

Fishes of Volcano Bay in Hokkaido

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Volcano Bay is situated on the south-western coast in Hokkaido and is known as one of the most important fishing grounds. This paper is a report on fishes obtained by the writer in the environs of the bay during these two years. The fishes treated here belong to 50 families, including 116 genera and 141 species. Influenced by the warm current (Kuro shio) from the south, 85 species are temperate forms, while on account of the cold current (Oya shio) from the Kurile Islands, 56 species are boreal ones, the latter being mainly found northwards from northern part of Japan proper and Hokkaido. As to the distribution, the facts agree with the observation on medusae made by UCHIDA (1940). In the following list the temperate forms are marked with an asterisk.

The list follows.

Family **Petromyzontidae**

- * 1. *Lampetra japonica* (MARTENS) Nom. Jap. Kawa-yatsume
Distribution: Northern parts of Japan, Korea, Hokkaido, Saghalien, Kamchatka and Amur.

Family **Galeorhinidae**

- * 2. *Musterus manazo* BLEEKER Nom. Jap. Hoshi-zame.
Distribution: Hokkaido to Formosa.

Family **Squalidae**

- * 3. *Squalus sucheyi* (GIRARD) Nom. Jap. Abura-same
Common in the bay, mainly in late summer and autumn.
Distribution: South-eastern parts of Korea, Formosa to Hokkaido, Japan, and Point Conception to Aleutian Islands.

Family **Rajidae**

- * 4. *Raja Pulchra* Liu Nom. Jap. Meganekasube
Distribution: Coasts of Japan.
- * 5. *R. Kujiensis* Tanaka Nom. Jap. Kujikasube
Distribution: Northern areas of Japanese waters; from Muroran, Hokkaido south to Kumano-nada, Pacific coasts.

Family **Pterotherissidae**

- * 6. *Pterothrissus gissu* HILGENDORF Nom. Jap. Dabo-gisu
Distribution: Southwards of Hokkaido to Tosa, Shikoku.

Family **Dussumieriidae**

- * 7. *Eterumeus microps* (TEMMINCK et SCHLEGEL) Nom. Jap. Urume-iwashi
Commonly found in summer and autumn.
Distribution: Hokkaido to Formosa, Hawaii, California.

Family **Clupeidae**

8. *Clupea pallasii* CUVIER et VALENCIENNS Nom. Jap. Nishin
Very common, very abundant mainly in summer and autumn.
Distribution: North Pacific, south to northern Japan and to southern California.
- * 9. *Sardinia melanosticta* (TEMMINCK et SCHLEGEL) Nom. Jap. Ma-iwashi
Common in two seasons of spring and autumn.
Distribution: Coasts of southern Japan, China and Korea.

Family **Engraulidae**

- * 10. *Engraulis japonicus* TEMMINCK et SCHLEGEL Nom. Jap. Katakuchi-iwashi
Very abundant during middle July to early October.
Distribution: Japan, Hokkaido, Korea and southern Saghalien.

Family **Salmonidae**

11. *Oncorhynchus keta* (WALBAUM) Nom. Jap. Sake
Abundant found in early summer and the fall.
Distribution: North Pacific, from San Francisco to Bering sea, Kamchatka, northern parts of Japan.
12. *O. masou* (BREVOORT) Nom. Jap. Masu
Abundant from the later part of May to early July.
Distribution: Northern area of Japanese waters, along the coasts of northern parts of Japan, Hokkaido.

