

Case 3539

***Sturmia* Robineau-Desvoidy, 1830, *Senometopia* Macquart, 1834 and *Drino* Robineau-Desvoidy, 1863 (Insecta, Diptera, TACHINIDAE): proposed conservation of usage**

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Abstract. The purpose of this application, under Article 70.2 of the Code, is to conserve the current usage of the names *Sturmia* Robineau-Desvoidy, 1830, *Senometopia* Macquart, 1834 and *Drino* Robineau-Desvoidy, 1863 for three well-established genera of tachinid flies. The type species of *Sturmia* has long been assumed to be *Sturmia vanessae* Robineau-Desvoidy, 1830 and the type species of *Senometopia* Macquart, 1834 has long been assumed to be *Carcelia aurifrons* Robineau-Desvoidy, 1830. However, the correct type species for both *Sturmia* and *Senometopia* is *Sturmia atropivora* Robineau-Desvoidy, 1830, which is currently recognised as a valid species of *Drino*. Acceptance of *S. atropivora* as the type species of *Sturmia* and *Senometopia* would change the current concept of those genera to that of *Drino*, and the names of the current genera *Sturmia* and *Senometopia* would change to those of the next available genus-group names. To avoid the nomenclatural instability that would result from following the Principle of Priority, it is proposed that all type fixations for *Sturmia* Robineau-Desvoidy, 1830 prior to that of *Sturmia vanessae* Robineau-Desvoidy, 1830 by Robineau-Desvoidy (1863) be set aside, along with all type fixations for *Senometopia* Macquart, 1834 prior to that of *Carcelia aurifrons* Robineau-Desvoidy, 1830 by Townsend (1916).

Keywords. Nomenclature; taxonomy; Diptera; TACHINIDAE; *Sturmia*; *Senometopia*; *Drino*; *Sturmia vanessae*; *Carcelia aurifrons*; *Sturmia atropivora*; tachinid flies; cosmopolitan.

1. Robineau-Desvoidy (1830, p. 171) proposed the genus *Sturmia* for four new species: *S. atropivora* Robineau-Desvoidy, *S. floricola* Robineau-Desvoidy, *S. concolor* Robineau-Desvoidy and *S. vanessae* Robineau-Desvoidy. A type species was not designated.

2. Desmarest in d'Orbigny (1848, p. 77) designated *Sturmia atropivora* Robineau-Desvoidy, 1830 as the type species of *Sturmia*. This designation was overlooked by subsequent authors until relatively recently.

3. Robineau-Desvoidy (1863, p. 888) designated *Sturmia vanessae* Robineau-Desvoidy, 1830 as the type species of *Sturmia*. The universally-accepted concept of *Sturmia* is based on this type species designation. *Sturmia vanessae* is currently treated as a junior subjective synonym of *Tachina bella* Meigen, 1824; the accepted valid name of this taxon is *Sturmia bella*.

4. Macquart (1834, p. 296) proposed the genus *Senometopia* for 17 previously described species, including *S. atropivora* Robineau-Desvoidy, 1830. A type species was not designated.

5. Stephens in Richardson (1838, p. 478) designated *Sturmia atropivora* Robineau-Desvoidy, 1830 as the type species of *Senometopia*. As with *Sturmia*, this designation was overlooked by subsequent authors until relatively recently.

6. Townsend (1916, p. 8) designated *Carcelia aurifrons* Robineau-Desvoidy, 1830 as the type species of *Senometopia*. The universally accepted concept of *Senometopia* is based on this type species designation. *Carcelia aurifrons* is currently treated as a junior subjective synonym of *Tachina excisa* Fallén, 1820; the accepted valid name of this taxon is *Senometopia excisa*.

7. Evenhuis & Thompson (1990, p. 238) discovered the overlooked type species designation for *Sturmia* by Desmarest in d'Orbigny (1848). They suggested that 'Application to I.C.Z.N. for suppression of Desmarest's designation may be necessary to maintain stability of taxonomy and usage' (p. 238). More recently, O'Hara et al. (2009, p. 118) and Evenhuis et al. (2010, p. 154) called attention to Desmarest's designation and noted that an application to the International Commission on Zoological Nomenclature was in preparation to suppress any type designations for *Sturmia* prior to the one by Robineau-Desvoidy (1863, p. 888). This present application is the one alluded to by O'Hara et al. (2009) and Evenhuis et al. (2010).

8. Evenhuis & Thompson (1990, p. 237) discovered an overlooked type species designation for *Senometopia* of *Sturmia atropivora* Robineau-Desvoidy, 1830 by Desmarest in d'Orbigny (1848) and suggested that the designation be suppressed in favor of *Carcelia aurifrons* Robineau-Desvoidy, 1830. An earlier type species designation for *Senometopia* than the one by Desmarest has since been discovered (Evenhuis 2010): that of Stephens in Richardson (1838, p. 478) who similarly designated *Sturmia atropivora* Robineau-Desvoidy, 1830.

