



## On nomenclature and synonymy of *Trichius rosaceus*, *T. gallicus*, and *T. zonatus* (Coleoptera: Scarabaeidae: Cetoniinae: Trichiini)

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### Abstract

The name *Scarabaeus rosaceus* Voet, 1766–1778, currently in use as one of two names for a west Palaearctic *Trichius* species, is unavailable because Voet's work is not consistently binominal. The valid name for the species is *Trichius gallicus* Dejean, 1821 with the Sardinian and North African populations forming the subspecies *T. g. zonatus* Germar, 1831. The lectotype of *Trichius zonatus* Germar is designated.

**Key words:** bumblebee beetles, lectotype designation, taxonomy, Germar type, Europe, Palaearctic

### Introduction

The European fauna west of the Caucasus contains three species of the genus *Trichius* Fabricius, 1775. *Trichius fasciatus* (Linnaeus, 1758) and *T. sexualis* Bedel, 1906 (see Krell 2010) have been known under these undisputed names for over a century. However, there is inconsistency in the valid name used for the third species that has a broad white stripe only on the penultimate sternite of the males. Both *Trichius zonatus* (Germar, 1831) and *Trichius rosaceus* (Voet, 1766–1778) are widely used as the valid names for this species, sometimes with the former name being used for the Sardinian and North African subspecies of this species. Examples of usage are:

for *T. zonatus*—Brakman 1966, Báguena 1967, Machatschke 1969, Stebnicka 1983, Jessop 1986, Mroczkowski & Stefańska 1991, Krell & Fery 1992, Brandstetter & Kapp 1998, Bunalski 1999, Przewoźny 1999, Rößner & Schulze 1999, Frank & Konzelmann 2002, Martin & Pedersen 2002, Micó & Galante 2002, Böhme 2005, Chi-mișliu 2007, Troukens 2007;

for *T. rosaceus*—Janssens 1960, Baraud 1977, Paulian & Baraud 1982, Gangloff 1991, Baraud 1992, Král 1993, Carpaneto & Piatella 1995, Decelle 1995, Sparacio 1995, Inglebert 1997, Krajčák 1999, San Martín *et al.* 2001, Pesarini 2004, Dutto 2005, Smetana 2006; Mertlik 2009, Ballerio *et al.* 2010;

and for *T. rosaceus zonatus*: Baraud 1977, Paulian & Baraud 1982, Chambon *et al.* 1985, Carpaneto & Piatella 1995, Krajčák 1999, Dutto 2005, Lapiana & Sparacio 2006, Smetana 2006, Ballerio *et al.* 2010.

The parallel usage of different names for the same species is undesirable and needs to be resolved. Here, I propose a solution by strictly applying the International Code of Zoological Nomenclature (International Commission on Zoological Nomenclature 1999).

### *Trichius rosaceus* (Voet, 1766–1778) (unavailable) and *Trichius rosaceus* Kraatz, 1891 (junior synonym)

In his *Catalogus Systematicus Coleopterorum*, Johann Eusebius Voet described *Scarabaeus rosaceus* from the Netherlands in the Dutch and French editions, but from Belgium (“Habitat in Belgico.”) in the Latin edition, which, however, belonged to the Austrian Netherlands at the time. The description is on sheet B, which was issued between 1766 and 1778 (Hagen 1857). From description and illustration, it is unclear to which of the three Central European *Trichius* species the author refers. Two species of *Trichius* occur in Belgium and the Netherlands: *Trichius fasciatus* and the one that is currently called *T. rosaceus* or *T. zonatus* (Brakman 1966, Decelle 1995).