

**TALES FROM THE PHYTOTELMATA: WYEOMYIA (HYSTATOMYIA)
DYAR & KNAB (DIPTERA: CULICIDAE)**

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Members of the tribe Sabethini (Diptera: Culicidae) oviposit and develop in phytotelmata (plant-held waters) and are primarily distributed in a pantropical pattern. Until recently, sabethines had been overlooked by systematists. However, current cladistic studies have demonstrated that while the tribe is a monophyletic group, three of its 12 genera are not. The genus *Wyeomyia* is particularly problematical and debate continues with regard to the monophyly of subgenera within *Wyeomyia*. In addition to examining relationships between the subgenus *Hystatomyia* and its putative sister group, *Phoniomyia*, I will carry out a species-level revision of *Wy.* (*Hystatomyia*). Subgeneric boundaries will be proposed from cladistic analyses using morphological characters. My research will explore characters specific to adults, pupae, and larvae. The revision of *Wy.* (*Hystatomyia*) will work to clarify the complex biogeographical patterns observed between Central America and northern South America in this subgenus.

The main objectives of this research are fourfold: 1) produce a comprehensive species-level monograph of *Wyeomyia* (*Hystatomyia*), 2) determine the sister group for the subgenus *Hystatomyia*, 3) provide data for the phylogenetic placement of *Hystatomyia* within *Wyeomyia* (Diptera: Culicidae: Sabethini), and 4) examine biogeographical patterns in Central and South America.