13. *O. gorbuscha* (WALBAUM) Nom. Jap. Karafuto-masu
Distribution: North Pacific, from Oregon to Kamchatka and northern area of Japanese waters south Hokkaido.
- * 14. *Salvelinus leucomaenis* (PALLAS) Nom. Jap. Ame-masu
Distribution: Kamchatka, northern area of Japanese waters, from Kurile Islands south to Shinano.
- Family **Plecoglossidae**
- * 15. *Plecoglossus altivalis* TEMMINCK et SCHLEGEL Nom. Jap. Ayu
Distribution: Coast of Alaska, Bering sea, Kamchatka, northern area of Japanese waters, south to Formosa and Korea, with except the river Zuman.
- Family **Osmeridae**
16. *Osmerus dentex* STEINDACHNER Nom. Jap. Kyuri-uwo
Distribution: Coast of Alaska, Bering sea, Kamchatka, northern area of Japanese waters, south to Hokkaido, northern China.
17. *Spirinchus lanceolatus* (HIKITA) Nom. Jap. Shishamo
Synonym. *S. dilatatus* SCHULTZ et CHAPMAN.
Distribution: South-east coast of Hokkaido and British Columbia, Canada.
- * 18. *Hypomesus olidus* (PALLAS) North. Jap. Wakasagi
Distribution: Lakes and marshes in various places throughout Japan and Korea, Alaska.
19. *H. japonicus* (BREVOORT) Nom. Jap. Chika
Distribution: Northern Japan, Hokkaido, Decastori's Bay, Manchuria, and Saghalien.
- Family **Salangidae**
- * 20. *Salangichthys microdon* (GUNTHER) Nom. Jap. Shira-uwo
Commonly from May to September, but most abundant in May and June.
Distribution: Japan, Hokkaido and Saghalien.
- Family **Cyprinidae**
- * 21. *Leuciscus hakuensis* GUNTHER Nom. Jap. Ugui
Distribution: Rivers and coasts of Japan, eastern Siberia, Korea, Saghalien.
- Family **Congridae**
- * 22. *Asteroconger myriaster* (BREVOORT) Nom. Jap. Ma-anago
Common in summer and early autumn in the bay,
Distribution: Japan and Korea coasts.
- Family **Gasterosteidae**
- * 23. *Gasterosteus aculeatus aculeatus* (LINNAEUS) Nom. Jap. Itoyo
Distribution: Northern areas from Fuzan, Korea and Hamada in the Coasts of Japanese waters and river Tone, Kanto Province, in Pacific coasts. Europe, North America, Greenland, Saghalien.
- Family **Syngnathidae**
- * 24. *Syngnathus schlegeli* KAUP Nom. Jap. Yohji-uwo
Distribution: Coasts of Japan and Korea.
- Family **Hemirhamphidae**
- * 25. *Hemirhamphus sajori* (EMMINCK et SCHLEGEL) Nom. Jap. Sayori
Distribution: Hokkaido to Formosa and south Korea.
- Family **Exocoetidae**
- * 26. *Cypsilurus agoo* (TEMMINCK et SCHLEGEL) Nom. Jap. Tobi-uwo
Distribution: Southern area of middle Japan to Formosa.
- Family **Fistularidae**
- * 27. *Fistularia petimba* LACEPEDE Nom. Jap. Aka-yagara
Distribution: Indian and Pacific oceans, south Japan.
- Family **Scombroideae**
- * 28. *Cololabis saira* (BREVOORT) Nom. Jap. Sanma
Distribution: Shumushu Island, North Kurile to Goto-Islets, Kyushu, and Korea.
- Family **Sphyraenidae**
- * 29. *Sphyraena pinguis* GUNTHER Nom. Jap. Aka-kamasu
Distribution: Southern and middle of Pacific, Hawaii Islands, occasionally northwards to Tokyo, England, and Cape Cod.
- * 30. *S. japonica* CUVIER et VALENCIENNS Nom. Jap. Yamato-kamasu
Commonly found in October and September.
Distribution: Southern area of middle Japan.
- Family **Mugilidae**
- * 31. *Liza haematocheila* (TEMMINCK et SCHLEGEL) Nom. Jap. Menada
Distribution: Coasts of Hokkaido and Japan to China.
- Family **Zeidae**
- * 32. *Zenopsis nebulosa* (TEMMINCK et SCHLEGEL) Nom. Jap. Kagami-dai
Rarely found in warm season
Distribution: Southern coasts from middle Japan.

