Research Paper

Prevalence and Risk Factors Associated with *Cryptosporidium* Infection in Raw Vegetables in Yazd District, Iran.


ABSTRACT

Consumption of raw vegetables is an important route of parasites transmission. It is an important source for foodborne outbreaks in both developed and developing countries, and outbreaks of parasitic diseases in humans. The objective of the present study was to detect the presence of Cryptosporidium oocysts in raw fresh vegetables in Yazd city, Iran, from 2017 to 2018. A total of 275 fresh vegetable samples were collected and tested using a sucrose flotation medium of 1.21 specific gravity and a Modified Ziehl-Nielsen staining procedure. Of the 275 vegetables examined, 85 (31.5%) samples were positive for Cryptosporidium oocysts. Lettuce had the highest rate (n= 16, 47.1%) of contamination with Cryptosporidium oocysts while basil and parsley showed the lowest rates of contamination (n= 6, 20%). There was a significant association between the occurrence of Cryptosporidium oocysts and the investigated vegetable types. According to the locations of the vegetable field, Amir Abad and Bahaman Hospital area had the highest (n: 16, 59.3%) and lowest (n= 5, 18.5%) rates of Cryptosporidium oocysts contamination, respectively. The plant part showed that the root vegetables had the highest contamination rates (n= 41, 45.6%), followed by leafy vegetables (n= 44, 24.4%). The analysis further indicated a significant association between the occurrence of Cryptosporidium oocysts and the route of vegetable consumption. Based on these results, the edible vegetables in Yazd city are one of the potential sources of Cryptosporidium infections in humans. Moreover, the vegetable fields within the city of Yazd are contaminated with Cryptosporidium oocysts which can pose public health problems.

Keywords: Cryptosporidium, Oocysts, Raw vegetables, Yazd city, Iran.

[Full text- PDF ] [XML] [Google Scholar] [ Crossref Metadata ]
A total of 100 cultured tilapia fishes and 20 water samples were collected from 4 different fish farms at different locations in Kafr El-sheikh Governorate for bacteriological and chemical analysis. The results of water quality parameters examination revealed that the mean values of pH, dissolved oxygen, unionized ammonia, and nitrite were 8.2 ± 0.73, 7.44 ± 0.54 parts per million (ppm), 0.05 ± 0.008 ppm, and 0.00 ppm, respectively. All water quality parameters were within the permissible limit. The bacterial isolation results revealed 38 species isolated from water samples. Of those 38 positive fish samples, 25 (65.78%) were Enterococcus faecalis, 2 (25%) were Enterococcus faecium, and 3 (7.89 %) were Streptococcus iniae. A total of 153 bp and 2 species had reduced total protein, albumin, and globulin in the blood serum while total cholesterol, urea, creatinine levels, and AST, ALT, GPX, CAT, SOD activities significantly increased, compared to non-infected fish. Using mPCR to identify Streptococcus agalactiae, Streptococcus iniae and Streptococcus pyogenes at 215 bp were detected. However, the mPCR from Streptococcus agalactiae was identified at 153 bp. The biochemical results indicated that the infected fish with the species isolated from fish and water isolates, 6 species had reduced total protein, albumin, and globulin in the blood serum while total cholesterol, urea, creatinine levels, and AST, ALT, GPX, CAT, SOD activities significantly increased, compared to non-infected fish.

**ABSTRACT**

This work aimed to investigate the antibacterial effect of zinc oxide (ZnO) and titanium dioxide (TiO2), then stored at 4°C for 17 days. The results indicated that ZnO (12 mM) had a significant destructive effect on bacterial cell than the mixture of ZnO + TiO2, and 12Mm TiO2 alone. The antibacterial activity of ZnO, TiO2, and combination of ZnO and TiO2 was also examined in minced meat

**ABSTRACT**


**ABSTRACT**


ABSTRACT

Modern pig farming worldwide has been facing substantial economic loss due to perinatal mortality which is mainly associated with the farrowing process. Therefore, the present study aimed to identify factors affecting the farrowing duration in natural farrowing sows in the intensive pig farming. Four factors were selected for the analysis: litter size (LS), number of total born (NTB), stillbirth (SB), and number of total born (NTB).

