



## A review of of the Holarctic *Sepedon fuscipennis* and *S. spinipes* groups with description of a new species (Diptera: Sciomyzidae)

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### Abstract

Two holarctically distributed species groups of *Sepedon*, *S. fuscipennis* (5 spp.) and *spinipes* (2 spp.) are reviewed. The diagnostic characters of all species are compared and the distinguishing structures of the male terminalia are illustrated. The Palaearctic *Sepedon hecate* **sp. nov.** is described and compared with the Nearctic species of the *S. fuscipennis* group. The new species is distributed mainly in the East Palaearctic but apparently penetrates to Central Europe. A detailed study of the male terminalia of the Palaearctic *S. spinipes spinipes* (Scopoli, 1763) and the Nearctic *S. spinipes americana* Steyskal, 1951 shows that the Nearctic taxon actually represents a well distinguished species, *S. americana* Steyskal, 1951, **stat. nov.**

**Key words:** Sciomyzidae, *Sepedon*, male terminalia, Palaearctic, Nearctic

### Introduction

In the 1970's one of us (K.E.) found a species resembling superficially the common Palaearctic *S. spinipes* (Scopoli, 1763) but distinctly different in some conspicuous external characters as well as the male terminalia. Owing to the known distribution of the new species (Amur area in the Far East of Russia) it was not excluded that this species could be actually a known Nearctic species. Although the paper by Orth (1986) on the taxonomy of the Nearctic *S. fuscipennis* group provided opportunity for authentic comparison with Nearctic species, the problem was, at least for the time, put off.

New inspiration to address the question arose when L.K. found a male of the "East Palaearctic" species from the Alps (Germany, Oberbayern), K.E. provided further specimens from his collection and N. Vikhrev loaned additional specimens from the Zeya valley, again in the Amur area. Extensive material of this new species thus enabled a detailed comparison with the Nearctic species of the *S. fuscipennis* group, in which also the new Palaearctic species undoubtedly belongs.

After many years we are finally able to prove that a second non-metallic blue *Sepedon* really occurs in the Palaearctic and that it may be reliably distinguished not only from the externally similar *S. spinipes* (Scopoli, 1763) but also from all the related Nearctic species of this genus. Because two subspecies have been distinguished within *S. spinipes* for more than 50 years, the nominate Palaearctic form and the Nearctic subspecies *S. spinipes americana* Steyskal, 1951, we decided to re-examine representative material of both taxa.

Within the Sciomyzidae the genus *Sepedon* is characterised by a large set of highly apomorphic characters, including the reduction of many setae belonging to the groundplan of the family and most importantly, a secondary symmetry of the male terminalia (cf. Rozkošný 1987). The proepisternal seta is