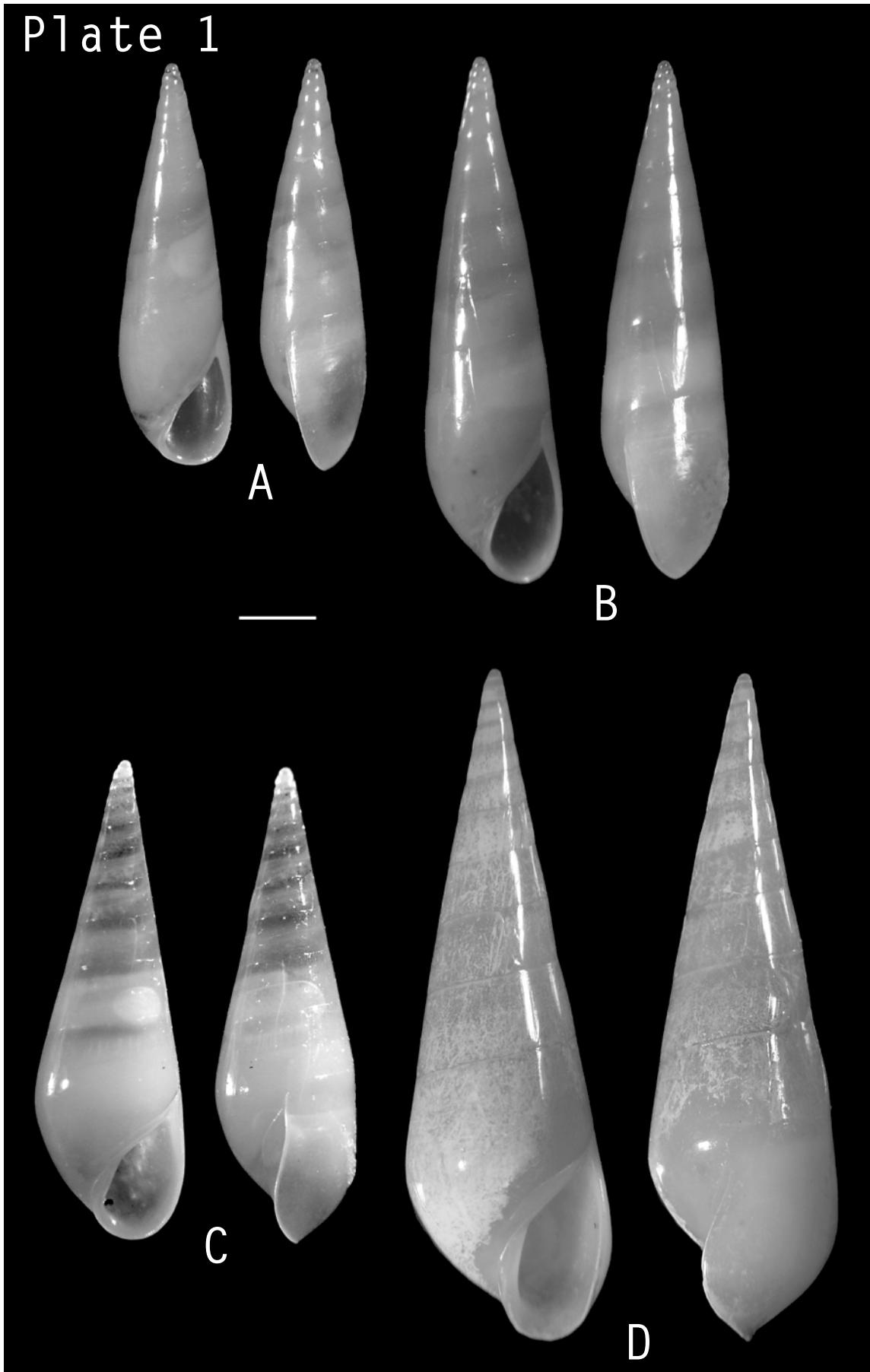
