

**DE GEER'S EXOTIC MUSCA SPECIES (DIPTERA: SYRPHIDAE
AND CALLIPHORIDAE)**

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DE GEER'S EXOTIC MUSCA SPECIES (DIPTERA:
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ABSTRACT—*Musca surinamensis* De Geer, described from Surinam, is relegated to *nomen dubium* status in the family Syrphidae. *Musca erythrocephala* De Geer, also described from Surinam, is newly placed as a synonym of *Cochliomyia macellaria* (Fabricius).

De Geer, in his *Memoires pour servir a l'histoire des Insectes* (1776: 145, 146), described only 2 exotic species of *Musca*, *surinamensis* and *erythrocephala*, both from Surinam. Fabricius (1781:422, 424) synonymized both species (see below) although he indicated that the synonymy of *erythrocephala* was dubious. Since Fabricius' time both of De Geer's names have been considered to apply to syrphids and Fabricius' synonymies have been accepted almost without exception. However, while preparing the fascicle on the family Syrphidae for *A Catalogue of the Diptera of the Americas south of the United States*, I questioned both of Fabricius' synonymies and have decided that neither is correct.

Musca surinamensis De Geer

This species has been accepted as a synonym of *Palpada hortorum* (Fabricius) 1775, a West Indian species not known from the main-

land. De Geer said that his species was very similar to *Eristalis horticola* (De Geer) and, among other things, that the wings, although transparent, nevertheless are tinged brownish yellow almost throughout and the legs are mixed yellow-ochre and brown (“*Les ailes, quoique transparentes, sont cependant teintées de brun jaunâtre presque par-tout, . . . les pattes sont mêlées de jaune d’ocre & de brun.*”). These characteristics, along with the type locality of *surinamensis*, clearly exclude *hortorum* as a synonym. Unfortunately the problem of the true identity of *surinamensis* is not as easily solved as the types are lost and the original description is inadequate. De Geer’s reference to the similarity of his species to *Eristalis horticola* (De Geer) indicates that *surinamensis* should be placed in *Palpada*, and of the *Palpada* known to me the female of *vinetorum* seems to fit the description the best. However, rather than replace a well-known name with a dubious senior synonym, I feel *surinamensis* should be left as *nomen dubium*.

Musca erythrocephala De Geer

Fabricius synonymized this species with his *Ornidia obesa* but he indicated that the synonymy was dubious because of differences in body pile and head color. Kertész (1910:189) listed *erythrocephala* as a valid species of *Volucella*. Williston (1886:316) and Fluke (1957:68) did not list De Geer’s species in their catalogs of Neotropical syrphids. However, van Doesburg (1963:50 & 1966:94) pointed out this omission, reprinted the original description, and later suggested that Fabricius’ synonymy of *erythrocephala* should be accepted “. . . till the contrary has been proved.” Apparently Fabricius and the other workers who have considered *erythrocephala* a syrphid have ignored the first line of De Geer’s description, which states that his species is very similar to *Lucilia caesar* (Linnaeus), a well known species of Calliphoridae. The only reference to *erythrocephala* De Geer that I could find in the calliphorid literature was by Hall (1948:307, 308), who in a discussion of the usage of the original combination “*Musca erythrocephala*” by various authors mentions De Geer’s species. Hall stated that for *erythrocephala* De Geer: 1) the type locality “. . . was not located”; 2) apparently the type “. . . is lost”; and 3) it “. . . may belong to *Rutilia*” (an Australasian genus of Tachinidae).

The “types” of *Musca erythrocephala* De Geer are still extant and are calliphorids, not syrphids or tachinids. Dr. Persson has kindly loaned me the 3 specimens under this name in the De Geer Collection (in the Swedish Museum of Natural History, Stockholm); 1 ♂ and 1 ♀ are *Chrysomyia megacephala* (Fabricius) 1805, and 1 ♀ is *Cochliomyia macellaria* (Fabricius) 1775. Since the type-locality of *erythrocephala* is Surinam this would exclude the specimens of *Ch.*

megacephala, an Oriental species, from being types and would restrict the name to the single specimen of *Co. macellaria*, a common and widespread New World species. However, to prevent any future uncertainty about the validity of this restriction, I hereby designate the single female specimen of *Co. macellaria* as the lectotype of *Musca erythrocephala* De Geer and have so labelled the specimen. Thus, the name *Musca erythrocephala* De Geer is removed from the family Syrphidae to the family Calliphoridae and synonymy under *Cochliomyia macellaria* (new synonymy).

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