

NOTE

**Annotated species list of the Bryozoa of Chuuk, Federated States  
of Micronesia**

W. C. BANTA AND SCOTT SANTAGATA<sup>1</sup>

Department of Biology  
American University  
Washington DC 20016  
email: wcbanta@american.edu

**Abstract**—Fifty-six species of Bryozoa are listed from the western Pacific near-atoll of Chuuk, almost all from coral rubble. Fifty-one (91%) are cheilostomes, including 39 (70%) ascophorans and 12 (20%) anascans. There were 4 (7%) stenolaemates and one (2%) ctenostome. Thirty-three (59%) belong to undescribed taxa.

The following stations were collected by SCUBA by Scott Santagata and by Patrick or Lori Colin (of the Coral Reef Research Foundation) in the western Pacific near-atoll of Chuuk, near 7°N, 152°E during 1992 and 1993. The bryozoan species, virtually all living on dead coral, represented 56 species; 33 belong to undescribed taxa, 59%. Of these, 51 (91%) are cheilostomes, including 39, (70%) ascophorans and 12 (20%) anascans, a ratio of 3.25:1. There were 4 (7%) stenolaemates and one (2%) ctenostome. All but a few species formed minute colonies a centimeter or two in diameter. The list is alphabetical within the groupings, Stenolaemata, Ctenostomata, anascan Cheilostomata and ascophoran Cheilosomata.

**Station Data:**

- DUBLONO1: 07-08-93, 07°20.69'N 151°55.31'E, 8-14m. Dublon Island Inlet  
FUJI02: 07-09-93, 07°20.92'N, 151°52.70'E, 14m. Mast of the wreck of the *Fujikawa* south of Dublon Island.  
FUJI04: 01-18-93, 07°20.92'N, 151°52.70'E, 30 m. Sand adjacent to the wreck of the *Fujikawa*, south of Dublon Island.  
NQCHA01: 07-14-92, 07°31.50'N, 151°58.20'E, 20m. Reef, south side of Quoi Island., in channel near Northeast Pass  
NQCHA02: The same, 08-20-92, 18m.

<sup>1</sup> Present address: Department of Biological Sciences, University of Southern California, Los Angeles CA 90089-0317. E-mail santagat@scf.usc.edu

- NQCHA03: The same, 07-06-93 6-30 m.  
 NQCHA04: The same, 07-12-93 5-13m.  
 SCHEIB01: 07-05-93 07°28.57'N 151°49.81'E, 15-23 m. Scheiben Reef, NE of airport on Weno.  
 SCHEIB02: The same, 07-13-93 15-17m.  
 YANAGI01: 08-09-92, 07°24.75'N 151°52.60'E, 18m. Yanagi Island., Chuuk Lagoon between Weno (Moen) and Dublon Island.  
 YANAGI02: The same, 07-07-93 07, 10-13 m.

#### Stenolaemata:

- Stomatopora? dichotoma* (Lamouroux, 1821). Diastoporidae. Identification uncertain; no oecia. See Brood (1972:220). YANAGI01.  
*Stomatopora* undescribed species. Diastoporidae. Triserial; oecia only slightly modified from autozooids: shorter, more densely punctate, with a short, flared oeciostome. May represent a new genus. SCHEIB02.  
*Tubulipora? flexuosa* (Pourtales, 1867:111). Tubuliporidae. Identification uncertain; oecium broken. YANAGI02.  
*Tubulipora? pulchra* MacGillivray, 1885:95. Tubuliporidae. Basal tubules were described by Osburn (1953:653), Robertson (1910:250), and others, but not by MacGillivray. No oecia. SCHEIB02.

#### Ctenostomata:

- Bowerbankia* undescribed species aff. *gracilis* (Leidy, 1855). Vesiculariidae. Like *B. gracilis*, but tentacles are nearly as long as the zoecium; they are less than half the length in *B. gracilis*. See Hayward (1985:144). NQCHA01.