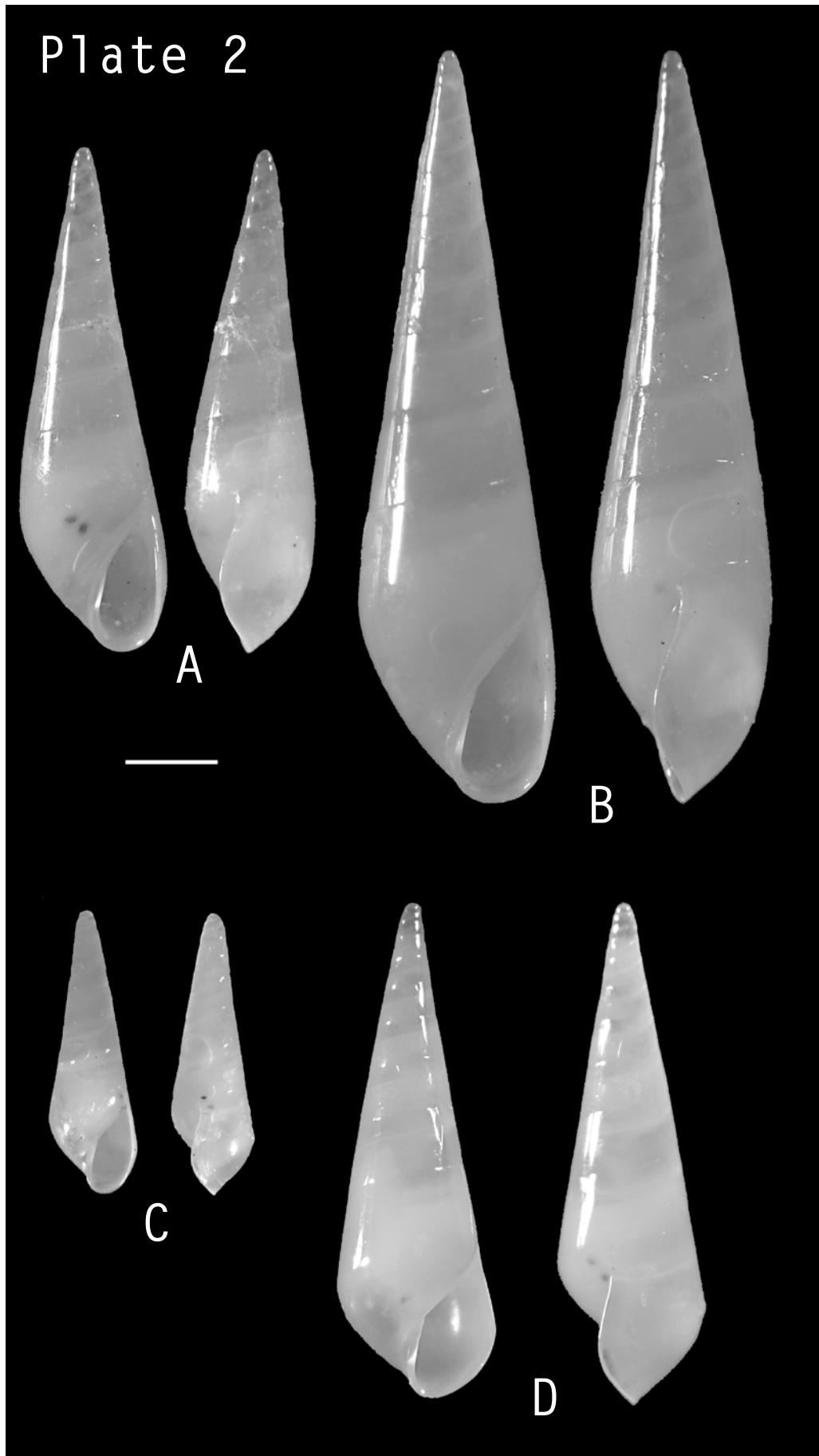