Family **Scombridae**

- * 33. *Scomber japonicus* HOUTTUYN Nom. Jap. Hira-saba
Abundant in summer and autumn.
Distribution: Hawaii, California, Atlantic, Philippine Islands, common in southern area of Japanese waters, northwards to Saghalien.

Family **Katsuwonidae**

- * 34. *Auxis tapeinosoma* (BLEEKER) Nom. Jap. Maru-sodá-gatsuo
Distribution: Hokkaido to Riu-kiu Islands, Formosa, Hawaii, New Guinea.

Family **Trichiuridae**

- * 35. *Trichiurus japonicus* (TEMMINCK et SCHLEGEL) Nom. Jap. Tachi-uwo
Distribution: Southern area of Japanese waters northwards to Tokyo.

Family **Carangidae**

- * 36. *Trichurus japonicus* (TEMMINCK et SCHLEGEL) Nom. Jap. Ma-aji
Abundantly found in summer and autumn.
Distribution: Southern area in Japanese waters and Korea.
- * 37. *Decapterus muroadsi* (TEMMINCK et SCHLEGEL) Nom. Jap. Muro-aji
Distribution: Southern waters from middle Japan.
- * 38. *Caranx equula* TEMMINCK et SCHLEGEL Nom. Jap. Kaiwari
Distribution: Tokyo to Nagasaki.
- * 39. *Alectis ciliaris* (Bloch) Nom. Jap. Itohiki-aji
Distribution: South to Indian ocean from middle coast of Japan, Hawaii, Samoa, New-Irland, New-Guinea, Solomon Islands.
- * 40. *Seriola quinqueradiata* TEMMINCK et SCHLEGEL Nom. Jap. Buri
Common in summer in the bay.
Distribution: Coasts of Japan and southwards.

Family **Rachycentridae**

- * 41. *Rachycentron canadum* (LINNAEUS) Nom. Jap. Sugi
Very rare in summer in the bay.
Distribution: Atlantic, Indian ocean, Japan.

Family **Tricodontidae**

- * 42. *Arctoscopus japonicus* (STEINDACHNER) Nom. Jap. Hata-hata
Abundantly found mainly in November and December.
Distribution: Japan, Kurile Islands, Kamchatka, Alaska.

Family **Oplegnathidae**

- * 43. *Oplegnathus fasciatus* (TEMMINCK et SCHLEGEL) Nom. Jap. Ishi-dai
Common in warm season,
Distribution: Southern area from Hokkaido, abundant in south Japan.

Family **Mullidae**

- * 44. *Upeneus bensus* (TEMMINCK et SCHLEGEL) Nom. Jap. Himeji
Distribution: Coasts of Japan, Riu-kiu Islands, Formosa, China, Indo-china, Philippine Islands, India, east Africa, Arabia.

Family **Scombropidae**

- * 45. *Scombropus boöps* (HOUTTUYN) Nom. Jap. Mutsu
Distribution: Same to Nagasaki, southern area of Japanese waters.

Family **Seranidae**

- * 46. *Lateolabrax japonicus* (CUVIER) Nom. Jap. Suzuki
Common in summer and autumn.
Distribution: Hokkaido to Korea, Formosa, China and Port Arthur.
- * 47. *Stereolepis ischinagi* (HILGENDORF) Nom. Jap. Ishinagi
Distribution: Otaru to Misaki region.

Family **Sparidae**

- * 48. *Eynniss japonicus* TANAKA Nom. Jap. Chi-dai
Rarely found in summer in the bay.
Distribution: Southern area of south Hokkaido, Philippine, China.
- * 49. *Pagrostomus major* (TEMMINCK et SCHLEGEL) Nom. Jap. Ma-dai
Distribution: China, Japan.