#### Anascan Cheiostomata:

- Aetea* sp. indet. Aeteiidae. Epizoic on *Bugula* sp. FUJI02  
*Antropora* undescribed species aff. *granulifera* Ryland & Hayward, 1992:229, non *Membranipora granulifera* Hincks, 1880:72. Calloporidae. Like *A. granulifera* Ryland & Hayward, but mandibles are more acutely pointed and not as widely separated. Indo-Pacific material is larger and avicularia more varied than in Atlantic material, including that from the type locality (Madeira). Several species are probably involved. NQCHA03.  
*Bugula dentata* (Lamouroux, 1816:135). Bugulidae. Conspicuous green colonies with blue iridescence. One large colony on the mast of a sunken ship at FUJI02.  
*Caberia* undescribed species aff. *enzoi* Gordon, 1984:50. Caberidae. Shorter gymnocyst than in *C. enzoi*; only 2 outer spines and no inner spines on aperture. See Gordon (1984:50). SCHEIB01 and DUBLON01.  
*Lepraliellidae*, undescribed genus, undescribed species. Marginal areolae, with a few massive hemispherical nodules scattered on the surface. Narrow slit-like sinus, prominent 2-pronged cardelles; no spines. Ovicells not seen. Very large spatulate oral avicularia. DUBLON01, YANAGI02.

*Cranosina coronata* (Hincks, 1881:5). Onychocellidae. See Ryland & Hayward (1992:230). SCHEIB02, YANAGI01.

*Scrupocellaria ferox* Busk, 1852. Scrupocellariidae. SCHEIB02, YANAGI02.

*Smittipora harmeriana* (Canu & Bassler, 1929:128). Onychocellidae. Avicularia are relatively smaller than in the original description and the opesiules do not widen the maximum width of the opesium. See Winston & Heimberg (1986:11). NQCHA03, NQCHA04.

*Smittipora* unidentified species. Onychocellidae. No avicularia; autozoids 380µm long, smaller than other species of *Smittipora*. SCHEIB02.

*Smittipora* undescribed species aff. *cordiformis* Harmer, 1926. Onychocellidae. Like *S. cordiformis*, but with distinct, minute opesiules and without a median distal apertural tubercle. NQCHA03, SCHEIB02.

*Steginoporella buskii* (Harmer, 1900:272). Steginoporellidae. See Winston & Heimberg (1986:11). SCHEIB02.

*Thalamoporella* sp. undescribed aff. *stapifera* (Levinsen, 1909:188). Thalamoporellidae. Like *T. stapifera*, but avicularia without a raised mandibular tip. YANAGI01.

#### Ascophoran Cheilostomata:

*Calyptotheca tenuata* Harmer, 1957:1016. Schizoporellidae NQCHA04.

*Calyptotheca* undescribed species aff. *tenuata* Harmer, 1957:1016. Schizoporellidae. Like *C. tenuata* but with smaller, acute apertural avicularia. NQCHA03.

*Calyptotheca* undescribed species aff. *wasiensis* (Waters, 1913:504). Schizoporellidae. Like *C. wasiensis*, but aperture longer than wide. Ovicells not found. Several species may be involved; see Harmer (1957:1017). SCHEIB02, YANAGI02.

*Celleporaria sibogae* Winston & Heimberg, 1986:30. Celleporariidae. Colonies dark gray with tiny white projections encrusting sponge, rock and coral. Resembles *C. vagans* (Busk 1881:343); See Ryland & Hayward (1992:259). NQCHA01, NQCHA03, NQCHA04.

*Celleporaria* undescribed species aff. *sibogae* #1 Winston & Heimberg, 1986:30. Celleporariidae. Like *C. sibogae*, but aperture wider than long, primogenial zoids coarsely granular, with a proximal apertural avicularium on a pointed rostrum. Ovicells and interzoocial avicularia not found. NQCHA03, NQCHA04.

