

Bivalve mollusk's collection from China in the Zoological Museum, Science and Educational Museum, Far Eastern Federal University (Vladivostok)



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Chinese bivalve molluscan fauna is one of the richest in the world. Marine bivalve mollusk's diversity in all Chinese seas is estimated at the level of 1104 species, with 87 and 175 species known for Bohai and Yellow seas, respectively, and 337 species are identified for subtropical East China Sea (Xu, Zhang, 2011); in Taiwan, 759 species of bivalves are known. For comparison, about 288 species of bivalves were found in all Russian Far Eastern seas (Lutaenko, 2013), over 1470 – in Japan, and over 450 – in Korea (Higo et al., 1999; Lee, Min, 2002). So, China and Japan are global hotspots of the world marine molluscan biodiversity but due to overexploitation of biological resources and high coastal population density, biota of these countries experiences strong decline and modifications. In this respect, historical collections stored in museums play an increasing role in understanding of the past and present state of biodiversity. Korea, Japan and China are three countries lie next to the eastern Russia and molluscan samples from these regions are very important for Russian malacologists in terms of taxonomic and biogeographic intercomparisons. We report here about the bivalve collection of the Zoological Museum, Science and Educational Museum of the Far Eastern Federal University.

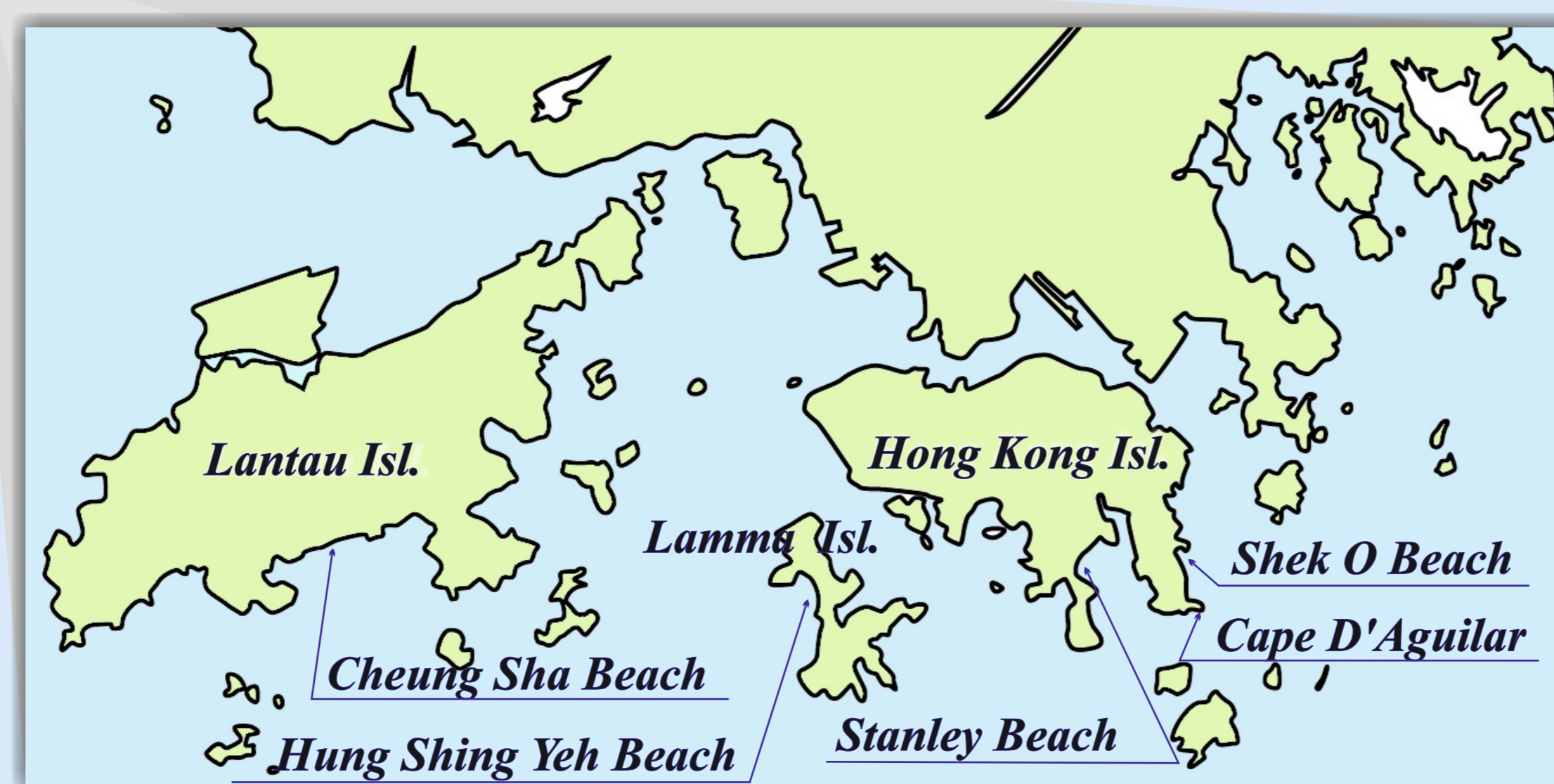


Region	Number of lots	Number of species
Yellow Sea	211	64
South China Sea	154	81
including Hong Kong	141	74
East China Sea	3	3

In total, 378 lots of Chinese bivalve mollusks are available in the museum, and more than 140 species are represented (some lots are not identified up to species level). A majority of lots are from Yellow Sea and South China Sea, and only few are available from East China Sea.

