



Comparison between conventional and ELISA methods for diagnosis of Sarcocystosis in buffaloes

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Abstract:

A total number of 100 female buffaloes were subjected to study. Macroscopic sarcocystis were collected from the esophagus of buffaloes slaughtered in Mosha slaughterhouse (Mosha, Assiut Governorate, Egypt) during the period from February to June 2010. Part from the esophagus containing the sarcocystis was fixed in 10% formol saline and was processed for histopathological exam. Serum samples from all animals were subjected to ELISA for detection of antibody to sarcocystis. The prevalence of macroscopic sarcocystis was 23%. On the other hand, ELISA technique revealed that 94.44% of examined animals were infected with sarcocystis. The sensitivity of the macroscopic method was 27%, specificity was 100%, positive predictive value was 100%, and negative predictive value was 7.46%. Histopathological sections of infected muscles showed cross and longitudinal sections of sarcocystis with different shape and size. The current study revealed that macroscopic examination for detection of sarcocystis is insufficient. Animals must be subjected to ELISA test to ensure that the animals are free from the parasite. It is recommended to apply control measures for the source of infection at the area of study.

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