

**A TALE OF TWO SETAE: LARVAL AND PUPAL CHAETOTAXY OF
Eucorethra underwoodi (DIPTERA: CHAOBORIDAE)**

Joshua R. Ogawa and Darlene D. Judd

Department of Entomology, Oregon State University, Corvallis, Oregon, 97331, USA

An understanding of changes in chaetotaxy patterns between larval instars and between fourth instar larvae and pupae are useful for developing characters for phylogenetic analysis and discriminating species. A comparison of setal patterns between the chaoborids and the culicids is a necessary step in establishing homologies across taxa as well as to differentiate larval instars within taxa. A comprehensive map of larval and pupal chaetotaxy patterns will be presented for *Eucorethra underwoodi* Underwood.

Eucorethra underwoodi was chosen because the species is locally abundant, relatively large, and is easily diagnosable in all life stages. The goals of this research are: 1) develop a rearing protocol and successfully rear larval instars, pupae, and an adult of the same individual and 2) establish homologies for setal patterns for larval and pupal life stages of *E. underwoodi*. This information builds a foundation for assessing homology for chaetotaxy between an exemplar chaoborid and species from the Culicidae.