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THE MECHANICAL TRANSMISSION OF *Trypanosoma evansi* BY *Haematobia minuta* (DIPTERA: Muscidae) AND *Hippobosca camelina* (DIPTERA: Hippoboscidae) FROM AN INFECTED CAMEL TO A MOUSE AND THE SURVIVAL OF TRYPANOSOMES IN FLY MOUTHPARTS AND GUT (A Preliminary Record)

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ABSTRACT

The role of *Haematobia minuta* Linnaeus and *Hippobosca camelina* Leach in the transmission of camel trypanosomiasis was assessed. In a preliminary survey, there were no trypanosomes in the mouth parts or gut of the field collected, *H. minuta* and *H. camelina*, following dissections. *H. minuta* mechanically transmitted *T. evansi* from an infected camel to mice but *H. camelina* failed to do so. Results show that *H. minuta* may play just a minor role in the transmission of camel trypanosomiasis as no parasites were found in the mouth parts and gut of the field collected flies and the transmission rate was low. Although parasites survived in the gut of both flies for as long as thirty minutes, the survival of trypanosomes in the mouth parts of both flies was restrictive as far as mechanical transmission is concerned. *H. camelina* failed to transmit *T. evansi* experimentally and therefore its importance in the transmission of camel trypanosomiasis in Northern Kenya was ruled out, unless by regurgitation. Sub-inoculated homogenates of flies previously fed on an infected camel were infective to Balb C mice but the significance of this in relation to mechanical transmission in nature remains unclear.

Key words: biting flies; camel trypanosomiasis; *Haematobia minuta*; *Hippobosca camelina*; Northern Kenya; *Trypanosoma evansi*