

A review of the genera comprising species of the genus *Eurynogaster sensu Hardy & Kohn, 1964* in Hawai‘i (Diptera: Dolichopodidae)

NEAL L. EVENHUIS

Hawaii Biological Survey, Bishop Museum, 1525 Bernice Street, Honolulu, Hawai‘i 96817-2704, USA; email: neale@bishopmuseum.org

Table of contents

Abstract	39
Introduction	40
Material and Methods	41
Systematics	41
Genera with species previously placed in <i>Eurynogaster sensu Hardy & Kohn, 1964</i>	44
Genus <i>Adachia</i> Evenhuis, gen. n.	44
Genus <i>Arciellia</i> Evenhuis, gen. n.	45
Genus <i>Elmoia</i> Evenhuis, gen. n.	48
Genus <i>Eurynogaster</i> Van Duzee	50
Genus <i>Major</i> Evenhuis, gen. n.	51
Genus <i>Sigmatineurum</i> Parent	53
Genus <i>Sweziella</i> Van Duzee	55
Genus <i>Uropachys</i> Parent	56
Character Discussion and Possible Phylogenetic Relationships	57
Acknowledgments	60
References	60

Abstract

The generic limits are redefined for the endemic Hawaiian dolichopodid genera *Eurynogaster* Van Duzee, *Sweziella* Van Duzee, and *Uropachys* Parent, with the latter two resurrected from synonymy with *Eurynogaster*. Additionally, four new endemic Hawaiian genera are described: *Arciellia*, **gen. n.**, *Adachia*, **gen. n.**, *Elmoia*, **gen. n.**, and *Major*, **gen. n.**, to accommodate species previously placed in *Eurynogaster*. The related genus *Sigmatineurum* is redefined. Based on re-examination of male genitalic and other diagnostic characters and study of type material, a number of species previously placed in *Eurynogaster* are transferred to the other genera producing the following new combinations: *Sweziella aeruginosa* (Hardy & Kohn), **comb. n.**, *S. conspicua* (Hardy & Kohn), **comb. n.**, *S. emarginata* (Hardy & Kohn), **comb. n.**, *S. gracilipennata* (Hardy & Kohn), **comb. n.**,

S. pictilipenna (Tenorio), **comb. n.**, *S. tergoprolixa* (Hardy & Kohn), **comb. n.**, *S. virida* (Van Duzee), **comb. n.**, *Uropachys clavastylus* (Hardy & Kohn), **comb. n.**, *U. crassicercus* (Hardy & Kohn), **comb. n.**, *U. flavicrurus* (Hardy & Kohn), **comb. n.**, *U. fusticercus* (Hardy & Kohn), **comb. n.**, *U. palustricola* (Hardy & Kohn), **comb. n.**, *U. pulvereus* (Hardy & Kohn), **comb. n.**, *Arciellia dolichostoma* (Hardy & Kohn), **comb. n.**, *A. flaviventer* (Hardy & Kohn), **comb. n.**, *A. xanthopleura* (Hardy & Kohn), **comb. n.**, *Adachia apicenigra* (Van Duzee), **comb. n.**, *A. hispida* (Hardy & Kohn), **comb. n.**, *A. nigripedis* (Hardy & Kohn), **comb. n.**, *A. nudata* (Hardy & Kohn), **comb. n.**, *A. williamsi* (Hardy & Kohn), **comb. n.**, *Elmoia bullata* (Hardy & Kohn), **comb. n.**, *E. exartema* (Hardy & Kohn), **comb. n.**, *E. hamata* (Hardy & Kohn), **comb. n.**, *E. lanceolata* (Tenorio), **comb. n.**, *E. multispinosa* (Hardy & Kohn), **comb. n.**, *E. nigrohalterata* (Parent), **comb. n.**, *E. saxatilis* (Grimshaw), **comb. n.**, *E. viridifacies* (Parent), **comb. n.**, and *Major minor* (Parent), **comb. n.** *Eurynogaster parenti* Hardy & Kohn is synonymized with *Pachyurus hawaiiensis* Parent, **syn. n.**, which is removed from secondary homonymy with *Eurynogaster hawaiiensis* (Grimshaw) and returned to *Uropachys*, **rev. stat.** A key to the genus *Eurynogaster* and allies in the Hawaiian Islands is included.

Key words: Dolichopodidae, Hawaiian Islands, *Adachia*, *Arciellia*, *Elmoia*, *Major*, *Sigmatineurum*, *Sweziella*, *Uropachys*, taxonomy

Introduction

The endemic Hawaiian genus *Eurynogaster* Van Duzee has not had the benefit of a systematic revision since the monumental work on Hawaiian Dolichopodidae by Hardy & Kohn (1964) and its supplement by Tenorio (1969). Parent (1940) synonymized *Sweziella* Van Duzee under *Eurynogaster* based on the advice of F.X. Williams (*in litt.*), who said that this genus was based on a single female (not a male as presumed by Van Duzee) and that it resembled *Eurynogaster*. *Eurynogaster* is one of the most speciose groups of Hawaiian dolichopodid flies [55 species were recorded by Nishida (2002)]. Hardy & Kohn (1964) treated *Eurynogaster* in the Sympycninae indicating that it was closest to *Campsicnemus* Haliday based on the shared presence of a prescutellar depression and was best separated from that genus by wing vein characters, the lack of acrostichal setae, and the fact that the male genitalia are comparatively larger and well differentiated. The result of implementation of this suite of characters is a relative heterogenous collection of species that possess characters that belong to separate genera.

Eurynogaster was proposed by Van Duzee (1933) for three newly described species: *Eurynogaster clavaticauda* Van Duzee, *E. nitida* Van Duzee, and *E. virida* Van Duzee. In the same paper, Van Duzee also proposed the genus *Sweziella*, for the single new Hawaiian species, *Sweziella albifacies* Van Duzee. He placed *Eurynogaster* in the Sympycninae and *Sweziella* in the Thinophilinae. The next year, Parent (1934) proposed the genus-group name *Pachyurus* Parent for the species *Pachyurus hawaiiensis* [he later (Parent, 1935) noted the generic name was preoccupied and proposed the replacement name *Uropachys*