

New distributional information about a North Pacific *Crassicardia*

Eugene V. Coan¹ and Roger N. Clark²

¹ Research Associate, Santa Barbara Museum of Natural History, 2559 Puesta Del Sol, Santa Barbara, California 93105; genecoan@gmail.com

² Research Associate, Santa Barbara Museum of Natural History, 2559 Puesta Del Sol, Santa Barbara, California 93105; insignis69@gmail.com

KEY WORDS Aleutian Islands, distribution, Carditidae, *Crassicardia rjabiniinae*

DISCUSSION

In sorting through material collected in recent years from the Aleutian Islands, by the National Marine Fisheries Service (NMFS), the junior author came across three lots of a species of *Crassicardia* not present in Coan *et al.* (2000). After reviewing relevant literature and discussing the matter with colleagues, all agree that these specimens represent *Crassicardia rjabiniinae* (Scarlato, 1955). The specimen from the furthest east location, near Tanaga Island, has been deposited as a voucher at the Santa Barbara Museum of Natural History (SBMNH ~~xxxxxx~~).

Recent work has demonstrated that the genus *Cyclocardia* Conrad, 1867, had been used for a variety of unrelated Carditidae (Pérez & Giachetti, 2020). As a consequence, the genus *Crassicardia* Savitskii, 1979, was recognized for several North Pacific taxa. Its type species is *Astarte crassidens* Broderip & G. B. Sowerby I, 1829, which had most often been placed in *Cyclocardia*. Other living species now included are *C. crebricostata* (Krause, 1885), *C. isaotakii* (Tiba, 1972) and *C. rjabiniinae* (Scarlato, 1955). Several fossil species were also included in this genus, which is known from the Pliocene.

The type locality of *Crassicardia rjabiniinae* is Sovetskaya Gavan (49°43'N). Its previously known distribution is from Avachinskiy Zaliv (52°52'N) in Kamchatka

to Zalif Petra Velikogo (42°43'N) on the Russian mainland, and from Hokkaido (42°) to Iwate Prefecture (40°N) in Japan (Higo *et al.*, 1999; Lutaenko & Noseworthy, 2012; Scarlato, 1981).

The recently discovered material is from the following stations, extending the known distribution of this species eastward:

W of Buldir Island (52°18.5'N, 175°49'E), 325 m, 9 August 1997. (NMFS 23-1997-01-243); 21.6 mm (single valve; not shown).

WSW of Buldir Island (52°10.21'N, 175°04.08'E), 172 m, 8 August 1997. (NMFS 23-1997-01-238); 24.7 mm. (Fig. 1B)

SW of Tanaga Id. (51°30.4'N, 178°33.28'W), 174 m, 23 July 2010. (NMFS 143-2010-01-157); 41.45 mm. (Fig. 1A)

ACKNOWLEDGEMENTS

We thank Paul H. Valentich-Scott, SBMNH for the initial identification; Dr. James W. Orr, Alaska Fisheries Science Center, Seattle, Washington for providing the 2010 specimen and Konstantin A. Lutakenko, A. V. Zhirmunsky Institute of Marine Biology, Vladivostok, Russia, for information on the western Pacific distribution of this species.

LITERATURE CITED

Coan, E.V., P.H. Valentich-Scott & F.R. Bernard. 2000. Bivalve seashells of western North America. Marine bivalve mollusks from Arctic Alaska to Baja California. Santa Barbara Museum of Natural History, Monographs 2: viii + 764

pp.

Higo, S., P. Callomon & Y. Goto. 1999.

Catalogue and bibliography of the marine shell-bearing Mollusca of Japan. Elle Scientific Publications, Osaka, 749 pp.

Lutaenko, K.A. & R.G. Noseworthy. 2012.

Catalogue of the living Bivalvia of the continental coast of the Sea of Japan (East Sea). Dalnauka, Vladivostok, 247 pp.

Pérez, D.E. & L.M. Giachetti. 2000. Is

Cyclocardia (Conrad) a wastebasket taxon? Exploring the phylogeny of the most diverse genus of the Carditidae (Archiheterodonta, Bivalvia). *Palaeontology* 63(3):477-95. <https://doi.org/10.1111/pala.12467>.

Savitskii, V.O. 1979. Novyi rod karditid

Crassicardia Savizky, gen. nov. (Bivalvia). [A new genus of carditid, *Crassicardia* Savitskii, gen. nov. (Bivalvia)]. pp. 65-68, in: A. G. Ablav, Z. N. Poiarkova & B. V.

Poiarkov, eds., *Paleontologiya i stratigrafiya Dal'nego Vostoka*. [Paleontology and stratigraphy of the Far East]. Akad. Nauk SSSR, Dal'novostochnyi Nauchnyi Tsentr, Dal'novostochnyi Geologicheskii Institut. 155 pp., 16 pls.

