

Two New Naticoid Species (Mollusca) from Hokkaido

By

Tadashige HABE

Department of Zoology, National Science Museum, Tokyo

and

Kiyoshi ITO

Matsugae Middle School, Otaru, Hokkaido

Eight naticoid species belonging to the genus *Cryptonatica* DALL, 1892, have hitherto been collected from the seas around Hokkaido by Messrs. Kinji TAKAGAWA, Toshiya MIYAUCHI and the writers. They can be identified by the following key.

Two white spiral bands on the brown body whorl.

Umbilicus narrowly perforated.

Operculum with two marginal grooves on the outer surface.
. *Cryptonatica janthostomoides* (KURODA et HABE, 1949) (Fig. 1)

Operculum without any marginal groove on the outer surface.
. *Cryptonatica janthostoma* (DESHAYES, 1841) (Fig. 2)

Umbilicus closed or nearly so.

Operculum without any groove on the outer surface.
. *Cryptonatica wakkanaiensis* sp. nov. (Fig. 3)

Two blackish brown bands on the white body whorl.

Umbilicus sealed.

Operculum with two marginal grooves on the outer surface.
. *Cryptonatica hirasei* (PILSBRY, 1905)

Zigzag series of brownish pattern on the ashy white body whorl.

Umbilicus narrowly perforated.

Operculum without any groove on the outer surface.
. *Cryptonatica ranzii* (KURODA, 1961)

No colored band on the body whorl.

Umbilicus sealed and operculum without any grooves on the outer surface.

Shell ovate in shape and light brown in color.
. *Cryptonatica zenryumaruae* sp. nov. (Fig. 4)

Shell rounded and light brown in color.
. *Cryptonatica aleutica* (DALL, 1919)

Shell rounded and white in color.
. *Cryptonatica clausa* (BRODERIP et SOWERBY, 1829)

Cryptonatica wakkanaiensis sp. nov.

(Fig. 3)

Shell exceedingly large, thick and solid, spherical in shape, with a low conic spire of 6 whorls, smooth and polished, faintly striated all over, two whitish narrow spiral bands on brown basal color, one on the supraperiphery and the other on the base, and white area surrounding the umbilicus on the extremely large body whorl. Besides, a white narrow band present just below the sutures in some specimens. Umbilicus closed over the small white flat callus or nearly so. Aperture wide, semilunate in shape, white within except the brown zone extending to the well rounded outer margin. Parietal wall enamelled by the white callus. Parietal margin rather straight and oblique and columellar margin stout, thickened and rounded. Outer surface of calcareous operculum white, smooth and slightly concave. Inner surface light brown, chitinous, and paucispiral.

Height 81.9 mm and breadth 72.6 mm (figured holotype specimen preserved in the National Science Museum, NSMT-Mo 51242).

Height 84.3 mm and breadth 73.9 mm (paratype specimen preserved in the National Science Museum, NSMT-Mo 51243).

Height 84.4 mm and breadth 76.4 mm (paratype specimen preserved in the National Science Museum, NSMT-Mo 51244).

Type-locality. Wakkanai Bay, northernmost of Hokkaido, at sandy bottom of 29–31 m deep.

Distribution. Besides the type-locality, off Cape Soya at the depth of 33–45 m; off Rishiri Island, Hokkaido, and off Kushunnai, Saghalien, at the depth of 40–50 m.

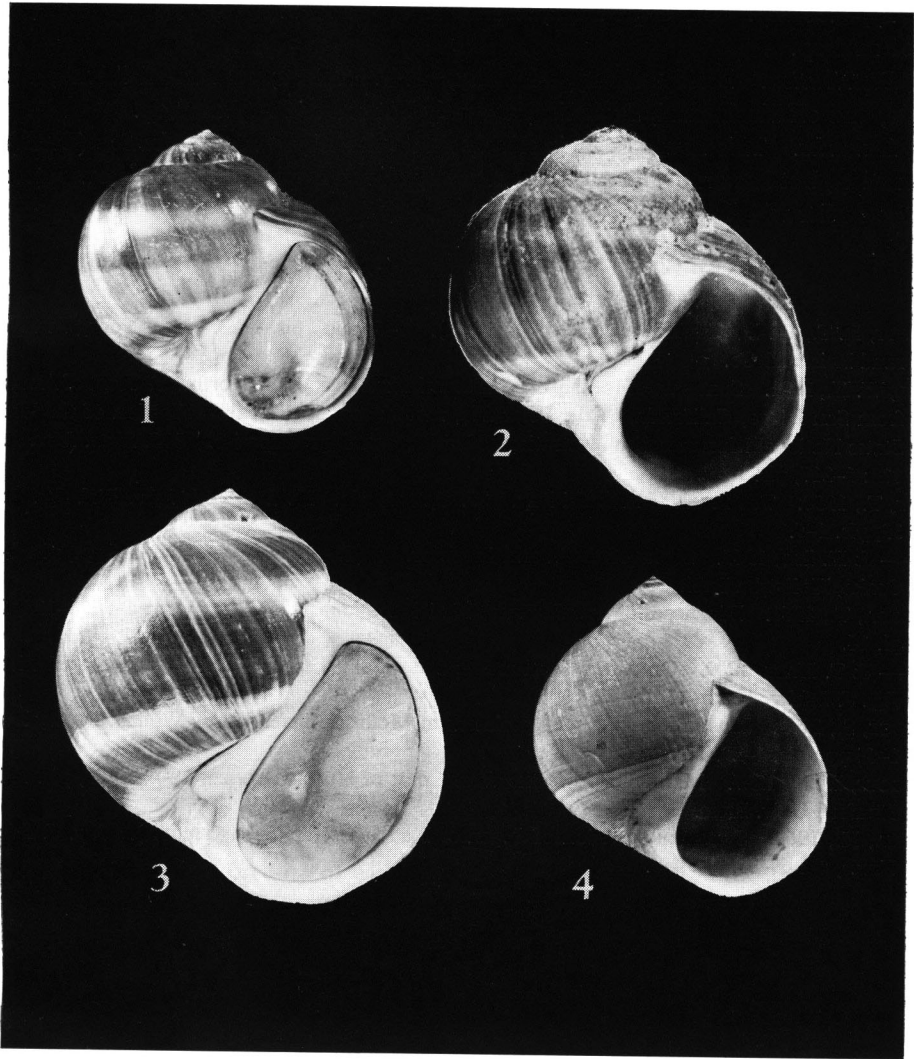
Remarks. This new species is characterized by the very large shell for the naticoid family, exceeding 80 mm in height in fully grown specimens. *Cryptonatica janhostoma* (DESHAYES) closely resembles this new species in shape and coloration, but has the smaller shell even in fully grown specimens with narrowly perforated umbilicus and light purplish aperture.

