Drosophila bunnanda—a new species from northern Australia with notes on other Australian members of the montium subgroup (Diptera: Drosophilidae)

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Abstract

An unknown *Drosophila montium* subgroup species was collected on Cape York Peninsula in 1992, a live culture of the same species was established from flies collected in the vicinity of Lake Placid near Cairns in 2001. From these specimens we now have sufficient information to describe a new species—*Drosophila bunnanda*. It differs morphologically from the four other *montium* subgroup species already known from northern Queensland—*D. serrata*, *D. birchii*, *D. kikkawai*, and *D. sp. cf. jambulina*, and from one very similar species—*D. dominicana*—known from Papua New Guinea. Molecular data support the taxonomic findings. Additional information and a key for all Australian *montium* subgroup species is provided to allow clear differentiation between them and *D. bunnanda*.

Key words: Drosophila bunnanda, Drosophila serrata, Drosophila birchii, Drosophila kikkawai, Drosophila jambulina, montium subgroup.

Introduction

The genus *Drosophila* was once subdivided into four large subgenera: *Sophophora, Scaptodrosophila, Hirtodrosophila* and *Drosophila s.str.* in addition to a number of other smaller subgenera. *Scaptodrosophila* and *Hirtodrosophila* are now treated as genera, but *Sophophora* remains subgeneric. *Drosophila melanogaster* Meigen, 1830 is the typical species of *Sophophora* and not *Drosophila* (the type species of *Drosophila* being *Musca funebris* Fabricius, 1787). More than 300 drosophilid species are morphologically similar to, and therefore classified with, *melanogaster* in the subgenus *Sophophora*. The *melanogaster* "species group" represents a large proportion of *Sophophora* (Bock &

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