

A list of the sipunculan collection of the Department of Zoology, the University Museum, the University of Tokyo

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Historical Background

The sipunculan collection housed in the University Museum, the University of Tokyo (coded UMUTZ-Spc), consists of 81 jars in total, 77 of which are classified into 16 species and the remaining are unidentifiable at the order or specific level. Specimens in the collection were collected between 1884 and 1938 mainly from Japanese coasts ranging from Kinkazan Is. in Sendai Bay in the north, to the Okinawa Islands (mostly by I. Ikeda, see below) and the Ogasawara Islands (by Messrs S. Hirota and R. Sekiguchi, see Hirota, 1894) in the south; and also rarely from the Philippines (by a famous ichthyologist B. Dean, see Ikeda, 1905) and Naples, Italy.

The collection was built mainly by Professor Iwaji Ikeda (1872-1922), the first Japanese taxonomist of sipunculans, judging from the hand-written small labels of “I. Ikeda” included in most jars. It contains a part of the specimens described by Ikeda (1904, 1905), while lacking the material for Ikeda’s (1924) paper. After studying in, and then working as a lecturer for the College of Science, Tokyo Imperial University, he moved as a professor to Hiroshima Higher Normal School (a predecessor of the present Hiroshima University) and, then to Kyoto Imperial University (a predecessor of the present Kyoto University) until his death, according to the obituary given by Prof. Seitaro Goto in the preface of Ikeda’s (1924) paper published posthumously. At present, his sipunculan specimens can be found exclusively in the University of Tokyo. Unfortunately, many of his specimens including the name-bearing types were lost, as mentioned below.

For reference, the second Japanese taxonomist of sipunculans is the late Dr. Hayao Sato, whose collection is kept in Tohoku University (for the list of Sato’s name-bearing types see Sonobe, 1974; for the taxonomy see Cutler and Cutler, 1981).

It seems that the sipunculan collection of the University of Tokyo remained unstudied until 1979 when Prof. Edward B. Cutler and Ms. Norma J. Cutler of Utica College of Syracuse University, U. S. A., made a thorough survey of the collection, except for some specimens rediscovered afterwards. Their results became an important part of their comprehensive works on the Japanese sipunculan fauna (Cutler and Cutler, 1981; Cutler, *et al.*, 1984). They left an unpublished list of the collection in the University of Tokyo, but unfortunately it disappeared recently there. However, their labels put in jars have been

very helpful for making the present inventory.

Notes on type specimens in the collection

When establishing a new species, Prof. Ikeda did not designate the name-bearing type by labeling “Type”, “Holotype”, and so on. Instead, some jars contain labels of species names followed by “n. sp.”, hand-written probably by Prof. Ikeda himself, and the specimens in such jars are regarded as the name-bearing types when label information is consistent with the original descriptions. The collection includes the name-bearing types or other type specimens of the following 6 species.

(1) *Sipunculus amamiensis* Ikeda (UMUTZ-Spc-45-1 and -Spc-46)

In the present collection there are two jars containing the labels of “*Sipunculus amamiensis* n. sp...”. The one (UMUTZ-Spc-45-1) is composed of 5 specimen from Koniya, Amami-Oshima Is. in 1901, was regarded as the type series of *Sipunculus amamiensis* Ikeda, 1904 by Cutler and Cutler (1981) with lectotype designation. Then, the single specimen in the other jar (UMUTZ-Spc-46) may possibly be another paralectotype of *Sipunculus amamiensis* Ikeda; this jar was rediscovered after Prof. Cutler and Ms. Cutler’s survey in 1978.

This species was established by Ikeda (1904, pp. 36-37) for “numerous specimens ... collected by me [=Prof. Ikeda], in April 1901, at Koniya (Amami-Oshima), and a single one at Naha (Okinawajima)”. According to the label information, the specimen of Spc-46 was collected by Ikeda himself from “Wokaha Islet, Okinawa”; this locality belongs to Itoman district, south of Naha. However, one of the labels therein clearly denotes “*Sipunculus amamiensis* n. sp.”, and therefore, “Naha” in the original description may possibly be an error. Thus, the specimen of Spc-46 is here treated as “possibly a paralectotype of *Sipunculus amamiensis* Ikeda”.

(2) *Phymosoma deani* Ikeda (UMUTZ-Spc-41)

Cutler and Cutler (1981) rightly designated the lectotype of *Phymosoma deani* Ikeda, 1904 among the specimens in the jar of UMUTZ-Spc-41, represented by only a single jar which contains the label of “*Phymosoma deanii* [sic] n. sp.” in the collection. Some paralectotypes are deposited in the National Science Museum, Tokyo (see Cutler and Cutler, 1981, p. 89).

