



The families Scissurellidae, Anatomidae, and Sutilizonidae in the northeast Pacific

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Abstract

The microscopic slit bearing gastropods of the northeastern Pacific are reviewed. Since the global monograph of Geiger (2012), one additional species has been described (*Anatoma georgii* Geiger, 2017). No significant material of other species has changed distributional records or range limits of the known taxa.

Introduction

The microscopic Vetigastropoda in the families Scissurellidae, Anatomidae, and other minor lineages were recently monographed by Geiger (2012). Since then, one additional species was described (Geiger 2017). The overall diversity of the group is rather low, comparable to the northwest Pacific, northeast Atlantic and Mediterranean, southern oceans of South America, but somewhat lower than southern oceans of Africa, and significantly lower than Pacific ocean surrounding New Zealand and the waters surrounding Australia. For collecting techniques see Geiger *et al.* (2007) and Geiger (2012). Maximum dimension in any direction are given for each species.

Scissurellids are generally found from the intertidal to SCUBA depths on hard substrates. They can be collected alive by rock brushings and algal shakings. Grunge samples often yield empty shells. The diversity is unremarkable for *Scissurella* and *Sinezona*; the northeastern Pacific harbors two of the three species of *Coronadoa*.

Anatomids are generally found from shelf to bathyal and abyssal depths, most likely often on soft substrates. They are collected by dredging or with grab samplers. Relatively few species are known from the northeast Pacific.

The hydrothermal vent environment contains a discrete lineage (Sutilizonidae) that is usually taxonomically placed in the vicinity of the other slit-bearing micro-vetigastropods. There are no representatives of the families Depressizonidae and Larocheidae in the northeastern Pacific.

As detailed in Geiger (2012) there is no justification for any superfamilies in Vetigastropoda because various phylogenies contradict one another at the most fundamental levels. The chief problem is most likely taxon sampling of minor lineages, such as Pendromidae and Larocheidae.

Abbreviations

- FMNH: Field Museum of Natural History, Chicago, Illinois, USA.
NHMUK: The Natural History Museum, London, United Kingdom.
LACM: Natural History Museum of Los Angeles County, California, Malacology Department, USA.
SBMNH: Santa Barbara Museum of Natural History, California, USA.
USNM: United States National Museum of Natural History, Smithsonian Institution, Washington (DC), USA.
ZIN: Zoological Institute of the Russian Academy of Sciences, St. Petersburg, Russia.
M: Monotypy.

OD: Original designation.
SD: Subsequent designation.

Systematics

Scissurellidae Gray, 1847 (Figures 1A–D)

Description. Shell 0.5–1 mm, trochiform to trochiform-depressed; nacre absent; protoconch sculpture variable (“microgranular” sign of erosion/abrasion); slit (*Scissurella*), hole (*Sinezona*), or nothing (*Coronadoa*); selenizone above periphery (*Scissurella*, *Sinezona*), or absent (*Coronadoa*); umbilicate or anomphalous; sculpture consisting of axial, spiral elements of variable strength. Color off-white. For radula, anatomical details see Geiger (2012).

