Short Notes

Restoration of *Cerithiopsis trisulcata* Yokoyama, 1922 in Place of *Seila yokoyamai* Cossmann, 1923 (Gastropoda: Cerithiopsidae)

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The nominal taxon *Seila yokoyamai* Cossmann, 1923 was originally proposed as a replacement name for *Cerithiopsis* (*Seila*) *trisulcatus* Yokoyama, 1922, and has consistently been used as the valid name for a Pleistocene to Recent Japanese cerithiopsid in subsequent literature (*e.g.*, Kuroda & Habe, 1952; Oyama, 1973; Higo, 1973; Hasegawa, 2000). Cossmann (1923) introduced the name because he considered that *C. trisulcatus* was preoccupied. However, careful examination of the nomenclature of this taxon revealed that Yokoyama's name can be regarded as available as discussed in detail in the following lines.

In a review of Yokoyama's 1922 paper, Cossmann (1923: 116) stated "*Seila trisulcata* dénomination préemployée pour une espèce parisienne, quoique non conservée (Cat. ill. Eoc., IV, p. 51), il serait donc préférable d'y substituer *Yokoyamai* nob [= the name *Seila trisulcata* is preoccupied for a Paris Basin species, though abandoned (Cat. ill. Eoc., IV, p. 51), and it would be better to substitute *Yokoyamai* nov.]. This brief sentence implies that *Cerithiopsis trisulcatus* Yokoyama, 1922 was transferred to the full genus *Seila*, and thereby became a junior secondary homonym of an invalidly introduced name for a Paris Basin fossil. Although the precise name, as well as the author and date, of the "Paris Basin species" was not stated clearly, the source "Cat. ill. Eoc., IV" corresponds to volume 4 of "Catalogue illustré des coquilles fossiles de l'Éocène des environs de Paris" (Cossmann, 1889). On the relevant page in this article Cossmann (1889: 51) stated in the remarks for *Lovenella variata* [Deshayes] "Deshayes considérait les individus du calcaire grossier comme distincts de ceux de l'éocène inférieur et leur a attribué, dans les collections, le nom *trisulcatum*, que je ne puis conserver, même à titre de variété, car ces individus sont identiques au type du *L. Variata* [= Deshayes considered individuals from the "Calcaire Grossier" as distinct from those from the lower Eocene and in collections assigned to them the name *trisulcatum*, though I cannot accept it, even as a variety, as these individuals are identical to the type of *L. variata*.].

In the original description of *Cerithium variatum*, Deshayes (1865 in 1864–1866) did not actually mention any variation or the nominal taxon "*C. trisulcatum*", although in the explanation of the figure (pl. 79, figs. 27, 28) he erroneously use the name *Cerithium mutatum* instead of *C. variatum*, which was corrected in the errata (Deshayes, 1865 in 1864–1866: 667).

These facts indicate that the name "*Cerithium trisulcatum*" had been used only on labels in Deshayes's collection, and was used for the first time in printed works by Cossmann (1889) as a synonym. The name *Cerithium trisulcatum* or *Lovenella trisulcata* is not accompanied by a description and is thus unavailable under ICZN Art. 12. Furthermore, Cossman's usage of the name does not qualify under ICZN Art. 11.5 (Names to be used as valid when proposed). The name *Cerithium trisulcatum* was proposed subsequently for an unrelated fossil taxon from the Lower Oligocene in Westergeln, Germany, by Koenen (1891). This taxon has been assigned to the genus *Fastigiella* by Cossmann (1906) and to *Cerithium* by Janssen (1963) with question, both in the family Cerithiidae, but neither to *Cerithiopsis* nor *Seila*, avoiding formation of homonymy with *Cerithiopsis trisulcatum*. Therefore *Cerithiopsis trisulcatum* Yokoyama, 1922 is actually not preoccupied and a replacement name is not necessary.

