

# Preliminary Studies on Temperature Selection and Activity Cycles of *Triatoma infestans* and *T. spinolai* (Heteroptera: Reduviidae), Chilean Vectors of Chagas' Disease

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Preferred temperature and activity patterns of *Triatoma infestans* Klug and *Triatoma spinolai* Porter were studied, both are vectors of Chagas' disease in Chile. In the laboratory, 24 *T. spinolai* and 18 *T. infestans* were exposed to a temperature gradient between 50 and 15°C and a photoperiod of 14:10 (L:D) h. Temperature and hourly position of bugs in an experimental chamber were recorded for 24 h. Both species showed a cycle of preferred temperature, and both selected higher temperatures beginning at 1600 hours, although *T. infestans* maintains this preference over a longer period. For both species, activity patterns were synchronized with the light-dark cycle, although these activity rhythms were significantly different. *T. spinolai* had higher activity during the photophase, and *T. infestans* showed a lower activity in the photophase and a higher one during the scotophase. The similar pattern of preferred temperatures may facilitate the selection of similar environments in the event of c