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

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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
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.
commercial antibiotics. The minimum concentration of SM extracts that have potential to inhibit the bacteria from the faeces of pet-reptile. A total of 129 fresh faecal samples were collected from pet-reptile, even though several of those isolates were resistant against several commercial antibiotics (76.74%), even though the method, and SM extract using minimum inhibitory concentration test. The isolated bacteria were found to be colonisation of both resistant and susceptible isolated bacteria was 62.5 mg/mL. This study aimed to evaluate the potency of Sansevieria masoniana Extract against antimicrobial resistant bacteria including Salmonella enteritidis, Enterococcus sp, Salmonella enterica arizonae, Pseudomonas sp, and Bacillus subtilis. All the isolated bacteria were tested against several antibiotics using disc diffusion method. The results showed that the SM extract was more potent against Enterococcus sp, Salmonella enteritidis, Pseudomonas sp, and Bacillus subtilis compared to other bacteria. Potency of Sansevieria masoniana Extract against Antimicrobial Resistant Bacteria (Abstract).
Effect of Zeolite Dietary Supplementation on Physiological Responses and Production of Laying Hens Drinking Saline Well Water in South Sinai.

Research Paper

DOI:

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 productive performance of laying hens drinking saline well water. 180 hens were randomly divided into six equal groups (30 hens / group). 1

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S compared with hens in T and S groups. Egg number and egg mass were significantly increased in the hens of T2 group (T2), hens drank tap water and fed diet containing 4 % zeolite. 4

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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. In conclusion, under drinking saline well water, addition of zeolite to laying hens' diets at levels 4 % might improve productive performance and eggshell quality.

Key words:

World Vet. J.

DOI:

Abd Elmonem Suliman M, Rushdy Eltanani R and Fathy Abdel-Mawla L.

This 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 coefficient of Crude Protein and Digestible Crude Protein (DCP%), some blood constitute of rabbits and economic efficiency of growing rabbit diets.

Influence of Treated Orange Pulp on Growth Performance, Nutrients Digestibility and Plasma Constituents of Rabbits.

Research Paper

DOI:

Abd Elmonem Suliman M, Rushdy Eltanani R and Fathy Abdel-Mawla L.

Sixty cross bread (New Zealand White, NZW X California), six weeks of age with live body weight (FBW, g), Body Weight Gain (BWG, g/R/day) and feed conversion ratio recorded in 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 Saccharomyces cerevisiae treatment didn't effect on digestibility and nutritive value of growing rabbits. Best economic efficiency observed with 10%UOP yeast treatment and replacement level of OP. The current study investigated the effect of replacement of Untreated Orange Pulp (UOP) and Treated Orange Pulp (TOP) on Growth Performance, Nutrients Digestibility and Plasma Constituents of Rabbits.

In conclusion, under hot desert conditions at Egypt. 120 Rabbits under Hot Desert Conditions.

Heat stress, HSP70, Physiological responses, Productive and reproductive programs. Red blood cells count, packed cell volume and hemoglobin concentration increased significantly (P˂ 0.05) in groups fed experimental diets compared to control group. Liver function was significantly affected by experimental diets, 5%TOP. Total lipid of plasma was significantly differences (P˂ 0.05) in groups fed experimental diets followed by 5%TOP. It was concluded that rabbit group fed 5%TOP recorded a better expression to improve production of rabbits reared under hot desert conditions at Egypt.
A Review on the Role of Lipid in Selected Apicomplexan, Anaerobic, Kinetoplastid and Intestinal Parasitic Infections.

**ABSTRACT**

**Keywords:** Lipid, Parasitic infection, Apicomplexan, Anaerobic, Kinetoplastid.

**COVID-19 and Parasitic Infections**

The COVID-19 pandemic has highlighted the importance of understanding the role of lipids in parasitic infections. Parasites often depend on host lipids for their survival and development. This review discusses the mechanisms by which lipids are utilized by various parasites and their implications in the context of parasitic infections.

**Lipid Utilization by Parasites**

Parasites like the apicomplexan Plasmodium, the anaerobic parasite Helicobacter pylori, and the kinetoplastid Trypanosoma cruzi rely on host lipids for various purposes, including energy production, membrane synthesis, and signaling pathways. The review highlights how these parasites can remodel or metabolize host lipids to their advantage during the infection process.

**Conclusion**

Understanding the role of lipids in parasitic infections is crucial for developing effective therapeutic strategies. Further research is needed to explore the specific mechanisms by which different parasites adapt to host lipids and to identify potential targets for novel anti-parasitic drugs.

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**References**