(3) *Phascolosoma japonicum* Ikeda = *Golfingia ikedai* Fisher (UMUTZ-Spc-50)

UMUTZ-Spc-50 contains much deteriorated (once dried-up) individuals, with the labels of “*Phascolosoma japonicum* n. sp.” and “I. Ikeda”, but without any information about locality and date of collection. Judging from the original description, this species was established for specimens from “coasts of Tokyo and Sagami Bays” (Ikeda, 1904, p. 7), and therefore, we may consider this material as a part of the syntypes. As the species name *Phascolosoma japonicum* Ikeda, 1904 was a junior synonym of *P. japonicum* Grube, 1877, the former was replaced by the new name *Golfingia ikedai* Fisher, 1950. Therefore, the material of Spc-50 is a part of syntypes also of *G. ikedai* (see ICZN 4th ed., Art. 67.8; International Commission on Zoological Nomenclature, 2000).

When Cutler and Cutler (1981) designated the neotype for *G. ikedai* (= *P. japonicum* Ikeda), the material of Spc-50 was still unknown to exist. However, at present, “the neotype should be set aside (unless, following an application, the Commission rules that the neotype is to be retained as the name-bearing type)” (ICZN 4th ed., Art. 75.8).

(4) *Phascolosoma nigrum* Ikeda (UMUTZ-Spc-42)

Cutler and Cutler (1981) rightly designated the lectotype of *Phascolosoma nigrum* Ikeda, 1904 among the specimens in the jar of UMUTZ-Spc-42, represented by only a single jar which contains the label of “*Phascolosoma nigrum* n. sp.” in the collection. Some paralectotypes are now deposited in the National Science Museum, Tokyo (see Cutler and Cutler, 1981, p. 68).

(5) *Dendrostoma minor* Ikeda (UMUTZ-Spc-23)

The specimens of UMUTZ-Spc-23, collected from Funakawa, Akita Prefecture in August, 1900 are a part of syntypes, on the basis of the original description saying, “Specimens of the species have been collected at Funakawa in the Province of Ugo [present Akita Pref.], Misaki, Habu on Oshima (Izu Province), and Tanegashima; a small island near Kagoshima” (Ikeda, 1904, pp. 58-59). The specimens are much deteriorated.

Cutler and Cutler (1981: 76) gave the comment that the specimens “may have been his type material. At some time in the past, however, they have completely dried out and are now shadows on the bottom of the jar. In view of this, specimens from our Sta. 8 are designated as neotype..., deposited at the National Science Museum, Tokyo...”. However, if one follows the ICZN 4th ed., their nomenclatural act seems invalid (see Art. 75). Thus, the specimens of Spc-23 still remain syntypes despite their limited scientific value.

(6) *Cloeosiphon japonicum* Ikeda (UMUTZ-Spc-52)

The specimens of UMUTZ-Spc-52, collected from Koniya, Amami-Oshima Is. on 30 March and Kachizato, Kakeroma Is. on 1 April, 1901, are a part of syntypes of *Cloeosiphon japonicum* Ikeda, 1904, because the original description says, “This species is one of the commonest Sipunculoids met with in the Riukiu [Ryukyu] and Amami-Oshima Islands.” (Ikeda, 1904, p. 49).

Not included in the collection are the name-bearing types of the following species (listed in alphabetical order of generic and specific names), which had been probably lost: *Aspidosiphon angulatus* Ikeda, 1904; *Aspidosiphon misakiensis* Ikeda, 1904 (neotype designated; see Cutler and Cutler, 1981, p. 79); *Aspidosiphon spinalis* Ikeda, 1904; *Aspidosiphon uniscutatus* Ikeda, 1904; *Cloeosiphon carolinus* Ikeda, 1924; *Phascolion artificiosus* Ikeda, 1904 (neotype designated; see Cutler and Cutler, 1981, p. 71); *Phascolion rectus* Ikeda, 1904 (neotype designated; see Cutler and Cutler, 1981, p. 74); *Phascolosoma misakianum* Ikeda, 1904 (neotype designated; see Cutler and Cutler, 1981, p. 60); *Phascolosoma okinoseanum* Ikeda, 1904; *Phascolosoma owstoni* Ikeda, 1904; *Phascolosoma quadratum* Ikeda, 1905; *Phascolosoma zenibakense* Ikeda, 1924 (neotype designated; see Cutler and Cutler, 1981, p. 70); *Phymosoma nahaense* Ikeda, 1904; *Phymosoma onomichianum* Ikeda, 1904 (neotype designated; see Cutler and Cutler, 1981,

p. 88); *Physcosoma yezoense* Ikeda, 1924.

