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Polychaetous Annelids Collected from Sagami Bay toward the Ogasawara Islands, Japan

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Abstract. Polychaetous annelids from Sagami Bay toward the Ogasawara Islands through the research project conducted during years 2006–2010 by the National Museum of Nature and Science are taxonomically examined. A total of 202 species and 38 indeterminable species in 42 families of polychaetes are recognized. Five species are new to science: *Australonoe japonica, Lepidonotus takunanae, Lepidonotus specklus, Eunice pusilla and Lumbrineriopsis paucidentata*. Ten species are new to the Japanese polychaetous fauna: *Paleanotus chrysolepis and Paleanotus debilis* (Chrysopetalidae), *Eupanthalis edriophthalma* (Acoetidae), *Neanthes unifasciata* (Nereididae), *Eranno bifrons* (Lumbrineridae), *Ampharete finmarchica* and *Schistocomus hiltoni* (Ampharetidae), *Lanice conchilega and Lanice seticornis* (Terebellidae) and *Euchone capensis* (Sabellidae).
Key words: Sagami Bay, Ogasawara Islands, benthic polychaetes, new species, taxonomy.

Introduction

The research project "Studies on the Origin of Biodiversity in the Sagami Sea: Fossa Magna Element and the Izu–Ogasawara (Bonin) Arc" was conducted during the period 2006–2010 from Sagami Bay toward the Ogasawara Islands by the National Museum of Nature and Science.

Polychaetes of Sagami Bay are known through studies extending from Marenzeller (1879) to the present time. Marenzeller studied collections from the east coast of Enoshima, near Yokohama and adjacent areas, made by members of a geological expedition around the world in 1875–76. Izuka (1912) reported 124 errantiate polychaetes from the Japanese waters, of which 56 species were collected from Sagami Bay.

The research project "Study on Environmental Changes in the Sagami Sea and Adjacent Coastal Area with Time Serial Comparison of Fauna and Flora" was organized by the National Science Museum, Tokyo during the period 2001–2005. In this survey polychaetes were collected from 123 stations, in depth between 7 and 1200 m, distributed all over Sagami Bay and the Sagami Sea, and a total of 289 species and 44 indeterminable species in 48 families of polychaetes were recognized.

The Ogasawara Islands in the sub-tropical zone are a series of oceanic Islands extending from Sagami Bay toward the Mariana Islands. The distance from Sagami Bay to the Ogasawara Islands is more than 1000 km. The Ogasawara Islands consist of three main Islands, Mukojima I., Chichijima I. and Hahajima I. These islands lying between the two main currents, Kuroshio and North-equatorial, are bathed on their coasts by several warm return currents stemming from those main currents. The average water temperature is 23.5℃ (19.9–28.2℃), transparency is 26.5 m and chlorinity is 19.22%. These oceanic islands far from the main land have a characteristic marine fauna due to their isolated geographical position.

In the Natural History Research Project of the Japanese Islands by the National Science Museum, Tokyo, 18 serpulid species in 9 genera are recognized from the Ogasawara Islands (Imajima,

