DESCRIPTION OF A NEW SPECIES OF Vexillum (Costellaria) (MOLLUSCA: GASTROPODA) FROM THE WEST PACIFIC OCEAN

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Abstract. Vexillum (Costellaria)choslenae from the West Pacific Ocean is here described as a new species of the family Costellariidae.

Family COSTELLARIIDAE

Genus Vexillum Röding, 1798

Subgenus Costellaria Swainson, 1840

Costellaria Swainson, 1840, Treat. Malac. pp. 130,320. Type species by M Mitra rigida Swainson, 1821 = M.semifasciata Lamarck, 1811. Recent, Indo-Pacific.

Vexillum (Costellaria) choslenae sp. n.

(Figs. 1-6)

Shell up to 33.0 mm in length, fusiformly-elongate, shining, sutures very narrowly canaliculate, width 32-33% of shell-length, teleoconch of 9-10 convex whorls, protoconch incomplete on specimens examined and consisting of 2+ minute, conical whorls. Sculptured with moderately strong, angulate axial ribs, distinct on upper spire whorls, sometime becoming obsolete and irregular on the last 2-3 whorls; ribs number from 11-37 on the penultimate and from 5-17 on the body whorl, ribs often hardly discernible on last whorl which has the appearance of being smooth. Post-embryonic whorls with 5-6 spiral grooves between axial ribs, grooves fading out towards later whorls and appearing either as small pits connected by obsolete grooves or becoming obsolete altogether; spirals number from 0-8 on the penultimate and from 6-19 on the body whorl. Aperture equal in height to the spire, 49-52% of shell-length, narrow and lirate within, outer lip smooth, slightly thickened and distinctly constricted basally, columella not calloused and only with a slight glaze and 4-5 strong folds; siphonal canal straight and somewhat spout-shaped, siphonal fasciole with 6-7 flattish cords, siphonal notch almost absent. Base colour orange-brown, spire whorls ornamented with a narrow white band, body whorl with 2 such bands, white band occasionally erupting into white, longitudinally oriented blotches, white bands bordered on either side by rectangular or streaklike darker brown spots, axial ribs frequently whitish; aperture bluish-white, columella pale orange-brown, folds usually lighter in colour.

TYPE LOCALITY. Tosa, Japan, 128 m.

DISTRIBUTION. From Japan to Papua New Guinea and New Caledonia.



Figs. 1-6 Vexillum(Costellaria)choslenae sp. n. 1,2. Holotype from Tosa, Japan, 128 m, AIM No. TM-1368; 30.8 mm. 3,4. Paratype from Tosa, Japan, 128 m, coll. A.Choslen No.247; 30.9 mm. 5,6. Paratype from S. of Isle of Pines, New Caledonia, AMS No. C-133281; 32.7 mm.

Holotype. In the Auckland Institute and Museum No. TM-1368, length 30.8 mm, width 10.0 mm, height of aperture 15.2 mm; small barnacle attached to upper spire whorls (Figs. 1,2).

Paratypes. No.1 from the type locality in coll. A.Choslen No.247, dimensions 30.9 x 10.0 x 15.5 mm (Figs. 3,4); paratype No.2 from S. of Isle of Pines, New Caledonia, 22°52'S & 167°35.5'E, 370 m, bottom large slabs of beach rock, in the Australian Museum, Sydney, No. C-133281, dimensions 32.7 x 10.7 x 17.0 mm (Figs. 5,6).

I have examined the first specimen of the new species several years ago in the Australian Museum, Sydney. It was collected by HMAS "Kimbla" in 1971, south of the Isle of Pines, New Caledonia, in 370 m, and being a solitary specimen a description has been postponed pending the discovery of additional material. Mr C. Derry recently submitted a photograph of this species for identification and kindly informed me about the existence of two specimens from Japan in the A. Choslen collection.

Ms A. Choslen purchased these specimens labelled "Vexillum sp. No.2" in 1956 through Mr S. Hashimoto from the Teramachi collection. These two specimens were supposed to have been identified by Dr Kuroda at a later date, but it is not known if the specimens have actually been seen by Dr Kuroda. One of the labels bears a tentative identification of "Vexillum (Costellaria)hirasei (Kira,1962)", but this species is a synonym of V.(C.)acupictum (Reeve,1844). The latter species is similar in size to V.(C.)choslenae but is sculptured along its entire length with numerous, thin axial riblets which are crossed by equally as numerous spiral striae, is white in colour with dark brown blotches distributed at random and also lacks the narrowly channeled sutures and spoutshaped siphonal canal. In colouring V.(C.)choslenae slightly resembles V.dennisoni (Reeve,1844) from the Philippines, but this species is a true Vexillum which in other respects bears little resemblance to V.(C.)choslenae. The species most probably lives in a coral environment since all specimens are coral encrusted and also tend to be prone to damage as evidenced by the repair-scars in every one of the specimens examined.

The new species is named for Ms A.A. Choslen, Hemet, California in recognition for her generous assistance to the Museum of Yucaipa and also for having made her specimens available for description.

Acknowledgements. I would like to thank Ms A.A. Choslen, Hemet, California, for making the specimens available to me and for supplying detailed background information, and to Mr C. Derry, La Habra, California, for having acquainted me with the existence of further specimens of the new species. To Mr I. Loch, Australian Museum, Sydney, I am grateful for facilitating the loan of the paratype from New Caledonia.



Cernohorsky, Walter Oliver. 1982. "DESCRIPTION OF A NEW SPECIES OF Vexillum (Costellaria) (MOLLUSCA: GASTROPODA) FROM THE WEST PACIFIC OCEAN." *Records of the Auckland Institute and Museum* 19, 109–111.

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