

TAXONOMIC COMPOSITION AND DISTRIBUTION OF SAUCER BUGS
(HETEROPTERA: NEPOMORPHA: NAUCORIDAE) OF TANZANIA

Aaron Yesaya Mbogho

Dr. Robert W. Sites, Thesis Supervisor

ABSTRACT

Naucorids are predaceous aquatic insects and the principal arthropod predators of biting fly larvae. Naucorids exert natural control of mosquito larvae and are important with respect to malaria in Tanzania. However, naucorids have been documented to harbor the mycobacterium responsible for Buruli ulcer in Africa, although transmission is not known. Therefore, to provide a sound foundation for future biological, ecological, and epidemiological investigations, a study to document the taxonomic composition and distribution of the species of Naucoridae of Tanzania was conducted from 2010 to 2012; a total of 127 localities sampled. Habitats sampled included streams, rivers, waterfalls, ponds, lakes, reservoirs, swamps, and cold and hot springs. Previously, only four genera and seven species were known from Tanzania. All taxa previously recorded from Tanzania were re-collected except two species (*Neomacrocoris karimii* Poisson and *N. usambaricus* Montandon). These collections added an additional two genera and eight species, including two undescribed species of *Neomacrocoris* and one undescribed species of *Macrocoris*. As a result, the known fauna of Naucoridae of Tanzania now comprises 6 genera and 14 species. This study provides the first authoritative identification resource to determine the entire fauna of Naucoridae of an African country using modern techniques. Publication of this study can serve as a model for future studies of this type in other countries in the African continent.