

**Case 3585*****Atomosia* Macquart, 1838 (Insecta, Diptera, ASILIDAE): 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 generic name *Atomosia* Macquart, 1838 for a well-established genus of robber flies. The type species of *Atomosia* has long been assumed to be *Atomosia incisuralis* Macquart, 1838. However, the correct type species is *Atomosia annulipes* Macquart, 1838, which is currently recognized as a valid species of *Aphestia* Schiner, 1866. Acceptance of *Atomosia annulipes* as the type species of *Atomosia* would change the current concept of that genus to that of *Aphestia*, and the remaining species currently included in *Atomosia* would require a new genus-group name as there are no junior synonyms from which to choose the next available name. To avoid the nomenclatural instability that would result from following the Principle of Priority, it is proposed that all type fixations for *Atomosia* Macquart, 1838 prior to that of *Atomosia incisuralis* Macquart, 1838 by Coquillett (1910) be set aside.

**Keywords.** Nomenclature; taxonomy; Diptera; ASILIDAE; *Atomosia*; *Atomosia incisuralis*; *Atomosia annulipes*; *Cormansis*; *Aphestia*; robber flies; Neotropical; Nearctic.

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1. Macquart (3 October 1838, p. 73; 18 December 1839, p. 213; see Evenhuis, 1997, p. 512) proposed the generic name *Atomosia* for six new species: *A. annulipes* Macquart, *A. nigripes* Macquart, *A. unicolor* Macquart, *A. incisuralis* Macquart, *A. brevicornis* Macquart and *A. pusilla* Macquart, 1838. A type species was not designated.

2. Duponchel in d'Orbigny (1841, p. 309) designated *Atomosia annulipes* Macquart, 1838 as the type species of *Atomosia*. This designation was overlooked by subsequent authors until recently and is the earliest subsequent designation of an originally included species.

3. Coquillett (1910, p. 512) designated *Atomosia incisuralis* Macquart (3 October 1838, p. 76; 18 December 1839, p. 216) as the type species of *Atomosia*. The universally accepted concept of *Atomosia* is based on this type species designation. *Atomosia annulipes* is currently treated as a junior subjective synonym of *Laphria puella* Wiedemann, 1828; the accepted valid name of this taxon is *Atomosia puella*.

4. Evenhuis & Thompson (1990, p. 232–233) discovered the overlooked type species designation for *Atomosia* by Duponchel in d'Orbigny (1841). They suggested that 'Acceptance of Duponchel's designation would change the current generic



concepts of *Atomosia* and *Aphestia*. Application to ICZN to suppress the designation by Duponchel may be warranted in this case’.

5. *Atomosia* Macquart, 1838, found throughout the Neotropical and southern Nearctic regions, contains over 50 species (Barnes, 2008) and is the type genus of the tribe ATOMOSIINI Lynch Arribálzaga (1882, p. 144; originally as ‘ATOMOSIARIA’), which includes 35 genera (Hull, 1962) in the subfamily LAPHRIINAE Macquart, 1838. Catalogues of Diptera and taxonomic revisions record *Atomosia* as a taxonomically valid genus occurring in the Nearctic (e.g. Hull, 1962; Martin & Wilcox, 1965; Poole, 1996; Barnes, 2008) and Neotropical (e.g. Hull, 1962; Martin & Papavero, 1970) regions.

6. Nomenclatural instability would result from the adoption of *Atomosia annulipes* as the type species of *Atomosia*, as designated by Duponchel in d’Orbigny (1841). *Atomosia annulipes* is currently treated as a species of *Aphestia* Schiner, 1866 (e.g. Hull, 1962; Papavero, 2009). *Atomosia annulipes* is also the currently accepted valid name of *Aphestia brasiliensis* Schiner, 1866, the type species of *Aphestia*. Acceptance of *A. annulipes* as the type species of *Atomosia* would result in the subjective synonymy of *Atomosia* and *Aphestia*, with *Atomosia* having priority. The remaining species currently included in *Atomosia* would require a new genus-group name to be established as there are no suitable junior synonyms available. The generic name *Cormansis* Walker, 1851 was explicitly treated as a junior synonym of *Atomosia* by Hull, 1962 and provisionally by Martin & Papavero, 1970 but this synonymy was overturned by Oldroyd (1975) who transferred *Cormansis* to a different tribe. Thus *Cormansis* Walker, 1851 cannot be used as the next available genus for these species. Since both *Atomosia* and *Aphestia* are currently treated within the ATOMOSIINI, the family-group name would not need to change, although the taxonomic concept circumscribing the genus-group name upon which it is based would be changed.

7. 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 *Atomosia* Macquart, 1838 before that of *Atomosia incisuralis* Macquart, 1838 by Coquillett (1910);
- (2) to place on the Official List of Generic Names in Zoology the name *Atomosia* Macquart, 1838 (gender: feminine), type species *Atomosia incisuralis* Macquart, 1838 by subsequent designation by Coquillett (1910), as ruled in (1) above;
- (3) to place on the Official List of Specific Names in Zoology the name *incisuralis* Macquart, 1838, as published in the binomen *Atomosia incisuralis* (specific name of the type species of *Atomosia* Macquart, 1838), as ruled in (1) above;
- (4) to place on the Official List of Family-Group Names in Zoology the name ATOMOSIINI Lynch Arribálzaga, 1882 (type genus *Atomosia* Macquart, 1838).

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