



## Redescription of *Sarcophaga (Discachaeta) bezziana* Böttcher and *Sarcophaga (Heteronychia) infixa* Böttcher, and description of a new *Heteronychia* Brauer & Bergenstamm from southern France (Diptera: Sarcophagidae)

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### Abstract

*Sarcophaga bezziana* Böttcher, 1913 and *S. infixa* Böttcher, 1913 are redescribed and their male terminalia are illustrated with SEM images; their subgeneric affiliation and affinities with related species are discussed. A lectotype is designated for *Sarcophaga bezziana* Böttcher. This species is compared to the closely related *S. amita* Rondani, 1860 and transferred from subgenus *Heteronychia* Brauer & Bergenstamm, 1889 to subgenus *Discachaeta* Enderlein, 1928, **comb. nov.** *Sarcophaga infixa* Böttcher **sp. rev.** is removed from synonymy with *S. haemorrhoides* Böttcher, 1913. A new species, *Sarcophaga (Heteronychia) gallica* **sp. nov.**, closely related to *S. (H.) infixa*, is described from southern France.

**Key words:** *Discachaeta*, *Heteronychia*, taxonomy, nomenclature, lectotype designation, new species

### Introduction

*Heteronychia* Brauer & Bergenstamm, 1889 is the largest subgenus of *Sarcophaga* Meigen, 1826, with approximately 100 valid species mainly distributed in the Palaearctic Region (Pape 1996). Within the framework of a wider study on *Heteronychia* and the closely related subgenus *Discachaeta* Enderlein, 1928, specimens of two rare species, *Sarcophaga bezziana* Böttcher, 1913 and *S. infixa* Böttcher, 1913 were examined. The first had long been confused with the unrelated species *Sarcophaga (Heteronychia) infantilis* Böttcher (1913c) and the study of the type series allowed this confusion to be corrected; the second (for which only schematic illustrations and incomplete descriptions existed in the literature) had been treated as a rare Central European species until recently synonymized with *S. (Heteronychia) haemorrhoides* Böttcher, 1913 by Pape *et al.* (2002).

We herein redescribe both Böttcher's nominal species and discuss their affinities with other species of *Discachaeta* and *Heteronychia*, as well as the subgeneric placement of *Sarcophaga bezziana*. Males from southern France initially thought to belong to *Sarcophaga infixa*, after comparison with the holotype and some additional specimens of *S. infixa* from Hungary and Austria, were found to differ significantly in several features of the terminalia and are described as a new species.