List of the sipunculan collection

The list was made according to Cutler's (1994) system. Our brief remarks are included in brackets. Registration numbers with suffixes, such as UMUTZ-Spc-2-1 and -2-2, mean that the thus numbered specimens had been kept in the same jar and divided into two (in this case) or more jars during the course of the present study, in order for the different species to be stored differently. Duplicate information in labels is not shown; the whole label information will be open by the Internet.

Phylum Sipuncula
Class Sipunculidea
Order Sipunculiformes

Family Sipunculidae
Sipunculus nudus Linnaeus

UMUTZ-Spc-1; No. of specimens: 2

Label information: "*Sipunculus nudus* L.", "I. Ikeda"

Remarks: Locality & date unknown.

UMUTZ-Spc-2-1; No. of specimens: 3

Label information: "*Sipunculus nudus* L.", "I. Ikeda", "Moroiso and Aburatsubo, Misaki, 27 Apr. & 25 Dec., 1901, coll. by K. Aoki"

Remarks: "*Sipunculus nudus*" in Ikeda, 1904, pp. 31-32.

UMUTZ-Spc-3; No. of specimens: 2

Label information: "160, *Sipunculus nudus* L., Tomo, Bingo [=Hiroshima Pref.]", "*Sipunculus* sp., mudd

y sand, above low-water mark, Tomo, Bingo", "I. Ikeda"

Remarks: "*Sipunculus nudus*" in Ikeda, 1904, pp. 31-32.

UMUTZ-Spc-48; No. of specimens: 1

Label information: "*Sipunculus nudus*, Naples", "498, *Sipunculus nudus*, Gephyrea inermia, Naples"

Siphonosoma australe australe (Keferstein)

UMUTZ-Spc-4; No. of specimens: 1

Label information: "*Sipunculus australis* Keferstein", "Southern Negros Manjuyodi, Feb. 1901, Shallow water, Bashford Dean / Manjuyodi"

Remarks: "*Siphonosoma australis*" in Ikeda, 1905, p. 1.

Siphonosoma cumanense (Keferstein)

UMUTZ-Spc-2-2; No. of specimens: 2

Label information: "I. Ikeda", "Moroiso and Aburatsubo, Misaki, 27 Apr. & 25 Dec.,

- 1901, coll. by K. Aoki”
 Remarks: “*Sipunculus cumanensis*” in Ikeda, 1904, pp. 32-35.
- UMUTZ-Spc-5; No. of specimens: 5
 Label information: ”5038 Tomo Bingo [Hiroshima Pref.], Sent to Leuckart”
 Remarks: “*Sipunculus cumanensis*” in Ikeda, 1904, pp. 32-35.
- UMUTZ-Spc-6; No. of specimens: 3 fragments
 Label information: ”Miyatsu, July 1903, Izuka”
- UMUTZ-Spc-7; No. of specimens: 1
 Label information: ”Namio-ue and Sakihara, Naha, Okinawa, 8 Apr. 1901, Ikeda coll.”, “*Sipunculus cumanensis* Keferstein”, “I. Ikeda”
 Remarks: “*Sipunculus cumanensis*” in Ikeda, 1904, pp. 32-35.
- UMUTZ-Spc-8; No. of specimens: 6
 Label information: ”*Sipunculus cumanensis* Keferstein, coll. Izuka”, “Kasaoka, Okayama Pref., 28 Nov. 1900, Izuka coll.”, “I. Ikeda”, “Onomichi [Hiroshima Pref.], 9 Dec. 1900”, “Tomo, Bingo [Hiroshima Pref.]”
 Remarks: “*Sipunculus cumanensis*” in Ikeda, 1904, pp.32-35.
- UMUTZ-Spc-9; No. of specimens: 3
 Label information: ”*Sipunculus cumanensis* Keferstein”, “Koniya [Amami-Oshima Is.], 30 Mar. 1901”, “I. Ikeda”
 Remarks: “*Sipunculus cumanensis*” in Ikeda, 1904, pp. 32-35.
- UMUTZ-Spc-10; No. of specimens: 1
 Label information: “*Sipunculus cumanensis* Keferstein, Ikeda coll.”, “Sakihara, entrance of Naha Port, Okinawa, 7 Apr. 1901, Ikeda coll.”, “I. Ikeda”
 Remarks: “*Sipunculus cumanensis*” in Ikeda, 1904, pp. 32-35.
- UMUTZ-Spc-11; No. of specimens: 4
 Label information: “*Sipunculus cumanensis* Kef., (Misaki)”
 Remarks: “*Sipunculus cumanensis*” in Ikeda, 1904, pp.32-35.
- UMUTZ-Spc-12-1; No. of specimens: 1
 Label information: “*Sipunculus cumanensis* Kef.”, “Noheze-se, Okinawa Is., 16 Apr. 1901”, “I. Ikeda”
 Remarks: “*Sipunculus cumanensis*” in Ikeda, 1904, pp. 32-35.
- UMUTZ-Spc-17; No. of specimens: 12
 Label information: “Ooko-mushi (in dialect)”, “Fukuoka, 22 Sept. 1905, given by Mr. Risaburo Tsukaguchi”
- UMUTZ-Spc-18-1; No. of specimens: 4
 Label information: Nothing
- UMUTZ-Spc-22; No. of specimen: Many fragments
 Label information: “Koajiro, Misaki, Aug. 1894”
- UMUTZ-Spc-47; No. of specimens: 2
 Label information: “Susaki, [near Shimoda], Izu Pen., 26 & 27 Mar. [year unknown]”