Keywords: Birth weight; Farrowing duration, Sow, Stillbirth, Total born.
**ABSTRACT**

Typhimurium isolates. The PCR identification of Salmonella determining the level of Salmonella, strains uploaded from the gene bank. Phylogenetic analysis of Staphylococcus aureus gene found in all of Egyptian isolated strain indicated a great homology with the different sopB gene of Egyptian isolated strain showed a great identity with the different gene World Vet. J.

bacteriological quality of bulk tank milk and monitoring mastitis economic losses. In the overall herd by the prevalence of 8.6%. Isolation and identification of Typhimurium isolates from bulk tank milk samples revealed that 20 locally field isolates were detected and confirmed phenotypically by culturing, gram staining, biochemical, molecular identification to be

importance of more efficacious preventive programs for controlling the mastitis and risk factor analysis of

**Keywords:** cfu/ml. The geometric mean of somatic cell count (SCC)/ml in Bulk tank milk samples of 150 dairy farms was 3.2×10³ cfu/ml. The geometric mean of somatic cell count (SCC)/ml revealed that the geometric mean of 150 dairy farms was 3.2×10³ cfu/ml. Serological identification of the 20 isolates revealed that they were Staphylococcus aureus.

**Risk Factor Analysis of**

**Keywords:** Essential oil, Fennel, Growth performance, Oregano, Rabbit, Thyme.

**Effect of Dietary Dried Fennel and Oregano and Thyme Supplementation on Zootechnical Parameters of Growing Rabbit.** The objective of this study was to analyze and compare the effects of fennel, oregano, and thyme essential oils of the above mentioned aromatic plants were extracted and were analyzed using a gas chromatograph coupled to a mass spectrometer. The treatment of fennel, oregano, and thyme had no beneficial effects on the growth performance of the rabbits but reduced the mortality rate. The phenylpropanoid and the phenolic monoterpenes were the major dietary treatments: Control diet, F diet (Control diet + 5% Foeniculum vulgaris), O diet (Control diet + 5% Origanum compactum), T diet (Control diet + 5% Thymus capitatus).

**Effect of Dietary Dried Fennel and Oregano and Thyme Supplementation on Zootechnical Parameters of Growing Rabbit.** Benlemlih M, Barchan A, Aarab A, Bakkali M, Arakrak A and Laglaoui A. The objective of this study was to analyze and compare the effects of fennel, oregano, and thyme essential oils of the above mentioned aromatic plants were extracted and were analyzed using a gas chromatograph coupled to a mass spectrometer. The treatment of fennel, oregano, and thyme had no beneficial effects on the growth performance of the rabbits but reduced the mortality rate. The phenylpropanoid and the phenolic monoterpenes were the major components of Foeniculum vulgaris, Origanum compactum, and Thymus capitatus essential oils. The aromatic plants and their active compounds can be used as additives in rabbit nutrition.

**Effect of Dietary Dried Fennel and Oregano and Thyme Supplementation on Zootechnical Parameters of Growing Rabbit.** The objective of this study was to analyze and compare the effects of fennel, oregano, and thyme essential oils of the above mentioned aromatic plants were extracted and were analyzed using a gas chromatograph coupled to a mass spectrometer. The treatment of fennel, oregano, and thyme had no beneficial effects on the growth performance of the rabbits but reduced the mortality rate. The phenylpropanoid and the phenolic monoterpenes were the major dietary treatments: Control diet, F diet (Control diet + 5% Foeniculum vulgaris), O diet (Control diet + 5% Origanum compactum), T diet (Control diet + 5% Thymus capitatus).

