



**Clinical and diagnostic investigations on  
Cryptosporidiosis of small ruminant in Sohag  
Governorate, Egypt**

**Thesis Presented By**

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## SUMMARY

The present study was conducted on 120 small ruminants (90 sheep and 30 goats). The age of those animals starts from one day till 2 years. They were examined during the period from November 2017 to January 2019, these animals belong to some animals farmers house and farms in Sohag governorate.

The clinical findings of cryptosporidiosis in the examined sheep and goat were showed mild to severe diarrhea and varying degree of dehydration. State of the appetite varied according to the severity of the disease. Some cases were suffered from fever. The feces were pale yellow, yellow or greenish in color, watery or pasty in consistency and some feces contained mucous and blood.

The result of conventional technique (MZN smears) in the present study says that animals were infested by *Cryptosporidium* oocysts (they were ovoid to spherical in shape). The prevalence rate was 27.5% in small ruminant (23.33% in sheep and 40% in goat). In sheep (31.4% from day to 3 months, 21.6% from 3-6 months and 11.11% above 6 months). In goat (50% from day to 3 months and 25% from 3-6 months)

Both male sheep and goat were more susceptible than female of both species to infection with cryptosporidiosis (male sheep 27.65% and male goat 41.17%, female sheep 18.60% and female goat 38.46%).

Non –hot months has higher infection rate for *cryptosporidium* in sheep and goat (29.78% in sheep and 43.75% in goat) than hot months (16.27% in sheep and 35.71% in goat).

Non-weaned sheep and goat has higher infection rate for cryptosporidiosis (30.76%in sheep and 72.72% in goat) than weaned (20.31% in sheep and 21.05% in goat).

The molecular technique used for identification of cryptosporidium infection in sheep and goat was species specific PCR for *C.parvum*. This technique was performed on 20 fecal samples (12 sheep 8 goat) and revealed that 75 %( 9/12) in sheep and 62.5% (5/8) in goat by mean of 70% (14/20) were positive for cryptosporidium parvum.

Results declared that PCR was superior test whereas, MZN stain method is a cheapest methods.



**مشاهدات اكلينيكية وتشخيصية عن مرض  
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