Dero superterrenus (Michaelsen, 1912) (Annelida, Clitellata, Naididae, Naidinae) associated with phytotelmata and artificial containers in Monroe County, Florida USA

Mark J. Wetzel* $^{\dagger 1}$ and Lawrence J. Hribar $^{\ddagger 2}$

¹Illinois Natural History Survey (INHS) – Prairie Research Institute at the University of Illinois Urbana-Champaign, 1816 South Oak Street, MC-652, Champaign, Illinois, United States
²Florida Keys Mosquito Control District – 503 107th Street, Marathon, Florida 33050, United States

Abstract

The island chain known as the Florida Keys surrounds the southernmost tip of the state of Florida, USA. We present the results of a multi-year inventory of phytotelmata in the Florida Keys, focusing on the aquatic oligochaetes collected and identified from these unique and usually temporary natural and artificial habitats. For many years (mid 1990s-present), the Florida Keys Mosquito Control District has been conducting larval mosquito surveillance in natural areas and in domestic situations. Domestic surveillance has included examination of artificial and natural containers near houses, inspection of sewage treatment plants, and monitoring mosquito larval development in storm water catch basins. Several publications discussed the results of this long-term monitoring program – focusing specifically on the mosquitoes and other arthropods in samples; the oligochaetes in samples remained unidentified. Recently, we identified the oligochaetes present in samples collected from 86 natural and artificial phytotelmata, including 1,114 specimens of Dero superterrenus (Michaelsen, 1912), several Dero sp. (incomplete, likely D. superterrenus), and five unidentifiable Tubificinae. The relationships of D. superterrenus with the four mosquitos encountered during the monitoring program – Aedes aegypti (L.), Culex quinquefasciatus Say, Culex nigripalpus Theobald, and an unidentified Wyeomyia species – are summarized. Other recently documented records for D. superterrenus elsewhere in the southern U.S. states are highlighted.

Keywords: phytotelmata, water bodies, aquatic oligochaetes, Annelida, Clitellata, Naididae, *Dero superterrenus*, distribution, new state records, USA, Florida

^{*}Speaker

[†]Corresponding author: mjwetzel@illinois.edu ‡Corresponding author: lhribar@keysmosquito.org