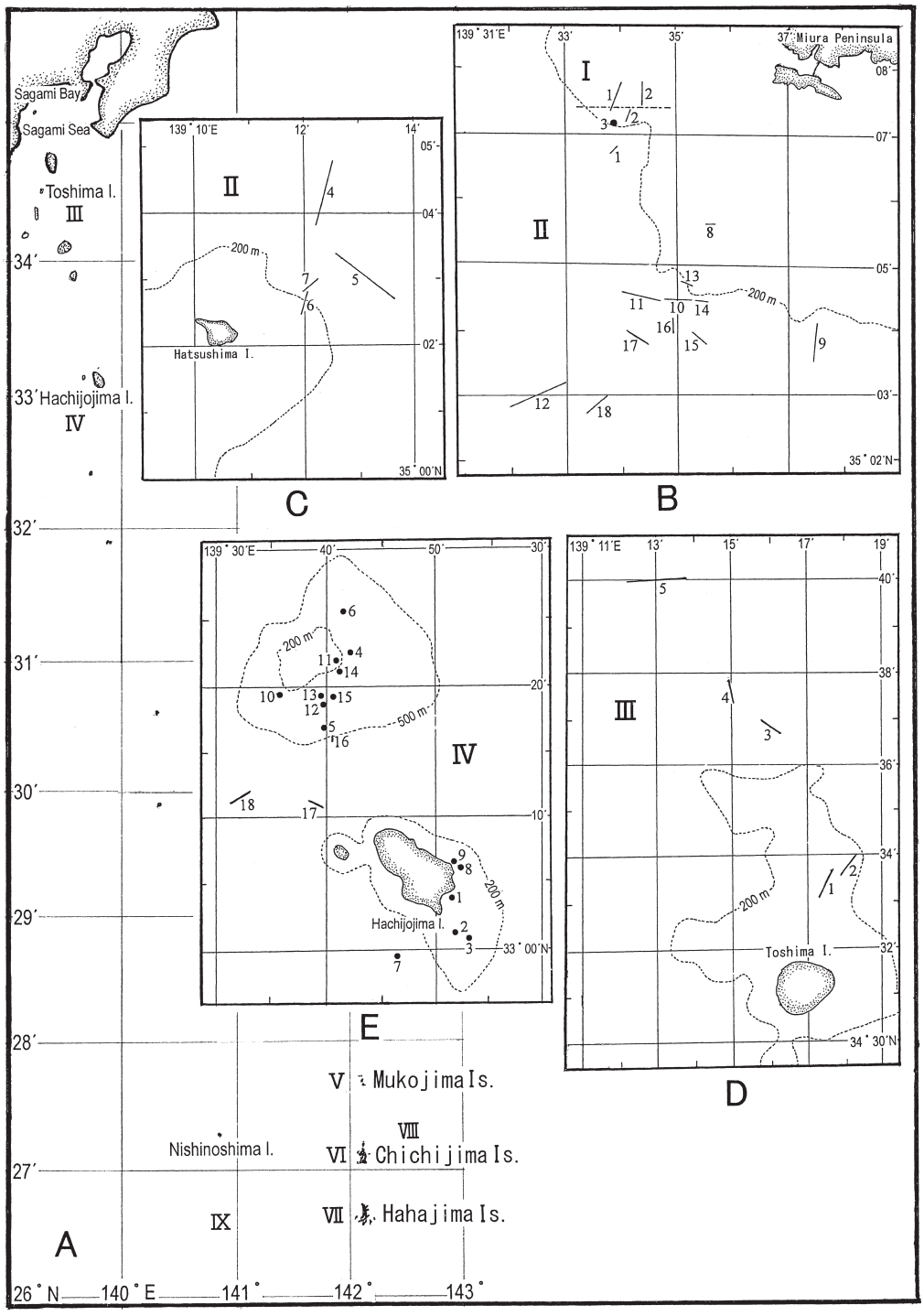

Fig. 1. Maps showing collected stations of polychaetes in the benthic surveys during 2006–2010. A, Map of the Izu-Mariana Arc; B, Map showing Sagami Bay (area I) and Sagami Sea (area II); C, Map showing around Hatsushima Island (area II); D, Map showing around Toshima Island (area III); E, Map showing around Hachijōjima Island (area IV).

