

Case 3531***Sematura* Dalman, 1825 (Insecta, Lepidoptera, SEMATURIDAE):
proposed precedence over *Mania* Hübner, 1821**

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Abstract. The purpose of this application, under Article 23.9.3 of the Code, is to conserve the generic name *Sematura* Dalman, 1825 (Lepidoptera, SEMATURIDAE) which is well-established for a small number of moths widespread in the Neotropical region. Because it is also the type genus of the small family SEMATURIDAE, it is usually cited or illustrated in general works on Lepidoptera and insects in the region. The name is threatened by its rarely used senior subjective synonym, *Mania* Hübner, 1821, which dropped out of use because it was incorrectly considered to be an unavailable homonym. It is proposed that *Sematura* Dalman be given precedence over *Mania* Hübner under the plenary power of the Commission, in the interest of nomenclatural stability.

Keywords. Nomenclature; taxonomy; Insecta; Lepidoptera; SEMATURIDAE; *Sematura*; *Mania*; *Nothus*; *Sematura lunus*; *Mania empedoclaria*; moths; Neotropical Region.

1. The Lepidoptera family SEMATURIDAE contains a small number of species from the Neotropical region and South Africa. It is based on the generic name *Sematura* Dalman, 1825 (p. 407), which has been widely used in the limited literature on this family since the middle of the 19th century. An earlier available name, *Mania* Hübner, 1821, which had been thought to be unavailable, now threatens the stability of the type genus of this family.

2. *Mania* was established by Hübner (1821, p. [3]) for the single species *Lars empedoclaria* Hübner, [1819], a junior subjective synonym of *Papilio empedocles* Cramer, 1779 (Fletcher, 1979), although it has also been considered a junior subjective synonym of *Phalaena lunus* Linnaeus, 1758 (p. 508) (Hampson, 1918, p. 368).

3. Westwood (1879, p. 510) incorrectly considered *Mania* Hübner, 1821 to be a junior homonym of *Mania* Treitschke, 1825 (p. 294), and introduced the replacement name *Manidia*. However, *Mania* Hübner pre-dates *Mania* Treitschke, so Westwood's replacement was unjustified.

4. *Sematura* was established by Dalman (1825, p. 407) to include *Phalaena lunus* Linnaeus, 1758 (p. 508), *Papilio aegisthus* Fabricius, 1781 (p. 20) and *Papilio*

empedocles Cramer, 1779 (p. 11). Guenée (1857, pp. 16–19) used the genus *Sematura*, listing *Mania* as a synonym, to include the species *Phalaena lunus*, *Sematura selene* Guenée, 1857, *S. diana* Guenée, 1857, *Papilio empedocles* and *S. phoebe* Guenée, 1857. Hampson (1918, p. 367) incorrectly referred to *Sematura* as Guenée's genus, but nevertheless selected as its type species *Phalaena lunus*.

5. Several authors have used the generic name *Nothus* Billberg (1820, p. 85) for *Phalaena lunus* and *Papilio empedocles*, but *Nothus* is a junior homonym of *Nothus* Olivier, 1811 (p. 383), and also its type species was designated as *Phalaena lunus* by Fletcher (1979), so making it a senior objective synonym of *Sematura*. This invalid homonym is not germane to the status of *Sematura* and *Mania*, but continues to confuse the nomenclature of this genus.

6. The species of *Sematura* have not had the benefit of a recent revision, hence there is continuing uncertainty about the number of species and their identity. Gaede (1930, p. 832) suggested that *empedocles* and *lunus* are likely to be one species, and Forbes (1942, p. 289) treats *lunus* as the male and *empedocles* as the female synonym. In our opinion, although it is quite likely that Linnaeus described the male and Cramer described the female of the same species, this is not a foregone conclusion as there appear to be other similar species in the genus. Until the genus is revised this will not be clear, however all authors have always treated the two specific names as congeneric, and there seems no doubt that the two generic names are subjective synonyms.

7. That being the case, *Mania* has precedence over *Sematura*. However, *Sematura* is in common usage, while *Mania* is almost forgotten. Forbes (1942, p. 289) treats *Mania* and *Manidia* as synonyms of *Sematura*, commenting correctly that '*Mania* Hübner 1823 [sic], is valid over *Mania* Tr. 1825, but only the latter has had any currency in the last century.' More than 50 years later, this is still true.