A few lots contain fresh-water mollusks (Unionidae – 5 lots, Cyrenidae (Corbiculidae) – 4 lots). Most of the collection consists of dry shells. All samples are labelled and listed in a systematic card catalog containing detailed information on each lot. All information is also in an electronic database created in the Access software. This allows to quickly sort, group and select objects in accordance with the user's request. An illustrated paper was published based on the collection from Hong Kong (Lutaenko K.A., Volvenko I.E. On the fauna of bivalve mollusks of Hong Kong (South China Sea) // Bulletin of the Russian Far East Malacological Society, 2013, v. 17, pp. 79-141) including several new records for this local fauna.

Family	Number of lots	Number of species
Veneridae	94	35
Arcidae	74	26
Ostreidae	34	7
Mytilidae	23	7
Mactridae	18	7
Pectinidae	16	4
Cardiidae	14	8
Tellinidae	13	7
Solenidae	11	2
Donacidae	9	4
Psammobiidae	9	4
Semelidae	6	4
Carditidae	5	1
Lucinidae	5	2
Pharidae	5	3
Ungulinidae	5	3
Mesodesmatidae	4	1
Chamidae	3	1
Corbulidae	3	3
Myidae	3	1
Isognomonidae	2	1
Pteriidae	2	1
Solecurtidae	2	1
Anomiidae	1	1
Glauconomidae	1	1
Glycymerididae	1	1
Gryphaeidae	1	1
Kelliidae	1	1
Laternulidae	1	1
Pinnidae	1	1
Plicatulidae	1	1
Spondylidae	1	1



Most species-rich families in the collection are Veneridae (35 species, 94 lots) and Arcidae (26 species, 94 lots), other families are represented by less than ten species (Ostreidae, Mytilidae, Mactridae, Pectinidae, Cardiidae, Tellinidae, Solenidae, Corbulidae, Donacidae, Psammobiidae, Semelidae, Lucinidae, Pharidae, Ungulinidae, Myidae), and the remaining families contain one species only (Carditidae, Mesodesmatidae, Chamidae, Myidae, Isognomonidae, Pteriidae, Solecurtidae, Anomiidae, Glauconomidae, Glycymerididae, Gryphaeidae, Kelliidae Laternulidae, Pinnidae, Plicatulidae, Spondylidae).

In Yellow Sea, many samples were collected around Qingdao and Yantai and neighboring areas of Shandong Province. Few samples are available from Hainan Island (South China Sea). Important collection from South China Sea mostly consists of samples from Hong Kong. Some mollusks were bought in markets of Qingdao, Yantai, Hong Kong, and Dalian. A majority of samples were collected by K.A. Lutaenko (NSCMB FEB RAS), some jointly with his Chinese (Zhang Junlong, Chen Linlin, Li Baoquan and others) or Russian (E.M. Sayenko, A.V. Raschepkina) colleagues, fresh-water mollusks were contributed by E.I. Schornikov (NSCMB FEB RAS) and O.A. Burkovsky (formerly, a staff member of the Zoological Museum) and Shu Gao (Nanjing University).