# Plate 1

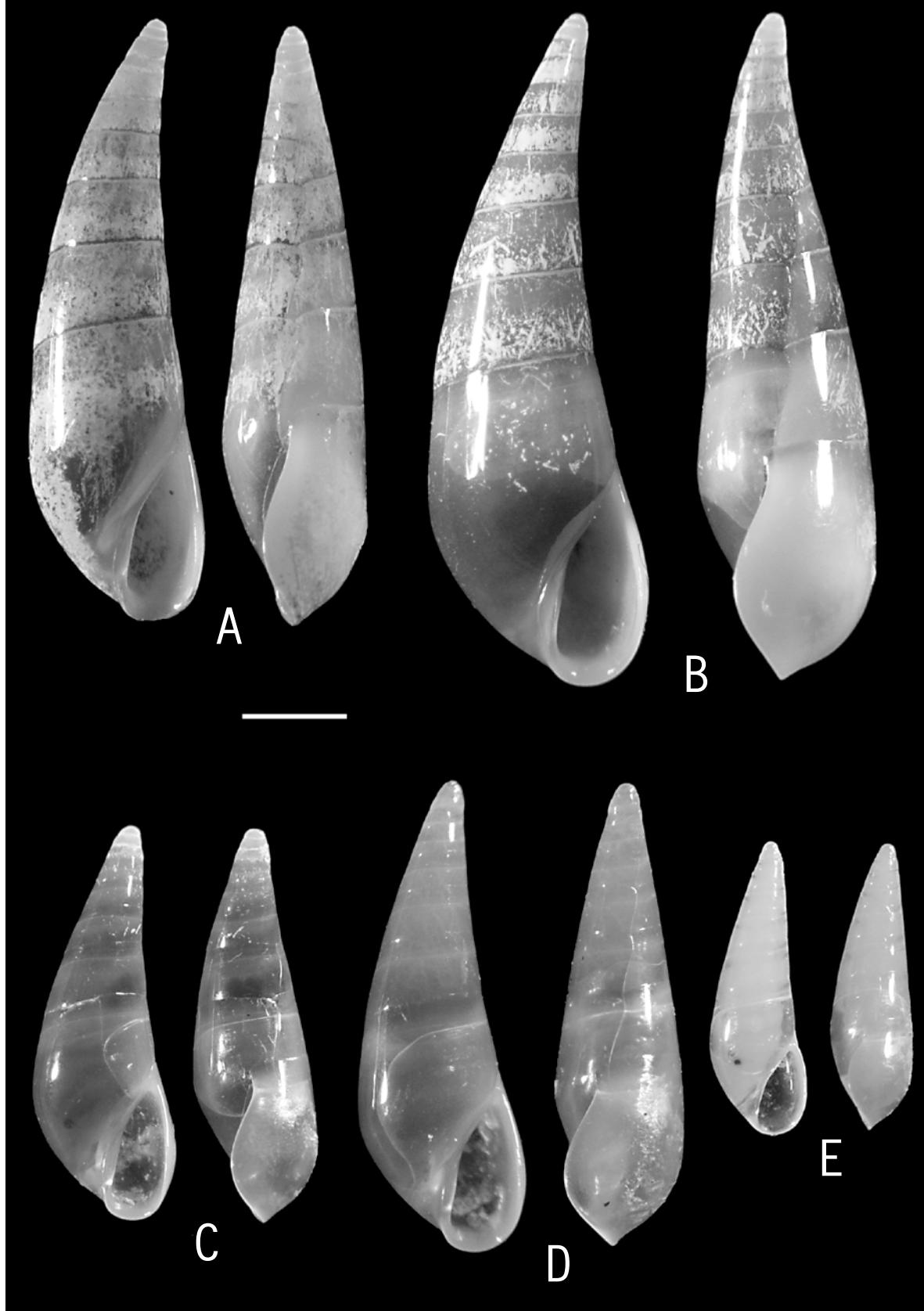


**Figure A - B** *Melanella rosa*, CSD Sta.A13(3), 5OCT92, 158 ft.; **C - D** *Balcis micans*; **C** CSD Sta. I18(2), 4JAN02, 19m; **D** LACSD Sta. E-40, 41 m, Nov. 1997. Scale bar = 1mm



**Figure A - B** *Polygireulima rutila*; **C - D** *Balcis oldroydae*; CSD station SD18, 11APR03, 31m. All removed from a single specimen of *Pisaster brevispinus*. Scale bar = 1mm