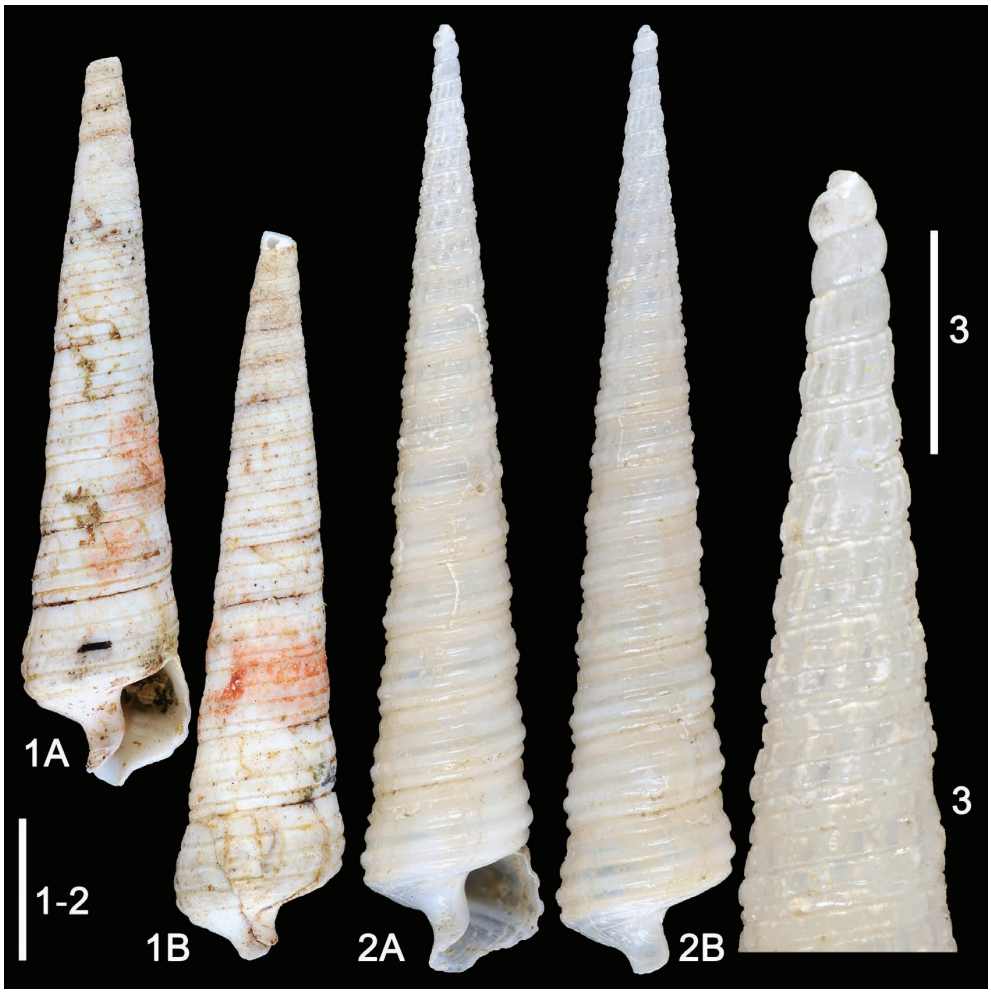
Another issue to be considered is the applicability of ICZN Art. 59.3 (Secondary homonyms replaced before 1961 but no longer considered congeneric) in this case. Art. 59.3 states that "A junior secondary homonym replaced before 1961 is permanently invalid...". *Cerithiopsis trisulcatus* Yokoyama, 1922 was (erroneously) considered a secondary homonym before 1961, and potentially regarded as "permanently invalid". However, it is a condition of this article that the homonymy of the related names is confirmed, and the absence of homonymy precludes its application.

The name "*Seila yokoyamai*" has consistently been used in every Japanese publication since 1946, as mentioned above, and might thus be thought subject to ICZN Art. 23.9 (Reversal of precedence). However, the name *Cerithiopsis trisulcatus* Yokoyama, 1922 was established after the year 1899, and the article is thus not applicable.