Siphonosoma funafuti (Shipley)

UMUTZ-Spc-37-3; No. of specimens: 1

Label information: "Naze, Amami-Oshima Is., 5 Apr. 1901, Ikeda coll.",
"*Phascolosoma amamiense* [by Cutler]"

Remarks: "*Siphonosoma funafuti* (Shipley)" in Cutler *et al.*, 1984, p.260.

UMUTZ-Spc-45-1; No. of specimens: 5

Label information: "*Siphonosoma amamiensis* (Ikeda), Lectotype [by Cutler]",
"*Sipunculus amamiensis* n. sp., Koniya, Amami-Oshima Is., 1901, Ikeda", "I.
Ikeda"

Remarks: The lectotype and 4 paralectotype of *Sipunculus amamiensis* Ikeda, 1904.
"*Siphonosoma amamiense* n. sp." in Ikeda, 1904, pp. 36-37 / "*Siphonosoma*
(*Siphonosoma*) *amamiense*" in Cutler and Cutler, 1981, pp. 57-8 / "*Siphonosoma*
funafuti" in Cutler *et al.*, 1984, p. 260.

UMUTZ-Spc-46; No. of specimens: 1

Label information: "*Sipunculus amamiensis* n. sp., Ikeda", "Wokaha Islet [off
Itoman], Okinawa Is., from coral reef sand, 11 Apr. 1901, Ikeda coll.", "I. Ikeda",
"*Sipunculus* nov. spec."

Remarks: Possibly a paralectotype of *Sipunculus amamiensis* Ikeda, 1904; for
further details see the text above. "*Sipunculus amamiensis* n. sp." in Ikeda, 1904, pp.
36-7 / "*Siphonosoma amamiense*" in Cutler & Cutler, 1981, pp. 57-8 /
"*Siphonosoma funafuti*" in Cutler *et al.*, 1984, p. 260.

Order Golfingiiformes

Family Golfingiidae

Golfingia margaritacea margaritacea (Sars)

UMUTZ-Spc-18-3; No. of specimens: 1

Label information: Nothing

UMUTZ-Spc-38; No. of specimens: 16

Label information: "*Golfingia margaritacea* [by Cutler]", "Enoura, Suruga Bay, Apr.
1884", "Enoura-Shizuoka Pref., June [by Cutler; "June" may be an error]"

Remarks: "*Golfingia margaritacea ikedai* Fisher" in Cutler & Cutler, 1981,
pp.62-63 / Cutler *et al.*, 1984, p.264-5.

UMUTZ-Spc-39; No. of specimens: 6

Label information: "*Gofingia margaritacea* [by Cutler]", "Awa Kominato, Chiba
Pref., Apr. 1885", "Awa Kominato, Chiba Pref., April [by Cutler]"

Remarks: "*Golfingia margaritacea ikedai* Fisher" in Cutler & Cutler, 1981,
pp.62-63 / Cutler *et al.*, 1984, pp.264-5.

UMUTZ-Spc-40-2; No. of specimens: 25

Label information: "*Phascolosoma* sp., Moroiso, Misaki, Kanagawa Pref., Aug.