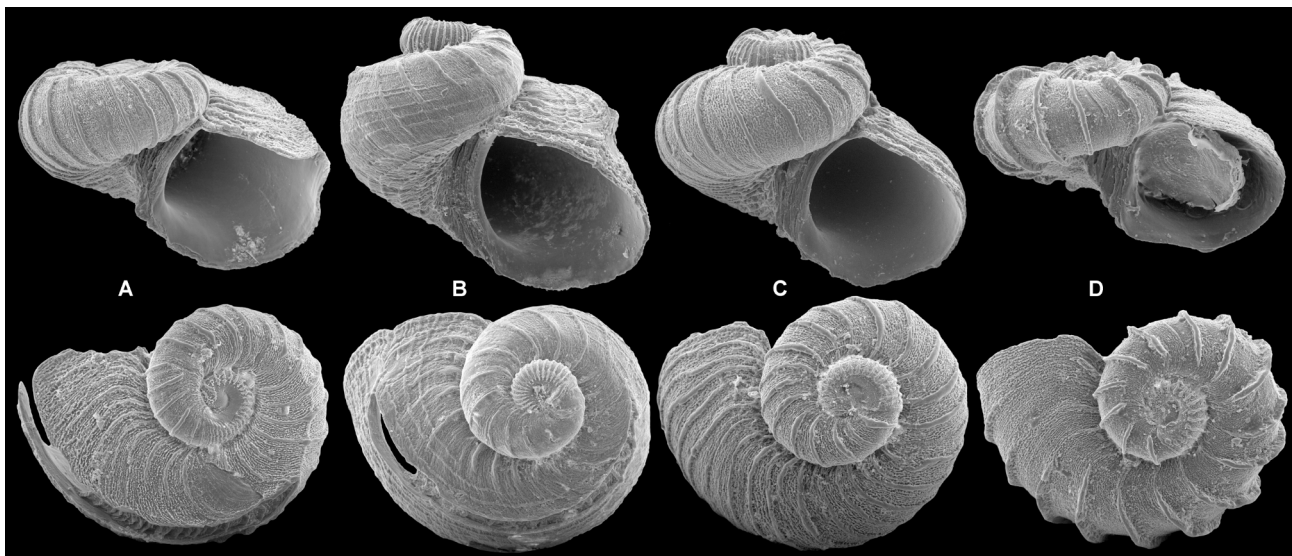


FIGURE 1. SCISSURELLIDAE. A. *Scissurella kaiserae* Geiger, 2006. 30–35 m, Baja Alcyone, Cocos Island, Costa Rica, 0.54 mm (SBMNH 348769, holotype). B. *Sinezona rimuloides* (Carpenter, 1865), 2–4 m, just W of Saldita Bay, Guaymas, Sonora, 0.76 mm (SBMNH 211378). C. *Coronadoa simonsae* Bartsch, 1946. 13–30 m, Corez Bank, 0.5 mi S of Bishop Rock, Los Angeles County, California, LACM 1969-34. 0.6 mm. D. *Coronadoa demisispira* Geiger & McLean, 2010. 26–40 m, Farnsworth Bank, off S side Santa Catalina Island, Los Angeles County, California, 0.6 mm (LACM 3113, holotype).

Scissurella d’Orbigny, 1824: With selenizone and open slit.

Sinezona Finlay, 1927: With selenizone and foramen; slit in juveniles.

Coronadoa Bartsch, 1946: Lacking selenizone, slit, or foramen.

Scissurella d’Orbigny, 1824 (Figure 1A)

Scissurella d’Orbigny, 1824: 343. Type species (SD Gray 1847: 146) *Scissurella laevigata* d’Orbigny, 1824 [= *Scissurella costata* d’Orbigny, 1824: first reviser’s principle Monterosato (1878): See Geiger, 2012]. Europe.

Schismope Jeffreys, 1856: 321. Type species (SD Geiger 2012: 137) *Scissurella striatula* Philippi, 1844. Europe.

Woodwardia Crosse & Fischer, 1861: 160. Type species (SD Geiger 2012: 137) *Scissurella elegans* d’Orbigny, 1824. Europe.

Maxwellella Bandel, 1998: 19. Type species (OD) *Scissurella annulata* Ravn, 1833. Europe †.

Reussella Bandel, 1998: 44. Type species (OD) *Scissurella depressa* Reuss, 1860. Europe †.

Praescissurella Lozouet, 1998: 66. Type species (OD) *Scissurella depontaillieri* Cossmann, 1879. Europe †.

Description. Shell to 1 mm, trochiform depressed, slit open; protoconch variable, sculpture as for family.

Remarks. Juvenile *Sinezona* also have an open slit, but the last quarter whorl does not markedly descend along the shell axis.

Scissurella kaiserae Geiger, 2006
(Figure 1A)

Scissurella kaiserae Geiger, 2006a: 2–7, figs 1–4. Holotype SBMNH 348769. Baja Alcyone, Cocos Island, Costa Rica.

Description. Shell to 0.6 mm, trochiform depressed; protoconch with fine axial cords; teleoconch I of 0.825 whorl, 17–20 distinct axial cords, interstices with fine growth marks; teleoconch II 0.33–0.4 whorl; shoulder flat; axial cords as on teleoconch I, spiral sculpture absent; base with distinct constriction below selenizone; sculpture as on shoulder; umbilicus moderately wide, funiculus distinct; aperture subquadratic.

Distribution. Central Baja California to Colombia. Shallow subtidal to 60 m. Scarce.

Sinezona Finlay, 1927
(Figure 1B)

Schismope, of authors, not Jeffreys, 1856. See Geiger (2012) for discussion.

Sinezona Finlay, 1927: 341. Type species (OD) *Scissurella brevis* Hedley, 1904. New Zealand.

Daizona Bandel, 1998: 57. Type species (OD) *Sinezona doliolum* Herbert, 1986. South Africa.

Ariella Bandel, 1998: 63. Type species (OD) *Ariella haliotimorpha* Bandel, 1998. Europe †.

Description. Shell to 1 mm, trochiform; hole in fully-grown specimens, protoconch variable, sculpture as for family.

Remarks. Juvenile *Sinezona* have an open slit, but the last quarter whorl does not markedly descend along the shell axis. *Sinezona carolarum* Geiger & McLean, 2010 is a rare Panamic Province species that may also occur into Baja California; see Geiger (2012).

