

## Stenobothrus rubicundus (Germar, 1817): an invalid name (Orthoptera)

by

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In the course of work on his M.Sc. thesis at the Zoological Museum, Amsterdam, Mr. H. WIJSMAN directed our attention to a rather complicated nomenclatorial problem relating to the current name of a well-known Central-European grasshopper, *Stenobothrus rubicundus* (Germar, 1817).

As author of the name *rubicundus* all recent writers have cited GERMAR, 1817. However, on page 256 of his book, GERMAR (1817) writes:

"325) *Gryllus rubicundus*, Götze (*sic*) ent. Beitr. II. 108. 38. Schaeff. Icon. tb." 241. f. 5. 6.

"Bei Triest.

"Vom Gr. biguttulus Panz. Fn. 33. 6. ist er gewiss ganz verschieden, wahrscheinlich auch von Gr. biguttulus Fb. Linn., obgleich Panzer Schäffers Figuren "anzieht. Ueberhaupt liegt die Naturgeschichte der europäischen Grillen noch "sehr im Dunkeln."

Up to now, apparently no one has realized that GERMAR did not describe a new species. Actually, he even did not give a description, but merely identified his material as *Gryllus rubicundus* Goeze.

In the work cited by GERMAR, GOEZE (1778), basing himself on the plates of SCHAEFFER (1778)<sup>1)</sup>, described two new species of Orthoptera with the specific name *rubicundus*, viz. on p. 95: no. 21. *Gryllus* (*Tettigonia*) *rubicundus* (based on SCHAEFFER, pl. 242 fig. 5—6, and pl. 249 fig. 1—2), and on p. 108: no. 38. *Gryllus* (*Locusta*) *rubicundus* (based on SCHAEFFER, pl. 241 fig. 5—6).

It is evident from SCHAEFFER's plate that *Gryllus* (*Tettigonia*) *rubicundus* Goeze, 1778, no. 21, is the same species as *Gryllus* (*Tettigonia*) *verrucivorus* Linnaeus, 1758. This name, therefore, is a junior synonym of *verrucivorus* L.

After examining the coloured figures of SCHAEFFER, it is also clear, that *Gryllus* (*Locusta*) *rubicundus* Goeze, 1778, no. 38, is the species now known as

<sup>1)</sup> It will be noted that GOEZE (1778) cited drawings from a book which according to most bibliographies was published in 1779. The 2nd volume of GOEZE's "Entomologische Beyträge" was probably published before September 29th, 1778, as its "Vorrede" is dated "Vor der Michaelismesse 1778" (i.e. 29.IX.1778). Evidently the work had to be published in time to be offered at the Michaelis fair in Leipzig in the year 1778.

In the "Vorrede", page a 2 verso, GOEZE among other things writes: "Da auch nun der vierte Band vom Thesauro des *Seba*, und *Schaefferi* Icones Insectorum Ratisbonensium in meinen Händen sind; so werde ich diese bey aller Gelegenheit zu nutzen suchen; in der Vorrede aber nichts weiter als eine blosze Anzeige thun können."

The 3rd volume of SCHAEFFER's *Icones* bears no date of publication, but in literature it is generally dated 1779. As GOEZE mentions the plates of SCHAEFFER up to no. 267 included, it seems certain that this portion of the volume was available to the public prior to September 29th, 1778. Plates 268 to 280 of SCHAEFFER must have been published later; their Orthoptera are not mentioned by GOEZE. These plates may have been published as late as the year 1779.

*Stenobothrus lineatus* (Panzer, 1796). Certainly these figures do not represent *Stenobothrus rubicundus* auctores.

GOEZE's two species were also described by GMELIN (1790), viz. on p. 2070, no. 125: *Gryllus (Tettigonia) rubicundus* (SCHAEFFER, pl. 242 fig. 5—6, and pl. 249 fig. 1—2) and on p. 2084, no. 190: *Gryllus (Locusta) rubicundus* (SCHAEFFER, pl. 241 fig. 5—6). In this, GMELIN based himself on GOEZE, as pointed out in GMELIN (1788), Ratio novae hujus editionis, pag. a 5 verso.

However, in his wellknown catalogue, KIRBY (1910: 176), under *Omocestus viridulus* (L., 1758), cited *rubicundus* Gmelin, p. 2070, no. 125, which, of course, should have been *rubicundus* Gmelin, p. 2084, no. 190. Possibly, KIRBY followed the identification by BRUNNER VON WATTENWYL (1882: 112). Neither of the two species is identical with *viridulus*, however.