Cryptonatica zenryumaruae sp. nov.

(Fig. 4)

Shell rather large, ovate in shape, with a conically elevated spire of 6 whorls, light brown except the white periumbilical area on the body whorl and dark brown streaks along the growth lines on the upper whorls reducing to the lower whorls. Surface with minute spiral striations all over. Body whorl very large, five-sixths of shell height and rounded at the periphery. Umbilicus sealed by white umbilical pad extending from the parietal callus. Aperture large, semilunate. Parietal wall rather straight and covered with the white callus. Outer margin roundly arcuate and simple at the edge and columellar margin short, roundly curved.

Height 50.7 mm and breadth 43.8 mm (figured holotype specimen preserved in



Figs. 1-4. — 1. *Cryptonatica janthostomoides* (KURODA et HABE), from Ise Bay, Honshu. $\times 1$. — 2. *C. janthostoma* (DESHAYES), from Akkeshi, Hokkaido. $\times 1$. — 3. *C. wakkanaiensis* sp. nov. (holotype specimen), from Wakkanai Bay, Hokkaido. $\times 0.6$. — 4. *C. zenryu-maruae* sp. nov. (holotype specimen), from off Cape Soya, Hokkaido. $\times 0.8$.

the National Science Museum, NSMT-Mo 51530).

Height 50.5 mm and breadth 44.3 mm (paratype specimen preserved in the National Science Museum, NSMT-Mo 51531).

Height 30.9 mm and breadth 29.7 mm (young specimen, NSMT-Mo 51532a).

Height 26.5 mm and breadth 26.6 mm (young specimen, NSMT-Mo 51532b).

Type-locality. Off Cape Soya, northernmost of Hokkaido, at sandy bottom of 40–50 m deep.

Distribution. Besides the type-locality, off Wakkanai; off Rishiri Island, Hokkaido, and off Kushunnai, Saghalien, at sandy bottom of 30–50 m deep.

Remarks. This new species is closely related to *Cryptonatica aleutica* (DALL) in coloration, but has an oval shell with distinctly elevated spire and dark brown streaks on the earlier whorls.

Literature Cited

- ABBOTT, R. T., 1974. American Sea Shells (2nd ed.). 1–663 pp., pls. 1–23. New York, Van Nostrand Reinhold Co.
- DALL, W. H., 1921. Summary of the marine shell-bearing mollusk of the Northwest Coast of America, from San Diego, California, to the Polar Sea, mostly contained in the collection of the United States National Museum, with illustrations of hitherto unfigured species. *U.S. Natn. Mus. Bull.*, **112**: 1–217, pls. 1–22.
- HABE, T., 1958. The fauna of Akkeshi Bay. 25. Gastropoda. *Publ. Akkeshi Mar. Biol. Sta.*, **8**: 1–39, pls. 1–5.
- & K. ITO, 1965. Shells of the World in Color. **2** (The North Pacific). 1–176 pp., pls. 1–56. Osaka, Hoikusha Publ. Co.
- KURODA, T., 1961. Diagnoses of new Japanese Naticidae. *Jap. J. Malac. Venus*, **21**: 123–135, 267, pl. 16.
- & T. HABE, 1949. On *Natica janthostoma* and an allied species which was confused with it. *Jap. J. Malac. Venus*, **15**: 69–72.
- KOSUGE, S., 1972. Illustrations of Type Specimens of Mollusca Described by William Healey DALL. 1–64 pp., pls. 1–29. Tokyo.
- OLDROYS, I. Sh., 1927. Marine Shells of the West Coast of North America, **2**(3): 1–339, pls. 1–108. Stanford Univ. Press.
- OYAMA, K., 1969. Systematic revision of Japanese Naticidae (Preliminary report). *Jap. J. Malac. Venus*, **28**: 69–88, pls. 4–5.