Sinezona rimuloides (Carpenter, 1865)
(Figure 1B)

Scissurella rimuloides Carpenter, 1865: 271. Holotype NHMUK slide 1532. Mazatlan [Sinaloa].

Description. Shell to 0.8 mm, trochiform; protoconch with strong axial cords, apertural varix connected to embryonic cap; teleoconch I ~ 1 whorl, 13–15 strong axial cords; teleoconch II 0.6 whorl; shoulder slightly convex, with fine growth lines; base with spiral lines strongest around open umbilicus.

Distribution. Humboldt Bay, Humboldt County, California, to Jalisco, and Galapagos Islands, Ecuador. Common.

Coronadoa Bartsch, 1946
(Figure 1C–D)

Coronadoa Bartsch, 1946: 447–448. Type species (OD): *Coronadoa simonsae* Bartsch, 1946. Southern California.

Description. Shell to 1 mm; trochiform; protoconch with strong axial cords, interstices with fine growth lines, no apertural varix; teleoconch sculpture with axial ribs; umbilicate; selenizone, foramen lacking.

Coronadoa simonsae Bartsch, 1946
(Figure 1C)

Coronadoa simonsae Bartsch, 1946: 281, fig. 103. Holotype USNM 346655. North Coronado Island, Baja California.

Description. Shell to 0.6 mm, trochiform globular, 20 strong axial cords to lamellae per whorl, adumbilical portion of base occasionally with 1–2 beaded spiral cord; umbilicus narrow, funiculus distinct.

Distribution. Sitka, Sitka County, Alaska, to Asuncion Island, Baja California. Intertidal to 40 m. Uncommon.

Coronadoa demisipira Geiger & McLean, 2010
(Figure 1D)

Coronadoa demisipira Geiger & McLean, 2010: 12–15, fig. 9. Holotype LACM 3113, Farnsworth Bank, California.

Description. Shell to 0.75 mm, trochiform depressed, 12–18 strong axial cords to lamellae not reaching suture, diminishing in strength with growth; umbilicus narrow, funiculus distinct.

Distribution. Marin County, California, to Cedros Island, Baja California. 10–50 m. Scarce.

Anatomidae McLean, 1989
(Figures 2A–G)

Description. Shells of northeast Pacific species to 3 mm, trochiform globular, trochiform-biconical; nacre absent; protoconch sculpture variable (“microgranular” sign of erosion/abrasion); slit open, selenizone at periphery; more or less umbilicate; sculpture consisting of axial, spiral elements of variable strength. Color off-white. For radula, anatomical details see Geiger (2012).

Anatoma Woodward, 1859
(Figures 2A–G)

Anatoma Woodward, 1859: 204. Type species (M: misidentified; SD Geiger, 2012: 734): *Scissurella crispata* Fleming, 1828. NE Atlantic.

Schizotrochus Monterosato, 1877: 416. Type species (OD) *Scissurella crispata* Fleming, 1828. Europe.

Hainella Bandel, 1998: 36–37. Type species (OD) *Scissurella euglypta* Pelseneer, 1903. Antarctic.

Thielella Bandel, 1998: 35. Type species (OD) *Scissurella amoena* Thiele, 1912. Subantarctic.

Remarks. Characters as for family. *Anatoma keenae* McLean, 1970, is known from the Gulf of California and may eventually be found on the Pacific side of the Baja peninsula.

Anatoma concinna (A. Adams, 1862)
(Figure 2A)

Anatomus concinnus A. Adams, 1862: 348. Syntype NHMUK 1874.5.19.64. Rinfunsiri, Japan.

Scissurella obtusata Golikov & Gublin, 1978: 171–172, fig. 3. Holotype ZIN 27738/1. Chirpoi Island, Russia.

Description. Shell to 1.9 mm, trochiform globular; protoconch with coarse flocculent sculpture, apertural varix absent; teleoconch I of 0.875–1 whorl, axial cords indistinct, dull, few if any fine spiral lines; teleoconch II of up to 1.5 whorls, suture moderately impressed, sutsel 1.5x as wide as selenizone; shoulder rounded, sculpture dull reticulate; base without constriction below selenizone, same sculpture as on shoulder; umbilicus narrow, funiculus distinct.

Distribution. Northern Japan to Alaska, to about 55° N, 173° W. 7–70 m. Rare.

Anatoma disciformis (Golikov & Sirenko, 1980)
(Figure 2B)

Scissurella (*Schizotrochus*) *disciformis* Golikov & Sirenko, 1980: 107–108, fig. 2. Holotype ZIN 32372. Moneron Island, Russia.

