TRIATOMA INFESTANS CHOOSES TO FEED UPON IMMUNE PREY

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Chagas' disease affects 18 million people in the world. Its main form of propagation is by the triatomine vector. Although much work has been carried to develop new drugs for treatment of Chagas disease, it continues to be incurable. In this work we immunized poultries with saliva of *Triatoma infestans* and evaluated if these immunizations produced alterations in some parameters related to the insect physiology. Blood-feeding *Triatoma infestans* obtained its fills from immune chickens in 15 min, but it needed 40 min for feeding upon non-immune chickens. High-titer specific IgGs and skin reactivity against *T. infestans* saliva antigens were elicited in immune chickens. Fluorescence-labeled leukocytes from non-immune or immune chickens were used to determine sources of blood drawn by equal numbers of triatomines distributed in separate compartments of a hut-like box. It was shown that 64.4 ± 4.7% of the reduviids were captured in the immune chicken room; 35.6 ± 4.5% were present in the non-immune chicken dwelling. Furthermore, *T. infestans* feeding upon immune birds reached the adult stage 40 days before those feeding upon non-immune birds. These results appear to have a broad epidemiologic significance as for spreading enzootics; hence, the immunologic status of vertebrate host populations appears to favor *T. infestans* as the main transmitter of *Trypanosoma cruzi*.

Triatoma infestans; saliva; immunity, blood-feeding.