

Dear Members of the Southeastern Entomological Community,

I write to you in an effort to reach those that may be in a position to facilitate our research efforts in determining the distribution and infection status of the regional arthropod vectors for the protozoan parasite, *Trypanosoma cruzi*. *Trypanosoma cruzi* is the causative agent of Chagas Disease, which causes considerable morbidity and mortality throughout Latin America. Although *T. cruzi* is endemic in sylvatic reservoir hosts throughout the southern tier of the United States, transmission to humans is relatively rare.

T. cruzi is transmitted through host contact with the contaminated feces of various species of triatomines, hemophagic members of the reduviid family of insects. More than 20 species of “Kissing Bugs” (because of their pattern of feeding around the face) are known to be vectors for *T. cruzi* in Latin America. In the southeastern United States there are two principal species involved in transmission, *Triatoma sanguisuga* and *Triatoma leticularia*. My lab here at Berry College has been working to answer three main questions in regard to these regional vectors. First, what is their distribution in the southeast? Second, what is the prevalence of *T. cruzi* infection in these bugs? Third, what strain of the parasite are they infected with?

We are asking for help in recovering specimens of both *T. sanguisuga* and *T. leticularia* from around the southeast. Since we are using PCR to both test for infection and to identify parasite strain, the age and condition of the specimen isn't critical. Any live specimens of these insects would be especially welcome since live parasite isolates could be recovered. If anyone is willing to part with their specimens, and need a replacement for their collection, we can provide those as well. If information on where they were collected is available, it can be used to help generate a GIS database for this project. Please realize that I am not an entomologist, thus technical bug questions are likely to be met with a blank stare/monitor.

T. sanguisuga and *T. leticularia* are morphologically similar, and frequently found in mixed colonies, often in close proximity to rodent dens, bird nests, chicken houses, and homes.



T. sanguisuga

If you are in a position to contribute to this important project, I would greatly appreciate your assistance. Please feel free to forward this on to anyone you feel might be able to assist. I'd be happy to answer any questions.

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T. leticularia

