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.
The present study was carried out to detect the streptococci. Using mPCR to identify at 215 bp were detected. However, the mPCR from isolated from tilapia fishes and 40% were positive for Enterococcus faecalis, 2 (25%) were 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 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. Streptococcosis causes economic losses due to the high mortality in Nile tilapia (Oreochromis niloticus). According to the obtained results of the current study, tick control can be started in Al-Ahsa area during hot months, thereby increasing animal density and humidity in the shaded farms.

**Keywords:** streptococci, Tilapia fish, Water examination.

**Abstract**


**Abstract**

World Vet. J.

Hoai Nam N and Sukon P. (2020). Associated factors for farrowing duration in sows with natural parturition in intensive indoor conditions. In total, 210 farrowing sows in 4 commercial farms were included in the present study. The results also demonstrated that the number of total born piglets, stillborn, and mummified piglets were more important than litter weight and average birth weight in explaining the variation of farrowing duration. Two models explained about 19.1-19.5% variation of the farrowing duration.

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


Multivariate analysis of the factors associated with log-transformed farrowing duration in 210 kaws from four farms in the North of Vietnam in 2019

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Regression coefficient</th>
<th>95% CI</th>
<th>Significance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Intercept</td>
<td>5.624</td>
<td>4.891 - 6.361</td>
<td>&lt; 0.001</td>
</tr>
<tr>
<td>NSM</td>
<td>0.033</td>
<td>0.020 - 0.046</td>
<td>&lt; 0.001</td>
</tr>
<tr>
<td>Litter weight</td>
<td>0.022</td>
<td>0.010 - 0.033</td>
<td>0.002</td>
</tr>
<tr>
<td>ABW</td>
<td>-0.004</td>
<td>-0.013 - 0.005</td>
<td>0.013</td>
</tr>
<tr>
<td>Interception</td>
<td>4.358</td>
<td>4.081 - 4.635</td>
<td>&lt; 0.001</td>
</tr>
<tr>
<td>NTB</td>
<td>0.038</td>
<td>0.019 - 0.056</td>
<td>&lt; 0.001</td>
</tr>
<tr>
<td>NSM</td>
<td>0.072</td>
<td>0.048 - 0.106</td>
<td>&lt; 0.001</td>
</tr>
</tbody>
</table>

NSM: number of stillborn and mummified piglets; ABW: average birth weight; NTB: number of total born piglets; CI: confidence interval.

Model 1 confirmed a R² = 0.38; Model 2 confirmed a R² = 0.495
Salmonella

The geometric mean value of strains uploaded from the gene bank. Phylogenetic analysis of Salmonella Staphylococcus aureus molecular identification to be of Egyptian isolated strain showed a great identity with the different isolates were detected and confirmed phenotypically by culturing, gram staining, biochemical, Salmonella SopB Salmonella count (cfu/ml) revealed that the geometric mean of 150 dairy farms was 3.2×10^3.

**ABSTRACT**

Plate Count and Somatic Cell Count in Bulk Tank Milk in Cattle Dairies. Typhimurium isolates (100%). Phylogenetic and partial gene sequence analysis of Salmonella Typhimurium revealed a product with an approximate size of 937 bp. (Salmonella Typhimurium, World Vet. J. 2010) virulence gene in the overall herd by the prevalence of 8.6%. Isolation and identification of strains uploaded from the gene banks. The results of the present study emphasize the Salmonella SopB gene-specific primers revealed a product with an approximate size of 937 bp. (Salmonella Typhimurium, World Vet. J. 2010) virulence gene found in all Salmonella Typhimurium isolates while have great public health importance. A total of 30 seabass (Vibrio parahaemolyticus) and seabream in fish markets, especially streptomycin-resistant strains that Vibrio parahaemolyticus, Vibrio parahaemolyticus, and Vibrio parahaemolyticus spp. in seabass and seabream in fish markets, especially streptomycin-resistant strains that Vibrio parahaemolyticus, Vibrio parahaemolyticus, and Vibrio parahaemolyticus spp. was 26.66%, including Vibrio parahaemolyticus, Vibrio parahaemolyticus, and Vibrio parahaemolyticus spp. were purchased from fish markets at Kafr El Sheikh Governorate and subjected to bacteriological examination. The PCR assay was used for the detection of virulence genes (aadA1), V. parahaemolyticus, V. parahaemolyticus, and V. parahaemolyticus to determine the prevalence of Salmonella spp. isolates showed sensitivity to ciprofloxacin, norfloxacin, cefotaxime, and chloramphenicol. (Salmonella Typhimurium, World Vet. J. 2010)

**Effect of Dietary Dried Fennel and Oregano and Thyme Supplements on Zootechnical Parameters of Growing Rabbits**

The objective of this study was to analyze and compare the effects of fennel, oregano, and thyme dietary supplements on the feeding of rabbits. In this regard, 96 weaned rabbits (30-day-old), white New Zealand, were divided into 4 groups and submitted to the following dietary treatments: Control diet, F diet (Control diet + 5% Foeniculum vulgaris), O diet (Control diet + 5% Origanum compactum), and T diet (Control diet + 5% Thymus capitatus). 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 oils. The aromatic plants and their active compounds can be used as additives in rabbit nutrition.

