

UNVEILING THE FEEDING PROFILE OF *Triatoma wygodzinskyi* LENT, 1951 (HEMIPTERA: REDUVIIDAE): GENETIC EVIDENCE OF LIZARD PREFERENCE

MARIA CLARA REGO E SILVA¹, QUEZIA MOURA OLIVEIRA¹, JOÃO PAULO SALES OLIVEIRA-CORREIA², CLEBER GALVÃO², ALENA MAYO IÑIGUEZ¹

¹LABORATÓRIO DE PARASITOLOGIA INTEGRATIVA E PALEOPARASITOLOGIA-IOC-FIOCRUZ, RIO DE JANEIRO, BRAZIL; ²LABORATÓRIO NACIONAL E INTERNACIONAL DE REFERÊNCIA EM TAXONOMIA DE TRIATOMÍEOS-IOC-FIOCRUZ, RIO DE JANEIRO, BRAZIL

Triatoma wygodzinskyi is a sylvatic triatomine, potentially a vector of *Trypanosoma cruzi*, that occurs in southeastern Brazilian states, where it is typically associated with rocky outcrops and occasionally found in human dwellings. It is closely related to species of the *T. pseudomaculata* complex and has been misidentified as *Triatoma arthurneivai* Lent & Martins, 1940 for over 40 years. There is a lack of information regarding host associations and trypanosomatid infections, highlighting this neglected species. Identifying blood meal sources (BMS) of vector insects enables the identification of species involved in maintaining enzootic parasite cycles, reveals the fauna supporting vector colonies, and provides insight into the faunal composition of the study areas. For this purpose, specimens identified as *T. wygodzinskyi* were collected from a rural area in *Vargem Grande do Sul* municipality, São Paulo state. Twenty-two triatomines collected from 5 colonies, including nymphs and adults, were selected for BMS identification and trypanosomatid diagnosis. The triatomines were dissected to obtain intestinal contents, followed by DNA extraction, PCR DNA Barcoding, and Sanger sequencing of the genetic markers *cytb*, 12S rDNA, and 18S rDNA. Preliminary analyses showed negative for infection and BMS as *Tropidurus itambere*, a neotropical ground lizard, and *Hemidactylus mabouia*, the cosmopolitan house gecko. Lizards of the *Tropidurus* genus are well-documented as BMS for other *Triatoma* species, and *Hemidactylus* has been previously identified as BMS for *Triatoma petrocchiae*. In general, lizards are considered refractory to *T. cruzi* infection, but recent studies highlight them as "silent hosts". The present is the first genetic detection study of BMS and trypanosomatid diagnosis for *T. wygodzinskyi*, demonstrating an important feeding profile on lizards. These findings are essential for understanding the ecology of *T. wygodzinskyi* and its role in parasite transmission.

Supported by: CAPES, FAPERJ, CNPq, LPIP-IOC/FIOCRUZ

Keywords: Blood meal sources, DNA Barcoding, Vector ecology