1890”, “*Golfingia margaritacea margaritacea* [by Nishikawa]”, “Miura Penn. Moroiso, 1902”

UMUTZ-Spc-44-2; No. of specimens: 2

Label information: “*Phascolosoma*”, “*Golfingia margaritacea* [by Cutler]”, “*Phascolosoma*, Koajiro, [Misaki, Kanagawa Pref.]... [unreadable]”

UMUTZ-Spc-50; No. of specimen: uncountable due to deterioration

Label information: “*Phascolosoma japonicum*, n. sp.”, “I. Ikeda”, “*Phascolo capensis*, Fleming ?”

Remarks: Part of the syntypes. “*Phascolosoma japonicum* n. sp.” in Ikeda, 1904, pp. 5-7.

UMUTZ-Spc-53-2; No. of specimens: 11

Label information: Nothing

Thysanocardia nigra (Ikeda)

UMUTZ-Spc-40-1; No. of specimens: 2

Label information: “*Phascolosoma* sp., Moroiso, Misaki, Kanagawa Pref., Aug. 1890”, “*Golfingia nigra* [by Cutler]”, “Miura Pen. Moroiso, 1902”

UMUTZ-Spc-42; No. of specimens: 30

Label information: “*Golfingia nigra* (Ikeda), Lectotype [by Cutler]”, “*Phascolosoma nigrum* n sp., Misaki, [Kanagawa Pref.] 1900, Ikeda”, “I. Ikeda”

Remarks: Lectotype and 29 paralectotypes of *Phascolosoma nigrum* Ikeda, 1904. “*Phascolosoma nigrum* n. sp.” in Ikeda, 1904, pp.3-5 / “*Golfingia (Thysanocardia) nigra*” in Cutler & Cutler, 1981, pp. 68-9 / “*Thysanocardia nigra*” in Cutler *et al.*, 1984, pp. 287-8.

UMUTZ-Spc-43; No. of specimens: 2

Label information: “*Golfingia nigra* [by Cutler]”, “*Phascolosoma*, Koajiro, [Misaki, Kanagawa Pref.] Aug. [18]98

Remarks: “*Golfingia (Thysanocardia) nigra*” in Cutler & Cutler, 1981, pp. 68-9 / “*Thysanocardia nigra*” in Cutler *et al.*, 1984, pp. 287-8.

UMUTZ-Spc-44-1; No. of specimens: 5

Label information: “*Golfingia nigra* [by Cutler]”, “*Phascolosoma*”, “*Phascolosoma*, Koajiro, [Misaki, Kanagawa Pref.]... [unreadable]”

UMUTZ-Spc-51; No. of specimens: 2

Label information: “*Phascolosoma nigrum*, Koajiro, [Misaki, Kanagawa Pref.] June 30, 1938”, “*Phascolosoma nigrum*, Gephyrea inermea, Koajiro, June 30, 1938”

UMUTZ-Spc-53-1; No. of specimens: 1

Label information: Nothing

Family Themistidae

Themiste (Lagenopsis) minor minor (Ikeda)

UMUTZ-Spc-23; No. of specimens: a few

Label information: “*Dendrostma minorum* n. sp. Ike. Aug. 1900, Funakawa, Akita Pref.”, “I. Ikeda”

Remarks: Part of the syntypes. Once dried-up, and much deteriorated. For further details about nomenclatural status of this material see the text above. “*Dendrostoma minor* n. sp.” in Ikeda, 1904, pp. 57-59.

UMUTZ-Spc-32-2; No. of specimens: 1

Label information: “*Themiste minor* [by Cutler]”, “Collection of the Zoshikan (the Seventh Higher Normal School), Nishino-omote, Tanegashima Is., 1 Jan. 1903, S. Ikeda coll.”, “I. Ikeda”

Remarks: “*T. (L.) minor*” in Cutler *et al.*, 1984, pp.284-5.

Class Phascolosomatidea
Order Phascolosomatiformes

Family Phascolosomatidae
Phascolosoma agassizii Keferstein

UMUTZ-Spc-28-1; No. of specimens: 19

Label information: “161 *Phymosoma japonicum*, Enoura, Suruga Bay, Apr. 1884”

Remarks: “*Phascolosoma japonicum*” in Ikeda, 1904, pp. 22-23 / Cutler *et al.*, pp.293-296.

Phascolosoma albolineatum Baird

UMUTZ-Spc-34-2; No. of specimens: 4

Label information: “*Phascolosoma albolineatum* [by Cutler]”, “Sakishima and off Naminoue Shrine, Naha, Okinawa Is., 8 Apr. 1901, Ikeda coll.”, “I. Ikeda”

Remarks: Once dried up. “*P. albolineatum*” in Cutler *et al.*, 1984, pp.292-3.

