

[Next issue](#) | [Archive](#)

Volume 1 (1); December, 2011

Research Paper

A Survey on Caprine Nematodiasis in Ladakh□

Kuchai, J.A. Chishti, M.Z. Bhat A.A. and Tak H.

World Vet. J. 1(1): 01-04, 2011; pii:S232245681100001-1

ABSTRACT

The present study was conducted for the time period of one year on goats of Ladakh (J&K) with the aim to find out the various nematode parasites infesting goats of this region and their prevalence with regard to season, sex, age, body condition, and agro-ecology. A total of 268 gastro intestinal tracts along with heart and lungs of the host animal of either sex and of different age groups belonging to different areas of the study area were collected randomly and were examined for nematode parasites. Out of these 116 (43.28%) were found infected with single or multiple parasite species. The study reveals the presence of four species of nematodes viz; *Trichuris ovis*, *Haemonchus contortus*, *Dictyocaulus filaria* and *Chabertia ovina*. It was also observed that among these *T. ovis* (48.03%) was most dominant followed by *H. contortus* (41.02%), *D. filaria* (37.05%) and *C. ovina* (22.35%) respectively. A significant difference was observed in prevalence of nematode parasites with respect to season, wherein higher prevalence (50.00%) was observed during the rainy season as compared to the dry

season 35.93%. Similarly an association was observed between sex and age of the host with prevalence of nematode infections. It was also observed that females were more infected (46.15%) as compared to males (40.57%). Likewise young animals were more infected (45.83%) than the adult ones (41.21%). Similarly an association was observed between prevalence and agro-ecology of the study area where in higher values (45.45%) were recorded for comparatively lowland (Kargil) areas as compared to highland (Leh) areas (40.08%). The study also shown slight relationship between body condition and prevalence wherein the intensity of infection was higher (47.22%) in weak animals as compare to healthy ones (40.62%). Hence, it was concluded that season, sex, age, agro-ecology and body condition are some of the important risk factors associated with nematode parasitism in this area.

Keywords: Goats, Nematode parasites, Prevalence, Ladakh

[Full text- [PDF](#)] [[XML](#)]

Research Paper

Effect of Firewood and Sawdust Smoke on Chemical and Physical Properties of *Clarias* Fish Mea□

Adam Sulieman H.M. and Mohammed Ahmed F.A.

World Vet. J. 1(1): 05-09, 2011; pii:S232245681100002-1

ABSTRACT

This study was conducted to determine chemical composition and sensory evaluation of dried and fresh smoked of *Clarias sp* fish meat prepared using firewood and sawdust at traditional kilns. *Clarias sp*.fish (20 kg) was collected from Elmorada fish

Market Omdroman (Sudan), these fish were in the range of 26 – 36 cm in length and 140 – 350 g in weight, the studied samples were divided into two main groups; fresh and dried. Each group was divided into two subgroups and treated with firewood and sawdust separately. The final products of the studied fish were analyzed for proximate analysis (crude protein, fat, moisture, dry matter, ash and nitrogen free extract) in addition to sensory evaluation. The study revealed that there were no significant differences in moisture, protein, fat, ash and nitrogen free extract content among studied samples. In the case of sensory evaluation of the smoked product, the fish smoked with firewood gave better overall acceptability than those smoked with dust wood. It could be concluded that the sawdust can be used practically as alternative to firewood to reduce the cost of smoking and waste of carpenter.

Keywords: Firewood, dust smoke, chemical physical attributes, *Clarias sp.*

[Full text- [PDF](#)] [[XML](#)]

Research Paper

Quality and Microbial Analysis of Local Salted-Fermented Paste Product (Terkin)□

Abu-Hassan O. and Adam Sulieman H.M.

World Vet. J. 1(1): 10-13, 2011; pii:S232245681100003-1

ABSTRACT

The study was conducted to determine the nutritive values (crude protein, crude fiber, ether extract, moisture, dry matter, ash and nitrogen free extract) of commercial Terkin paste product which was collected from Jebel Al-aulia area (Khartoum State, 45Km south of Khartoum) and

