On the types of *Neptunea polycostata* Scarlato in Galkin et Scarlato, 1955 and *Neptunea convexa* Goryachev, 1978 (Neogastropoda: Buccinidae)

Yuri I. KANTOR

A.N. Severtzov Institute of Ecology and Evolution, Russian Academy of Sciences, Leninski prospect 33, Moscow 119071, RUSSIA

ABSTRACT. Lectotypes, type series and type localities of *Neptunea polycostata* Scarlato in Galkin et Scarlato, 1955 and *Neptunea convexa* Goryachev, 1978 have been designated. The status of the type material has been discussed.

Neptunea polycostata was first introduced as a nomen nudum in the list of Buccinidae from Russian Far Eastern seas, as Neptunea satura var. polycostata [Scarlato, 1952]. The taxon was later validated under the same name by Galkin and Scarlato [1955]. No data on the types or type locality were provided. The variety was raised to species level by Golikov [1963] in his monograph of the genus Neptunea. Although neither type material, nor type locality have been discussed in the mentioned publication, on pl. 12 a specimen was illustrated, which in the figure caption was referred to as "holotype". According to ICZN, such a statement does not constitute fixation of the lectotype. Therefore all the specimens available to Scarlato should be considered as syntypes.

At the same time, there is a specimen in the collections of Zoological Institution of Russian Academy of Sciences (ZIN No. 14909/1), which is labelled as "holotype", but does not correspond to figure in pl. 12 of Golikov [1963] (Fig. 1 C-D). The same specimen was illustrated as "holotype" by Tiba and Kosuge (1988 — p. 17-65, Fig. 1).

Therefore there is a source of confusion between two different specimens, both invalidly designated as "holotype".

To stabilize of nomenclature I designate here the specimen illustrated by Golikov in pl. 12 (Fig. 1 A,B) as the lectotype of *Neptunea polycostata* Scarlato in Galkin et Scarlato, 1955. The lectotype is stored in the collection of ZIN, No. 14925/17. Shell length is 163 mm. Type locality of *N. polycostata* is that of the lectotype: Japan Sea off Cape Olyarovsky, 42°46'N, 133°54'E, 62-45 m. The species is distributed off southern Kurile Islands and in Tatar Strait at depth 25-200 m.

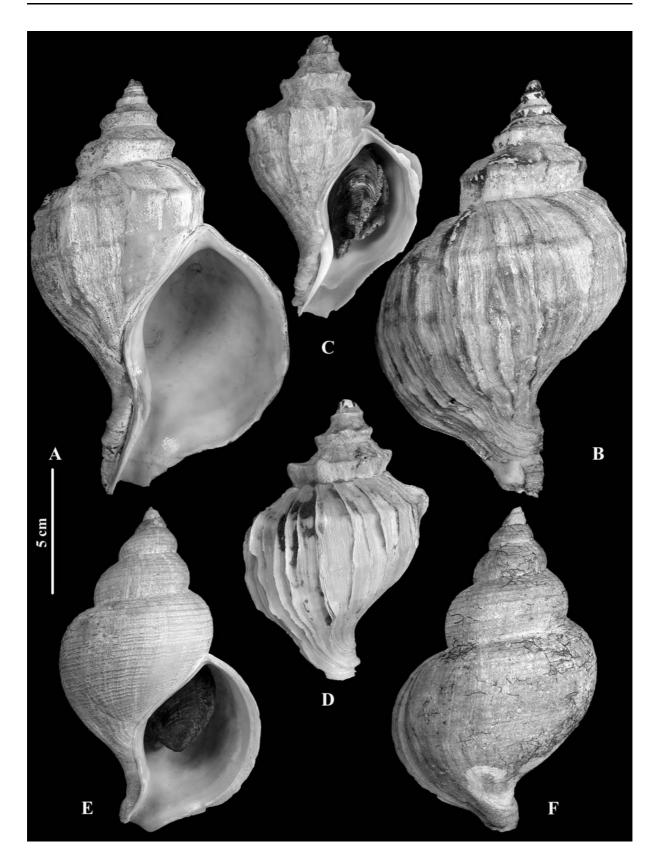
According to ICZN Art. 72.4.1.1, any, even unpublished, information about the type series may be

taken into account. According to the card catalogue of the collection of marine molluscs of ZIN, lots Nos. 14909/1-14924/16 and 14926/18 were collected before publication of the description of *Neptunea polycostata* and were identified by O.A. Scarlato. Therefore, these lots constituted the type series and are paralectotypes.