Description. Shell to 2 mm, trochiform, biconical; protoconch sculpture coarse flocculent, no apertural varix; teleoconch I of 0.5 whorl, axial cords dense, broad; teleoconch of up to II 1.75 whorls, suture impressed, sutsel very narrow; shoulder rounded, axial cords dense, low, interstices as wide as cords, spiral lines forming reticulate pattern; base sculpture similar to shoulder; umbilicus, funiculus distinct.

Distribution. Moneron Island, Russia, to Aleutian Islands, Alaska, to about 52° N, 174° W. 7–210 m. Rare.

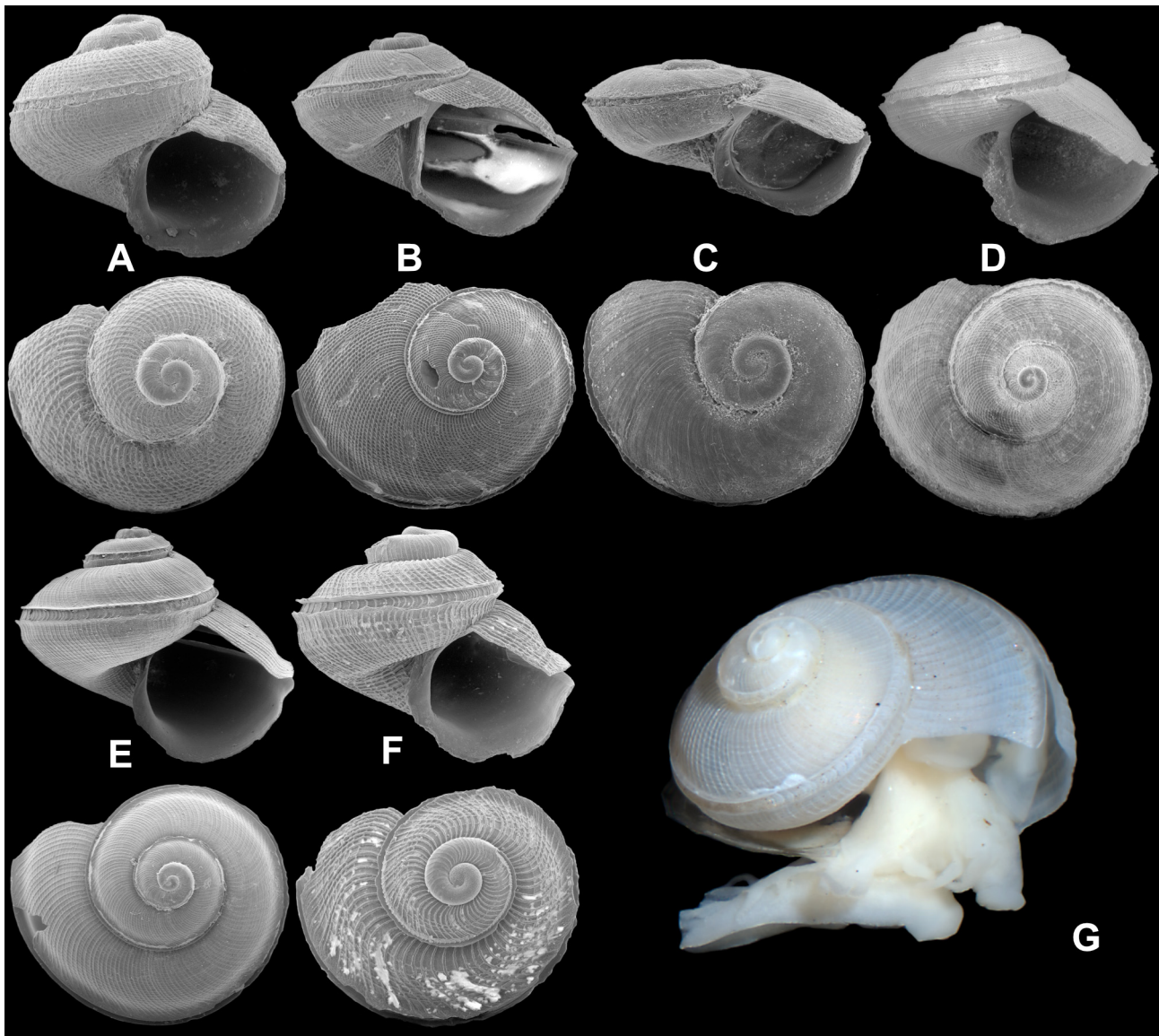


FIGURE 2. Anatomidae. A. *Anatoma concinna* (A. Adams, 1862). 7 m, Middle Rocks, Chicagof Harbor, Bering Sea side of Attu Island, Near Islands, Aleutian Islands, Alaska, LACM 1979-71. 1.8 mm. B. *Anatoma disciformis* (Golikov & Sirenko, 1980). 121 m, SE side Seisopochoi Island, Rat Islands, Aleutitan Islands, Alaska, LACM 1986-322. 2.0 mm. C. *Anatoma georgii* Geiger, 2017. Intertidal, Hawk Inlet, Sakgway Hoonah-Angoon County, Alaska. 1.2 mm (SBMNH 473348, holotype). D. *Anatoma janetae* Geiger, 2006. 850–900 m Nitinat Canyon, NW Washington. 2.1 mm (Harry Lee Collection). E. *Anatoma kelseyi* (Dall, 1905). 183 m, off La Jolla, San Diego, San Diego County, California. 3.2 mm (SBMNH 103215, neotype). F. *Anatoma lyra* (Berry, 1947). 37–52 m, granite pinnacle, Cordell Bank, off Point Reyes, Marin County, California, LACM 1981-50. 1.4 mm. G. *Anatoma kelseyi*. 421 m, 2.3 mi 48°T to South Point Light, Santa Rosa Island, Santa Barbara County, California, 33.850°N, 120.183°W, LACM 1975-384 = *Velero IV* 23129-75. Preserved animal, z-stacked under stereomicroscope, 2.3 mm.

***Anatoma georgii* Geiger, 2017**
(Figure 2C)

Anatoma georgii Geiger, 2017: 226–227, figs 1–18. Holotype SBMNH 473348. Hawk Inlet, Sakgway Hoonah-Angoon County, Alaska.

Description. Shell to 1.36 mm, trochiform, depressed. Protoconch of 0.75 whorl no apertural varix, flocculent sculpture. Teleoconch I of 0.67 whorls, with finest growth lines only; teleoconch II of up to 1.125 whorls.

Shoulder slightly convex, with finest growth lines, last 0.125 whorl with about a dozen finest spiral threads, suture impressed, sutsel about as wide as selenizone, base biconvex, with distinct ridge at midpoint, without constriction below selenizone, same sculpture as on shoulder, periumbilical cord distinct, no funiculus. Umbilicus moderately wide. Aperture subquadratic. Selenizone at periphery, rather narrow for genus, keels low, slit with parallel margins.