Phascolosoma arcuatum Gray

UMUTZ-Spc-41; No. of specimens: 4

Label information: “*Phymosoma deani* (Ikeda), Lectotype [by Cutler]”, “*Phymosoma deanii* n.sp., Ikeda”, “I. Ikeda”, “South Negros, Manjuyodi, Feb. 1901, Bash. Dean”

Remarks: The type series of *Phymosoma demani* Ikeda, 1905. “*Phymosoma deani* n. sp.” in Ikeda, 1905, pp. 171-175 / *Phascolosoma (P.) deani* in Cutler & Cutler, 1981, pp. 88-8.

UMUTZ-Spc-49; No. of specimens: 1

Label information: “*Thalassema Formosa?*”

Phascolosoma nigrescens Keferstein

UMUTZ-Spc-12-4; No. of specimens: 1

Label information: "Noheze-se, Okinawa Is., 16 Apr. 1901", "I. Ikeda"

UMUTZ-Spc-13-2

No. of specimens: 3

Label information: "Sakihara, entrance of Naha Port, Okinawa, 7 Apr. 1901", "I. Ikeda"

UMUTZ-Spc-25-2; No. of specimens: 1

Label information: "Naha, Okinawa Is., 24 May 1906, Miya coll.", "I. Ikeda"

UMUTZ-Spc-26-3; No. of specimens: 1

Label information: "I. Ikeda", "Okinawa, 15 July 1901, coral reef"

UMUTZ-Spc-27-2; No. of specimens: 1

Label information: "Koniya, Amami-Oshima Is., 30 Mar. 1901, or Kachiaki, Kakeroma Is., 1 Apr. 1901", "I. Ikeda"

UMUTZ-Spc-29-1; No. of specimens: 318

Label information: "Okumura, Chichi-jima Is., Ogasawara Isls, in rocks, 1 Mar. 1894, Hirota & Sekiguchi coll."

UMUTZ-Spc-37-4; No. of specimens: 1

Label information: "Naze, Amami-Oshima Is., 5 Apr. 1901, Ikeda coll.", "*Phascolosoma nigrescens* [by Cutler]"

***Phascolosoma pacificum* Keferstein**

UMUTZ-Spc-12-2; No. of specimens: 1

Label information: "*Phymosoma pacificum* Kef.", "Noheze-se, Okinawa Is., 16 Apr. 1901"

Remarks: "*Phymosoma pacificum*" in Ikeda, 1904, pp. 25-26.

UMUTZ-Spc-26-2; No. of specimens: 1

Label information: "*Phymosoma pacificum*", "I. Ikeda", "Okinawa, 15 July 1901, coral reef"

Remarks: "*Phymosoma pacificum*" in Ikeda, 1904, pp. 20-22 / "*Phascolosoma pacificum*" in Cutler *et al.*, 1984, pp. 296-297.

UMUTZ-Spc-27-1; No. of specimens: 9

Label information: "*Phymosoma pacificum* Kef. Ikeda", "Koniya, Amami-Oshima Is., 30 Mar. 1901; Kachiaki, Kakeroma Is., 1 Apr. 1901", "I. Ikeda"

Remarks: "*Phymosoma pacificum*" in Ikeda, 1904, pp. 25-26 / "*Phascolosoma pacificum*" in Cutler *et al.*, 1984, pp. 296-297.

UMUTZ-Spc-37-1; No. of specimens: 6

Label information: "Naze, Amami-Oshima Is., 5 Apr. 1901, Ikeda coll.", "*Phascolosoma pacificum* [by Cutler]"

Remarks: "*P. pacificum*" in Cutler *et al.*, 1984, pp.296-7.

