

An enzyme-linked immunosorbent assay for the epidemiological survey of *Dermatophilus congolensis* infection in camels (*Camelus dromedarius*)

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Abstract

The breeding of camels (*Camelus dromedarius*) is especially important in arid and semi-arid areas of Africa, where drought and famine frequently occur. A number of diseases which impair camel production have recently been described, including dermatophilosis (caused by *Dermatophilus congolensis*). However, it is not possible to determine the prevalence of infection from clinical cases alone. An enzyme-linked immunosorbent assay has therefore been developed to determine the epidemiological prevalence of *D. congolensis* infection in sera of camels. Whole-cell antigen was used on microplates and the test serum was added. Horseradish peroxidase-conjugated sheep antibodies against heavy and light chains of camel immunoglobulin (Ig)G were then added, followed by substrate. The test was used to trace the antibody profile of twelve experimentally-infected camels. Peak antibody levels in serum occurred within twenty-one days following infection. It is planned to use this test to determine the epidemiological prevalence of *D. congolensis* infection in camels reared in a pastoral area of Kenya.