It is concluded that *Cerithiopsis* (*Seila*) *trisulcatus* Yokoyama, 1922 is a nomenclaturally valid name, and has precedence over the commonly used name *Seila yokoyamai* Cossmann, 1923 for the Japanese cerithiopsid species.

Taxonomy

Abbreviations: NSMT – National Museum of Nature and Science, Tsukuba; SHMNH – Saito Ho-on Kai Museum of Natural History [whole



Figs. 1–3. Shells of *Cerithiella trisulcata*. **1**. Lectotype of *Cerithiopsis* (*Seila*) *trisulcatus* Yokoyama, 1922, UMUT CM 20958. **2–3**. Recent specimens from the sea area Enshu-nada, off Shizuoka Prefecture, *ca.* 150 m depth, NSMT-Mo 55508. Scale bars: 1–2 = 2 mm; 3 = 1 mm.

collection is now preserved in NSMT]; UMUT – the University Museum, the University of Tokyo.

***Cerithiella trisulcata* (Yokoyama, 1922) new combination**

(Figs. 1–3)

Cerithiopsis (*Seila*) *trisulcatus* Yokoyama, 1922: 73–74, pl. 3, fig. 15.

Seila yokoyamai Cossmann, 1923: 116 [unnecessary replacement name for *Cerithiopsis* (*Seila*) *trisulcatus* Yokoyama, 1922]; Kuroda & Habe, 1952: 85; Taki & Oyama, 1954: 11, pl. 23, fig. 15 [reproduction of the original figure]; Ohara, 1972: pl. Q-35, fig. 7; Higo, 1973: 66; Oyama, 1973: 27, pl. 5, fig. 25 [reproduction of the original figure]; Baba, 1990: 134, pl. 5, fig. 5; Hasegawa, 2000: 301, pl. 149, fig. 17; Hasegawa, 2001: 213 (off Shimoda, Izu Penisula, 50–52 m).

Notoseila yokoyamai – Ito *et al.*, 1986: 9, pl. 5, fig. 6 (off Ishikawa Prefecture, Sea of Japan; 100–115 m); Ito, 1989: 45, pl. 4, fig. 3 (off Sado Island and Niigata Prefecture, Sea of Japan; 101–153 m); Ito, 1990: 89 (Wakasa Bay, Sea of Japan; 59–139 m).

Not *Seila yokoyamai* – Nomura & Hatai, 1935: 33 (Iwate Prefecture) [= *Seila morishimai* (Habe, 1970)].

Material examined: Lectotype, UMUT-CM 20957 (designated by Oyama, 1973), Shito (Ichihara City, Chiba Prefecture; Pleistocene Shimosa Group, Semata Formation). Recent material, NSMT-Mo 55508, the sea area Enshu-nada, off Shizuoka Prefecture, *ca.* 150 m depth.

Remarks: *Cerithiopsis* (*Seila*) *trisulcatus* Yokoyama, 1922 was originally described as a Pleistocene fossil (Fig. 1), and it has frequently been recorded from various Pleistocene Formations (Semata, Lower Umegase, Upper Mandano and Toyofusa Formations) in the Kazusa Group (Baba, 1990) and also from Recent Japanese waters (Hasegawa, 2000). In the Recent fauna, it is distributed from Boso Peninsula along the Pacific coast, and from Sado Island in the Sea of Japan to Kyushu, on sublittoral sandy gravel bottoms down to a depth of *ca.* 150 m. Although Nomura & Hatai (1935) recorded this species from the northeastern part of Honshu, and the record was cited in subsequent literature (*e.g.*, Horikoshi *et al*., 1979), examination of the voucher specimens (SHMNH 5028; SHMNH 5316) revealed that they are not this species but *Seila morishimai* (Habe, 1970). The fossil lectotype (Fig. 1) differs slightly from most of the Recent specimens (Figs. 2–4) in possessing flatter spiral cords with narrower, groove-like interspaces and more convex base, but reasonably falls in a range of variation.

