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.
ABSTRACT


The purpose of study was to evaluate the influence of hairline crack eggs on hatchery parameters and chicks performance. Hairline crack eggs were compared with normal eggs for hatchability, candling, putrification/blasting and dead in the shell. Eighteen different breeder farms, each group containing (n= 50,000) eggs. The hairline crack eggs like hairline crack eggs were detected by simple hatch debris analysis. The defects like breakage of this packaging increase the risk of microbial contamination. Such kinds of eggs should not be used for incubation. The water loss, chick yield and culling chicks percentage were also significantly better for normal eggs compared to hairline crack eggs. The highest hatchability (49.07 ± 0.51b) 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 were significantly higher for hairline crack eggs as compared normal eggs for SSF5 flock. The water loss, chick yield and culling chicks percentage were also significantly better for normal eggs compared to hairline crack eggs. The lowest hatchability was found for SP117 which is the oldest 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) 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.

Keywords: hatchability, candling, putrification/blasting, dead in the shell, hatchery, hairline crack eggs, normal eggs, SSF6, SSF1, AP27, SP117, hatchability, candling, putrification/blasting, dead in the shell.
Effect of Zeolite Dietary Supplementation on Physiological Responses and Production of Laying Hens Drinking Saline Well Water in South Sinai.

ABSTRACT

Hi-Plus rabbits, one-day old were randomly divided into six equal treatments (20 rabbits/treatment), namely T1, T2, T3, T4, T5 and T6. T1 served as control. The rabbits of second, third, fourth, fifth and sixth treatments were exposed to heat shock (36±1 °C for 3 hours from Conception). Rabbits of T2, T3, T4, T5 and T6 were exposed to heat shock programs. In conclusion, applying heat shock exposure programs of rabbits especially T3 and T5 compared with hens in T, T1 and T2 groups. Egg weight significantly increased in the hens of S compared to them in T, T1 and T2 groups. Egg number and egg mass were significant increase in the hens of T compared with hens in T1, T2 and T3 groups. Productive performance and eggshell quality.

EXPERIMENTAL DESIGN AND FEEDING TRAIL OF GROWING NEW ZEALAND WHITE RABBITS (6-14 WEEKS OF AGE) FEED TREATED ORANGE PULP BY S. CEREVISIAE YEAST.


DOI:

Hematological parameters, Laying hens, Productive performance, Saline water, Zeolite.

KEYWORDS:

DOI:

12:00 - 15:00 for three successive days). Rabbits of T2, T3, T4, T5 and T6 were exposed to heat shock (36±1 °C for 3 hours from Conception). Rabbits of T2, T3, T4, T5 and T6 were exposed to heat shock programs. In conclusion, applying heat shock exposure programs of rabbits especially T3 and T5 compared with hens in T, T1 and T2 groups. Egg weight significantly increased in the hens of S compared to them in T, T1 and T2 groups. Egg number and egg mass were significant increase in the hens of T compared with hens in T1, T2 and T3 groups. Productive performance and eggshell quality.

EXPERIMENTAL DESIGN AND FEEDING TRAIL OF GROWING NEW ZEALAND WHITE RABBITS (6-14 WEEKS OF AGE) FEED TREATED ORANGE PULP BY S. CEREVISIAE YEAST.
This work is licensed under a Creative Commons Attribution 4.0 International License. 

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

Hamouda AF, Amin AAE, Ibrahim SS, and Mahmoud MA.

ABSTRACT

To evaluate the effect of different levels and forms of biological additives mixtures on Barki ewes productivity. The first mixture of probiotic added as liquid forms (Mixture Probiotic Liquid, MPL), enzyme preparations of MPL and MPP to sheep rations, may improve weaning weight and daily gain of lambs as much as live body weight and milk production of ewes.

Keywords: Biological additives, Productive performance, Reproduction, Milk, Barki sheep.

Lipids are a diverse class of biomolecules that play a major role as energy source, membrane components and cellular signaling molecules. Because of the variation in modes of life, different parasites for disease pathogenesis, differentiation and survival of larvae in the host tissue. This review showed that the different in vivo and in vitro studies indicated that lipids have different role in different stage of the parasites infection. The associations between parasites and the lipid droplets are fundamentally engaged in production, they are involved in different aspects of innate signaling and antigen presentation empowering pathogenesis and used to subvert host metabolism as ways of immune evasion.

Intestinal Parasitic Infections.

Yesuf M and Kenubih A.

Melamine, Vital assets toxicity, Bee’s honey, White albino rats

Coccidiosis has an economic impact for poultry and livestock. The current study examined the prevalence of coccidiosis is high...