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I strongly approve the retention of the spelling *Haminoea*, as suggested by others. Their arguments are convincing, and make much more sense than adoption of *Haminaea*. I also looked in my files on the spelling of this genus in the literature and came to a similar conclusion as P. Mikkelsen (above). There is much more use of *Haminoea* than of *Haminaea*. Even though there is some recent literature using the spelling *Haminaea*, the more important recent systematic works (e.g. the *Southern Synopsis*) continue to use *Haminoea*.

I hope this helps you to find a solution to this problem.

Proposals

In the light of the comments above, the International Commission on Zoological Nomenclature is asked:

(1) to place on the Official List of Generic Names in Zoology the name *Haminoea* [Turton], 1830 (gender: feminine), type species *Bulla hydatis* Linnaeus, 1758 by monotypy;

(2) to place on the Official List of Specific Names in Zoology the name *hydatis* Linnaeus, 1758, as published in the binomen *Bulla hydatis* (specific name of the type species of *Haminoea* [Turton], 1830);

(3) to place on the Official List of Family-Group Names in Zoology the name HAMINOEIDAE Pilsbry, 1895 (type genus *Haminoea* [Turton], 1830) (correction of HAMINEIDAE under Article 35d of the Code);

(4) to place on the Official Index of Rejected and Invalid Generic Names in Zoology the names *Haminaea* Leach, 1847 and *Haminea* Gray, 1847 (incorrect subsequent spellings of *Haminoea* [Turton], 1830);

(5) to place on the Official Index of Rejected and Invalid Family-Group Names in Zoology the name HAMINEIDAE Pilsbry, 1895 (incorrect original spelling of HAMINOEIDAE).

For references to the above names see BZN **44**: 166–167 and **47**: 263–269.

Comments on the proposed conservation of *Hydrobia* Hartmann, 1821 (Mollusca, Gastropoda) and *Cyclostoma acutum* Draparnaud, 1805 (currently *Hydrobia acuta*) by the replacement of the lectotype of *H. acuta* with a neotype; proposed designation of *Turbo ventrosus* Montagu, 1803 as the type species of *Ventrosia* Radoman, 1977; and proposed emendation of spelling of HYDROBIINA Mulsant, 1844 (Insecta, Coleoptera) to HYDROBIUSINA, so removing the homonymy with HYDROBIIDAE Troschel, 1857 (Mollusca)

(Case 3087; see BZN **55**: 139–145)

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I wish, in my capacity as curator of Recent molluscs in the Muséum National d'Histoire Naturelle, Paris, to correct an inappropriate wording in para. 6 of the

application: '[Boeters] regarded them [two putative syntypes found at the MNHM] as syntypes because when Dollfus (1912, pl. 4, figs. 5–8) figured them he wrote '*Hydrobia acuta* Draparnaud sp. (types: Muséum de Vienne)' in the caption; whether they were actually original specimens is impossible to determine'.

I should like to draw attention to p. 250 of Dollfus's (1912) publication: 'La figure de Draparnaud est mauvaise, comme on pourra s'en convaincre en la comparant aux photographies que nous donnons des échantillons types, de sa collection, dont nous avons eu communication, de la manière la plus aimable, par les soins des conservateurs du Musée de Vienne'. [Draparnaud's illustration is inaccurate, as evidenced by a comparison with photographs of type specimens, from his collection, which have been communicated to us, in the most courteous manner, by the curators of the Vienna Museum]. In my view this leaves not the slightest doubt on the syntype status of the specimens illustrated as such by Dollfus, and I reject categorically the suspicion that they are not original material. Why a couple of specimens were retained by Dollfus in Paris rather than returned to Vienna is another question, but one can surmise that, considering that over 70 syntypes were present in Vienna, Dollfus received permission to retain a couple of them.

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We cannot agree with the first proposal of para. 12, item (1) of the application by Giusti, Manganelli & Bodon, that is, to replace the validly designated lectotype of *Cyclostoma acutum* Draparnaud, 1805 by a neotype, which even belongs to a species and (sub)genus different from the lectotype. It is only because the valid type designation has been either neglected or ignored that the nomenclatural stability sought by Boeters (1984) has not yet been reached. Despite the statement by Giusti, Manganelli & Bodon (1998, p. 7), Boeters (1984) clearly emphasized that the lectotype and the paralectotype of *Cyclostoma acutum* are not conspecific. We see no

reason why a choice between retaining the lectotype and designating a neotype should not be guided by the objectivity of the Code. There has been a formal action and there is a Code to be followed towards stability.