Neptunea convexa Goryachev, 1978 was established by indication (as "*Neptunea convexa* comb. nov.") by Goryachev [1978: 26] as follows: "Species described by Golikov (1963) as "Neptunea insularis (Dall, 1895)" and variety N. i. var. convexa Golikov from northern Kurile Islands should be assigned to independent species Neptunea convexa comb. nov.". According to MCZN Art. 45.6.3. the name convexa is definitely infrasubspecific, since it was published after 1961, and Golikov used the term "variety". Therefore, according to Art. 45.5.1, Goryachev is the author of Neptunea convexa. He did not mention neither type material, nor type locality and all the specimens of "Neptunea insularis", mentioned by Golikov [1963] (18 lots, 21 specimens), should be considered as syntypes. In the card catalogue of the collection of marine molluscs of ZIN, there are only 6 lots (ZIN 14750/1-14755/6) identified by Golikov prior to 1963. The rest of material is whereabouts unknown. One specimen (14754/5) was later identified as Neptunea gulbini Goryachev et Kantor, 1983, probably by Goryachev himself. Therefore the type series is represented by the mixture of species. To stabilize the nomenclature it is necessary to designate a lectotype.

Following Recommendation 74B, I designate as a lectotype of *Neptunea convexa* Goryachev, 1978 the specimen, which was illustrated by Golikov [1963: pl. 15, fig. a] and erroneously labelled as "holotype" in the catalogue of marine molluscs of ZIN (ZIN No. 14755/6) (Fig. 1 E-F). Shell length is 127 mm. Type locality: W of Paramushir, Okhotsk Sea, 50°30.2'N, 155°38.8'E, 640 m, R/V *Vityaz* sta. 2836. Other former syntypes (including the specimen of *N. gulbini*, which now has No. 45424/4) should be considered as paralectotypes.

The species is distributed in the Okhotsk Sea, off northern Kurile Islands, and off south-eastern Kamchatka, at depth 230-1000 m.



- FIG. 1. Neptunea polycostata Scarlato in Galkin et Scarlato, 1955: A-B lectotype, ZIN No. 14925/17; C-D specimen erroneously labelled as "holotype" in catalogue of the marine molluscs of ZIN (No. 14909/1). E-F — Neptunea convexa Goryachev, 1978, lectotype, ZIN No. 14755/6.
- РИС. 1. *Neptunea polycostata* Scarlato in Galkin et Scarlato, 1955: А-В лектотип, ZIN 14925/17; С-D экземпляр, ошибочно выделенный как "голотип" в каталоге морских моллюсков ЗИН (ZIN 14909/1). Е-F *Neptunea convexa* Goryachev, 1978, лектотип, ZIN No. 14755/6.

The authorship of *N. convexa* was erroneously attributed to Golikov (as N. insularis convexa Golikov, 1963) by Higo et al. [1999].

Acknowledgements

I am greatly indebted to Dr. A.V. Sysoev (Zoological

References

- Galkin Yu.I., Scarlato O.A. 1955. Gastropods Gastropoda. In: Atlas of invertebrates of Far Eastern seas of the USSR. Published by Academy of Science of USSR. Moscow-Leningrad: 167-175 [In Russian].
- Golikov A. N. 1963. Gastropods of the genus Neptunea Bolten. Fauna of USSR, Published by Zoological Institute of Academy of Sciences of USSR. Leningrad, Nauka, Mollusks, 5(1): 1-217. [In Russian].
- Goryachev V.N. 1978. Gastropods of the genus Neptunea Röding, 1798 of the Bering Sea. Moscow. Nauka, 92 p. [In Russian].
- Higo S., Callomon P., Gotô Y. 1999. Catalogue and bibliography of the marine shell-bearing Mollusca of Japan. Elle Scientific Publications, Osaka, 749 pp.
- Scarlato O.A. 1952. On the study of molluscs of the family Buccinidae of Soviet Far-Eastern seas. Uchenyje zapiski Leningradskogo gosudarstvennogo universiteta, 145, seriya biologicheskaya, 31: 120-124 [In Russian].
- Tiba R., Kosuge S. 1988. North Pacific Shells. 17.

Museum of Moscow State University) for his valuable comments on the manuscript.

The project is supported by the grant of Russian Foundation for Basic Research No. 01-04-481324 [Biodiversity of the molluscs of Russia and adjacent territories (inventory of the fauna)].

Genus Neptunea (Bolten) Roeding, 1798. Occasional Publication of the Institute of Malacology of Tokyo: 17-1-17-95.

О типах Neptunea polycostata Scarlato in Galkin et Scarlato, 1955 и Neptunea convexa Goryachev, 1978 (Neogastropoda: Buccinidae)

Ю. И. КАНТОР

Институт проблем экологии и эволюции им. А.Н. Северцова РАН; Ленинский просп. 33, Москва 119071, РОССИЯ

РЕЗЮМЕ. Обозначены лектотипы, типовые серии и типовые местонахождения Neptunea polycostata Scarlato in Galkin et Scarlato, 1955 и Neptunea convexa Goryachev, 1978. Обсужден статус типового материала. Проект поддержан грантом РФФИ No. 01-04-481324 [Биоразнообразие моллюсков России и прилежащих территорий (инвентаризация фауны)].