*Celleporaria* undescribed species aff. *sibogae* #2 Winston & Heimberg, 1986:30. Celleporariidae. Primogenial zoids recumbent with apertures vertical to substrate. Aperture almost circular, with spicules projecting into the aperture from the region of the cardelles and from median proximal apertural border. Small apertural avicularia with circular mandibles borne on median proximal spikes. Ovicells and interzoocial avicularia not found. DUBLON01.

*Chorizopora brogniartii* Hincks, 1879:156. Chorizoporidae. Harmer (1957:948). SCHEIB02.

*Cigclisula ?turrata* (Smitt, 1873:65). Stomachaetosellidae. Larger than other Pacific specimens; possibly an undescribed species. SCHEIB02.

- Cosciniopsis lonchaea* (Busk, 1884:146). Hippopodinidae. See Ryland & Hayward (1992:258). SCHEIB02.
- Crepidacantha crinispina* Levinsen, 1909:266. Crepidacanthidae. Anter longer than wide; apertural avicularia lateral to cardelles or farther forward; no ovicells found. See Ryland & Hayward (1992:277). SCHEIB02.
- Crepidacantha carsioseta* Ryland & Hayward, 1992:277, non Winston & Heimberg 1986. Crepidacanthidae. Avicularia directed mediodistally; no suboral umbo. At least two species are apparently involved. SCHEIB02.
- Cibrilaria* sp. undescribed aff. *Cibrilaria* sp. 2 d'Hondt, 1986:715. Cibrilinidae. Seven oral spines; our material has ovicells. SCHEIB02.
- Dakaria?* *granulata* Canu & Bassler, 1929:297 Schizoporellidae. Generic assignment questionable; see Gordon (1984:86). SCHEIB02.
- Dakaria?* undescribed species aff. *granulata* Canu & Bassler, 1929:297. Schizoporellidae. Much smaller than *D. granulata*. See Canu & Bassler (1929:297). DUBLON01.
- Exochonella* undescribed species aff. *tuberculata* (Macgillivray, 1883:132). Exochonellidae. Peristome formed from recognizable spines, tubercles among pores. See Harmer (1957:651). NQCHA03, SCHEIB02.
- Figularia* undescribed species. Cibrilinidae. Seven pairs of costae; interzoidal avicularium with a broad, almost circular mandible. NQCHA03.
- Gigantopora pupa* (Jullien, 1903:272). Gigantoporidae. See Gordon (1984:79). SCHEIB02.
- Iodictyum* undescribed species aff. *buchereri* Harmer, 1934:552. Phidoliporidae. Peristomial avicularia directed distally, not proximally; infrafenestral interzoecial avicularia are present in every fenestra; scattered basal tubercles, but no basal avicularia. NQCHA02.
- Lagenicella* species aff. *exallos* Gordon, 1984:80. Lagenicellidae. Identification uncertain; no ovicells. NQCHA04.
- Lepraliella multidentata* (Thornely, 1905:120). Smittinidae. See Gordon (1984:123). NQCHA04.
- Microporella* undescribed species aff. *lunifera* Haswell, 1880; see Harmer (1957:965). Microporellidae. Like *M. lunifera*, but with 5-6 oral spines, a circular ascopore, and marginal ovicell pores. SCHEIB02.
- Monoporella nodulifera* (Hincks, 1881:10). Microporidae. See Gordon (1984:53). NQCHA03.
- Parasmittina* sp. undescribed aff. *hastingsae* Soule & Soule, 1973:417. Smittinidae. Lacks long-beaked avicularia; several spoon-shaped avicularia on the small colony. Peristomial lappets, small lateral apertural avicularia. NQCHA03.
- Parasmittina parsevalii* (Aduouin, 1826). Smittinidae. See Winston & Heimberg (1986:24). YANAGI02.
- Parasmittina* sp. undescribed aff. *spathulata* Smitt, 1873:60. Smittinidae. Like *P. spathulata* in having long, parallel-sided posteriorly directed avicularia, but with a very broad lyrule, high peristome, and spatulate giant avicularia. See Soule & Soule (1973:392) SCHEIB01.
- Parasmittina* sp. undescribed aff. *nitida* (Verrill, 1875:415), morphotype B (Mature & Schopf 1968:41). Smittinidae. Frontal walls flat with about 20 areolae;

aperture slightly oval transversely; a few scattered frontal adventitious avicularia with circular or long oval mandibles. DUBLON01.

