

ABSTRACT

Studies on the Epidemiology of American
Trypanosomiasis in Trinidad.

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Studies were conducted on American Trypanosomiasis in Trinidad during the period October 1981 to September 1985, in an attempt to assess the epidemiological status of the Chagas's disease in the island.

A broad spectrum investigation was done incorporating studies on the vectors, reservoir hosts and human hosts, in order to evaluate the levels of infection with *Trypanosoma cruzi*.

A total of 148 reduviid bugs were collected, belonging to four sylvatic species, *Panstrongylus geniculatus*, *P. rufotuberculatus*, *Rhodnius pictipes* and *Eratyrus mucronatus*. Of these 42.5% (51/120) of *P. geniculatus* examined were found to be harbouring *T. cruzi* and one specimen of *R. pictipes* was found to be positive for the parasite. *P. geniculatus* therefore seems to be the most important vector.

128 mammals, belonging to 15 different species, were live trapped and heart tissues alone were obtained from an additional 32 mammals. Of all the mammals examined, only four individuals belonging to two species, *Didelphis marsupialis insularis* and *Dasypus novemcinctus novemcinctus*, were found to be infected with *T. cruzi*.

No human cases of Chagas's disease were detected from 512 sera samples screened for antibodies to *T. cruzi* using the indirect fluorescent antibody test.

Based on the results obtained, it can be concluded that the transmission cycle of *T. cruzi* is entirely sylvatic involving sylvatic reduviid bugs, the most important being *P. geniculatus*, and the common opossum and armadillo as reservoir hosts.