Family **Embiotocidae**

- * 50. *Ditrema temmincki* (BLEEKER) Nom. Jap. Umi-tanago
Distribution: Hokkaido to southern Japan.

Family **Monocanthidae**

- * 51. *Cantherius modestus* (GUNTHER) Nom. Jap. Umazura-hagi
Commonly found in summer and autumn.
Distribution: Southern area from Hokkaido to Kyusiu and south Korea.

Family **Tetraodontidae**

- * 52. *Sphaeroides rubripes* (TEMMINCK et SCHLEGEL) Nom. Jap. Tora-fugu
Distribution: China, southern area from middle coasts of Japan.

- * 53. *S. pardalis* (TEMMINCK et SCHLEGEL) Nom. Jap. Higan-fugu
Distribution: Hokkaido to southern Japan.
- * 54. *S. vermicularis porphyreus* TEMMINCK et SCHLEGEL Nom. Jap. Ohshu-fugu Namer-fngn; ma-fngn
Commonly found in summer and autumn, mainly during August and October.
Distribution: Otaru to Kagoshima.
- Family **Molidae**
- * 55. *Mola mola* (LINNAEUS) Nom. Jap. Manbo
Common in summer in the bay.
Distribution: Warm seas, occasionally northward to Tokyo, England, Cape Cod and San Francisco.
- Family **Scorpaenidae**
56. *Sebastes (Sebastes) steindachneri* HILGENDORF Nom. Jap. Yanagino-mai
Distribution: Hakodate, Hokkaido.
- * 57. *S. (Mebarus) teczanowskii* (STEINDACHNER) Nom. Jap. Ezo-mebaru
Very common all the year round, mainly abundant in summer.
Distribution: Northern Japan, Hokkaido Southern Kurile, Gulf of Strielok, near Vladivostok.
- * 58. *S. (neohispaniscus) schlegeli* HILGENDORF Nom. Jap. Kuro-soi
Common, mainly from spring to autumn.
Distribution: Hokkaido to south Japan, Korea, Tinnanpo, Mopoo, Chifu, China.
59. *S. (N.) vulpes* (STEINDACHNER et DODERLEIN) Nom. Jap. Ma-soi
Distribution: Southern region of Hokkaido to Kyusiu and Korea.
- * 60. *S. (Pteropodus) nivosus* HILGENDORF Nom. Jap. Goma-soi
Distribution: Miyake, Same, Hakodate, Hokkaido.
- * 61. *S. (P.) trivittatus* HILGENDORF Nom. Jap. Shima-soi
Not common, mainly in autumn.
Distribution: From northwards of Aomori to Hokkaido.
- * 62. *S. (Murasoius) pachycephalus* TEMMINCK et SCHLEGEL Nom. Jap. Mura-soi
Distribution: Wakanoura to Nagasaki.
- Family **Anoplopomatidae**
63. *Anoplopoma fimbria* (PALLAS) Nom. Jap. Namiara (Local name)
Rarely found in Hokkaido and very rarely in this bay.
Distribution: Southern California to Alaska.
- Family **Hexagrammidae**
64. *Pleulogrammus azonus* JORDAN et METZ Nom. Jap. Ho-kke
Distribution: Aleutian Islands, Vladivostok, Chipesani, Saghalien, Hokkaido, northern Japan.
65. *P. monopterygius* (PALLAS) Nom. Jap. Chishima-hokke
Distribution: Unalaska, Bering sea, Vladivostok, northern area of Japanese waters.
66. *Hexagrammos octogrammus* (PALLAS) Nom. Jap. Suji-ainame
Distribution: Unalaska, Petropaulski, Robben, Iturup Island, Chipesani, Saghalien, Hokkaido.
- * 67. *H. otakii* JORDAN et SNYDER Nom. Jap. Ainame
Common, mainly in summer.
Distribution: Coasts throughout Japan.
68. *H. lagocephalus* (PALLAS) Nom. Jap. Usagi-ainame
Distribution: Robben, Bering sea, Iturup, Airop, Saghalien.
- Family **Cottidae**
69. *Triglopus jordani* (SCHMIDT) Nom. Jap. Karafuto-kajika
Common in summer and autumn
Distribution: Okhotsk sea, Bering sea, Saghalien, northern Japanese waters.
70. *Hemilepidotus gilberti* JORDAN et STARKS Nom. Jap. Yokosuji-kajika
Rarely found in the bay
Distribution: Hokkaido, Bering sea, Kamchatka, southward of Okhotsk sea, Aniva bay, northern Japan waters.
71. *Ceratocottus namiyei* JORDAN et STARKS Nom. Jap. Oni-kajika
Distribution: Hokkaido, Saghalien, Korsakoff.
72. *Myoxocephalus joak* (CUVIER et VALENCIENNES) Nom. Jap. Oku-kajika
Very few in this bay.
Distribution: North to the Arctic and south to the Amuru river.
73. *M. raninus* JORDAN et STARKS Nom. Jap. Gisu-kajika
Common all the year round.
Distribution: Aomori, Same, Hakodate, Saghalien.
74. *Ainocottus ensiger* JORDAN et STARKS Nom. Jap. Yari-kajika
Common, mainly in summer and autumn
Distribution: Hokkaido.
75. *Gymnancanthus intermedius* (SCHLEGEL) Nom. Jap. Ai-kajika
Very common all the year round.
Distribution: Same, Hokkaido, Peter the Great Bay, Bassiet Bay.