This species has been assigned by previous authors to the genus *Seila* A. Adams, 1861 (type species: *Triphoris dextroversus* A. Adams & Reeve, 1850, subsequently designated by Dall, 1889) and the related genus *Notoseila* Finlay, 1927, which has been regarded as a subgenus of *Seila* by recent authors (*e.g.*, Cecalupo & Perugia, 2011). However, it apparently differs from other species assigned to *Seila* (*e.g.* Dushane & Draper, 1975; Marshall, 1978), and shows closer similarity to species of the genus *Cerithiella* Verrill, 1882 (type species by typification of the replaced name: *Cerithium metula* Lovén, 1846) (see Bouchet & Warén, 1993) in the morphology of the protoconch (Fig. 4) and siphonal canal, as well as in its sublittoral to bathyal habitat. Although the present species differs superficially from most of the species in *Cerithiella* in lacking axial ribs on the lower teleoconch whorls, it possesses distinct axial sculpture on the initial teleoconch whorls (Fig. 3), and there is no reason to exclude this species from the genus on the basis of this character. Accordingly *Cerithiopsis* (*Seila*) *trisulcatus* is formally transferred herein into the genus *Cerithiella*. More detailed study, including examination of its radula and a molecular phylogenetic scrutiny, will be necessary to confirm its precise generic position.

Fig. 4. Protoconch of *Cerithiella trisulcata*. Two views of the Recent specimen illustrated in Figs. 2–3, NSMT-Mo 55508. Scale bar = 200 μm.

Concluding remarks

Cossmann's replacement name *Seila yokoyamai* for *Cerithiopsis* (*Seila*) *trisulcatus* Yokoyama was unnecessary, and must be abandoned. This taxon is transferred from *Seila* to *Cerithiella*, and should be known as *Cerithiella trisulcata* (Yokoyama, 1922).

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Seila yokoyamai Cossmann, 1923 に換えて *Cerithiopsis trisulcatus* Yokoyama, 1922 の復権（腹足綱：クリイロケシカニモリ科）

長谷川和範

要　約

Seila yokoyamai Cossmann, 1923 は *Cerithiopsis trisulcatus* Yokoyama, 1922 に対する置換名として提唱され，その後今日まで一貫してヨコヤマケシカニモリの有効な学名として使用されてきた。Cossmann (1923) は，置換名を与えた根拠として，「（属位変更の結果新たな組み合わせとなる）*Seila trisulcata* はパリ盆地産の同名の名義タクソンに先取される」と記しているが，関連する文献を精査した結果，この名前は Deshayes コレクションの中の標本ラベルに用いられただけで，印刷物では扱われていないことが判明した。従って，動物国際命名規約（ICZN）の条 11.5（学名が提唱された時点で有効として使用されていること）に当てはまらない。すなわち，ICZN 条 59.3（1961 年よりも前に置換されたがもはや同属だとは考えられていない二次同名）の要件を満たさないことから，*Cerithiopsis trisulcatus* Yokoyama, 1922 の無効性が取り消される。さらに，置換名 *Seila yokoyamai* は現在ではより一般的に用いられているものの，ICZN 条 23.9（優先権の逆転）の前提条件「古参異名が 1899 年よりも後に有効名として使用されていなこと」を満たさないことから，優先権の逆転もあり得ない。従って，ヨコヤマケシカニモリの学名は *Cerithiopsis trisulcatus* Yokoyama, 1922 に変更されることになる。

ヨコヤマケシカニモリは元々更新統瀬又層の化石種として提唱された名義タクソンであるが，その後関東各地の更新統のみならず，現生からも報告されている。現生では，太平洋では房総半島以南，日本海では佐渡以南，九州までの，水深 150 m 前後の潮下帯から知られている。属位について，Cossmann (1923) 以来，今日までの主要な文献では *Seila* A. Adams, 1861，あるいはその亜属とされる *Notoseila* Finlay, 1927 に含められていたが，この度原殻や水管溝などの貝殻の形態を詳しく検討した結果，*Cerithiella* Verrill, 1882 に所属を変更するのが適当であると判断した。