



## Two new genera of Swammerdamellini (Diptera, Scatopsidae), with a discussion of the position of the species of *Rhexoza*

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## **Abstract**

Species previously included in the genus *Rhexoza* Enderlein have been gradually displaced to other Swammerdamellini genera, as *Quateiella* Cook, *Akorhexoza* Cook, *Pararhexosa* Freeman and *Abrhexosa* Freeman. The holotype of *Rhexoza lobata* Cook, 1956a, from Cordoba, State of Vera Cruz, México, was examined and *Brahemyia*, **gen.n.** is erected for this species –*Brahemyia lobata*, **n.comb.** Other species of *Rhexoza* were examined and *Cooka*, **gen.n.** is proposed for six Nearctic species: *C. similis* (Beekey, 1938) **n.comb.**, *C. teskeyi* (Cook, 1975) **n.comb.**, *C. aterrima* (Melander, 1916) **n.comb.**, *C. incisa* (Cook, 1975) **n.comb.**, *C. iowensis* (Cook, 1975) **n.comb.**, and *C. melanderi* (Cook, 1975) **n.comb.** Two Australian species previously placed in *Rhexoza* are transferred to *Pararhexosa* Freeman, *P. chelata* (Cook, 1971) **n.comb.**, and *P. senticosa* (Cook, 1971) **n.comb.** Four other species of *Rhexoza* are transferred to *Abrhexosa* Freeman: the Nearctic species *A. amaryllis* (Cook, 1975) **n.comb.**, *A. ryckmani* (Cook, 1975) **n.comb.**, and *A. grossa* (Cook, 1956) **n.comb.**, and the Neotropical species *A. panamensis* (Cook, 1956) **n.comb.** One species is transferred from *Rhexoza* to *Quateiella*: *Q. freyi* (Duda, 1937) **n.comb.**, from the Canary Islands. *R. richardsi* Freeman, 1985 *R. flixella* Haenni, 2001 and *R. lydiae* Withers, 2004 fit in *Rhexoza* with the type–species, *R. subnitens* (Verrall, 1886). *R. radiella* (Enderlein, 1926), and *R. seminitens* (Edwards, 1928), known only from females, are kept doubtfully in the genus. The monophyly of these genera is discussed, as well as their position within the Swammerdamellini.

Key words: Diptera, Scatopsidae, Swammerdamellini, Systematics

## Introduction

The Scatopsidae are tiny, blackish flies usually with dull wings and more often seen running on the substract than flying. Their size varies from about 0.6 to 3.0 mm long and they are often overlooked in collections and field work. Scatopsid larvae live in decaying plant or animal material, humid wood holes etc. and pupae is formed within the exuvia of the last larval instar.

The classification of the Scatopsidae includes four subfamilies, gathering 33 genera (Amorim, 1994). The Aspistinae includes the Holarctic genera *Aspistes* Meigen and *Arthria* Kirby; the Ectaetiinae includes only *Ectaetia* Enderlein, with worldwide distribution; the Psectrosciarinae presently includes only two genera, *Psectrosciara* Kieffer, and *Anapausis* Enderlein; the Scatopsinae is much larger, with the remaining 28 genera distributed in four tribes, Rhegmoclematini, Scatopsini, Colobostematini, and Swammerdamellini.

The tribe Swammerdamellini was proposed by Cook (1963) to include three genera: the very distinctive small scatopsids of the genus *Swammerdamella*, described by Enderlein (1912), the monotypic genus *Coboldia* erected by Melander (1916) for the cosmopolitan species *Coboldia fuscipes*, and *Rhexoza*, created by Enderlein (1936). The monophyly of *Swammerdamella* is unquestionable and the revision of the genus by Cook (1956b) furnishes a diagnosis in which there are plenty of autapomorphies —e.g., the shape of the max-