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Research Note

THE POSSIBILITY OF OCCURENCE OF *TRYPANOSOMA RANGELI* IN THE STATE OF TOCANTINS, BRAZIL

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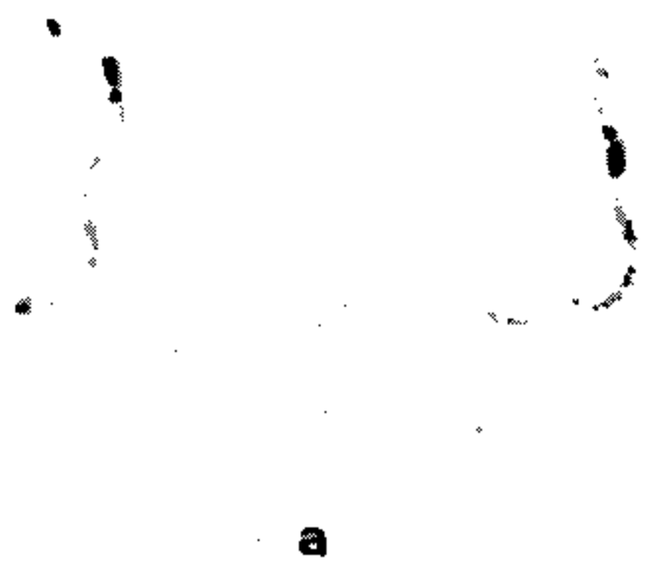
The first reports of the occurence of *Trypanosoma rangeli* in Brazil were made in the years 50 (L. M. Deane, 1958. *Rev. Brasil. Malariol. Doenças Trop., 10:* 451-458 and 531-541). A. D'Alessandro et al. (1986, *Am. J. Trop. Med. Hyg., 35:* 285-289) found the parasite in monkeys (*Saguinus mistax*) in the State of Amazonas. M. A. Miles et al. (1983, *Am. J. Trop. Med. Hyg., 32:* 1251-1259) characterized 46 trypanosome strains isolated from different sylvatic reservoirs and vectors in the Amazon basin as *T. rangeli,* by means of biological and isoenzyme methods. T. V. Barrett & T. S. Oliveira (1977, *Trans. R. Soc. Trop. Med. Hyg., 71:* 445-446) described the infection of a nymph of *Rhodnius domesticus* by *T. rangeli* in the State of Bahia, and more recently, M. Steindel et al. (1991, *Mem. Inst. Oswaldo Cruz, 86:* 73-79) reported the presence of the parasite in the State of Santa Catarina, in South on Brazil.

In this report, we present the results of an analysis of palm tree (*Mauritia vinifera*) infestation by triatomines in the municipality of Ponte Alta do Norte, State of Tocantins. The palm trees were numbered, and searched for triatomines. The search of trypanosomes in the insects was made using Giemsa stained smears of faeces. The parasites were morphologically identified with help of Dr L. M. Deane as *Trypanosoma* like *rangeli.*

Nineteen out of 20 palm trees were found to be infested and 150 *R. neglectus* were captured. In one palm tree (Angical locality), one adult was found to be infected by *T. cruzi* and another by *T.* like *rangeli.* In additon, a third instar nymph captured in a rodent nest in the Campo Belo locality, harboured *T.* like *rangeli* (Figure).



Trypanosoma rangeli forms presented in faeces of *Rhodnius neglectus*. a. epimastigotes; b. trypomastigote. Giemsa stained 1,000 X.

The occurence of *T. rangeli* in Brazil is reinforced by the finding of *R. prolixus,* its main vector in the Central and northern regions of South America, in palm trees of the State of Goiás, now the State of Tocantins (Diotaiuti et al., 1984. *Rev. Brasil. Malariol. D. Trop., 36:* 11-14). It was probably introduced into this region through bird migration between the northern regions of South America and Brazil. The report of *T. rangeli* in rodents in South Brazil (M. Steindel et al., *loc. cit.*) shows the possibility of a wider distribution of this parasite in the country. Although our results are based only on morphological identification, the presence of *T. rangeli* in other Brazilian states reinforces our findings. The inclusion of procedures to distinguish *T. cruzi* from *T. rangeli* in the routine examination of triatomine bugs, especially in studies of the sylvatic cycle of Chagas' disease, is clearly necessary.

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