76. *G. herzensteini* JORDAN et STARKS Nom. Jap. Tsumaguro-kajika
Not common all the year round.
Distribution: Northern area of Japan waters, southward to Toyoma Bay, Peter the Great Bay, Aniva Bay.
77. *Cottiusculus gonez* SCHMIDT Nom. Jap. Okihime-kajika
Not common, mainly in summer.
Distribution: Aniva Bay, Vladivostok.
78. *Alcichthys alcicornis* (HERZENSTEIN) Nom. Jap. Nizi-kajika
Distribution: Same, Hokkaido.
- * 79. *Bero elegans* (STEINDACHNER) Nom. Jap. Bero
Common all the year round.
Distribution: Tokyo to Kitami, Vladivostok.
80. *Blepias draciscus* JORDAN et STARKS Nom. Jap. Isobatengu
Distribution: Aomori, Hokkaido, Iturup Island.
81. *Hemitripterus villosus* (PALLAS) Nom. Jap. Kemushi-kajika
Common all the year round.
Distribution: Northern Japan, Hokkaido, Saghalien, Lososei Bay, Airop, Kadiak Island, Alaska.
82. *Eurymen gyrinus* GILBERT et BURKE Nom. Jap. Yagishiri-kajika
Synonym. *Japonopsychrolutus dontatus* Nojima. Common all the year round.
Distribution: Avatcha Bay, west coast of Hokkaido.
- Family **Agonidae**
83. *Tilesina gibbosa* SCHMIDT Nom. Jap. Onishachi-uwo
Common all the year round
Distribution: Korea, Hakkaido, Saghalien, Peter the Great Bay, Broughton Bay.
84. *Percis japonica* (PALLAS) Nom. Jap. Inugochi
Distribution: Niigata, Okhotsk sea, Saghalien, Kurile Islands.
85. *Agnomatus proboscidalis* VALENCIENNES Nom. Jap. Atsumori-uwo
Rarely found in the bay.
Distribution: Hakodate, Port of the Emperor Nicholas, Gulf of Tartary.
86. *A. jordani* SCHMIDT Nom. Jap. Kumagai-uwo
Rarely found in the bay.
Distribution: Northern Japan to Okhotsk sea, Chipesani and Lososei Bay, Saghalien.
87. *Occa ibria* JORDAN et STARKS Nom. Jap. Yoroi-shachi-uwo
Distribution: Northern region from Cape of Inubo, Ibur.
88. *Brachyopsis rostratus* (TILESII) Nom. Jap. Shichiro-uwo
Distribution: Nemuro, Aniva Bay, Petropavlovsk, Kurile Islands, Lososei Bay.
89. *Pallasina barbata* (STEINDACHNER) Nom. Jap. Yagi-uwo
Distribution: North Pacific, south to Japan and Oregon, Arctic ocean near Bering sea, Bristol Bay, Port of Clarence, Alaska.
90. *Podothecus sachi* (JORDAN et SNYDER) Nom. Jap. Tokubire
Common in summer.
Distribution: Northern Japan to Hokkaido, and east coast of Korea.
91. *P. thompsoni* JORDAN et GILBERT Nom. Jap. Yase-tokubire
Rarely found in the bay
Distribution: Niigata, Korea, Shana Bay, Iturup, Cape Pestschnuzoff.
- Family **Cyclopteridae**
92. *Cyclopterichthys ventricosus* PALLAS Nom. Jap. Hotei-uwo
Distribution: Okhotsk sea, Bering sea, Kamchatka.
- Family **Liparidae**
93. *Liparis agassizii* PATNUM Nom. Jap. Ezo-kusa-uwo
Distribution: North to Unalaska on the America, and south to Matsushima Bay in the Japan.
- * 94. *L. tessellatus* (GILBERT et BURKE) Nom. Jap. Bikunin
Commonly found all the year round.
Distribution: Southern area from Hokkaido and China sea.
- Family **Triglidae**
- * 95. *Chelidonichthys kum* (LESSON et GARNOT) Nom. Jap. Hohboh
Distribution: From New-Zealand north to southern Hokkaido.
- * 96. *Lepidotrigla microptera* GUNTHER Nom. Jap. Kanagashira
Distribution: Coasts of Japan to China.
- Family **Gobidae**
- * 97. *Chaenogobius urotaenia* (HILGENDORF) Nom. Jap. Ukigori
Distribution: Chitose to Kawatana, Chipesani, Lososei Bay, Lake Busse, Saghalien.
98. *Chloea murorana* JORDAN et SNYDER Nom. Jap. Hebi-haze
Distribution: Northern Japan and Korea.