9. Nomenclatural instability would result from the adoption of *Sturmia atropivora* as the type species of *Sturmia* and *Senometopia*, as designated by Desmarest in d'Orbigny (1848) and Stephens in Richardson (1838), respectively. *Sturmia atropivora* is currently treated as a valid species of *Drino* Robineau-Desvoidy, 1863 (e.g. Herting & Dely-Draskovits, 1993; O'Hara et al., 2009). Acceptance of *S. atropivora* as the type species of *Sturmia* and *Senometopia* would result in the names *Sturmia*, *Senometopia* and *Drino* becoming subjective synonyms, with *Sturmia* having priority over the other two. The genus currently known as *Drino* would take the name *Sturmia* (with *Drino* in subjective synonymy). The genus currently known as *Sturmia* would take the name *Oodigaster* Macquart, 1854 (the next available genus-group name for an included species; the type species of *Oodigaster* was recently fixed as *Tachina bella* Meigen, 1824 by O'Hara et al. (2009) under Article 70.3.2 of the Code). The genus currently known as *Senometopia* would take the name *Stenometopia* Agassiz, 1846 (an unjustified emendation of *Senometopia* and the next available genus-group name).

10. Regional catalogues of Diptera record *Drino* (EXORISTINAE Robineau-Desvoidy, 1963, ERYCIINI Robineau-Desvoidy, 1830 [relative precedence of family-group names protected by Article 35.5 of the Code]; including subgenera *Zygobothria* Mik, 1891 and *Palexorista* Townsend, 1921, both commonly treated as separate genera prior to the 1990s) as a cosmopolitan genus with about 125 species; *Sturmia* (EXORISTINAE, GONIINI Robineau-Desvoidy, 1830; prior to the 1990s commonly classified in the STURMIINI Robineau-Desvoidy, 1863) is recorded as a widely distributed genus in the Old World with 11 species; and *Senometopia* (EXORISTINAE, ERYCIINI; prior to the 1990s commonly placed as a subgenus of *Carcelia* Robineau-Desvoidy, 1830) is also recorded as a widely distributed genus in the Old World with about 60 species (e.g. Crosskey, 1977, 1980; Cantrell & Crosskey, 1989; Herting & Dely-Draskovits, 1993; O'Hara & Wood, 2004; O'Hara et al., 2009; [Guimarães (1971) recorded *Sturmia* from the Neotropical Region in error]). Switching the name of the genus *Drino* to *Sturmia* would cause substantial confusion in the tachinid literature. Furthermore, the concept of the former STURMIINI would be changed. The name STURMIINI is currently regarded as a subjective synonym of GONIINI, but acceptance of Desmarest's type species designation for *Sturmia* would place it in subjective synonymy with ERYCIINI (the latter name having priority; Sabrosky, 1999, pp. 130, 293).

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

- (1) to use its plenary power to set aside all type species fixations for the nominal genus *Sturmia* Robineau-Desvoidy, 1830 before that of *Sturmia vanessae* Robineau-Desvoidy, 1830 by Robineau-Desvoidy (1863);
- (2) to use its plenary power to set aside all type species fixations for the nominal genus *Senometopia* Macquart, 1834 before that of *Carcelia aurifrons* Robineau-Desvoidy, 1830 by Townsend (1916);
- (3) to place on the Official List of Generic Names in Zoology the following names:
 - (a) *Sturmia* Robineau-Desvoidy, 1830 (gender: feminine), type species *Sturmia vanessae* Robineau-Desvoidy, 1830, as ruled in (1) above;
 - (b) *Senometopia* Macquart, 1834 (gender: feminine), type species *Carcelia aurifrons* Robineau-Desvoidy, 1830, as ruled in (2) above;
- (4) to place on the Official List of Specific Names in Zoology the following names:
 - (a) *vanessae* Robineau-Desvoidy, 1830, as published in the binomen *Sturmia vanessae* (specific name of the type species of *Sturmia* Robineau-Desvoidy, 1830);
 - (b) *aurifrons* Robineau-Desvoidy, 1830, as published in the binomen *Carcelia aurifrons* (specific name of the type species of *Senometopia* Macquart, 1834).

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Acknowledgement of receipt of this application was published in BZN **67**: 270.

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O'Hara, James and Evenhuis, Neal L. 2011. "Case 3539 Sturmia Robineau-Desvoidy, 1830, Senometopia Macquart, 1834 and Drino Robineau-Desvoidy, 1863 (Insecta, Diptera, tachinidae): proposed conservation of usage." *The Bulletin of zoological nomenclature* 68(1), 61–64.
<https://doi.org/10.21805/bzn.v68i1.a1>.

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