

## *Neptunea alabaster* sp. nov., a new species of the genus *Neptunea* (Neogastropoda, Buccinidae) from the Bering Sea

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**ABSTRACT.** A new species, *Neptunea alabaster* sp.n. (Neogastropoda, Buccinidae) from the Bering Sea is described. This species closely related to “*Neptunea lyrata*” complex of species.

*Neptunea lyrata* (Gmelin, 1791) is a very well known North Pacific species, with a wide distribution from Korea and North Japan to California. Specimens attributed to *N. lyrata* demonstrate a very high variability. In the present paper we consider *N. lyrata* a complex of closely related species and (or) subspecies.

One of these numerous so-called “forms” of *Neptunea lyrata* is common in the Bering Sea. We here call it the “northern form”. Goryachev [1978] reports findings of this form along the entire Bering Sea coast of Russia. Our data confirm Goryachev’s report: numerous specimens of the “northern form” of *N. lyrata* were caught by the Japanese trawlers “Kaiyo-Maru No. 28” and “Tenyu-maru No. 78” in 1995-2001 in many localities along the Russian coast of the Bering Sea.

We found some specimens which are conchologically distinctly different from the typical “northern form” of *N. lyrata* (Figs. 1, 3). All specimens were found only in the Olutorsky Bay of the Bering Sea. Not a single specimen of this new taxon was found outside the Olutorsky Bay, although several thousands of trawlings were carried out in other parts of the Bering Sea.

The bathymetric range of this new taxon distinctly differs from that of the “northern form” of *N. lyrata* (Fig. 4). Data from catches of 39 trawls were analyzed, including 24 catches of the typical “northern form” of *N. lyrata* and 17 catches of the new species. All typical *N. lyrata* were found in catches of trawlings with a maximal depth of less than 250 m, whereas specimens of the new species were found in trawl catches with a minimal trawling depth over 250 m. Typical *N. lyrata* and the new species were found together in only one trawl catch – it was a commercial trawling with a very wide bathymetric range from 135 to 430 m deep.

The important conchological differences between these two species are sufficient to establish a new taxon in the “*N. lyrata* complex”.

### *Neptunea alabaster* sp. nov.

**Type material.** Holotype: Zoological Museum of Moscow State University (ZMMU), No. Lc-25896; dried shell, shell height (H) 118.3 mm. Bering Sea, 59°06’4 N, 166°02’7 E, 330-335 m, 22.09.2001.

Paratypes: ZMMU, No. Lc-25897; dried shell, H 117.0 mm. Bering Sea, 60°04’0 N, 168°20’7 E, 370 m, 21.12.1997.

ZMMU, No. Lc-25898; dried shell, H 86.6 mm. Bering Sea, 59°13’4 N, 166°28’8 E, 280-420 m, 25.09.2001.

ZMMU, No. Lc-25899; shell with animal in alcohol, H 109.3 mm, male. Bering Sea, 59°34’9 N, 166°39’5 E, 420-440 m, 16.09.2001.

ZMMU, No. Lc-25900; shell with animal in alcohol, H 103.1 mm, female. Bering Sea, 59°51’3 N, 167°46’6 E, 455 m, 30.08.2001.

Collection of Koen Fraussen (CKF) No. 3193; shell with animal in alcohol, H 113.8 mm, male. Bering Sea, 60°05’5 N, 168°24’7 E, 290 m, 26.11.1998.

CKF No. 3194; shell with animal in alcohol, H 114.1 mm, female. Bering Sea, 59°59’9 N, 168°04’4 E, 360 m, 24.11.1998.

CKF No. 3401; dried shell, H 117.6 mm. Bering Sea, 59°52’2 N, 169°45’2 E, 180-350 m, 06.09.1998.

CKF No. 3627; dried shell, H 121.4 mm. Bering Sea, 60°01’7 N, 168°07’1 E, 315 m, 22.12.1997.

CKF No.4541; dried shell, H 107.7 mm. Bering Sea, 59°52’2 N, 169°45’2 E, 180-350 m, 06.09.1998.

Collection of Dmitry Alexeyev (CDA) No. C153; dried shell, H 118.6 mm. Bering Sea, 60°01’8 N, 168°08’0 E, 320 m, 17.12.1997.

CDA No. C546; dried shell, H 129.2 mm. Bering Sea, 59°26’3 N, 166°38’8 E, 270-360 m, 04.07.2000.

Measurements of examined shells are shown in Table 1.

**Description.** Shell of medium size for the genus. Maximum height of shell is 129.2 mm, usually 110-120 mm. Shape of whorls is usually slightly angular, with rather well distinguishable shoulder, but some specimens have almost regularly rounded body whorl (Fig. 2). Angularity of upper whorls is better expressed. Body whorl comprises about 3/4 of total shell size. Adult shells have 5.5-6 definitive whorls, protoconchs are absent in all examined shells. Outer