*Parasmittina* undescribed species aff. *serrula* Soule & Soule, 1973:386. Smittinidae. Differs in possessing parallel-sided avicularia, 30 ovicell pores, numerous oral spines. See also Gordon (1984:96), Ryland & Hayward (1991:272). NQCHA04.

*Parasmittina exasperatrix* d'Hondt, 1986:728. Smittinidae. SCHEIB02.

*Phonicosia?* undescribed species. Schizoporellidae. *Phonicosia jousseumi* (Jullien, 1888) from the Straits of Magellan is probably congeneric; there is a slit-like sinus, 8 oral spines, without pores distal to aperture; no avicularia. Gordon (1984) synonymized *P. jousseumi* with *L. circinnata* MacGillivray, 1869:134, but *L. circinnata* has pores distal to the aperture and lacks oral spines. SCHEIB02.

*Pleurocodonellina signata* (Waters, 1889:17) Smittinidae. Generic assignment questionable; see Soule & Soule (1973:384). YANAGI02.

*Rhynchozoon* undescribed species. Phidoloporidae. Small for genus: 300 µm long; aperture 200 µm long with distinct v-shaped sinus, anter beaded, spines temporary. Numerous acutely pointed adventitious avicularia on the sides of vertical calcareous knobs or spikes. Ovicell umbonate, imperforate. SCHEIB02.

*Rhynchozoon* undescribed species aff. *haha* Hayward, 1988:334. Phidoloporidae. Five spines surround aperture; few frontal avicularia. See Ryland & Hayward (1992). NQCHA03.

*Robertsonidra novella* Ryland & Hayward 1992:261. Hippoporinidae. NQCHA03. *Scledocleidochasma* undescribed species aff. *porcellaniforme* Soule et al., 1991:481. Cleidochasmatidae. Like *S. procellaniforme*, but with mostly unpaired avicularia, a relatively narrower sinus and few or no oral spines; no sutured median rostral platforms. NQCHA04.

*Stylopoma distorta* Canu & Bassler, 1929:314. Schizoporellidae. Adventitious avicularia unilateral oral or frontal, with triangular mandibles; giant adventitious avicularia present. Synonymized dubiously by Harmer (1957:1035) with *S. parviporosa* Canu & Bassler, 1929:315. DUBLON01.

*Stylopoma* undescribed species aff. *thornleyae* Livingstone, 1926:84. Schizoporellidae. Up to 5 adventitious avicularia per zoid; spoon-shaped interzoecial and adventitious avicularia. See Ryland & Hayward (1992:265). DUBLON01.

*Stylopoma* undescribed species aff. *duboisi* (Aduoin, 1826:239). Schizoporellidae. Aperture relatively broader and sinus less slit-like than in *S. duboisi*; ovicell covers apertures of adjacent zoids. See Ryland & Hayward (1992:265). DUBLON01, YANAGI02.

Smittinidae, undescribed genus, undescribed species. Smittinidae. Like a multi-serial *Teuchopora* with olocyst-tremocystal frontal lyrules and cardelles; smooth peristome produced from spines; ovicell with perforated central area like those of *Lagenipora*. NQCHA03.

*Turbicellepora* undescribed species aff. *ampla* (Kirkpatrick, 1888:76). Celleporidae. Aperture relatively larger than in *T. ampla*. See Ryland & Hayward (1992:284). YANAGI02.

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