**Effect of Dietary Dried Fennel and Oregano and Thyme Supplementation on Zootechnical Parameters of Growing Rabbit.** Benlemlih M, Barchan A, Aarab A, Bakkali M, Arakrak A and Laglaoui A. The objective of this study was to analyze and compare the effects of fennel, oregano, and thyme essential oils of the above mentioned aromatic plants were extracted and were analyzed using a gas chromatograph coupled to a mass spectrometer. The treatment of fennel, oregano, and thyme had no beneficial effects on the growth performance of the rabbits but reduced the mortality rate. The phenylpropanoid and the phenolic monoterpenes were the major components of Foeniculum vulgaris, Origanum compactum, and Thymus capitatus essential oils. The aromatic plants and their active compounds can be used as additives in rabbit nutrition.

**Effect of Dietary Dried Fennel and Oregano and Thyme Supplementation on Zootechnical Parameters of Growing Rabbit.** Benlemlih M, Barchan A, Aarab A, Bakkali M, Arakrak A and Laglaoui A. The objective of this study was to analyze and compare the effects of fennel, oregano, and thyme essential oils of the above mentioned aromatic plants were extracted and were analyzed using a gas chromatograph coupled to a mass spectrometer. The treatment of fennel, oregano, and thyme had no beneficial effects on the growth performance of the rabbits but reduced the mortality rate. The phenylpropanoid and the phenolic monoterpenes were the major components of Foeniculum vulgaris, Origanum compactum, and Thymus capitatus essential oils. The aromatic plants and their active compounds can be used as additives in rabbit nutrition.
The main objective of this study was to apply
strains uploaded from GenBank. Nucleotide alignment report of the sequenced
Salmonella Typhimurium strain and the different
were PapC N-terminal conserved domain (107-394bp),
were PapC N-terminal domain encoded
World Vet. J. 375-379 DOI:
https://dx.doi.org/10.36380/scil.2020.wvj47

ABC1 and fructosamine, which could serve as
treatment of interdigital necrobacillosis in dairy cows. The current study was conducted from
intramuscular injection of oxytetracycline at the dosage of 1.0 milligram per kilogram of
required protein level and citric acid were 80.87% and 83.48%, respectively. The overall odds ratio
unsexed one-day-old broilers were assigned to 4 dietary treatments, 4 replicates of 10 chickens
each. A factorial design arrangement 2×2 was used, including two protein levels, 100% (optimal
improved blood albumin and reduced haemoglobin
acid which could significantly improve body weight gain, feed conversion ratio, carcass yield,
Performance, Carcass Characteristics, Intestinal Morphology, and Blood Components.

Effect of Different Dietary Crude Protein Levels and Citric Acid on Broiler Chickens'
Tribeus terrestris

Research Paper

On the last day of the study, the animals were euthanized, and their kidney and lung were sampled for histological study. The kidney tissue in mice exposed to cadmium showed cellular inflammation, necrosis, hyperplasia, and large urinary space in Bowman's capsule in kidney and lung tissues against cadmium toxicity in female mice. In this regard, 20 female mice were divided into three groups, the first group was given Tribulus terrestris (40 mg/kg), the second group was given the toxic substance (cadmium 6 mg/kg) only, and the third group was given the toxic substance (cadmium 6 mg/kg) and Tribulus terrestris (40 mg/kg). The results showed that the administration of Tribulus terrestris could protect mice from the effects of cadmium toxicity in their kidney and lung tissues.

Keywords: Tribulus terrestris, Kidney, Lung, Cadmium, Mice.
Fecal and blood samples were collected from diarrheic dogs and their role in the transmission of Helicobacter pylori and Giardia cases was investigated. In conclusion, this study indicated a high prevalence of H. pylori in both dogs and dog owners in Egypt. Zoonotic transmission of H. pylori between dogs and humans is probable and represents a public health concern.

The objective of the present study was to determine the prevalence of H. pylori genus-specific 16s rRNA gene of human and dog isolates were similar. In conclusion, this study indicated a high prevalence of H. pylori in both dogs and dog owners in Egypt. Zoonotic transmission of H. pylori between dogs and humans is probable and represents a public health concern.

