January 3, 2018

Dear Editor:

I am sending you our manuscript entitled "Chironomidae (Diptera) species diversity of estuaries across a land use gradient on the Caribbean coast of Costa Rica" by Petra Kranzfelder and Leonard C. Ferrington, Jr. We would like to have the manuscript considered for publication in *Revista de Biología Tropical.*

Chironomidae assemblages are likely to provide a useful measure of biotic integrity in Neotropical estuaries of Costa Rica, which lack an intensive estuarine bioassessment tool to support environmental monitoring. In Neotropical estuaries on the Caribbean coast of Costa Rica, we characterized the taxonomic composition of Chironomidae, tested a Chironomidae Index of Biotic Integrity (CIBI) for evaluating the surface water quality and physical habitat, and made recommendations for increasing the sensitivity of the CIBI to detect differing degrees of stress. We identified 228 morphospecies and 70 genera from 17,071 Chironomidae pupal exuviae collected from nine estuaries, which ranked in the following order from lowest to highest biotic integrity based on CIBI scores: Estero Negro, Laguna Cuatro, Laguna Jalova, Laguna del Tortuguero, Río Parismina, Laguna Barra del Colorado, Río Pacuare, Río Bananito, and Río Estrella. The CIBI successfully differentiated between estuaries with poor to good biotic integrity, which indicates that CIBI can be used to evaluate the surface water quality and physical habitat of Neotropical estuaries. We recommend that future studies refine our approach by developing regionally accurate genus and corresponding species-level tolerance values to improve the sensitivity of the CIBI for biological monitoring of Neotropical estuaries. We believe our findings would appeal to the audience of specialized personnel in the field of Biology and Conservation of tropical organisms and environments.

These data represent original findings and all authors have approved the manuscript and agree with submission to *Revista de Biología Tropical.* We have met our ethical requirements. We agree to pay excess page charges if required.We recommend three possible reviewers: Carlos de la Rosa ([carlosldelarosa@gmail.com)](mailto:carlosldelarosa@gmail.com)), Richard Jacobsen ([Pahayokeensis@aol.com)](mailto:Pahayokeensis@aol.com)), and Narcís Prat (nprat@ub.edu). Please prepare a Spanish Abstract (Resumen) and address all correspondence concerning this manuscript to Petra Kranzfelder ([kranz081@umn.edu](mailto:kranz081@umn.edu)).

Sincerely,



Petra Kranzfelder, Ph.D.