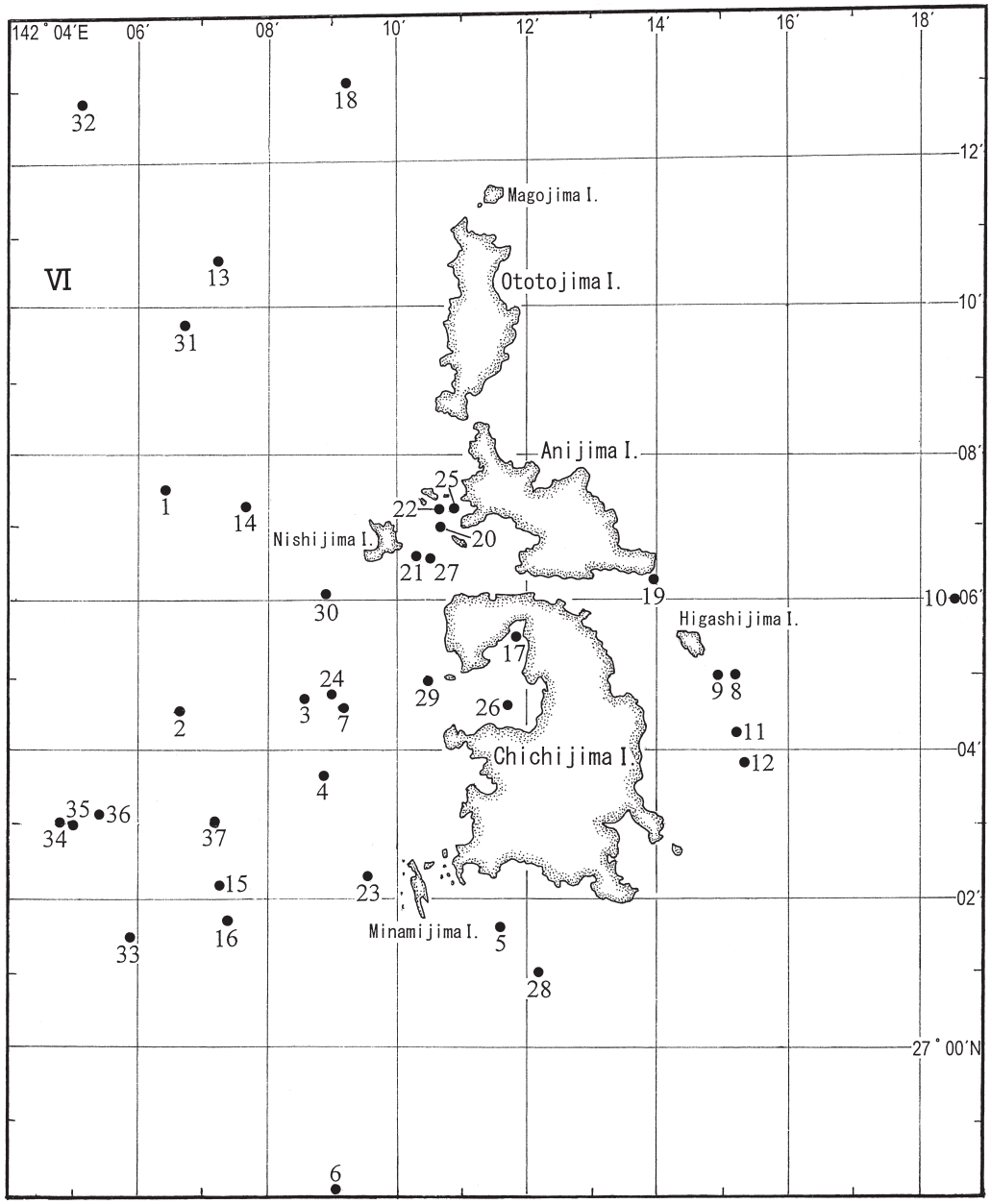

Fig. 2. Map of Chichijima Islands (area VI) showing collected stations of polychaetes.

