

Case 2917***Coproica* Rondani, 1861 and *Ischiolepta* Lioy, 1864 (Insecta, Diptera): proposed conservation of usage by the designation of *Limosina acutangula* Zetterstedt, 1847 as the type species of *Coproica***

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Abstract. The purpose of this application is to designate *Limosina acutangula* Zetterstedt, 1847 as the type species of the sphaerocerid fly genus *Coproica* Rondani, 1861 in accordance with the original concept, accepted understanding and usage. The original fixation of *Ischiolepta pusilla* (Fallén, 1820) as the type was based on a misidentification. The usage of *Ischiolepta* Lioy, 1864 will also be conserved.

1. Fallén (1820, p. 8) proposed the name *Copromyza pusilla* for specimens of a sphaerocerid fly currently known as *Ischiolepta pusilla*, a widespread, frequently synanthropic species assigned to the subfamily SPHAEROCERINAE. Han & Kim (1990, p. 433) recently designated a lectotype for *C. pusilla*, fixing its identity as the species recognized by modern workers as *Ischiolepta pusilla* (Fallén, 1820).

2. Meigen (1830, p. 206) described and illustrated a species that he identified as *Borborus pusillus* (Fallén). However, Meigen's description and illustration clearly indicate that the species before him was not *Copromyza pusilla* Fallén, 1820. The only sphaerocerid fly whose wing venation corresponds to that described by Meigen and illustrated in his plate 62, fig. 19, is the male of the species currently recognized as *Coproica acutangula* (Zetterstedt, 1847) (subfamily LIMOSININAE).

3. Macquart (1835, p. 570) erected the genus *Heteroptera* to accommodate the single species *Heteroptera pusilla*, making *Copromyza pusilla* Fallén, 1820 the type species by monotypy. This was a misidentification: in Macquart's discussion of the species he referred to the modified wing venation that distinguishes *Copromyza pusilla* from other sphaerocerid flies, and, as with Meigen (1830), it is obvious from Macquart's description that the species before him was *Limosina acutangula* Zetterstedt, 1847, and not *Copromyza pusilla* Fallén, 1820.

4. Zetterstedt (1847, p. 2490) correctly identified and redescribed *Copromyza pusilla* noting the distinctive crenulate scutellum of the species. Zetterstedt stated on p. 2491 that *Borborus pusillus* of Meigen and *Heteroptera pusilla* of Macquart are not the same species as *Copromyza pusilla* Fallén, 1820, and that the species that Meigen and Macquart had before them is the one that he described as the new species *Limosina acutangula* Zetterstedt, 1847 (p. 2499). Most modern workers on the

SPHAEROCERIDAE consider *L. acutangula* to represent *Coproica* Rondani, 1861, a cosmopolitan, frequently synanthropic genus of limosinine sphaerocerids.

5. Rondani (1856, p. 124) included *Heteroptera* Macquart, 1835 in a key and catalogue of sphaerocerid genera, with *Copromyza pusilla* Fallén, 1820 listed as type species. Papp (1984, p. 81) considered Rondani's citation of *Copromyza pusilla* as 'Spec. Typ.' of *Heteroptera* to be a subsequent designation of the type species. Papp's interpretation was erroneous because *Copromyza pusilla* was already the type species of *Heteroptera* by monotypy (see para. 3 above).

6. Rondani (1861, p. 10) proposed *Coproica* as a replacement name for *Heteroptera* Macquart, 1835 which was preoccupied by *Heteroptera* Latreille, 1817 (Insecta, Hemiptera). In fact, both *Heteroptera* Macquart, 1835 and *Heteroptera* Latreille, 1817 are preoccupied by *Heteroptera* Rafinesque, 1814 (Mollusca).

7. Authors of recent catalogues of SPHAEROCERIDAE have cited the type species of *Coproica* Rondani, 1861 as *Limosina pusilla* (Meigen, 1830) (Richards, 1965, p. 725; Richards, 1967, p. 16; Hackman, 1977, p. 400), *Borborus pusillus* Meigen, 1830 sensu Macquart (1835) (Richards, 1980, p. 618), *Copromyza pusilla* Fallén, 1820 (Papp, 1984, p. 81), or *Borborus pusillus* Meigen, 1830 (Marshall, 1989, p. 603). All the above authors recognized *Copromyza pusilla* Fallén, 1820 sensu Meigen (1830) and Macquart (1835) as a misidentification of *Limosina acutangula* Zetterstedt, 1847.

8. There is no evidence that Macquart's (1835) designation of *Copromyza pusilla* Fallén, 1820 as the type species of *Heteroptera* represents a deliberate use of misidentification (Article 11(i) of the Code). If Macquart had specified that the type of *Heteroptera* was *pusilla* in the sense of Meigen (1830) and not of Fallén (1820) then *Heteroptera pusilla* would be a valid name and would be attributed to Macquart (1835). However, Macquart referred only to *Copromyza pusilla* Fallén, 1820 and did not specify that he used *pusilla* in the sense of Meigen (1830). Furthermore, Macquart listed *Borborus pusillus* of Meigen (1830) as a synonym of *Copromyza pusilla* Fallén, 1820, which indicates that he considered the two conspecific. It is clear that Macquart (1835) misidentified the type species of the genus and the case must be referred to the Commission (Article 70b) to designate a type species for *Heteroptera* Macquart, 1835, i.e. *Coproica* Rondani, 1861.

9. Designation of *Copromyza pusilla* Fallén, 1820, the species named in the original fixation, as the type species of *Coproica* Rondani, 1861 would render *Ischiolepta* Lioy, 1864 (p. 1112, type species by monotypy *Borborus denticulatus* Meigen, 1830 (p. 200)) a junior subjective synonym of *Coproica* and would change the currently accepted concept of both generic names, thereby confusing the taxonomy of the family SPHAEROCERIDAE. Designation of the species actually involved, in accordance with Article 70b(i), would fix *Limosina acutangula* Zetterstedt, 1847 as the type species of *Coproica* Rondani, 1861. This would be in accordance with common usage and would also conserve *Ischiolepta* Lioy, 1864 as currently recognized. *Limosina acutangula* would be automatically (Article 67(h)) the type species of the invalidly named nominal genus *Heteroptera* Macquart, 1835.

10. The International Commission on Zoological Nomenclature is accordingly asked:

- (1) to use its plenary powers to set aside all previous fixations of type species for the nominal genus *Coproica* Rondani, 1861 and to designate *Limosina acutangula* Zetterstedt, 1847 as the type species;

- (2) to place the following names on the Official List of Generic Names in Zoology:
 - (a) *Coproica* Rondani, 1861 (gender: feminine), type species by designation in (1) above *Limosina acutangula* Zetterstedt, 1847;
 - (b) *Ischiolepta* Lioy, 1864 (gender: feminine), type species by monotypy *Borborus denticulatus* Meigen, 1830;
- (3) to place the following names on the Official List of Specific Names in Zoology:
 - (a) *acutangula* Zetterstedt, 1847, as published in the binomen *Limosina acutangula* (specific name of the type species of *Coproica* Rondani, 1861);
 - (b) *denticulatus* Meigen, 1830, as published in the binomen *Borborus denticulatus* (specific name of the type species of *Ischiolepta* Lioy, 1864);
- (4) to place on the Official Index of Rejected and Invalid Generic Names in Zoology the name *Heteroptera* Macquart, 1835 (a senior objective synonym of *Coproica* Rondani, 1861 and a junior homonym of *Heteroptera* Rafinesque, 1814).

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