Case 2837/2***Melanophila* Eschscholtz, 1829 and *Phaenops* Dejean, 1833 (Insecta, Coleoptera): proposed conservation of usage by the designation of *Buprestis acuminata* De Geer, 1774 as the type species of *Melanophila***

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Abstract. The purpose of this application is to conserve the current understanding and usage of the names *Melanophila* Eschscholtz, 1829 and *Phaenops* Dejean, 1833 (family BUPRESTIDAE Leach, 1815, jewel beetles) by designating *Buprestis acuminata* De Geer, 1774 as the type species of *Melanophila*. At present *Melanophila* and *Phaenops* are both typified by *B. cyanea* Fabricius, 1774. Both genera have a worldwide distribution. Most species of *Melanophila* are Nearctic and Neotropical and most of *Phaenops* are Palaearctic. *M. acuminata*, the larvae of which feed on conifers and broadleaved trees, has the widest distribution of buprestid species.

1. Eschscholtz (1829, p. 9) briefly described and named the genus *Melanophila*. He included two nominal species, *Buprestis tarda* and *B. appendiculata*, both of Fabricius (1792, pp. 209 and 210 respectively). Westwood ([1838], p. 24) gave *B. tarda* as 'the typical species' of *Melanophila*. The type species designations in Westwood's *Synopsis of the genera of British insects* were accepted as valid in Opinion 71 (January 1922) although *Melanophila* has never been used in the sense of *tarda* as the type species (see paras. 5 and 7 below). The dates of publication of Westwood's work were set out in Direction 63 (June 1957).

2. Dejean (1833, p. 79) established the name *Phaenops* and included seven species, among them *Buprestis tarda* (with *B. cyanea* Fabricius, 1775, p. 223 as a synonym), *B. appendiculata* and *B. decostigma* Fabricius, 1787 (p. 180; misspelt as '*decastigma*' by many subsequent authors). The name *Phaenops* was not accompanied by a diagnosis, description or illustration but since included nominal species can be identified by citations of their authors it meets the requirements of availability under Article 12b(5) of the Code.

3. Kirby (1837, p. 160) established *Oxypteris* as a subgenus of *Buprestis*; he designated *B. appendiculata* Fabricius, 1792 as the type species. Kirby synonymised *appendiculata* with *Buprestis acuminata* De Geer, 1774 (p. 133) and this has been accepted by all later authors. Kirby (p. 158) also established *Trachypteris* as a further subgenus of *Buprestis*; *B. decostigma* Fabricius, 1787 was designated as the type species.

4. Laporte & Gory ([1838], p. 4) established the genus *Apatura* to include 15 species, among them *tarda* (= *cyanea*), *appendiculata* (= *acuminata*) and *decostigma*. Gory & Laporte ([1840], p. 2) realised that *Melanophila* was the prior name for the taxon and Gory ([1840], p. 73) adopted this name. Duponchel & Chevrolat ([1841], p. 641) designated *appendiculata* as the type species of *Apatura* and noted that it was a junior homonym of *Apatura* Fabricius, 1807 in Lepidoptera.

5. Lacordaire (1857, p. 47) noted that Dejean and other authors had used *Phaenops* rather than *Melanophila*. However, he defined *Phaenops* and restricted it to *tarda*; he did not mention Westwood's ([1838]) selection of the same species as 'typical' of *Melanophila* (see para. 1). Lacordaire retained *appendiculata* (= *acuminata*), *decostigma* and allied species in *Melanophila*. Subsequent authors (Gemminger & Harold, 1869, p. 1384; Saunders, 1870, pp. 1, 10, 24; Saunders, 1871, pp. 47, 49; Kerremans, 1892, pp. 110, 114; Kerremans, 1903, pp. 162–165; Reitter, 1911, p. 186) followed this taxonomic arrangement. Kiesenwetter (1857, p. 74) synonymised *decostigma* with *Buprestis picta* Pallas, 1773 (p. 719); this synonymy has been accepted by very nearly all later authors, exceptions being Richter (1949) and Cobos (1986, 1987) (see para. 6 below).

6. Recent authors, with the single exception of Leraut (1983), have consistently used *Melanophila* for *acuminata* and related species and *Phaenops* for the *cyanea* (= *tarda*) group of species. Théry (1942, p. 73) designated *cyanea* as the type species of *Phaenops*, whilst Richter (1949, p. 227), Schaefer (1949, p. 216), Bílý (1982, p. 42) and Cobos (1986, p. 186) gave, albeit incorrectly, *acuminata* as the type of *Melanophila*. The names *Melanophila* and *Phaenops*, sensu *acuminata* and *cyanea* respectively, have been used by Tassi (1966, p. 19), Volkovitsh (1977, p. 24), Harde (1979, pp. 219, 220), Bellamy (1985, p. 420), Bílý (1989, p. 45) and Weidlich (1989, p. 58). A list of a further 10 references published in the last 30 years is held by the Commission Secretariat. Most of the authors cited above, and all those cited in para. 4, did not distinguish *Trachypteris* Kirby from *Melanophila*. The exceptions are Richter (1949, pp. 230–238) who maintained *Trachypteris* as a subgenus to include *picta* and *decostigma*, and Cobos (1986, p. 187; 1987, pp. 79–86) who, in his recent revision of the BUPRESTIDAE, treated *Trachypteris* as a monospecific genus for *picta* (with *decostigma* as one of a number of subspecies).

7. Leraut (1983) adopted the name *Melanophila* for the genus currently called *Phaenops* (the *cyanea* group of species), although the name has not been used in this sense since 1857; he used *Trachypteris* in place of *Melanophila* as long understood (the *acuminata-picta* group of species), citing *Oxypteris* Kirby as a synonym. The usage of the names *Melanophila* and *Phaenops* has been stable and universally accepted for more than 135 years. To my knowledge authors since 1983 have not adopted Leraut's nomenclature for these two buprestid genera; its adoption would cause considerable and unnecessary confusion. Moreover, if *picta* and *decostigma* are separated from *acuminata* and its allies the latter group would need to be renamed *Oxypteris* Kirby, 1837, adding still further confusion, a point which was not mentioned by Leraut.

8. 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 *Melanophila* Eschscholtz, 1829 and to designate *Buprestis acuminata* De Geer, 1774 as the type species;
- (2) to place on the Official List of Generic Names in Zoology the following names:
 - (a) *Melanophila* Eschscholtz, 1829 (gender: feminine), type species by designation in (1) above *Buprestis acuminata* De Geer, 1774;
 - (b) *Phaenops* Dejean, 1833 (gender: feminine), type species by designation by Théry (1942) *Buprestis cyanea* Fabricius, 1775;

- (3) to place on the Official List of Specific Names in Zoology the following names:
- (a) *acuminata* De Geer, 1774, as published in the binomen *Buprestis acuminata* (specific name of the type species of *Melanophila* Eschscholtz, 1829);
 - (b) *cyanea* Fabricius, 1775, as published in the binomen *Buprestis cyanea* (specific name of the type species of *Phaenops* Dejean, 1833).

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Muhle, Hans. 1993. "Melanophila Eschscholtz, 1829 and Phaenops Dejean, 1833 (Insecta, Coleoptera): proposed conservation of usage by the designation of Buprestis acuminata De Geer, 1774 as the type species of Melanophila." *The Bulletin of zoological nomenclature* 50, 31–34.
<https://doi.org/10.5962/bhl.part.1786>.

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