Wadi Halfa Town (located in Sudanese-Egyptian border, North of Sudan) and to investigate the total bacterial count and pH level in order to ensure the hygienic situation of two products, using a Sudanese Standards and Metrology Organization (SSMO), SDS 3767/2007 standards. The results of this study revealed highly significant differences ($p > 0.01$) in crude protein 24.0% and 30.7%, ether extract 6.3% and 11.8%, moisture 56.4% and 39.2%, dry matter 43.6% and 60.8% and ash 13.2% and 19.1% for Jebel Al-aulia and Wadi Halfa Terkin product, respectively. The study recorded also no significant differences in crude fibre 1.5% and 1.2% and nitrogen free extracts 3.1% and 3.4% for Jebel Al-aulia and Wadi Halfa Terkin product respectively. It could be concluded that the findings of microbial analysis of studied products, the Jebel Al-aulia Terkin showed a lower level of total bacterial count (3.5×10^5 CFU/g) than Wadi Halfa Terkin product (6.2×10^5 CFU/g) and pH level of studied products had recorded a higher level (7.2) in Terkin of Jebel Al-aulia than Wadi Halfa Terkin product (6.7).

Keywords: Quality, microbial, fermented product, fish, Terkin, Paste

[Full text- [PDF](#)] [[XML](#)]

Research Paper

Prevalence of Trypanosome Infection in *Oreochromis niloticus* and *Clarias lazera* from Fish Farms and Reservoir of Jebel Aulia Dam in Sudan

Ahmed Hamid S.H. and Mohammed Babiker E.

World Vet. J. 1(1): 14-16, 2011; pii:S232245681100004-1

ABSTRACT

The study was conducted to find out the prevalence of trypanosome infection in freshwater fishes *Oreochromis niloticus* and *Clarias lazera*. The species *O. niloticus* was collected from the fish farm of the College of Veterinary Medicine (CVMFF) in Sudan University of Science and Technology, Wad Almamoun fish farm (WMFF) and the Reservoir of Jebel Aulia Dam (RJAD) while the species *C.*

lazera

was collected from CVMFF and RJAD. From each site, 40 specimens were collected for the study purpose. The prevalence of t

rypanosom

e infection in

O. niloticus

was 60%, 50% and 20% in RJAD, WMFF and CVMFF respectively. While as in case of

C. lazera

the prevalence was 30% and 0% in the host species collected from RJAD and CVMFF respectively. In case of

O. niloticus

infection was restricted to those specimens which were within the length ranges of: 18-29, 24-28, and 12-24cm collected from RJAD, WMFF and CVMFF, respectively and within the length range of 27- 45 in

C. lazera

collected from RJAD.

Keywords: Trypanosomes, prevalence, *Oreochromis niloticus*, *Clarias lazera*

[Full text- [PDF](#)] [[XML](#)]

Research Paper

First Report of *Dicrocoelium dendriticum* from Sheep of Ladakh (J & K) – India

Kuchai J.A., Chishti M.Z. and Dar S.A.

World Vet. J. 1(1): 17-19, 2011; pii:S232245681100005-1

ABSTRACT

Dicrocoelium dendriticum is one of the most common trematode infecting the liver of ruminants throughout the world and poses a threat to livestock mostly by damaging the liver of the hosts especially in heavily infected animals. In the present study a large number of flukes were recovered from the livers of sheep of Ladakh. The morphological studies of these specimens revealed that they possess all the diagnostic characters of the species

Dicrocoelium dendriticum

(Rudolphi, 1819) Loos, 1899 as regards their shape and size of body, size of suckers, ovaries, and testes etc. However several minor intraspecific variations in size ratio of various body organs were observed as mentioned in table 1. Hence the present species were assigned to

Dicrocoelium dendriticum

(Rudolphi, 1819) Loos, 1899. The parasite has been reported for the first time from this region and hence it forms the first report. In addition some of the morphological parameters have been described for the first time which were not described by the previous authors these parameters could be of great taxonomic importance.

Keywords: *Dicrocoelium dendriticum*, Ladakh, Morphology, Sheep

[Full text- [PDF](#)] [[XML](#)]

Research Paper

Treatment Trial of Bovine Bacterial Mastitis in Khartoum State, Sudan

Mohammed Salih R.R. and Mohamed Ahmed F.A.