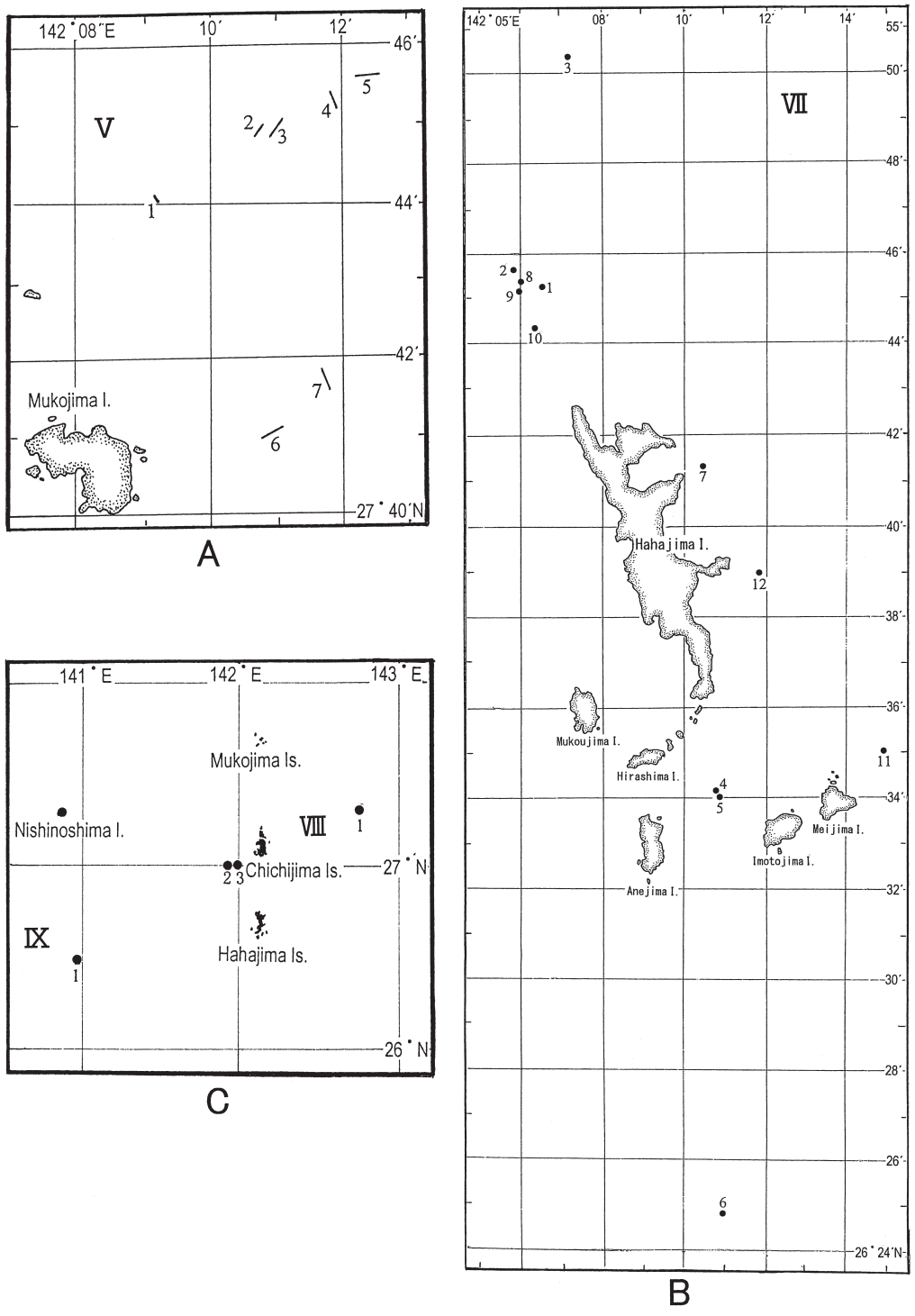

Fig. 3. Maps showing collected stations of polychaetes. A, Map showing around Mukojima Island (area V); B, Map showing around Hahajima Islands (area VII); C, Map off Chichijima Islands (area VIII) and off Hahajima Islnads (area IX).

Table 1. Collection data for stations at where polychaetes were collected in survey.