There is general consensus that the syntypes from the Draparnaud collection on which the name *Cyclostoma acutum* was based belong to two species. Their identification is also not a matter of dispute. Giusti & al. (1998) have published excellent photographs of the shells and, in particular, the diagnostic soft parts of both species. Authors also agree that the existing lectotype is unequivocally recognizable as belonging to one of these species. There is no reason why the type series with identifiable shells should be invalidated. Therefore, the creation of a neotype is not an option anyway.

The following notes summarize the arguments for our point of view on this case; the nominal species involved have a rather complicated history.

A. Validity of the lectotype of *Cyclostoma acutum* Draparnaud, 1805 as designated by Boeters (1984)

1. *Cyclostoma acutum* was described by Draparnaud (1905) without a locality other than 'France'. In view of the fact that Draparnaud was 'Professeur d'Histoire Naturelle à l'École de Médecine de Montpellier' it has been assumed that the type material was collected near Montpellier. Consequently, Radoman 1977 (p. 207) restricted the type locality to 'Étang du Prévost, Palavas, französische Mittelmeerküste [French Mediterranean coast]'.

2. Draparnaud's collection was acquired by the Naturhistorisches Museum in Vienna in 1819 (see Locard, 1895). His collection did not contain any syntypes of *Cyclostoma acutum* when Boeters (1969) and Falkner (1979 and 1983) independently searched for them. At these times the fate of the syntypes was unknown. However, Dollfus (1912, pl. 4, figs. 5–8) published photographs of two syntypes from Draparnaud's collection, which Boeters (1984, p. 3) subsequently found in the Muséum National d'Histoire Naturelle in Paris and photographed again. Boeters (1984, p. 4) came to the unequivocal conclusion that the two syntypes belong to different species and he was thus the first to detect that *Cyclostoma acutum* was founded on a mixture of two biological species. His view that the syntypes of *C. acutum* belong to different species was confirmed by dissections of animals collected by himself at the Étang du Prévost (see Boeters 1984, p. 4).

3. At least until 1977 (Radoman's paper), *Cyclostoma acutum* Draparnaud, 1805 was understood in different ways but always related to *Turbo ventrosus* Montagu, 1803: either as (possibly) a younger synonym of *Turbo ventrosus* (see para. 4 below), or as a species different but congeneric with *Turbo ventrosus* (see para. 5 below).

4. *Cyclostoma acutum* as (possibly) a younger synonym of *Turbo ventrosus*

4.1. Some selected examples of authors following this view are Forbes & Hanley (1850, p. 138); Jeffreys (1862, p. 68: 'There can, however, be no doubt of its [*H. ventrosa*] being the *Cyclostoma acutum* of Draparnaud'); Frauenfeld (1863, p. 1019: '*H. ventrosa* Mont. ... Ich folge den englischen Autoren, die für die Draparnaudsche Art den obigen Namen annehmen ...' [I follow the English authors who accept the above mentioned name for Draparnaud's species]); Geyer, (1909, p. 93 and 1927, p. 167: '*P. ventrosa* Montagu ... Syn. *stagnalis* der Holländer, *acuta* Drap. der Literatur.'); Kennard & Woodward (1926, pp. 18 and 19).

4.2. *Turbo ventrosus* was described by Montagu (1803, p. 317, pl. 12, fig. 13) as follows: *T[urbo]* with a smooth, glossy, thin shell, with six ventricose, or much rounded volutions, of a light pellucid horn-colour; but when the animal is in it, the appearance is black: apex moderately pointed: aperture suborbicular, closed by a thin, wrinkled, corneous operculum: margin almost intire [sic] the whole way round. Length one eighth of an inch; breadth about one third its length'. The name *Turbo ventrosus* was unambiguously treated as valid by its author and not 'proposed in synonymy' as indicated in the application (para. 6) by Giusti et al. Robson (1922) provided anatomical data based on British specimens: (i) for the male he reported (p. 181): 'The intromittent portion [of the penis] in *P[aludestrina] ventrosa* is long and pointed'; (ii) for the female, the bursa copulatrix (termed oviducal gland) was described as follows (p. 178): 'In general form it is an irregular-shaped gland with a short duct'. According to fig. 8 the shape of the bursa with its duct resembles somewhat that of a kidney (Boeters 1984, p. 4, speaks of a shape like that of a hammer).

4.3. It is important to state here that the anatomical features of the (i) male and (ii) female reported by Robson (1922) are presented by only one of the two species examined by Boeters from the Étang du Prévost (and present in the type series of *Cyclostoma acutum*). The result is the same when turning to conchological features: 'much rounded volutions' and 'suborbicular aperture' described by Montagu (1803) for his *Turbo ventrosus* can only be found in that species from the Étang du Prévost which shows simultaneously both anatomical features (i) and (ii) given by Robson.