## Plate 3



**Figure A - B** *Vitreolina columbiana*; **A** CSD Sta. E9(2), 7/2/01, 380 ft.; **B** CLA Sta. A1 Santa Monica Bay, 16m, 3JULy02  
**C - D** *Vitreolina macra*, CSD voucher # M-176; **C** CSD Sta. ITP 2755(2), 7-9-01, 98 ft.; **D** CSD Sta. ITP 2685(1), 7-28-99, 398 ft.; **E** *Vitreolina yod* \*, CSD Sta. ITP Reg. 2655 26JUL99, 89 ft. Scale bar = 1mm

\* This specimen is probably a juvenile *Vitreolina* sp. (SCAMIT. 2013 32(1)) - K. Barwick 26OCT2016

Table 1 - Literature reports of southern California Eulimidae; information from describer except where indicated by footnotes

Species	SCAMIT Ed. 4	Geographic Range	Depth Range	Shell Length (mm)	Shell Width (mm)	# Whorls	Host
<i>Balcis berryi</i> (Bartsch, 1917)	✓	Del Monte, Monterey; Catalina Island, California	12 fm	6	2	12	
<i>Balcis compacta</i> (Carpenter, 1864)	✓	San Pedro, California; Punta Abreojos, Lower California <sup>1</sup>		6.8 6.7 <sup>2</sup>	2.2 <sup>1</sup> 2.45 <sup>2</sup>	+ 8 <sup>1</sup>	
<i>Balcis micans</i> (Carpenter, 1864)	✓	Kodiak Island, Alaska to Punta Abreojos, Baja California Sur <sup>3</sup>	30 – 100 m <sup>3</sup>	9.5 – 12.5 <sup>1</sup> 10 – 13 <sup>3</sup>	3 – 4 <sup>1</sup> > 3 <sup>3</sup>	Up to 15 <sup>3</sup>	Holothuroidea? <sup>3</sup>
<i>Balcis oldroydae</i> (Bartsch, 1917)	✓	Kamchemak Bay, Alaska to Isla Cedros, Baja California <sup>3</sup>		9.2	3	14	
<i>Eulima almo</i> (Bartsch, 1917)	✓	Santa Rosa Island to San Diego, California	53 – 113 fm	7	1.8	10	
<i>Eulima raymondi</i> Rivers, 1904	✓	Monterey Bay, California to Bahía Guatulco, Oaxaca, Mexico <sup>3</sup>	40 – 100 m <sup>3</sup>	to 12 <sup>3</sup> 7.8 – 12 <sup>11</sup>	1.3 – 2.5 <sup>11</sup>	+ 10 – 13 <sup>11</sup>	
<i>Haliella abyssicola</i> Bartsch, 1917		Off Columbia River, Oregon to Punta San Pablo, Baja California Sur <sup>3</sup>	400 – 1500 m <sup>3</sup>	10.4 11 <sup>3</sup>	2.9	10	
<i>Haliella loman</i> Dall 1908		"16 miles off Point Loma Light, California" <sup>1</sup>	642 – 650 fm <sup>1</sup>	20.2 <sup>1</sup>	7 <sup>1</sup>	+9 <sup>1</sup>	
<i>Hypermastus randolphi</i> (Vanatta, 1899)		Alaska to California <sup>4</sup>	0 – 55 m <sup>4</sup>	6 <sup>2</sup> 6.2 – 7 <sup>12</sup>	2.3 <sup>2</sup> 2.3 – 2.6 <sup>12</sup>	8 – 9 <sup>4</sup>	<i>Dendraster excentricus?</i> <sup>4</sup>
<i>Melanella californica</i> Bartsch, 1917		Catalina Island, California		6.2	2.3	8	
<i>Melanella lastra</i> Bartsch, 1917		San Pedro, California to Magdalena Bay, Lower California	"Deep water off stones"	2.6 – 4.1	1 – 1.6	9 – 10	
<i>Melanella peninsularis</i> Bartsch, 1917		San Diego, California to Magdalena Bay, Lower California		5.2	2.2	11	"On <i>Haliotis</i> "
<i>Melanella thersites</i> Carpenter, 1864		Monterey, California to Point Abreojos, Lower California <sup>1</sup>	3 – 13 fm - deep water <sup>1</sup>	5.9 – 6.85 <sup>13</sup>	2.16 – 2.6 <sup>13</sup>	12 <sup>1</sup>	"on a starfish" <sup>2</sup>
