Using Polymerase chain reaction (PCR) for Diagnosis of Bovine Theileriosis in Upper Egypt

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Abstract:

The present study was conducted on the period from April 2008 to July 2009 and included at 150 cattle and 35 Egyptian buffalo. The age of these animals ranged from one day to above five years old. The animals belonged to farms and villages of EL-Wady EL-geded, Assiut, ELFayoum, EL- Minia and Sohage Governorates. The results of the present study cleared that the (Tams-1 primer) based PCR assay was the most sensitive test in detection of the infection with tropical theileriosis in all cases (acute, chronic and carriers). The infection rates in blood and lymph samples taken from cattle were 65.6% and 45.3%, respectively. On the other hand the infection rates were 16.7% and 25% in blood and lymph samples taken from buffaloes, respectively. PCR used as golden standard test to evaluate the conventional tests. The sensitivity of this method was 58.3% and 50% in cattle and buffaloes, respectively. While the specificity were 100% in both cattle and buffaloes. We concluded that, Tams-1 target-based PCR is the most sensitive and specific test used for diagnosis of the disease in either acute or chronic cases and also in carrier animals of tropical theileriosis.

Keywords:

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