5. *Cyclostoma acutum* as congeneric with *Turbo ventrosus*

5.1. The understanding of *Cyclostoma acutum* as a distinct species which is congeneric with *Turbo ventrosus* (of which it is the Mediterranean representative) has mainly been that of authors studying the French or Mediterranean fauna. Examples of this interpretation are Dollfus (1912), Wagner (1928, p. 275) and Germain (1931, p. 647).

5.2. Authors who considered *Hydrobia acuta* as a distinct, mainly Mediterranean species differentiated it from the Atlantic *Hydrobia ventrosa* (formerly often regarded as synonymous with *Helix stagnorum* Gmelin, 1791), but they were not aware that their understanding of *H. acuta* encompassed two taxa (one with flat whorls and the other with convex whorls). The fact that Dollfus photographed two syntypes belonging to different species (1912, pl. 4, figs. 5 and 8 and figs. 6–7) shows that he encompassed two different species within his concept of *Cyclostoma acutum*. This is reflected in photographs of samples from his own collection, attributed to *Hydrobia acuta* sensu Dollfus, since these samples belong to more than one species; especially in the shells from Palavas are the whorls of one specimen (pl. 4, figs. 11 and 13) markedly more vaulted than those of the other one (figs. 12 and 14). Figures 11 and 12 were later copied by Wenz (1939, p. 555, fig. 1487) as representing the type species of *Hydrobia*. Further striking evidence that Dollfus did not establish an understanding of *Cyclostoma acutum* as a species with flat whorls is, finally, given by Germain (1931, p. 648) who referred to Dollfus and defined *Paludestrina acuta* as having a 'spire formé de 6–7 tours assez convexes'. Wagner (1928, p. 275) also examined syntypes in Draparnaud's collection; in attributing several samples of his own or other collections to *Hydrobia acuta*, specimens with more or less vaulted whorls seem to be included when he speaks of 'der schwächeren oder stärkeren Wölbung'. He was apparently not aware that the type series was a mixture of two species.

6. In 1977 Radoman (p. 206, fig. 2 and pl. 21, figs. 1–2) published under the name *Hydrobia acuta* conchological and anatomical data of molluscs collected at the type locality as restricted by him. These animals belonged only to the species with flat whorls and were not characterized by the anatomical features reported by Robson (1922) for *Turbo ventrosus*. Since, until Radoman's (1977) publication, *Cyclostoma acutum* Draparnaud, 1805 had been predominantly understood as a (possibly) younger synonym of *Turbo ventrosus* Montagu, 1803, or at least a closely related species, Boeters (1984) did not follow Radoman in his interpretation of *C. acutum* but tried to conserve the historical understanding in his designation of a lectotype (Boeters, 1984, pl. 1, fig. 1, corresponding to Dollfus, 1912, pl. 4, figs. 5 and 8). In comparison with the then accessible paralectotype, only the lectotype shows the convex whorls which are regarded as characteristic of *Hydrobia ventrosa* and allied species. Further, as regards the two different species examined by Boeters from the Étang du Prévost, only that species which can be correlated with the lectotype based on the mentioned conchological features shows both anatomical features (i) and (ii) as reported by Robson (1922) for *Hydrobia ventrosa*. Irrespective of the taxonomic question as to whether *Hydrobia acuta* and *ventrosa* should be regarded as synonyms or as two distinct but closely related species the lectotype designated by Boeters (1984) was in full accord with all the facts relevant for stability of nomenclature at that time. It is not clear to us why Giusti & Pezzoli (1985, p. 124, note 13) refused to accept this legitimate lectotype designation.

7. The designation of the lectotype by Boeters (1984) served not only for stability as regards the understanding of *Cyclostoma acutum* Draparnaud, 1805, but also for that of *Hydrobia* Hartmann, 1821, as will be explained in the following paragraphs.

B. The current understanding of *Hydrobia* Hartmann, 1821

1. When establishing the genus *Hydrobia*, Hartmann (1821a, pp. 47–48, 58; 1821b, pp. 202, 258) included *Cyclostoma acutum* Draparnaud, 1805, which was subsequently selected by Gray (1847) as the type species.

2. It should be stressed that a penis having an 'intromittent portion ... long and pointed', as describd by Robson (1922) for *Turbo ventrosus* Montagu, 1803, was considered to be characteristic not only of *Turbo ventrosus* but also of the genus *Hydrobia*, at least until 1977. This can be shown by the following references: Henking (1894, pl. 4, fig. 2, *Hydrobia ulvae*); Robson (1922, p. 181, *Hydrobia ventrosa*); Krull (1935, p. 433, fig. 16A, *Hydrobia ventrosa*, and fig. 16B, *H. ulvae*); Muus (1963, p. 133, figs. A-B, *Hydrobia ventrosa*, and figs. E-F, *H. ulvae*); Davis (1966, p. 32, fig. 3, *H. totteni*); Radoman (1974, p. 286, *Hydrobia* in general); Hershler & Davis (1980, p. 204, fig. 4D, *H. truncata*).

