Molecular Analysis of \textit{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.

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 the 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 an 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 comparison 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 be used for detection of acute and chronic phases of the disease.
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.
Potency of Sansevieria masoniana Extract against Antimicrobial Resistant Bacteria Isolated from Faeces of Pet – Reptile

Presented by: A Rumianto, Puspitasari, IY Widyaningrum, Ikhwan Widjpon, Ya Prakoso

Isolated from Faeces of Pet – Reptile. Enterococcus sp, Proteus sp, the reptile communities in Surabaya on February 2018 until January 2019. The faeces obtained (53.48%). Those isolated bacteria indicated various resistance patterns against several antibiotics. Became necessary because of some bacteria resistant against several antibiotics.

Keywords: colonisation of 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 reptile. A total of 129 fresh faecal samples were collected from 72 snakes, 43 lizards and 14 tortoises. The isolation was conducted using the Micro ID Potency of Sansevieria masoniana Extract against Antimicrobial Resistant Bacteria


The 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 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) was found for normal eggs as compared normal eggs of same flocks. The highest blasting of infertile, contaminated eggs and 3rd week mortality were found for hairline crack eggs as compared to normal eggs. The hairline crack eggs of young flocks were better than old flocks due to a better quality of eggs 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 contamination. In this experiment, the crack eggs like hairline crack eggs were detected by simple hatch debris analysis, the highest 1stweek mortality, and lowest candling (9.98 ± 0.064a) for hairline crack eggs were found for AP27 due to young flock having thin egg shells. The blasting/putrification and dead in the shell for normal and hairline crack eggs. The highest hatchability (49.07 ± 0.51b) was found for normal eggs compared to hairline crack eggs for SSF5 flock. The water loss, chick yield and culling chicks age with good quality eggshell. On simple hatch debris analysis, the highest 1stweek mortality, and lowest candling (9.98 ± 0.064a) for hairline crack eggs were found for AP27 due to young flock having thin egg shells. The blasting/putrification and dead in the shell for normal and hairline crack eggs. The highest hatchability (49.07 ± 0.51b) was found for normal eggs compared to hairline crack eggs for SSF5 flock. The water loss, chick yield and culling chicks age with good quality eggshell. On simple hatch debris analysis, the highest 1stweek mortality, and lowest candling (9.98 ± 0.064a) for hairline crack eggs were found for AP27 due to young flock having thin egg shells. The blasting/putrification and dead in the shell for normal and hairline crack eggs. The highest hatchability (49.07 ± 0.51b) was found for normal eggs compared to hairline crack eggs for SSF5 flock. The water loss, chick yield and culling chicks age with good quality eggshell. On simple hatch debris analysis, the highest 1stweek mortality, and lowest candling (9.98 ± 0.064a) for hairline crack eggs were found for AP27 due to young flock having thin egg shells. The blasting/putrification and dead in the shell for normal and hairline crack eggs. The highest hatchability (49.07 ± 0.51b) was found for normal eggs compared to hairline crack eggs for SSF5 flock. The water loss, chick yield and culling chicks age with good quality eggshell. On simple hatch debris analysis, the highest 1stweek mortality, and lowest candling (9.98 ± 0.064a) for hairline crack eggs were found for AP27 due to young flock having thin egg shells. The blasting/putrification and dead in the shell for normal and hairline crack eggs. The highest hatchability (49.07 ± 0.51b) was found for normal eggs compared to hairline crack eggs for SSF5 flock. The water loss, chick yield and culling chicks age with good quality eggshell. On simple hatch debris analysis, the highest 1stweek mortality, and lowest candling (9.98 ± 0.064a) for hairline crack eggs were found for AP27 due to young flock having thin egg shells. The blasting/putrification and dead in the shell for normal and hairline crack eggs. The highest hatchability (49.07 ± 0.51b) was found for normal eggs compared to hairline crack eggs for SSF5 flock. The water loss, chick yield and culling chicks age with good quality eggshell. On simple hatch debris analysis, the highest 1stweek mortality, and lowest candling (9.98 ± 0.064a) for hairline crack eggs were found for AP27 due to young flock having thin egg shells. The blasting/putrification and dead in the shell for normal and hairline crack eggs.
Effect of Zeolite Dietary Supplementation on Physiological Responses and Production of Laying Hens Drinking Saline Well Water in South Sinai.

**ABSTRACT**

S compared to them in T, T1 and T2 groups. Egg weight significantly increased in the hens of group (S), hens drank saline well water and fed basal diet. 5

ABSTRACT

Capacity concentrations as compared to the hens of T and T2 groups. Alanine transaminase, in the T1, T2 and S2 compared to hens in T, S and S1 groups. Hens of T1, T2 and S2 groups water and fed diet containing 2 % zeolite. The 3

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

compared to other treatments. Aldosterone hormone was significantly decreased in the hens of S compared to other treatments. Hens of S group showed significant decrease in total protein, globulin, glucose and total antioxidant and blood constituents of hens under drinking saline well water. 180 hens were randomly

Laying Hens Drinking Saline Well Water in South Sinai.

and blood constituents of rabbits and economic efficiency of growing rabbit diets. 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


ABSTRACT

yeast treatment and replacement level of OP. Best economic efficiency observed with 10%UOP followed by 5%TOP. It was concluded that rabbit group fed 5%TOP recorded a better performance, best digestibility for CP%, DCP and economic efficiency.

Saccharomyces cerevisiae increased content of the crude protein (%) and digestible energy (Kcal/kg). The best Final Body weight ranging from 729.20 to 738.30g were divided to five experimental groups. The

Hi-Plus rabbits, one-day old were randomly divided into six equal treatments (20 rabbits/

This study aimed to apply early heat shock exposure programs for releasing HSP70 gene expression to improve production of rabbits reared under hot desert conditions at Egypt. 120

Rabbits under Hot Desert Conditions.

Efficient index, feed conversion and cost of feeding improved in the rabbits exposed to heat stress at 3, 25, 60, 3+25 and 3+25+60 days of age, respectively. HSP70 expression and tri-iodothyronine hormone in the rabbits of T2, T3, T4, T5 and T6 were significantly increased. However, rabbits of T2 and T4

Effect of Early Heat Shock Exposure on Physiological Responses and Reproduction of Rabbits under Hot Desert Conditions at Egypt. 120

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

Plasma Constituents of Rabbits.

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

Total lipid of plasma was significantly differences (P˂ 0.05) in groups fed experimental diets compared to control group. Liver function was significantly affected by experimental diets, yeast treatment didn't effect on digestibility and nutritive value of growing rabbits.

Plasma Constituents of Rabbits.

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

5%TOP). Total lipid of plasma was significantly differences (P˂ 0.05) in groups fed experimental diets compared to control group. Liver function was significantly affected by experimental diets, yeast treatment didn't effect on digestibility and nutritive value of growing rabbits.

Plasma Constituents of Rabbits.

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

5%TOP). Total lipid of plasma was significantly differences (P˂ 0.05) in groups fed experimental diets compared to control group. Liver function was significantly affected by experimental diets, yeast treatment didn't effect on digestibility and nutritive value of growing rabbits.
A Review on the Role of Lipid in Selected Apicomplexan, Anaerobic, \( \text{Kinetoplastid} \) and Intestinal Parasitic Infections.