***Phascolosoma scolops* (Selenka & de Man)**

- UMUTZ-Spc-12-3; No. of specimens: 2
 Label information: “*Phymosoma scolops* Sel. et de Man”, “Noheze-se, Okinawa Is., 16 Apr. 1901”, “I. Ikeda”
 Remarks: “*Phymosoma scolops*” in Ikeda, 1904, pp. 20-22.
- UMUTZ-Spc-13-1; No. of specimens: 2
 Label information: “*Phymosoma scolops* Sel. et de Man, Ikeda coll.”, “Sakihara, entrance of Naha Port, Okinawa, 7 Apr. 1901”, “I. Ikeda”
 Remarks: “*Phymosoma scolops*” in Ikeda, 1904, pp. 20-22.
- UMUTZ-Spc-14; No. of specimens: 2
 Label information: “*Phymosoma scolops* Sel. et de Man”, “Shimabira, Kagoshima Pref., rocky shore, 18 Apr. 1896, Mitsukuri & Hara coll.”, “I. Ikeda”
 Remarks: “*Phymosoma scolops*” in Ikeda, 1904, pp. 20-22.
- UMUTZ-Spc-15; No. of specimens: 3
 Label information: “*Phymosoma scolops* Sel. et de Man, [locality and date unreadable], by Iizuda”, “I. Ikeda”
 Remarks: “*Phymosoma scolops*” in Ikeda, 1904, pp. 20-22.
- UMUTZ-Spc-16; No. of specimens: 32
 Label information: “*Phymosoma scolops*, Sele. & de Man, (Ikeda coll.)”, “Koniya & Sokari, Amami-Oshima Is., 20 & 29, Mar. 1901”, “I. Ikeda”
 Remarks: “*Phymosoma scolops*” in Ikeda, 1904, pp. 20-22.
- UMUTZ-Spc-18-2; No. of specimens: 1
 Label information: Nothing
- UMUTZ-Spc-24-3; No. of specimens: 1
 Label information: “Nikaha Islet off Itoman, Okinawa Is., 11 Apr. 1901 coral reef”, “I. Ikeda”
- UMUTZ-Spc-25-1; No. of specimens: 2
 Label information: “*Phymosoma scolops*, Sel. et de Man, Ikeda”, “Naha, Okinawa Is., 24 May 1906, Miya coll.”, “I. Ikeda”
- UMUTZ-Spc-26-1; No. of specimens: 3
 Label information: “*Phascolosoma scolops* [by Cutler]”, “*Phymosoma scolops*”, “I. Ikeda”, “Okinawa, 15 July 1901, coral reef”
 Remarks: “*Phymosoma scolops*” in Ikeda, 1904, pp. 20-22 / “*Phascolosoma scolops*” in Cutler *et al.*, pp.298-299.
- UMUTZ-Spc-28-2; No. of specimens: 1
 Label information: “Enoura, Suruga Bay, Apr. 1884”
- UMUTZ-Spc-31; No. of specimens: 2
 Label information: “*Phascolosoma scolops* [by Cutler]”, “I. Ikeda”, “Kataura, Kagoshima Pref. 26 July 1899, Miyajima coll.”
 Remarks: “*P. scolops*” in Cutler, Cutler & Nishikawa, 1984, pp.298-300.
- UMUTZ-Spc-32-3; No. of specimens: 15
 Label information: “Collection of the Zoshikan (the Seventh Higher Normal

- School), Nishino-omote, Tanegashima Is., 1 Jan. 1903, S. Ikeda coll.”, “I. Ikeda”
 UMUTZ-Spc-33-1; No. of specimens: 5
 Label information: “*Phascolosoma scolops* [by Cutler]”, “Wokaha, Itoman, Okinawa Is., 11 Apr. 1897”, “I. Ikeda”
 Remarks: “*P. scolops*” in Cutler *et al.*, 1984, pp.298-299.
- UMUTZ-Spc-34-1; No. of specimens: 3
 Label information: “*Phascolosoma scolops* [by Cutler]”, “Sakishima and off Naminoue Shrine, Naha, Okinawa Is., 8 Apr. 1901, Ikeda coll.”, “I. Ikeda”
 Remarks: Once dried up. “*P. scolops*” in Cutler *et al.*, 1984, pp.298-9.
- UMUTZ-Spc-35; No. of specimens: 5
 Label information: “*Phascolosoma scolops* ?? [by Cutler]”, “Akune, Kagoshima Pref., 19 Apr. 1896, Mitsukuri & Hara coll.”
 Remarks: “*P. scolops*” in Cutler *et al.*, 1984, pp.298-9.
- UMUTZ-Spc-37-2; No. of specimens: 5
 Label information: “Naze, Amami-Oshima Is., 5 Apr. 1901, Ikeda coll.”, “*Phascolosoma scolops* [by Cutler]”
 Remarks: “*P. scolops*” in Cutler *et al.*, 1984, pp.298-9.

***Phascolosoma scolops* (Selenka & de Man) (?)**

- UMUTZ-Spc-45-2; No. of specimens: 7
 Label information: “I. Ikeda”, “Koniya, Amami-Oshima Is., 28 Feb. 1901, Ikeda coll.”

Phascolosoma (Phascolosoma) sp.