3. It must be added that in 1963 Muus (p. 133, fig. D) described *Hydrobia neglecta* and figured for the first time basically different anatomical features. The intromittent portion of the penis of *H. neglecta* is described as 'stout as compared with the slim, pointed organ of *H. ventrosa*, and the rounded tip is usually bent at right angles with the axis of the penis. A skin fold forms a characteristic obtuse angle at the point of bending of the tip'.

4. In his (1974) paper Radoman gave the first general definition of the genus *Hydrobia* based mainly on anatomical characters, and the relevant passage of this definition clearly says (p. 286) that 'the penis is longer [than in *Obrovia* Radoman,

1974] and pointed'. In consequence of this difference from the traditional understanding of *Hydrobia*, Radoman introduced a separate genus for a new species having a penis like that of *Hydrobia neglecta*, viz. *Obrovia* Radoman, 1974 (type species *Obrovia salaria* Radoman, 1974).

5. As already mentioned above, the paralectotype studied by Boeters (1984) must be attributed to a species different from the lectotype. When comparing both species based on the syntypes of *Cyclostoma actum* Draparnaud, 1805 and on material collected in the Étang du Prévost, Boeters (1984) came to the conclusion that the species represented by the paralectotype would have to be treated as belonging to *Obrovia* Radoman, 1974, and not to *Hydrobia* Hartmann, 1821 in the sense of experts at that time.

6. From the foregoing explanation it follows that the designation of a lectotype by Boeters (1984) not only stabilized the understanding of the identity of *Cyclostoma acutum* Draparnaud, 1805 but also that of *Hydrobia* Hartmann, 1821.

We have no comment to make on the second and third proposals of para. 12, item (1) of the application by Giusti, Manganelli & Bodon (those dealing with the generic name *Ventrosia* Radoman, 1977 and the homonymous family-group names HYDROBIIDAE in the Mollusca and Insecta).

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For the reasons given on p. 103 of my recent paper (Hoeksema, 1998) on *Hydrobia acuta* (Draparnaud, 1905) I should like to underline the necessity of the designation of a neotype for *H. acuta*, as proposed by Giusti, Manganelli & Bodon in their application.

The specimen in Paris selected as the lectotype of *Hydrobia acuta* by Boeters (1984) is clearly a specimen of *H. ventrosa* (Montagu, 1803); it has convex whorls, deep sutures and a wide umbilicus. A second specimen in Paris of Draparnaud's original material, showing more flattened whorls, shallow sutures and an almost closed umbilicus, is a specimen of *H. acuta* as identified by Radoman (1977). Both *H. acuta* and *H. ventrosa* occur in the étangs near Montpellier, Hérault, southern France, the type locality for *H. acuta* defined by Radoman.

Acceptance of Boeter's (1984) unfortunate lectotype designation would render *H. acuta* a junior synonym of *H. ventrosa* and a new name would need to be found for *H. acuta* sensu Radoman (1977), Giusti & Pezzoli (1984), Giusti, Manganelli & Schembri (1995) and nearly all subsequent authors.

I therefore fully support the application.

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I support the application.

The proposed replacement of the lectotype of *Hydrobia acuta* (Draparnaud, 1805) with a neotype will stabilize a recently developed species concept. The nomenclature of the nominal species involved in this application and their genera are not yet fully stable for taxonomic reasons as the taxa are still the subject of research. The species concept of *Hydrobia acuta* which the applicants wish to confirm was established not before 1977 (Radoman's publication) and then only by serendipity because Radoman apparently had only one of the two sympatric species (*H. acuta* sensu Radoman, and not *H. ventrosus* Montagu, 1803) available for study from the type locality defined by him. The lectotype selection by Boeters (1984) was valid but was later recognized to have the effect of synonymizing *H. acuta* with *H. ventrosa*.

There are two small points to be made on the type material of *Hydrobia acuta*. In para. 5 of the application the 'type locality' defined by Radoman, the Étang du Prévost near Palavas, is cited without comment. Draparnaud (1805) did not give a locality, nor is any reported from the labels on specimens in his collection (see Locard, 1895; Dollfus, 1912; and Boeters, 1984). His material could have come from anywhere in France but it is plausible (as assumed by other authors) that much of it