Distribution. Aleutian Islands to Alaska mainland, intertidal to 7 m. Rare.

Remarks. The species had been misidentified by Geiger (2012: fig. 784A) as a juvenile of *A. lyra*. The latter always has distinct axial sculpture on the teleoconch.

Anatoma janetae Geiger, 2006
(Figure 2D)

Anatoma janetae Geiger, 2006b: 108–112, figs 1–2. Holotype FMNH 307218. East Pacific Rise (12 42.7 N, 103 54.5 W), 2574 m.

Description. Shell to 3.8 mm, trochiform, biconical, very thin, fragile; protoconch sculpture flocculent, apertural varix not connected to embryonic cap; teleoconch I of 0.6–0.75 whorl, strong spiral cord in position of selenizone, ~32 raised axial cords; teleoconch II of up to 2.25 whorls, suture little impressed, sutsel never wider than half width of selenizone; shoulder rounded, fine spiral cords predominant, crossed by weaker axial lines; base with spiral lines or steps, more widely spaced towards umbilicus without funiculus.

Distribution. Nitinat Canyon, Washington, to East Pacific Rise. 850–2600 m. Rare.

Anatoma kelseyi (Dall, 1905)
(Figure 2E, 2G)

Scissurella (*Schizotrochus*) *kelseyi* Dall, 1905: 124–125. Holotype USNM 181820, lost. Off San Diego, California.

Scissurella chiricova Dall, 1919: 370. Holotype USNM 206509. SE of Chirikof Island, Alaska.

Description. Shell trochiform-globose, to 6 mm (holotype), typically <4 mm; protoconch sculpture reticulate, apertural varix barely connected to embryonic cap; teleoconch I of 0.75 whorls, ~ 38 axial cordlets; teleoconch II of 3.125 whorls in 3.2 mm specimen, sutsel increasing with growth in width from less than width to more than width of selenizone; shoulder rounded, suture moderately impressed, many fine axial cords, intersected by a good dozen finest spiral lines; base with weak constriction below selenizone, wider reticulate pattern; umbilicus narrow, funiculus indistinct.

Distribution. Aleutian Islands and Alaska, to ~32° N in southern California. 55–2000 m. Scarce.

Anatoma lyra (Berry, 1947)
(Figure 2F)

Scissurella lyra Berry, 1947: 268–270, pl. 1, figs 10, 11. Holotype SBMNH 34531. San Pedro, Los Angeles, California, middle Pleistocene Lomita Marl.

