Research Highlights

Reassessing nomenclature for 'horned turban' snail

The 'horned turban' is well known to people mainly in Japan, Korea, and China as an edible marine snail. The species of Japan and Korea was known as *Turbo cornutus* Lightfoot, 1786 (Sazae in Japanese; Fig. 1) and the Chinese one as *T. chinensis* Ozawa & Tomida, 1995 (Nankai-sazae; Fig. 2). The first literature record of *T. cornutus* was published 250 years ago (Fig. 3) and the name was globally accepted.

However, Hiroshi Fukuda, at the Graduate School of Environmental and Life Science, Okayama University discovered the existence of nomenclatural confusion for these two species. He reviewed their history since original descriptions based on examination of old literature and re-defined the identities of the two species in accordance with the *International Code of Zoological Nomenclature*.

Turbo cornutus is not identifiable with the species of Japan and Korea. It should be restricted to the species endemic to southern China and Taiwan. Turbo chinensis is the junior synonym and invalid.

Turbo japonicus Reeve, 1848 has long been believed to be a junior synonym of T. cornutus, but Reeve's name contains two distinctly different species. One of them is a species known only from Mauritius and Réunion, in spite of the name 'japonicus'. Subsequent authors validated the name for species in Mauritius. Another T. japonicus by Reeve is the horned turban of Japan, but this is the junior homonym of the aforementioned T. japonicus from Mauritius, and is unfortunately, invalid.

Surprisingly, the horned turban of Japan and Korea did not have any valid scientific names. Thus, *Turbo sazae* Fukuda, 2017 was proposed for this species as a new replacement name for the invalid *T. japonicus*.

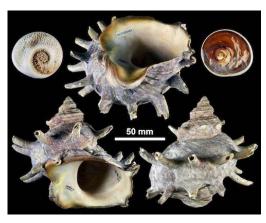


Fig. 1. Turbo sazae from Japan.



Fig. 2. *Turbo cornutus* from China. Photo by Dr Yuichi Kameda of the National Science Museum, Tokyo.



Fig. 3. The original illustration of the type specimen of *Turbo cornutus* from China, after Davila (1767).



The complicated history of the nomenclature for these species was caused by 'Chinese whispers' by zoologists over 250 years, partly because the species were very common for all the researchers and nobody suspected the misidentification.

Reference

Author

Hiroshi Fukuda

Title of original paper

Nomenclature of the horned turbans previously known as Turbo cornutus [Lightfoot], 1786 and Turbo chinensis Ozawa & Tomida, 1995 (Vetigastropoda: Trochoidea: Turbinidae) from China, Japan and Korea

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http://www.okayama-u.ac.jp/user/agr/profile/nougaku04_4.html



Reference (Okayama University e-Bulletin): Fukuda's team

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Discovery of a remarkable new species of land snail restricted to arid environments in small islands and coastal areas of the central Seto Inland Sea, Japan

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