- UMUTZ-Spc-33-2; No. of specimens: 1
 Label information: “*P. (Phas.)* species [by Cutler]”, “I. Ikeda”, “Wokaha, Itoman, Okinawa Is., 11 Apr. 1897”

Phascolosoma (Phascolosoma) sp.

- UMUTZ-Spc-34-3; No. of specimens: 1
 Label information: “*P. (Phas.)* species [by Cutler]”, “Sakishima and off Naminoue Shrine, Naha, Okinawa Is., 8 Apr. 1901, Ikeda coll.”, “I. Ikeda”
 Remarks: Once dried up.

***Antillesoma antillarum* (Grube & Oersted)**

- UMUTZ-Spc-24-2; No. of specimens: 1
 Label information: “*Phascolosoma (Rueppellisoma) onomichianum* ?? [by Cutler]”, “Nikaha Islet off Itoman, Okinawa Is., 11 Apr. 1901 coral reef”, “I. Ikeda”
 Remarks: “*A. antillarum*” in Cutler *et al.*, 1984, pp.290-291.
- UMUTZ-Spc-30; No. of specimens: 3
 Label information: “*Phymosoma antillarum* Gr. and Oerst., Ikeda”, “Tomari village

and Sakihara, Naha, Okinawa Is., 7 Apr. 1901, Ikeda coll.”, “I. Ikeda”
Remarks: “*Phymosoma antillarum*” in Ikeda, 1904, pp. 24-25.

Order Aspidosiphoniformes

Family Aspidosiphonidae

Aspidosiphon (Paraspidosiphon) steenstrupii Diesing

UMUTZ-Spc-20; No. of specimens: 13

Label information: “*Aspidosiphon steenstrupi* [by Cutler]”, “1 Apr. 1901 [locality unreadable, but probably in Amami-Oshima Is.]”, “I. Ikeda”, “*Aspidosiphon steenstrupi* Diesing”

Remarks: “*Aspidosiphon steenstrupii*” in Ikeda, 1904, pp. 40-41.

UMUTZ-Spc-21; No. of specimens: 12

Label information: “*Aspidosiphon steenstrupii* Diesing”, “Naha, Okinawa Is., 8 Apr. 1901, Ikeda coll.”, “I. Ikeda”, “*Phymosoma australis*”

Remarks: Once dried up. “*Aspidosiphon steenstaupi*” in Ikeda, 1904, pp. 40-41.

UMUTZ-Spc-29-2; No. of specimens: 1

Label information: “Okumura, Chichi-jima Is., Ogasawara Isls, in rocks, 1 Mar. 1894, Hirota & Sekiguchi coll.”

UMUTZ-Spc-32-1; No. of specimens: 1

Label information: “*Aspidosiphon steenstrupii* [by Cutler]”, “Collection of the Zoshikan (the Seventh Higher Normal School), Nishino-omote, Tanegashima Is., 1 Jan. 1903, S. Ikeda coll.”, “I. Ikeda”

Remarks: “*A. (P.) steenstrupii*” in Cutler, Cutler & Nishikawa, 1984, pp.308-9.

Cloeosiphon aspergillus (Quatrefagas)

UMUTZ-Spc-24-1; No. of specimens: 2

Label information: “Nikaha Islet off Itoman, Okinawa Is., 11 Apr. 1901 coral reef”, “*Cloeosiphon aspergillus* [by Cutler]”, “I. Ikeda”

Remarks: “*C. aspergillus*” in Cutler *et al.*, 1984, pp.310-311.

UMUTZ-Spc-45-3; No. of specimens: 2

Label information: “Koniya, Amami-Oshima Is., 30 Feb. 1901, b, Ikeda coll.”, “I. Ikeda”

UMUTZ-Spc-45-4; No. of specimens: 4

Label information: “Koniya, Amami-Oshima Is., 30 Feb. 1901, a, *Cloeosiphon asperg ?*”, “I. Ikeda”

UMUTZ-Spc-52; No. of specimen: 16

Label information: “*Cloeosiphon japonicum* n. sp.”, “Koniya, [Amami-Oshima Is.], 30 Mar. 1901”, “Kachizato, Kakeroma Is., 1 Apr. 1901”, “I. Ikeda”

Remarks: Once dried up. Part of the syntypes of *Cloeosiphon japonicum* Ikeda.

“*Cloeosiphon japonicum* n. sp.” in Ikeda, 1904, pp. 49-53.

Material of uncertain identity at class level

UMUTZ-Spc-36; No. of specimen: 2

Label information: “Kinkazan Is., Sendai Bay, 22 July 1899”, “I. Ikeda”

Remarks: Once dried-up.

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