

**INFLUENCE OF AGE OF WILD GLOSSINA SPP (DIPTERA
GLOSSINIDAE) ON TRYPANOSOME SPECIES
DISTRIBUTION AND HOST PREFERENCE AT
NGURUMANI KAJIADO DISTRICT. ”**

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DECLARATION

Candidate

This thesis is my original work and has not been presented for a degree in any other University.

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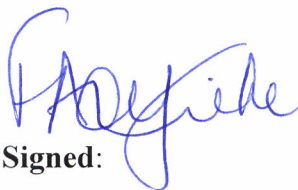
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ABSTRACT

The influence of age of *Glossina pallidipes* (Austen), on seasonal variation, trypanosome infection in cattle was investigated over a period of eight months in Ngurumani Kajiado district. *Glossina pallidipes* age was determined using the ovarian age categories, 25 age categories of the fly were identified and the mean monthly ages obtained.

The mean age of the flies in the study period averaged between 58.63 days and 22.90 days. Old fly age categories were found in the months of the June and August while the lowest survival was on the month of July.

Trypanosome Infection in cattle was highest in the month of August. The mean infection in the flies was higher in the dry season than in the wet season. There was no association between the infection in flies and the infection rate in cattle. *T. congolense* infection in cattle was highest in May as this marked the end of the wet season.

There was no significant correlation between the mean age of flies, the infection in cattle and fly infection rate. A negative correlation was found between the trypanosome infection in cattle and the infection in flies. Separately there was a significant relation between the total infection in the flies and the infection in cattle using the Poisson distribution model. The tsetse population and the total infection of the trypanosomiasis in cattle were analyzed using the Poisson regression and no significant relation was found.

In conclusion age of the flies does not significantly affect the trypanosome infection in flies and in cattle.