- * 99. *Chloea castanea* (O' SHAUGHNESSY) Nom. Jap. Kuri-haze
Distribution: Nagasaki, Misaki, Matsushima, Aomori, Tsuruga and Niigata.
- * 100. *Tridentiger obscurus* (TEMMINCK et SCHLEGEL) Nom. Jap. Tora-haze
Distribution: Southern area from the lake Abashiri to Riukiu Islands.
- Family **Ammodytidae**
- * 101. *Ammodytes personatus* GIRARD Nom. Jap. Ikanago
Very commonly found from April to October, mainly in summer season.
Distribution: Coasts of the Pacific, Alaska, Siberia, Inland sea in Japan. Montary Bay.
- Family **Hypopterychidae**
102. *Hypopterychus dybowskii* STEINDACHNER Nom. Jap. Shiwa-ikanago
Distribution: Strielok Bay, Patroke Bay, Saghalien.
- Family **Callionemydiae**
- * 103. *Callionymus beniteguri* JORDAN et SNYDER Nom. Jap. Tobi-numeri
Distribution: Otaru to Nagasaki.
- Family **Echenididae**
- * 104. *Echeneis brachyptera* LOWE Nom. Jap. Kuro-koban
Rarely found in the bay.
Distribution: Warm seas, north to Cape Cod.
- Family **Blennidae**
105. *Opisthocentrus ocellatus* (TILESUS) Nom. Jap. Gazi
Distribution: Aomori, Murooran, Hakodate, Otaru, Petropaulsky, Chipesani, Lake Busse, Lososei Bay.
106. *Abryois azumae* JORDAN et SNYDER Nom. Jap. Azuma-gazunagi
Distribution: Murooran, Otaru.
- * 107. *Enedrias nebulosus* (TEMMINCK et SCHLEGEL) Nom. Jap. Ginpo
Common all the year round.
Distribution: Otaru to Nagasaki.
- * 108. *Azuma emmnion* JORDAN et SNYDER Nom. Jap. Fusa-ginpo
Common, mainly in spring and early summer.
Distribution: Hakodate, Same, Miyako.
- * 109. *Zoarchias veneficus* JORDAN et SNYDER Nom. Jap. Gazunagi
Distribution: Hakodate, Murooran, Otaru, Kominato, Boshuu.
110. *Stichaeus nozawae* JORDAN et SNYDER Nom. Jap. Taue-gazi
Common in Spring.
Distribution: Otaru, Hakodate.
111. *Dinogunella grigorjewi* (HERZENSTEIN) Nom. Jap. Nagazuka
Very Common, mainly during spring.
Distribution: Volcano Bay, Hakodate, Mito, Saghalien.
112. *Lumpenus anguillaris* (PALLAS) Nom. Jap. Unagi-gazi
Very abundantly found in summer and autumn.
Distribution: Northern Japan, Hokkaido, Saghalien, Kamchatka, Alaska and San Francisco.
113. *L. fowleri* JORDAN et SNYDER Nom. Jap. Nuime-gazi
Abundantly found in the bay,
Distribution: Pacific coasts of Hokkaido.
- * 114. *Ernogrammus hexagrammus* (TEMMINCK et SCHLEGEL) Nom. Jap. Musuji-gazi
Distribution: Otaru to Nagasaki.
- * 115. *Lycenchelys poecilimon* JORDAN et FOWLER Nom. Jap. Sarasa-gazi
Distribution: Offshore of Kinkazan, Toyoma Bay.
- Family **Anarhichadidae**
116. *Anarhichas orientalis* PALLAS Nom. Jap. Ohkami-uwo
Very rare
Distribution: Saghalien, Monbetsu, Iburi, Alaska, Vancouver, Lososei Bay, China.
- Family **Cryptacanthodidae**
117. *Cryptacanthoides bergi* LINDBERG
synonym. *Lyconectes exoensis* HIKITA et HIKITA
Distribution: Abuta, Kushiro, Hokkaido.
- Family **Bothidae**
- * 118. *Paralichthys olivaceus* (TEMMINCK et SCHLEGEL) Nom. Jap. Hirame
Common, mainly in summer and autumn.
Distribution: Coasts of China and Japan.
- Family **Pleuronectidae**
119. *Atheresthes evermanni* JORDAN et STARKS Nom. Jap. Abura-garei
Rarely found all the year round.
Distribution: Kurile Islands, Saghalien, Hokkaido, Sendai Bay.