The Role of Afferent C-Fibers in Muscle Contraction of Trachea and Bronchi in Rat. The study was targeted toward the investigation of the effect of the local humoral mechanism of C-fibers in muscle contraction of trachea and bronchi. Moreover, the study was targeted toward the investigation of the effect of the local humoral mechanism of C-fibers in muscle contraction of trachea and bronchi. The obtained data can contribute to the study of the interaction of the autonomous nervous system with the smooth muscle. C-fibers, which represent the excitatory non-adrenergic non-cholinergic system, caused smooth muscle contraction by the realization of a tachykinins-releasing mechanism.

Spatial Monitoring of Pyrethroid Residues by RP-HPLC in Raw Bovine Milk in West Delta of Egypt. The achieved results indicated that Pyrethroid residues were respectively screened at frequencies of 18.66%, 17.33%, and 14.66% in Alexandria, 21.33%, 17.33%, and 14.66% in El- Behera, and 44%, 28%, and 24 % in Matrouh. As for Cypermethrin, its concentrations did not exceed MRLs. These results indicated only 2.66%, 1.33%, and 0.00 % for Cyhalothrin, and 1.33%, 4%, and 2% for Deltamethrin.

The Use of enzyme-linked immunosorbent assay (ELISA) was used for the preliminary investigation before genotyping in the identification of zoonotic giardiasis.
ABSTRACT
Polycystic ovary syndrome, a common cause of infertility among women in the reproductive age, is associated with high levels of androgens. Recognizing the anti-androgenic effects of spearmint, the present study aimed to evaluate the effects of its hydroalcoholic extract on the levels of luteinizing hormone, follicle-stimulating hormone, and testosterone and ovarian folliculogenesis in normal and letrozole-induced polycystic ovary syndrome rats. Female mature rats were divided into six groups (n=8 per group), as follows: Normal rats (I or Control), normal rats which received 250 mg/kg spearmint extract (II) or 500 mg/kg spearmint extract (III), and PCOS-induced rats (IV), PCOS-induced rats which received 250 mg/kg spearmint extract (V), or 500 mg/kg spearmint extract (VI). At the end of the experiment the animals were euthanized, and then mentioned parameters were evaluated. Administration of spearmint extract to PCOS rats resulted in a decrease of body weight and testosterone level, higher corpus luteum, and lower ovarian cysts and atretic follicles, compared to PCOS rats which received no spearmint. Accordingly, the spearmint can attenuate polycystic ovarian syndrome-related problems, such as a high testosterone level and ovarian cysts.

Keywords: Folliculogenesis, Mentha spicata, Ovary, PCOS, Rat

ABSTRACT
Despite the paucity of data, brucellosis is considered as a major problem in Algeria. The aim of present study was to assess the presence of bovine and ovine brucellosis in the areas close to the capital city (Algiers) where its vaccination is not implemented. A total of 402 cattle and 203 ovine sera were collected from two slaughterhouses, and examined by the Rose Bengal Test (RBT). Positive samples were then tested by Complement Fixation Test (CFT) and Hypertonic Double Gel Diffusion (DDG) with a smooth lipopolysaccharide, and the extract of native hapten was also tested by Indirect Enzyme Linked Immuno Sorbent Assay (iELISAs) with smooth lipopolysaccharide and polyclonal or protein G conjugates. Twenty-four bovine sera (5.97%) were RBT positive. Of these, 23 were positive in CFT, DDG, and 16 samples were also positive in iELISA when the assay was adjusted to 100% specificity. Only two ovine sera were RBT positive; one was CFT and DDG positive, and the other one had a CFT-titer of 1/4, and was DDG negative. This preliminary study confirmed that bovine brucellosis is a major problem in Algeria, and indicated that some field studies are needed to determine the prevalence of Brucellosis in Algeria urgently. Similarly, other studies are necessary in areas with dominance of ovine breeding system. Further studies in the areas with a dominance of ovine breeding system are necessary. The results of this work showed that simple tests like RBT and DDG are not outperformed by CFT or iELISA for assessing the apparent prevalence of brucellosis in the absence of vaccination. Finally, isolation and typing of the involved Brucella species are also necessary in order to have a complete epidemiological picture of brucellosis in Algeria.

Keywords: Abattoirs, Algeria, Brucellosis, Cattle, Serology, Sheep, Prevalence