



## The flat-footed fly genus *Seri* Kessel & Kessel (Diptera: Platypezidae)

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### Abstract

Systematic information on the rarely collected Holarctic platypezid genus *Seri* Kessel & Kessel is reviewed. Two species are included, *S. obscuripennis* (Oldenberg) from the Palaearctic Region and *S. dymka* (Kessel) from the Nearctic Region. The two species are diagnosed and the male of *S. dymka* is described for the first time. New records of *S. dymka*, previously recorded only from western North America, indicate that the species has a transcontinental distribution. The phylogenetic position and generic status of *Seri* is discussed.

**Key words:** Platypezidae, Platypezinae, *Seri*, Nearctic, Palaearctic

### Introduction

The flat-footed fly genus *Seri* was erected by Kessel & Kessel (1966) to include one rarely collected species, *S. dymka*, described earlier (in *Clythia* Meigen) by Kessel (1961) from western North America. Subsequently Chandler (1974) assigned the poorly known Palaearctic species *Clythia* (= *Platypeza*) *obscuripennis* Oldenberg to *Seri* based primarily on similarities in wing venation. Not much more has subsequently been published on the genus, although Chandler (2001) redescribed *Seri* based on *S. obscuripennis* and illustrated the male genitalia of that species (also illustrated in Chandler & Shatalkin 1998).

Additional Nearctic specimens of *Seri* have now been studied, including the first known male of *S. dymka*. The purpose of this paper is to report on these specimens, describe the male of *S. dymka*, diagnose the included species and evaluate the status of the genus.

### Material and methods

This study is based on material borrowed from or deposited in the following institutions and collections: California Academy of Sciences, San Francisco, CA, USA (CAS); Canadian National Collection of Insects, Ottawa, ON, Canada (CNC); Cornell University Insect Collection, Ithaca, NY, USA (CUIC); University of Guelph Insect Collection, Guelph, ON, Canada (DEBU); private collection of P.J. Chandler, Melksham, United Kingdom (PJC).

Morphological terminology for adult structures primarily follows McAlpine (1981) and Cumming and Wood (2009), except for the antenna and wing venation where the terms of Stuckenberg (1999) and Saigusa (2006) are used respectively. In the system outlined by Saigusa (2006), the dipteran wing vein  $A_1$  (as used in McAlpine 1981) is homologized with the mecopteran  $CuP$ , and consequently  $CuA_1$  (of McAlpine) is termed  $M_4$ , whereas  $CuA_2$  is  $CuA$ , the anal cell is cell  $cua$  and the anal vein ( $CuA_2+A_1$ ) is  $CuA+CUP$ . The wing vein homologies as they relate to Platypezidae are shown in Figure 3.

Specimen photographs were taken using a Canon EOS 40D Digital SLR camera with an MP-E 65mm 1–5x macro lens mounted on a Kaiser RS1 copy stand. The male genitalic figure was prepared after macerating the ter-