Scarlato, O.A. 1955. K Voprosu Ob

amfipatsificheskikh arealakh na primere dvustvorchatykh molliuskov. [On the question of the amphi-Pacific distribution of some sample bivalve mollusks].” Akademiia Nauk SSSR, Zoologicheskii Institut, *Trudy* 21:174-78.

Scarlato, O.A. 1981. Dvustvorchatye molliuski umerennykh shirot zapadnoi chasti Tikhogo Okeana. [Bivalve mollusks of the temperate latitudes of the western part of the Pacific Ocean]., Akademiia Nauk SSSR, Zoologicheskii Institut, *Opredeliteli po Faune SSSR*, 126: 480 pp., 64 pls.

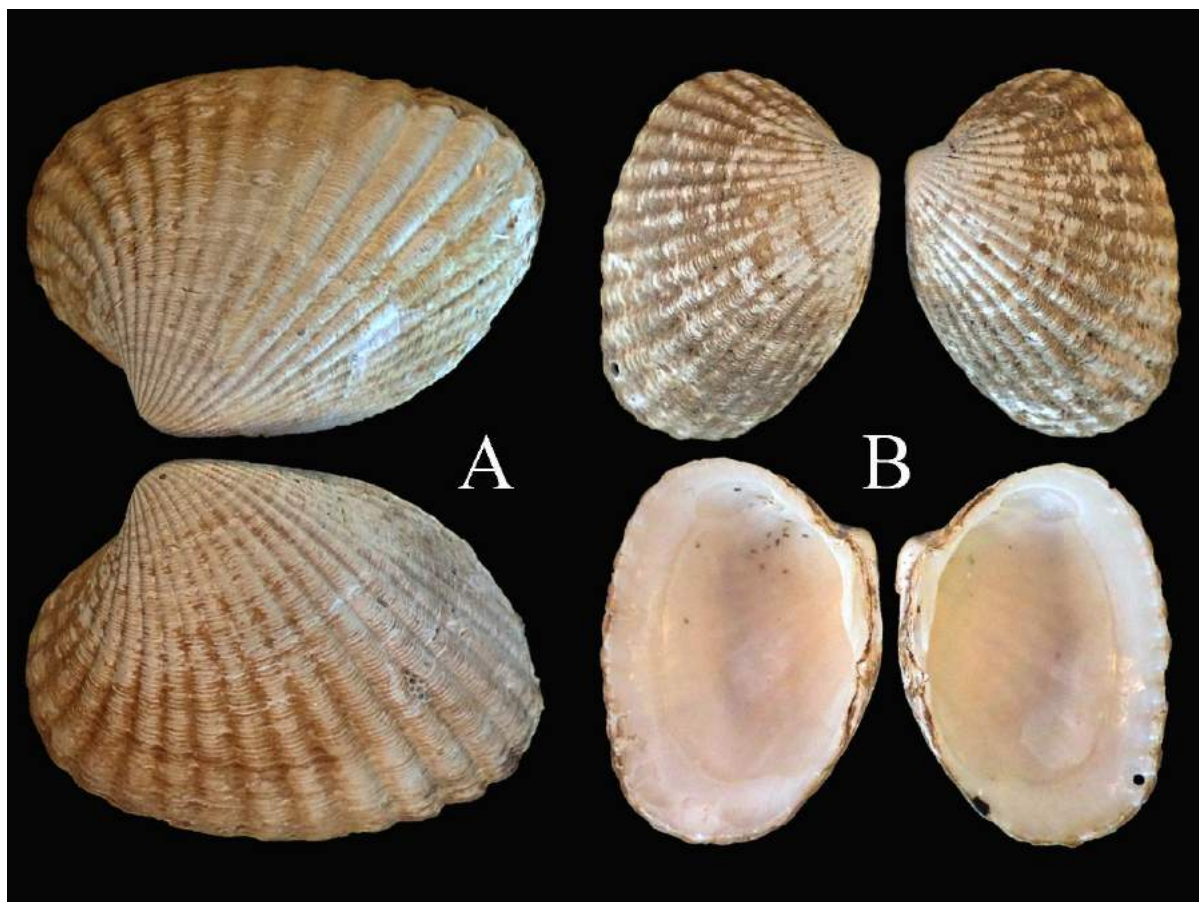


Figure 1. *Crassicardia rjabiniinae*: **A**= SBMNH xxxxxx, SW of Tanaga Island, 41.45 mm in length; **B**= Roger N. Clark Collection - RNC 5055, WSW of Buldir Island, 24.7 mm in length.