking Saline Well Water in South Sinai.

Emam KRS, Toraih HM, Hassan AM, El-Far AA, Morsy AS and Ahmed NA.

This study conducted to investigate the effects of dietary zeolite on egg production, egg quality and hemoglobin were significant lower in the hens of S compared to other treatments. Hens of S compared to them in T, T1 and T2 groups. Egg weight significantly increased in the hens of group (S2) compared with hens in T and S groups. Egg number and egg mass were significant increase in the hens of group (S2), hens drank saline well water and fed diet containing 4 % zeolite. Red blood cells count, packed cell volume and hemoglobin concentration increased in the hens of S group 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. Total protein, globulin, glucose and total antioxidant capacity concentrations as compared to the hens of T and T2 groups.
A Review on the Role of Lipid in Selected Apicomplexan, Anaerobic, Kinetoplastid and Intestinal Parasitic Infections.

Intestinal Parasitic Infections.

Prevalence of Rabbit Coccidia in Medea Province, Algeria.

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