Scissurella baxteri McLean, 1984: 233, fig. 1. Holotype LACM 1991. Hesketh Island, Kenai-Cook County, Alaska.

Description. Shell to 2.3 mm, trochiform low-globular; protoconch with flocculent sculpture, apertural varix absent; teleoconch I of 0.5–0.6 whorl, faint axial cords; teleoconch II of up to 2 whorls, suture deeply impressed, sutsel very narrow on early whorls, as wide as selenizone in fully grown specimens; shoulder rounded, weak to strong axial cords crossed by half dozen spiral lines; base rounded, reticulate sculpture; umbilicus, funiculus distinct.

Distribution. Aleutian Islands and Bering Sea, Alaska (to about 59° N) to about 32° N in southern California. 10–250 m. Scarce.

Sutilizonidae McLean, 1989
[= **Temnociinidae** McLean, 1989]
(Figure 3A–B)

Description. Shell to 4 mm, limpet shaped, axial and spiral sculpture, slit closed to foramen, protoconch pitted. Nacre absent, color off-white. For anatomical details see Geiger (2012) and references therein.

Distribution. Restricted to hydrothermal vent habitat, and only rarely collected by submersible or ROVs.

Sutilizona McLean, 1989

Sutilizona McLean, 1989: 14. Type species (OD): *Sutilizona theca* McLean, 1989. East Pacific Rise.

Description. Coiling axis at $\sim 45^\circ$ to apertural plane.

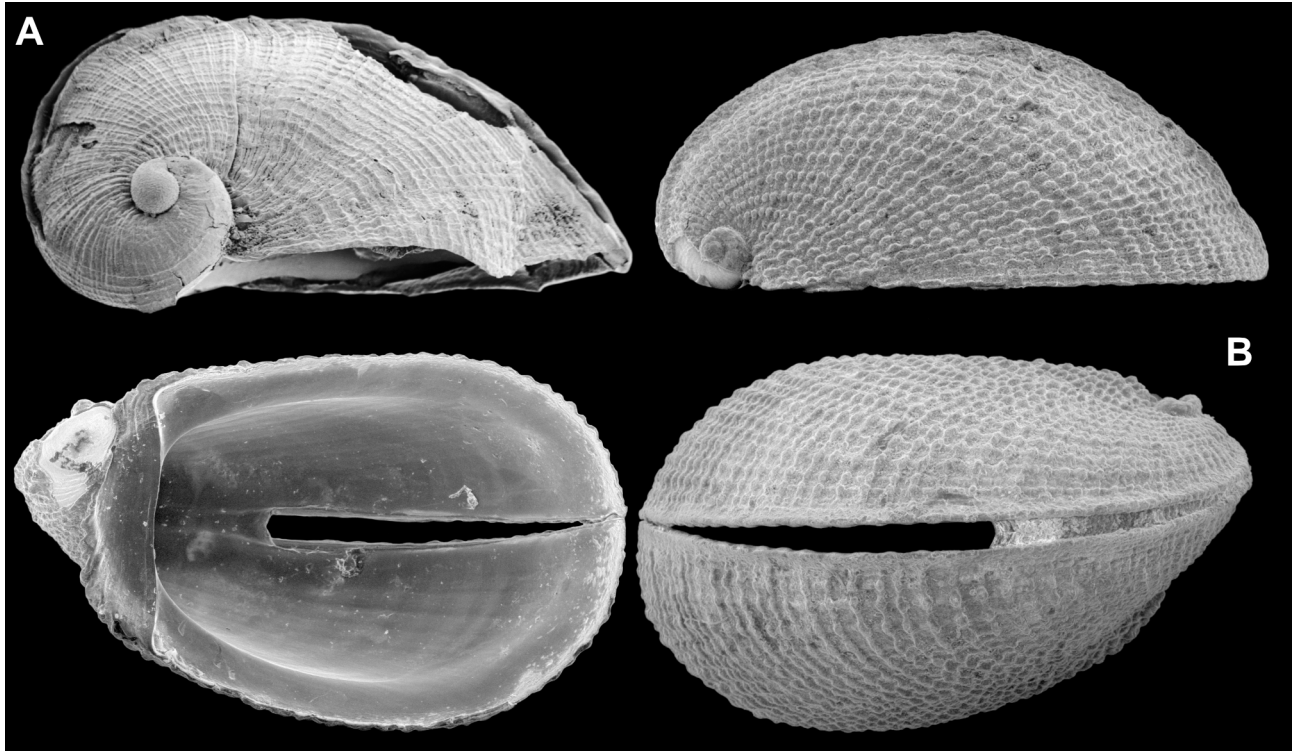


FIGURE 3. Sutilizonidae. A. *Sutilizona tunncliffae* Warén & Bouchet, 2001. 2202 m, hydrothermal vents of Endeavor Segment, Juan de Fuca Ridge, off Vancouver Island, British Columbia 2.2 mm (original holotype figure, specimen now destroyed). Image by and with kind permission of A. Warén. B. *Temnocinclis euripes* McLean, 1989. 1575 m, hydrothermal vents of Axial Seamount, Juan de Fuca Ridge, off Washington. 3.8 mm (USNM 859964, holotype).