120. *Hippoglossus hippoglossus* (LINNAEUS) Nom. Jap. Ohioyo
Rarely found in the bay.
Distribution: Northwards to Hokkaido, Kurile Islands, Saghalien, Kamchatka, Alaska, north Atlantic, Spitzbergen, Murman coast and Iceland, southwards to California and the Bay of Biscay.
- *121. *Cynopsetta dubius* SCHMIDT Nom. Jap. Aka-garei
Very abundant all the year round.
Distribution: From Japanese waters coasts of Saghalien, Gulf of Tartary to Iki Islands, Shimane Pref. and eastern coasts of Korea.
122. *Acanthopsetta nadeshnyi* SCHMIDT Nom. Jap. Urocome-garei
Distribution: Only the coasts of Japan water from Saghalien, Vladivostok, Gulf of Tartary and Okhotsk sea to Korea.
- *123. *Protopsetta herzensteini* (SCHMIDT) Nom. Jap. Sohachi-garei
Common all the year round.
Distribution: Japan water, Okhotsk sea, southwards of Korea, coasts of Shantung, Gulf of Tartary and Port Arthur.
- *124. *Xystrias grigorjewi* (HERZENSTEIN) Nom. Jap. Musi-garei
Distribution: Hokkaido to Formosa and coasts of Korea.
- *125. *Verasper moseri* JORDAN et GILBERT Nom. Jap. Kuroshuzi-garei
Commonly found in the bay.
Distribution: Iturup Island, Hokkaido, Aomori and Same to the offshore of Ibaragi Pref.
- *126. *Lepidopsetta mochigarei* SNYDER Nom. Jap. Asaba-garei
Distribution: Kurile Islands, Gulf of Tartary, Southern Saghalien southwards through the sea of Japan to Korea.
- *127. *Limanda iridorum* JORDAN et STARKS Nom. Jap. Suna-garei
Common
Distribution: Kurile Islands, Saghalien, Hokkaido, northern Japan, coasts of Korea, southern part of Okhotsk sea.
128. *L. schrencki* (SCHMIDT) Nom. Jap. Kurogashira-garei
Distribution: Kurile Islands, Saghalien, Hokkaido, Aomori, Vladivostok, Usuri Bay, Maritime Province and eastern coasts of Korea.
- *129. *L. angustirostris* KITAHARA Nom. Jap. Ma-garei
Distribution: Kurile Islands, Saghalien, south to Kohama, Inland sea east coasts of Korea, Usury Bay and China.
- *130. *Kareius bicoloratus* (BASILEEWSKY) Nom. Jap. Ishi-garei
Distribution: Kurile Islands, Saghalien to southern Japan, Korea and north China.
131. *Cledoderma asperrimum* (TEMMINCK et SCHLEGEL) Nom. Jap. Same-garei
Distribution: Kurile Islands, Saghalien, Hokkaido and Nagasaki and coasts of Korea.
- *132. *Microstomus stelleri* SCHMIDT Nom. Jap. Baba-garei
Common all the year round.
Distribution: Kurile Islands, Saghalien, Peter the Great Bay and shores of Japan to southern Japan, east China sea and Korea.
- *133. *Tanakius kitaharae* (JORDAN et STARKS) Nom. Jap. Yanagi-mushi-garei
Common, mainly in spring in the bay.
Distribution: Hokkaido to southern Japan.
- *134. *Platichthys stellatus* (PALLAS) Nom. Jap. Takanoha-garei
Distribution: Kamchatka, Bering sea, Korea, North America, southern California, Tokyo and San Luis obispo.