<i>Melanella hemphilli</i> Bartsch, 1917		San Diego, California to Bahia Magdalena, Point Abreojos, Lower California	Intertidal	8.3	3	10	
<i>Melanella rosa</i> Willett, 1944		Redondo, California	125 fm	11	2.5		
<i>Niso attilioi</i> (Hertz & Hertz, 1982)		South of La Jolla Trench, off San Diego California	90 – 140 m	7.57 – 8.9	3.08 – 3.17	10.5	
<i>Niso lomana</i> Bartsch, 1917		Santa Rosa Island and Point Loma, California <sup>1</sup> Cedros Island, Baja California to Angel de la Guarda and Tiburon Islands, Gulf of California <sup>6</sup>	48, 71 – 75 fm 9 – 175 m <sup>6</sup> (183) m <sup>7</sup>	14.5 broken 20 <sup>6</sup>	9 <sup>6</sup>		
<i>Polygireulima rutila</i> (Carpenter, 1864)	✓	Monterey Peninsula, California to Bahía Magdalena, Baja California Sur <sup>3</sup> Gulf of Georgia, B.C., Canada to Magdalena, Baja California <sup>1</sup>	7 – 350 fm <sup>1</sup> 10 – 400 m <sup>3</sup>	6.8 <sup>1</sup> 6 – 8 <sup>3</sup>	1.9 <sup>1</sup>	13 <sup>1</sup>	Asteroids <sup>1, 3</sup> holothuroids <sup>8</sup>
<i>Pseudosabinella bakeri</i> (Bartsch, 1917)	✓	Carmel Monterey, California to Isla Cedros, Baja California <sup>3</sup>	10 – 150 m <sup>3</sup>	3 – 6 <sup>3</sup> 2.7	1.1	9	
<i>Subniso hipolitensi</i> (Bartsch, 1917)		San Diego, California to San Hipolito Point; San Diego, California to Los Angeles Bay, Baja California <sup>9</sup>	2 – 30 m <sup>10</sup>	3.1 <sup>1</sup> to 4.5 <sup>10</sup>	1.2	10	
<i>Vitreolina columbiana</i> (Bartsch, 1917)	✓	Attu, Aleutian Islands, Alaska to Isla Cedros, Baja California <sup>3</sup>	50 m or less <sup>3</sup>	8 – 9.5 6 – 9.5 <sup>3</sup>	2.6 – 3	15 <sup>3</sup> 12 – 15	<i>Cucumaria</i> sp. <sup>3</sup>
<i>Vitreolina macra</i> (Bartsch, 1917)	✓	Kamchemak Bay, Alaska to Mazatlan, Mexico <sup>3</sup>	48 fm <sup>22</sup> 20 – 100 m <sup>3</sup>	5.2 – 7.5 <sup>11</sup> 6 – 7.5 <sup>3</sup>	1.9 – 2.6 <sup>11</sup>	11 – 13 <sup>11</sup> 13 <sup>3</sup>	<i>Brandtothuria arenicola</i> <sup>5</sup>
<i>Vitreolina yod</i> (Carpenter, 1857)	✓	Santa Maria Basin to Mazatlán, Sinaloa, Mexico <sup>3</sup>	20 – 400 m <sup>3</sup>	2 – 3 <sup>3</sup> 1.4 – 3.4 <sup>14</sup>		8 <sup>3</sup>	

<sup>1</sup> Bartsch, 1917; <sup>2</sup> Vanatta, 1899; <sup>3</sup> McLean, 1996; <sup>4</sup> Warén & Crossland, 1991; <sup>5</sup> Brand & Muniz Ley, 1980; <sup>6</sup> Keen, 1971; <sup>7</sup> Skoglund, 2002; <sup>8</sup> Morris, 1966; <sup>9</sup> Emerson, 1965; <sup>10</sup> Hertz & Hertz, 1982 <sup>11</sup> from species described in Bartsch (1917) synonymized by McLean, 1996. <sup>12</sup> From species described in Bartsch (1917) synonymized by Warén and Crossland, 1991. <sup>13</sup> From species described in Vanatta (1899) synonymized by Bartsch, 1917. <sup>14</sup> Myers, et.al., 2001.