Sutilizona tunncliffae Warén & Bouchet, 2001
(Figure 3A)

Sutilizona tunncliffae Warén & Bouchet, 2001: 143, figs. 15f, 17d, 18, b, d, g. Holotype now destroyed. Main Field, Endeavor Segment, Juan de Fuca Ridge, 2202 m.

Description. Morphology as for genus.

Distribution. Eastern Pacific rise hydrothermal vents, ~ 1500 – 3000 m. Rare.

Temnocinclis McLean, 1989

Temnocinclis McLean, 1989: 5. Type species (OD): *Temnocinclis euripes* McLean, 1989. East Pacific Rise.

Description. Coiling axis more or less at right angle to apertural plane.

***Temnocinclis euripes* McLean, 1989**
(Figure 3B)

Temnocinclis euripes McLean, 1989: 7, figs 1A–H, 4A, 5A–B. Holotype USNM 859964. Axial Seamount, Juan de Fuca Ridge, Washington, 1575 m.

Description. Morphology as for genus.

Distribution. Eastern Pacific rise hydrothermal vents, ~1500–3000 m. Rare.

Discussion

The global scissurellids were recently monographed in detail by Geiger (2012). Since then, a few additions have been made, such as new distributional records in the Mediterranean (Micali & Geiger 2015) and some new species from Brazil (Pimenta & Geiger 2015). In the northeast Pacific faunal province, *A. georgii* was added, while no additional material has come to light that would confirm or extend geographic or bathymetric ranges. Some species still remain known from only a few samples; additional material would be welcome to fill in biogeographic gaps and add anatomical details for more species.

McLean (co-)described one *Coronadoa* species, two *Anatoma* species, and all hydrothermal vent taxa. McLean described one species twice (*Anatoma keenae* = *A. epicharis*) and introduced *A. baxteri* as a synonym for *A. lyra* as detailed in Geiger (2012). He had not proposed any further taxa in his manuscript, which kept the task here simple. The introduced synonyms in *Anatoma* can be attributed to smaller and larger specimens being considered discrete taxa, and that temporal continuity was not taken into consideration. The former was even more evident in his treatment of the Seguenziidae (see Geiger this volume), where all taxa attributable to growth stages of the same species were recognized, and additional names were introduced. The latter may be seen in the context of McLean's well-known low regard for fossils, which he referred to as "very dead shells." Accordingly, revisions including McLean taxa should carefully consider the possibility of excess names.

Acknowledgements

The photographs shown here were all taken by the late James H. McLean. Lindsey Groves and Jann Vendetti discharged editorial duties.

References

- Adams, A. (1862) On some new species of Scissurellidae from the Seas of China and Japan. *Annals and Magazine of Natural History Series*, 3, 10, 346–348.
<https://doi.org/10.1080/00222936208681336>
- Bandel, K. (1998) Scissurellidae als Modell für die Variationsbreite einer natürlichen Einheit der Schlitzbandschnecken (Mollusca, Archaeogastropoda). *Mitteilungen des Geologisch-Paläontologischen Instituts der Universität Hamburg*, 81, 1–120.
- Bartsch, P. (1946) A remarkable new genus and species of West American marine mollusks. *Journal of the Washington Academy of Sciences*, 36, 447–448.
- Berry, S.S. (1947) New Mollusca from the Pleistocene of San Pedro, California—III. *Bulletins of American Paleontology*, 31, 257–272, pls. 26–27.
- Carpenter, P.P. (1865) Diagnoses of new species and a new genus of mollusks from the Reigen Mazatlan collection: with an account of additional specimens presented to the British Museum. *Proceedings of the Zoological Society of London*, 1865, 268–271.
<https://doi.org/10.1111/j.1469-7998.1865.tb02333.x>
- Crosse, H. & Fischer, P. (1861) Observations sur le genre pleurotomaire, et description d'une deuxième espèce appartenant au même genre. *Journal de Conchyliologie*, 9, 155–167, pl. 5.
- Dall, W.H. (1905) Some new species of mollusks from California. *The Nautilus*, 18, 123–125.
- Dall, W.H. (1919) Description of new species of Mollusca from the North Pacific Ocean in the collection of the United States

