

Case 2670

***Kobeltia* Seibert, 1873 (Mollusca, Gastropoda): proposed confirmation of *Arion hortensis* Férussac, 1819 as the type species**

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Abstract. The purpose of this application is to confirm the nominal species *Arion hortensis* Férussac, 1819 as the type species of the terrestrial slug subgenus *Kobeltia* Seibert, 1873, in accordance with existing usage. The original description was of a misidentified species.

1. Seibert (1873, p. 81) considered a slug which he supposed was *Arion hortensis* Férussac, 1819 to be generically distinct from other species of *Arion* Férussac, 1819 and proposed the new name *Kobeltia*. This name was neglected by subsequent authors for more than half a century until Hesse (1926, p. 66) adopted it as a 'section' within the genus *Arion*, with *A. hortensis* Férussac as the first included species. Most authors since have followed Hesse's system of classification, replacing 'section' by 'subgenus'.

2. Férussac's nominal species *A. hortensis* (1819, pp. 65–66) is represented by pl. 2 (not pl. 12 as cited on p. 65), figs. 4–5. He also described *A. hortensis* var. α (1819, pp. 65–66, pl. 2, fig. 6), which may well be the species later described by Mabilie (1868, p. 137) as *A. distinctus* (Davies, 1979, p. 123; see para. 6 below); this variant is excluded from the type series of *A. hortensis* by Article 72b of the Code. The dates of publication of Férussac's work were investigated by Sherborn & Woodward (1901, pp. 74–76; text only) and Kennard (1942, pp. 12–17, 105–118; text and plates).

3. Seibert's interpretation of *Arion hortensis* Férussac, 1819 when he proposed *Kobeltia* was based on the work of Lehmann (1873, pp. 21–24, pl. 2, figs. 4a, pl. 7, fig. 4). Lehmann's description and figures, however, are not of *A. hortensis* but a species currently referred to as *Arion (Carinarion) fasciatus*. This latter species was originally described as *Limax fasciatus* by Nilsson in 1823 (pp. 3–5) and it has been studied in detail by a number of authors, including Likharev & Wiktor (1980, pp. 407–409). Lehmann's misidentification of *A. hortensis* was noted by Simroth (1885, pp. 277–278, 288), who assigned Lehmann's species to *A. bourguignati* Mabilie, 1868 (p. 138).

4. Cockerell (1891, p. 20) considered *A. bourguignati* to be a junior subjective synonym of *A. circumscriptus* Johnston, 1828 (p. 76), which Hesse (1926, p. 65) selected as the type species of his 'section' (now subgenus) *Carinarion*. Lohmander (1937) suggested that three very closely related species had been confused under the name 'circumscriptus': *A. circumscriptus* Johnston, 1828 s.s., *A. silvaticus* Lohmander, 1937 and *Limax fasciatus* Nilsson, 1823. Whether these are indeed distinct biological species is still a much debated issue (Backeljau et al., 1987).

5. Acceptance of Seibert's designation of *A. hortensis* sensu Lehmann (1873), now recognised (Backeljau & De Bruyn, 1990, in press) to be *Limax fasciatus* Nilsson, 1823, as the type species of *Kobeltia* Seibert, 1873 would undoubtedly give rise to much

confusion in the nomenclature of what is already a taxonomically complex group. In addition, if *fasciatus* and *circumscriptus* are considered to be synonyms, or to belong in the same subgenus, *Carinarion* Hesse, 1926 would become a junior subjective synonym of *Kobeltia* Seibert, 1873. Following Hesse's (1926) monograph the identity of the type species of *Kobeltia* has been understood as '*Arion hortensis*' (see para. 6 below) and not *Limax fasciatus* Nilsson, 1823. A list of more than 40 references is held by the Commission Secretariat demonstrating usage of the name *Kobeltia* in which Hesse's interpretation of the genus group has been adopted, and I have not found a single paper in which *fasciatus* is even included in the subgenus.

6. Recently, Davies (1977, p. 173; 1979, p. 123) has shown that three distinct taxonomic species have been known under the name '*A. hortensis*'. The first of these species is *A. hortensis* s.s. (Férussac, 1819, p. 65, pl. 2, figs. 4–5). The species is known from the British Isles, parts of France, Belgium, the Netherlands, Germany and Switzerland. Two original specimens, labelled 'montagnes env. de Clermont (Oise)', are in the Muséum National d'Histoire naturelle in Paris, one of which has been dissected and was designated as the lectotype by De Winter (1984, p. 3, fig. 3). The second species, *A. distinctus* Mabille, 1868 (p. 137), is probably the species represented by Férussac's *A. hortensis* var. *a* (1819, pl. 2, fig. 6). It is found in much of Europe and North America and has a type locality at Sèvres, near Paris. No original material survives but a neotype (no. alcohol 9120 in the Rijksmuseum van Natuurlijke Historie, Leiden, collected from Sèvres in 1983) was designated by De Winter (1984, p. 3, figs. 2 and 4). The third species, *A. owenii* Davies, 1979 (p. 126), may possibly be the same as *Limax subfuscus* Draparnaud, 1805, cited by Taylor (1905, p. 217) as *A. hortensis* Férussac var. *subfusca*. *A. owenii* has a holotype, BM(NH) 197910, from East Donegal in Ireland. The species is known from the north of Ireland and locally in southern Scotland, Wales and Cornwall. The three species differ in their genitalia, spermatophores, mating behaviour and, to a lesser extent, in their external morphology (Davies, 1977, 1979; Backeljau, 1981; De Wilde, 1983; and Backeljau & Marquet, 1985), and have been shown to be biochemically distinct (Backeljau, 1985a and b). All three are included in the subgenus *Kobeltia*.

7. A number of 20th century authors have described *Kobeltia* (see, for example, Hesse, 1926, p. 66; Germain, 1930, p. 77; Wiktor, 1973, p. 43; Likharev & Wiktor, 1980, p. 409; and Grossu, 1983, pp. 55–58). Backeljau & De Winter (1987, p. 177) discussed the problem of three closely related species having hitherto been confused as '*A. hortensis*'. To avoid further confusion, and to rectify Seibert's earlier mistake in the identity of *hortensis* with *Limax fasciatus*, I now propose to confirm *A. hortensis* Férussac, 1819, as defined by the lectotype designated by De Winter (1984), as the type species of *Kobeltia*. It may be noted that most, if not all, of the older records of '*A. hortensis*' from Germany, Seibert's native country, are actually of *A. distinctus*, and only one record of *A. hortensis* s.s. is known (Backeljau & De Winter, 1987).

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

- (1) to confirm that *Arion hortensis* Férussac, 1819, is the type species of the nominal genus *Kobeltia* Seibert, 1873;
- (2) to place on the Official List of Generic Names in Zoology the name *Kobeltia* Seibert, 1873 (gender: feminine), type species *Arion hortensis* Férussac, 1819, as confirmed in (1) above;

- (3) to place on the Official List of Specific Names in Zoology the name *hortensis* Férussac, 1819, as published in the binomen *Arion hortensis* (specific name of the type species of *Kobeltia* Seibert, 1873), and as defined by the lectotype designated by De Winter (1984).

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