Table 2 – Shell characters for selected species of Eulimidae reported by SCAMIT participants

Species	n	Shell Length (mm) mean $\pm$ s. dev.	Maximum shell diameter (mm) mean $\pm$ s. dev.	No. of whorls	Outer lip shape	Incremental scar type <sup>1</sup>	Depth range (m)	Agency/Collections represented <sup>3</sup>	Host reported by participating SCAMIT members
<i>Balcis micans</i>	4	6.6 $\pm$ 1.6	2.2 $\pm$ 0.5	9 – 11	sinuous	vitreolina	19 - 48	CSD, LACSD, CCSF	Unknown
<i>Balcis oldroydae</i>	16	3.9 $\pm$ 0.8	1.2 $\pm$ 0.2	7 - 10	sinuous	vitreolina	18 - 201	CSD, LACSD, HC,	<i>Lovenia cordiformis</i> <sup>2</sup> <i>Pycnopodia helianthoides</i> <sup>2</sup> <i>Pisaster brevispinus</i> <sup>2</sup> <i>Allocentrotus fragilis</i> <i>Dendraster excentricus</i> <sup>2,4</sup>
<i>Balcis</i> sp A	2	5.4 $\pm$ 0.6	2.0 $\pm$ 0.1	9	sinuous	vitreolina	41 – 45	LACSD, CLAEMD	Unknown
<i>Balcis</i> sp SD1	1	5.1 $\pm$ na	1.9 $\pm$ na	10	sinuous	normal	55	CSD	Unknown
<i>Balcis</i> sp SD2	1	6.6 $\pm$ na	2.3 $\pm$ na	11	sinuous	normal	14	CSD	Unknown
<i>Melanella rosa</i>	14	5.8 $\pm$ 1.5	1.6 $\pm$ 0.3	7 – 11	evenly curved	normal	18 -119	CSD, LACSD	Unknown
? <i>Nanobalcis</i> sp	1	2.9 $\pm$ na	1.2 $\pm$ na	8	slightly sinuous	normal?	56	CSD	Unknown
<i>Polygireulima rutila</i>	46	5.4 $\pm$ 0.9	1.5 $\pm$ 0.2	8 – 11	sinuous	vitreolina	16 – 201	CSD, LACSD, HC, CCSF	<i>Lovenia cordiformis</i> <sup>2</sup> <i>Astropecten verrilli</i> <i>Pycnopodia helianthoides</i> <sup>2</sup> <i>Allocentrotus fragilis</i> <i>Parastichopus californicus</i> <i>Pisaster brevispinus</i> <sup>2</sup> <i>Dendraster excentricus</i> <sup>2,4</sup>
<i>Vitreolina columbiana</i>	2	5.6 $\pm$ 0.3	1.8 $\pm$ 0.2	9 – 10	sinuous	vitreolina	16, 109 - 129	CSD, CLAEMD	Unknown
<i>Vitreolina macra</i>	12	4.4 $\pm$ 0.8	1.4 $\pm$ 0.2	6 – 9	sinuous	vitreolina	29 - 121	CSD	Unknown
<i>Vitreolina yod</i>	4	2.4 $\pm$ 0.4	0.8 $\pm$ 0.1	6 – 7	sinuous	vitreolina	27 - 30	CSD	Unknown

<sup>1</sup> after Bouchet and Waren, 1986<sup>2</sup> *B. oldroydae* and *P. rutila* found together on individual specimens<sup>3</sup> Material was reviewed from City of San Diego (CSD), Los Angeles County Sanitation District (LACSD), The City of Los Angeles (CLAEMD), The Hertz Collection (HC), and The City and County of San Francisco (CCSF)<sup>4</sup> Host record from the Hertz Collection.