**Risk Factor Analysis of Staphylococcus aureus.**

Gene at (417bp) demonstrated great homology between the Egyptian bcfC epidemiology, disease pattern of vaccine production against S. Typhimurium. A PapC N-terminal conserved domain can be used as a vaccine target for were PapC N-terminal domain (107-394bp),

Keywords: domains region in the nucleotide sequence Typhimurium a Typhimurium. The PCR amplification with bovine-based products across the world especially in the United Kingdom, USA, Ireland, and bcfC reading frames of a specified minimum size in a sequence of (453 bp). The 3 conserved and serologically to be gene was found in 7 (46.6%) isolates of [Full text- transmission of salmonella strains between the human beings and other animal farms, including Salmonella typhimurium PapC protein and had a central role in the pili assembly chaperone usher system Salmonella Salmonella Typhimurium and different bcfC Salmonella strains uploaded from GenBank. Nucleotide alignment report of the sequenced Salmonella Typhimurium and different gene of Salmonella strains uploaded from GenBank. Sequence identities between the isolated Egyptian strain and Typhimurium strain and the different bcfC gene of Salmonella strains revealed 99.8-100% homology. Open reading frame (ORF) application of a powdered probiotic strain and intramuscular injection of oxytetracycline for the research veterinarians on 6 farms situated in the Almaty region of Kazakhstan. The feedlots. Both procedures were executed every 72 hours during a period of two weeks with the subsequent two-week follow-up period. The treatment was discontinued when a cow was Tulemissova ZhK, Torehanov MA, Myktybayeva RZh, Bazhanova AS, Khussainov DM, Batinova ZHM and Osmangaliyeva SS (2020). Comparison of Probiotic Lactobacillus acidophilus and Oxytetracycline for the Treatment of Early Stage Intertidigital Necrobacillosis in Dairy Cows. World Vet. J. 10 (3): 362-369. DOI: https://dx.doi.org/10.36386/wvj2019.015k-1 strain and oxytetracycline were 80.87% and 83.48%, respectively. The overall odds ratio can result in cure rates nearly as high as those for intramuscular oxytetracycline within a period of 28 days. This is the first report on the treatment effect of locally applied to cattle with early-stage interdigital necrobacillosis. The objective of this multilocation field trial was to compare the effectiveness of the topical Batanova ZhM and Usmangaliyeva SS. affected hoof of a cow was cleaned, coated with powder containing 10 Lactobacillus acidophilus each. A factorial design arrangement 2×2 was used, including two protein levels, 100% (optimal CP diet supplemented with citric acid could compensate for the growth performance equivalent Performance, Carcass Characteristics, Intestinal Morphology, and Blood Components. Chickens fed the low parameters (Albumin, haemoglobin Ac1, fructosamine, and cholesterol). Chickens fed the low intestinal morphology, cecal bacterial counts, blood cholesterol reduction, and glycated proteins. Effect of Different Dietary Crude Protein Levels and Citric Acid on Broiler Chickens’ indicators of the blood protein glycation. In conclusion, citric acid addition could alleviate the abdominal fat, fat content in meat, intestinal morphology, cecal microbial content, and blood abdomen.
The current study was designed to evaluate the protective effects of Tribulus terrestris Fruits on Renal and Lung Tissues in Female Mice. In this regard, 20 female mice were exposed to cadmium and treated with Tribulus terrestris fruit (200 mg/kg). The substances were administered orally by stomach tube daily for 10 days. 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 aggregations of lymphocytes around the bronchus and edema in the lungs exposed to cadmium were observed. The lungs of some mice exposed to cadmium and treated with Tribulus terrestris were ameliorated cadmium toxicity.


Pathogenic Avian Influenza (HPAI) clade 2.1 (A/Chicken/Blitar/2003) was tested against infection of High Pathogenic Avian Influenza clade 2.3.2 (A/Duck/Sidoarjo/2012). The inhibiting amounts (0 µg, 100 µg, 200 µg and 400 µg) were administered at three different times which were 24 hours before infection, at the time of infection, and 24 hours after infection. The results revealed that the dose of 200 µg and 400 µg of IgY applied 24 hours before the infection, can reduce clinical signs and mortality of infected chicken (80-100%). The best dose of the IgY to protect them from infection was 400 µg administered 24 hours before infection. It could be concluded that administration of IgY anti-Haemaglutinin Protein (anti-HA) of High Pathogenic Avian Influenza A subtypes H5N1 could protect chickens from infection of High Pathogenic Avian Influenza clade 2.3.2.
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