THREE NOMENCLATURAL NOTES ON PANAMIC BIVALVES

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In the process of writing our forthcoming book on the bivalve mollusks of tropical western America, we have encountered a number of nomenclatural problems. We herewith untangle three of these issues and illustrate the species in question.

I. Pleurolucina undata (Carpenter, 1865) (Figure 1)

This is a case of an improperly renamed junior homonym. Hertlein & Strong (1945: 105) renamed Lucina undata Carpenter, 1865 (p. 279) as Lucina undatoides, because of “the prior use of that combination of names by Lamarck, 1819.”

However, there is no such Lamarckian taxon. Lamarck (1818: 543) had placed Venus undata Pennant, 1777 (plate 58, figure 51), in the genus Lucina. Well before the era of Hertlein & Strong, this well-known British species was universally placed in the genus Mysia Lamarck, 1818: 543, or its junior synonym Lucinopsis Forbes & Hanley, 1848: 433, belonging to the Veneridae or Petricolidae (for example, Lamy, 1920: 75, 205).

Hertlein & Strong relied in several cases on ambiguous entries in nomenclators without researching the status of the earlier names involved. In this case, as in some others, they would not have concluded that the taxa involved were secondary homonyms if they had examined the literature.

Moreover, Hertlein & Strong’s “type” of Lucina undatoides has no status, even if Carpenter’s name had been properly replaced. The Hertlein & Strong replacement name was clearly proposed as such and not expressly as a new species, thus Carpenter’s type specimens would also apply to the new name.

Pleurolucina undata (Carpenter, 1865) is one of three Panamic members of this lucinid genus (Figure 1), one of which is as yet unannamed. It is restricted to the Golfo de California, México, from the intertidal zone to 60 m depth. Thus, the Hertlein & Strong unnecessary replacement name becomes a junior synonym.

II. Spondylus limbatus G. B. Sowerby II, 1847 (Figure 2)

Spondylus calcifer Carpenter, 1857 (p. 152), is one of the most typical Panamic bivalves. Indeed, Carpenter himself extracted many species in his famous Mazatlán catalogue by breaking up shells of S. calcifer. Found in and on these shells were not only various borers and nestlers, but also many gastropods that had taken refuge in their abandoned burrows and other niches and crevices. Indeed, he even smashed the type material of S. calcifer itself in his search (Keen, 1968: 393)!

It thus came as somewhat of a shock to discover this well-known species placed into synonymy in a paper focused chiefly on the spondylids of the eastern Atlantic (Lampréll et al., 2001:615). As it turns out, Spondylus limbatus G. B. Sowerby II, 1847 (1847a: 87; 1847b: 427, plate 88, figure 51), described from the “Persian Gulf”, was not from there at all, but rather was instead from the eastern Pacific [BMNH 1846.12.4.1], giving it a decade’s precedence over S. calcifer.

Unfortunately, the name S. limbatus has been repeatedly used in the literature, albeit in the wrong province, so that it is not a nomen oblitum under the current International Code of Zoological Nomenclature (ICZN, 1999), so as to trigger its “Reversal of precedence” provisions (Article 23.9.1-2), and the name S. calcifer is not so universally known that we feel it worthwhile to prepare a petition to the International Commission to conserve it under Article 23.9.3. As a result, we propose to use the earliest available name for the species, S. limbatus, for the eastern Pacific species.

The species occurs from Bahía de Choya, Sonora, México, to Caleta Mero, Tumbes, Perú, from the intertidal zone to 18 m.

III. Chionopsis lilacinia (Carpenter, 1864) (Figure 3)

This is another case of a homonym that never was, together with the unearthing of some long-overlooked type specimens.
Figure 1. *Pleuro lucina undata* (Carpenter, 1865), SBMNH 127307, México, Baja California Sur, La Paz, shell length = 15 mm; A, external right; B, external left; C, internal left; D, internal right.
Figure 2. *Spondylus limbatus* G. B. Sowerby II, 1847, SBMNH 138364, México, Baja California Sur, Punta Chivato, shell length = 77 mm; A, external right; B, internal right; C, external left; D, internal left.
Carpenter (1864: 570) proposed the name Venus crenatula lilacina for an eastern Pacific subspecies of the western Atlantic Venus crenatula G. B. Sowerby II, 1853, ex Chemnitz ms (p. 729, plate 161, figure 190). The earliest name for the western Atlantic species is now considered to be Venus pubera Bory de Saint Vincent, 1827, ex Valenciennes ms (p. 152; pl. 267, fig. 4).

Carpenter’s taxon was based on an eastern Pacific lot figured by Reeve (1863: plate 13, figure 46). He found these specimens differed from West Indian lot figured by Reeve (1863: plate 13, figure 4). He added, rather ambiguously, to additional material sent by Xantus either to the BMNH or the USNM. Thus, we herein designate as the lectotype the specimen illustrated by Reeve (BMNH 20050240-1) (Figure 3).

Dall (1902: 393) then offered Chione purpurissata as a replacement name for the eastern Pacific Chione lilacina (Carpenter, 1864) on the grounds that it was preoccupied by “Chione lilacina (Gray, 1838)”.

However, there is no such taxon. Gray (1838: 305) had merely placed Callista lilacina Lamarck, 1818 (pp. 564-565), in the genus Chione. Lamarck’s taxon is now regarded as a synonym of Callista erycina (Linnaeus, 1758) (p. 686, originally described as Venus), a smooth-shelled Indo-Pacific member of the Pitarinae (Habe, 1977: 270; Oliver, 1992: 187). Thus, he had reviewed the literature, Dall (1902) would certainly not have regarded these two taxa as belonging to the same genus.

The eastern Pacific Chione lilacina occurs from Bahía de Los Angeles, Baja California, and Puerto Lobos, Sonora, Mexico, to Playas de Villamil, Guayas, Ecuador, from the intertidal zone to 80 m depth. It differs from the closely related western Atlantic C. pubera in being proportionately higher and in having the internal lilac blush. Dall’s unnecessary replacement name should be regarded as a junior synonym.

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FORBES, EDWARD & SYLVANUS CHARLES THORP HANLEY


GRAY, JOHN EDWARD


HABE, TADASHIGE


HERTLEIN, LEO GEORGE & ARCHIBALD MCCLURE STRONG


ICZN [INTERNATIONAL COMMISSION ON ZOOLOGICAL NOMENCLATURE]

Figure 3. *Chionopsis lilacina* (Carpenter, 1864), lectotype herein, BMNH 20050240-1, México, Baja California Sur, Cabo San Lucas, shell length = 66 mm; A, external right; B, external left; C, internal left; D, internal right; E, external dorsal; F, right hinge; G, left hinge.
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