World Vet. J. 1(1): 20-24, 2011; pii:S232245681100006-1

ABSTRACT

Mastitis is an inflammatory reaction of the udder tissue which is commonly caused by the microbial infection. Bovine mastitis is one of the devastating diseases causing huge loss to the dairy industry worldwide. The present study investigated the current status of clinical mastitis among dairy cattle in Khartoum state, Sudan. The prevalence of mastitis was assessed by measuring of milk pH and also based on the result of bacteriological evaluation of milk samples. A total of 100 isolates were recovered from 500 milk samples. The major pathogens isolated from the milk samples were : 31% *Bacillus coagulans*, 11% *B. cereus*, 9% *B. subtilis*, 9% *B.*

licheniformis

, 4%

B. circulans,

2%

B. lentus

, 3%

B. mycoides

, 3%

B. amyloliquefaciens,

2%

B. megaterium

, 16%

Staphylococcus aureus,

8%

Staphylococcus hyicus,

1%

Corynebacterium

spp. and 1%

Klebsiella

spp. Antibiogram studies were also conducted for the isolates by using twelve antibiotics including Chloramphenicol, Ciprofloxacin, Gentamycin, Tetracycline, Piperacillin/ Tazobactam, Pefloxacin, Amikacin, Ofloxacin, Co-Trimoxazole, Ceftizoxime, Cefotaxime and Ampicillin/ Sulbactam, which were used frequently in this area for the treatment of mastitis and Chloramphenicol and Ciprofloxacin were found to be more effective antibiotics among all the tested antibiotics. The effectiveness of different antibiotics in different isolates were as follows: Hundred percent of isolates were sensitive for Chloramphenicol and Ciprofloxacin, 91.6% for Gentamycin and Piperacillin/ Tazobactam, 83.3% for Pefloxacin and Tetracycline, 75.0% for Amikacin and Ofloxacin, 66.6% for Ceftizoxime, 33.3% for Co-Trimoxazole and Cefotaxime and 16.6% for Ampicillin/ Sulbactam.

Keyword: Mastitis, cattle, bacterial infection, Milk, antibiotics

[Full text- [PDF](#)] [[XML](#)]

Research Paper

Hydatid cysts protoscolices viability and fertility of cysts isolated from various animals in Ilam Province

Salari S., Pooyanmehr M., Karimi I. and Rashki A.

World Vet. J. 1(1): 24-26, 2011; pii:S232245681100007-1

ABSTRACT

Echinococcosis, a worldwide zoonosis, is caused by the larval stages of *Echinococcus granulosus* and *E. multilocularis*

belonging to the family taeniidae. Because of the increasing consumption of red meat; survey, prevention and treatment of this disease will be essential. Also detection of contaminant factors including parasitic agents and the factors that are related to the hosts is helpful to codify a useful programme for prevention of this disease. This slaughterhouse based survey has been done to determine the rate of hydatidosis in Ilam province on 2380 sheep, 975 goats and 1820 cows. Overall 10% of infected livers and lungs from each animal group randomly collected and the number of cysts was determined macroscopically. The rate of hydatidosis was 6.8 % in sheep, 4.2 % in goats and 8.6 % in cows. The infection rates of lungs in sheep, goats and cows were 82, 73 and 75%, respectively, while the infection rates of livers were 12, 8 and 13%, in sheep, goats and cows, respectively. The difference of infection rates between lung and liver was statistically significant ($p < 0.05$). After transferring of specimens to the laboratory for detection of protoscolices, results shows that the rate of alveolar cysts were teemed in sheep, cows and goats were 12 %, 24 % and 22 %, respectively and also exuberated hepatic cysts in sheep, cows and goats were 25 %, 2.5 % and 18 %, respectively. The rates of alive

protoscolices in fertile cysts were determined by eosin staining and the percentage of protoscolices that were stained were considered alive. Their cumulative rates were 79.45, 88.95 and 72.02 % while their rates in livers were 65.71, 38.45 and 86.14% in sheep, cows and goats, respectively. These results showed a considerable infection of sheep and goats in this region. It could be concluded that because sheep, goats and guard dogs are maintained close to together, therefore these high rates of infection are due to continuous contact of these animals with dogs and their feces. Also low knowledge of people about true prevention strategies especially in the deprived region that has nomadic inhabitants may be the main cause of increasing of hydatid cyst infestation. The prevention strategies like suitable annihilation of infected viscera would be key task in decreasing hydatid cyst rate in llam.

Keywords: Hydatid cyst, llam, Protoscolex, Zoonosis

[Full text- [PDF](#)] [[XML](#)]

[Next issue](#) | [Archive](#)



This work is licensed under a [Creative Commons Attribution-NonCommercial 4.0 International License](#)