Family Cynoglossidae

- *135. *Rhinoplagusia japonica* (TEMMINCK et SCHLEGEL) Nom. Jap. Kuro-ushinoshita
Distribution: Northern Japan to Formosa.

Family Gadidae

136. *Gadus macrocephalus* TILESIIUS Nom. Jap. Madara
Distribution: Bering sea, Kurile Islands, Robben, Kamchatka, Hokkaido, Saghalien, Toyoma Bay.
137. *Theragra charcogramma* (PALLAS) Nom. Jap. Suketo-dara
Abundantly found especially from December to March.
Distribution: Bering sea, Kurile Islands, Robben, Hokkaido, Saghalien, Toyoma Bay.
138. *Eleginus gracilis* (TILESIIUS) Nom. Jap. Komai
Not common in this bay.
Distribution: Arctic shores of Asia and north America, Bering sea, Decastris Bay, Hokkaido
- *139. *Lotella maximowizi* HERZENSTEIN Nom. Jap. Yezo-iso-ainame
Common, mainly in summer and early autumn.
Distribution: Hokkaido to Kagoshima.

Family Lophidae

- *140. *Lophiomis seitigerus* (VAHL) Nom. Jap. Ankoh
Common in summer.
Distribution: China sea, Wakanoura, Nagasaki' Hakodate.

*141. *Pterophryne histrio* (LINNAEUS) Nom. Jap. Hanaokoze

Distribution: Misaki, Sagami, Enoshima.

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