- National Museum. *Proceedings of the United States National Museum*, 56 (2295), 293–371.
<https://doi.org/10.5479/si.00963801.56-2295.293>
- Finlay, J.H. (1927) New species names for Australian molluscs. *Transactions and Proceedings of the New Zealand Institute*, 57, 488–493.
- Geiger, D.L. (2006a) Eight new species of Scissurellidae and Anatomidae (Mollusca: Gastropoda: Vetigastropoda) from around the world, with discussion of two new senior synonyms. *Zootaxa*, 1128, 1–33.
- Geiger, D.L. (2006b) A new blind *Anatoma* species from the bathyal of the northeastern Pacific (Vetigastropoda: Anatomidae). *Molluscan Research*, 28, 108–112.
- Geiger, D.L., Marshall, B.A., Ponder, W.F., Sasaki, T. & Warén, A. (2007) Techniques for collecting, handling, preparing, storing and examining small molluscan specimens. *Molluscan Research*, 27, 1–50.
- Geiger, D.L. (2012) *Monograph of the Little Slit Shells*. Santa Barbara Museum of Natural History, Santa Barbara. 1291 pp.
- Geiger, D.L. (2017) Four new Vetigastropoda (Anatomidae, Seguenziidae) from the northeastern Pacific. *The Nautilus*, 131, 226–232.
- Geiger, D.L. & McLean, J.H. (2010) New species and records of Scissurellidae and Anatomidae from the Americas (Mollusca: Gastropoda: Vetigastropoda). *Zootaxa*, 2356, 1–35.
<https://doi.org/10.11646/zootaxa.2356.1.1>
- Golikov, A.N. & Gublin, V.V. (1978) Prosobranchial gastropods of the Kurile Islands: I: Orders Docoglossa — Entomostoma. In: *Fauna and Vegetation of the shelf of the Kurile Islands*. O. G. Kussakin (ed.): pp. 159–223. Nauka, Moscow.
- Golikov, A.N. & Sirenko, B.I. (1980) New species of the subclass Scutibranchia from the Sea of Japan. *Academy of Sciences of the USSR, Zoological Institute, Explorations of the fauna of the Seas*, 25, 105–108.
- Gray, J.E. (1847) A list of the genera of Recent Mollusca, their synonyms and types. *Proceedings of the Zoological Society of London*, 15, 129–219.
- Jeffreys, J.G. (1856) Note on the genus *Scissurella*. *Annals and Magazine of Natural History Ser. 2*, 17, 319–322.
<https://doi.org/10.1080/00222935608697517>
- Lozouet, P. (1998) Nouvelles espèces de gastéropodes (Mollusca: Gastropoda) de l'Oligocène et du Miocène inférieur de l'Aquitaine (sud-ouest de la France). *Cossmanniana*, 5, 61–102.
- McLean, J.H. (1984) New species of northeast Pacific archaeogastropods. *The Veliger*, 26, 233–239.
- McLean, J.H. (1989) New slit-limpets (Scissurellacea and Fissurellacea) from hydrothermal vents. Part 1 Systematic description and comparison based on shell and radular characters. *Natural History Museum of Los Angeles County, Contributions in Science*, 407, 1–29.
- Micali, P. & Geiger, D.L. (2015) Additions and corrections to the Scissurellidae and Anatomidae (Gastropoda Vetigastropoda) of the Mediterranean Sea, with first record of *Sinezona semicostata* Burnay and Rolán, 1990. *Biodiversity Journal*, 6, 703–708.
- Monterosato, M. de. (1877) Notizie sulle conchiglie della rada di Civitavecchia. *Annali Museum Civico di Genova*, 9, 407–428.
- Monterosato, M. de. (1878) Enumerazione e sinonimia delle conchiglie mediterranee. *Giornale Scienze Naturali ed Economiche, Palermo*, 13, 61–115.
- Orbigny, A. d' (1824) Monographie d'un nouveau genre de mollusque gastéropode, de la famille des Trochoides. *Mémoire de la Société d'Histoire Naturelle de Paris*, 1, 340–345, pl. 23.
- Pimenta, A.D. & Geiger, D.L. (2015) Taxonomic revision of the Anatomidae (Mollusca: Gastropoda: Vetigastropoda) from Brazil, with description of four new species. *Malacologia*, 59, 135–175.
<https://doi.org/10.4002/040.059.0109>
- Warén, A. & Bouchet, P. (2001) Gastropoda and Monoplacophora from hydrothermal vents and seeps, new taxa and records. *The Veliger*, 44, 116–231.
- Woodward, S. P. (1859) On a new species of mollusk of the genus *Scissurella* d'Orb. *Proceedings of the Zoological Society of London*, 27, 202–204, pl. 46.