From the above the following conclusions evolve: (1) the name *rubicundus* with GERMAR, 1817, as author has no standing in nomenclature, and (2) *Stenobothrus rubicundus* auctores is not identical with either of the two species described as *Gryllus rubicundus* by GOEZE.

As a synonym of *rubicundus* auctores, and as far as we know the only one, has been cited *Gryllus miniatus* Charpentier, 1825. This is indeed the same species as *Stenobothrus rubicundus* auctores. It is interesting to note that apparently GERMAR himself in 1838 realized that his former identification of *rubicundus* was incorrect. In that year he (GERMAR, 1838: fasc. 20, pl. 16—17) depicted under the name "*Oedipoda miniata* Charpentier" the species now known as *Stenobothrus rubicundus* auctores, and in the synonymy cited besides CHARPENTIER also "*Germ. Iter in Dalmat. p. 256. Gryllus rubicundus*". This latter citation refers to "Reise durch Oesterreich, Tyrol nach Dalmatien und in das Gebiet von Ragusa", Vol. 2.

The name *miniatus* Charpentier, 1825, was used for *rubicundus* auctores by most authors throughout the second half of the last century and in the beginning of this century. In fact, it would have been the valid name for the species were it not that *Gryllus miniatus* Charpentier, 1825, is a junior homonym of *Gryllus miniatus* Pallas, 1771 (= *Oedipoda miniata* (Pallas)). The incorrect use of the name *rubicundus* probably originated from JACOBSON & BIANCHI (1902: 178, 223), who took up the name *rubicundus* Germar, 1817, to escape from this homonymy.

As under the Code the species in question can neither take the name *Stenobothrus miniatus* nor *Stenobothrus rubicundus*, we name it ***Stenobothrus rubicundulus*** nom. nov., a new name for *Stenobothrus miniatus* (Charpentier, 1825) described as *Gryllus miniatus*.

As we have stated above, one of the species described as *Gryllus rubicundus* by GOEZE is identical with *Stenobothrus lineatus* (Panzer). The status of the name *rubicundus* Goeze, 1778, therefore, is very important as it threatens the use of *lineatus* Panzer, 1796.

To the best of our knowledge, no one has ever decided whether *Gryllus (Tettigonia) rubicundus* Goeze or *Gryllus (Locusta) rubicundus* Goeze will have priority. Therefore, we here establish the priority of *Gryllus (Tettigonia) rubi-*

*cundus* Goeze, no. 21, over *Gryllus (Locusta) rubicundus* Goeze, no. 38. As was pointed out already, *rubicundus*, no. 21, is a junior synonym of *Gryllus (Tettigonia) verrucivorus* Linnaeus, 1758, whereas *rubicundus*, no. 38, becomes a junior homonym of *rubicundus*, no. 21, and so cannot affect the status of *lineatus* Panzer.

Unfortunately, the incorrect use of the name *rubicundus* also affects the status of a name of the genus-group.

For *Stenobothrus rubicundus* (Germar, 1817), CHOPARD (1951: 280) established the monobasic subgenus *Crotalacris*. As *rubicundus* Germar, 1817, is not the same as *rubicundus* Goeze, 1778, *Crotalacris* Chopard is based on a misidentified type-species. In accordance with art. 70 (a) of the Code, we will, therefore, direct the attention of the International Commission on Zoological Nomenclature to this case.

Summarizing the above discussion, we give here the essential synonymy:

### *Stenobothrus rubicundulus* nom. nov.

Synonym: *Gryllus rubicundus*; Germar, 1817

*Gryllus miniatus* Charpentier, 1825

*Oedipoda miniata*; Germar, 1838

*Stenobothrus miniatus*; auctores

*Stenobothrus rubicundus*; auctores

Nec: *Gryllus (Tettigonia) rubicundus* Goeze, 1778, no. 21

*Gryllus (Tettigonia) rubicundus*; Gmelin, 1788, no. 125

Nec: *Gryllus (Locusta) rubicundus* Goeze, 1778, no. 38

*Gryllus (Locusta) rubicundus*; Gmelin, 1788, no. 190

Nec: *Gryllus miniatus* Pallas, 1771.

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