8. Unfortunately *Sematura* cannot be given precedence over *Mania* under article 23.9.2 of the Code, as *Mania* has been used as valid at least four times since 1899. Kaye (1901, p. 150) used it with *Sematura* placed in brackets afterwards (misspelt as *Semaetura*) for *empedoclaria* (= *empedocles*) and *actaeon* Felder (= *lunus*) in his preliminary list of the moths of Trinidad. In a popular article, Janet (1902, p. 349) referred to *Mania empedoclaria* Hübner as inhabiting '. . .Haïti et quelques autre [sic] îles des Antilles'. Dyar (1914, p. 244) used it for *lunus* and *empedocles* in his treatment of the moths of the Canal Zone, Panama. Fischer-Sigwart (1923, p. 22) mentioned *Mania lunus* in a list of Brazilian Lepidoptera. Apart from these four instances, all publications located referring to the genus since 1899 have used either *Sematura* (Pagenstecher, 1907; Longstaff, 1912; Pfeiffer, 1917; Hampson, 1918; Jordan, 1923; Eltringham, 1925; Kaye & Lamont, 1927; Eltringham, 1929; Gaede, 1930; Brues & Melander, 1932; Eltringham, 1933; Forbes, 1942; D'Almeida, 1943; Portmann, 1945; Cardoso, 1949; Costa Lima, 1950; Biezanko et al., 1957; Fulton, 1967; Batten & Batten, 1968; Stanek, 1969; Smith, 1972; Dickens, 1974; Sbordonì & Forestiero, 1985; Beutelspacher, 1988, 1992; Scoble, 1992; Minet & Scoble, 1998; Fänger, 1999; Salazar, 2001; Viana & Costa, 2001; Cock, 2003; Núñez, 2004; Corona et al., 2005; Chacón & Montero, 2007; Regier et al., 2008; Heppner, 2008; Mutanen et al., 2010), *Manidia* (Calvert & Calvert, 1917, p. 64) or *Nothus* (Laithwaite et al., 1975; Lamas, 1989; Hogue, 1993; Racheli & Racheli, 1996; Purser & Garnier, 2007; Scott et al., 2010).

9. Internet usage is similarly based on *Sematura* and *Nothus*, with no further use of *Mania* or *Manidia*. Thus, the number of hits with Google for different combinations of *Sematura* spp. together with Lepidoptera on 1 July 2010 was as follows: *Mania lunus* 1; *Mania empedocles* 1; *Manidia lunus* 0; *Manidia empedocles* 0; *Sematura lunus* 110; *Sematura empedocles* 9; *Nothus lunus* 40; *Nothus empedocles* 22. It should be noted that the use of a combination does not mean that this is the accepted name on a given website; it may be listed as a synonym or incorrect name. However, it is clear that *Mania* is not in common usage for the two principal species of *Sematura*.

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

- (1) to use its plenary power to give the name *Sematura* Dalman, 1825 precedence over the name *Mania* Hübner 1821, whenever the two are considered to be synonyms;
- (2) to place on the Official List of Generic Names in Zoology the following names:
 - (a) *Sematura* Dalman, 1825 (gender: feminine), type species by subsequent designation by Hampson (1918) *Phalaena lunus* Linnaeus, 1758, with the endorsement that it is to be given precedence over *Mania* Hübner, 1821 whenever the two are considered to be synonyms;
 - (b) *Mania* Hübner, 1821 (gender: feminine), type species by monotypy *Lars empedoclaria* Hübner, [1819], with the endorsement that it is not to be given precedence over *Sematura* Dalman, 1825 whenever the two are considered to be synonyms;
- (3) to place on the Official List of Specific Names in Zoology the following names:
 - (a) *lunus* Linnaeus, 1758, as published in the binomen *Phalaena lunus*, specific name of the type species of *Sematura* Dalman, 1825;
 - (b) *empedoclaria* Hübner, [1819], as published in the binomen *Lars empedoclaria*, specific name of the type species of *Mania* Hübner, 1821.

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