Area	Stn. No.	Date	Collection		Position	Depth (m)
I	1	2006/10/25	*Rinkai-Maru*	St.1	35°07.76′N,139°33.96′E–35°07.34′N,139°33.86′E	100–111
I	2	2006/10/25	*Rinkai-Maru*	St.2	35°07.79′N,139°34.41′E–35°07.44′N,139°34.40′E	93–97
II	1	2006/10/26	*Rinkai-Maru*	St.1	35°06.81′N,139°33.87′E–35°06.76′N,139°33.81′E	502–455
II	2	2007/08/23	*Rinkai-Maru*	St.1	35°07.23′N,139°34.12′E–35°07.35′N,139°34.22′E	131–104
II	3	2007/08/23	*Rinkai-Maru*	St.2	35°07.17′N,139°33.81′E–no data	198–no data
II	4	2007/11/24	*Tansei-Maru*	St.L-1-700	35°03.81′N,139°12.22′E–35°04.82′N,139°12.59′E	699–754
II	5	2007/11/24	*Tansei-Maru*	St.L-1-800	35°03.41′N,139°12.55′E–35°02.73′N,139°13.73′E	563–756
II	6	2007/11/25	*Tansei-Maru*	St.L-1-200	35°02.83′N,139°12.07′E–35°02.49′N,139°11.90′E	280–116
II	7	2007/11/25	*Tansei-Maru*	St.L-1-500	35°03.05′N,139°12.28′E–35°02.82′N,139°12.01′E	510–255
II	8	2007/11/25	*Tansei-Maru*	St.L-2-100	35°05.68′N,139°35.45′E–35°05.66′N,139°35.65′E	113–104
II	9	2007/11/25	*Tansei-Maru*	St.L-2-200	35°03.52′N,139°37.43′E–35°04.16′N,139°37.53′E	397–286
II	10	2007/11/25	*Tansei-Maru*	St.L-2-350	35°04.54′N,139°34.67′E–35°04.50′N,139°35.30′E	364–302
II	11	2007/11/25	*Tansei-Maru*	St.L-2-500	35°04.58′N,139°34.04′E–35°04.55′N,139°34.79′E	535–338
II	12	2007/11/25	*Tansei-Maru*	St.L-2-800	35°03.20′N,139°33.01′E–35°02.83′N,139°31.98′E	793–905
II	13	2007/11/28	*Tansei-Maru*	St.L-2′-200	35°04.79′N,139°35.27′E–35°04.86′N,139°35.12′E	223–221
II	14	2007/11/28	*Tansei-Maru*	St.L-2′-350	35°04.41′N,139°35.54′E–35°04.44′N,139°35.31′E	326–321
II	15	2007/11/28	*Tansei-Maru*	St.L-2′-500	35°03.79′N,139°35.53′E–35°03.98′N,139°35.33′E	513–438
II	16	2007/11/28	*Tansei-Maru*	St.L-2′-600	35°03.97′N,139°34.93′E–35°04.27′N,139°34.96′E	604–407
II	17	2007/11/28	*Tansei-Maru*	St.L-2′-700	35°03.81′N,139°34.42′E–35°04.09′N,139°34.04′E	715–728
II	18	2007/11/28	*Tansei-Maru*	St.L-2′-1000	35°02.78′N,139°33.27′E–35°03.04′N,139°33.74′E	716–681
III	1	2007/11/27	*Tansei-Maru*	St.L-3-100	34°33.11′N,139°17.42′E–34°33.65′N,139°17.67′E	143–143
III	2	2007/11/27	*Tansei-Maru*	St.L-3-200	34°34.04′N,139°18.37′E–34°33.56′N,139°17.81′E	198–152
III	3	2007/11/27	*Tansei-Maru*	St.L-3-300	34°36.95′N,139°15.81′E–34°36.70′N,139°16.37′E	316–328
III	4	2007/11/27	*Tansei-Maru*	St.L-3-400	34°37.83′N,139°14.91′E–34°37.30′N,139°15.17′E	372–342
III	5	2007/11/27	*Tansei-Maru*	St.L-3-500	34°39.89′N,139°12.19′E–34°40.03′N,139°13.87′E	551–504
IV	1	2007/07/24	*Takunan*	St.2	33°04.12′N,139°51.14′E–33°03.89′N,139°50.94′E	?–31
IV	2	2007/07/24	*Takunan*	St.4	33°01.55′N,139°51.56′E–33°01.50′N,139°51.52′E	80–79
IV	3	2007/07/24	*Takunan*	St.7	33°01.37′N,139°53.29′E–33°01.22′N,139°53.10′E	103–99
IV	4	2007/09/10	*Takunan*	St.4	33°22.64′N,139°42.52′E–33°22.82′N,139°42.65′E	112–114
IV	5	2007/09/10	*Takunan*	St.5	33°21.81′N,139°39.50′E–33°21.98′N,139°39.49′E	146–147
IV	6	2007/09/10	*Takunan*	St.6	33°25.08′N,139°42.08′E–33°25.26′N,139°42.06′E	142–136
IV	7	2007/09/11	*Takunan*	St.8	32°58.45′N,139°46.71′E–32°58.39′N,139°46.85′E	207–206
IV	8	2007/09/11	*Takunan*	St.9	33°06.01′N,139°52.34′E–33°05.86′N,139°52.33′E	80–76
IV	9	2007/09/11	*Takunan*	St.10	33°06.62′N,139°51.96′E–33°06.54′N,139°51.97′E	68–66
IV	10	2008/07/16	*Takunan*	St.1	33°19.31′N,139°35.52′E–33°19.21′N,139°35.75′E	195–188
IV	11	2008/07/16	*Takunan*	St.3	33°21.97′N,139°41.64′E–33°21.97′N,139°41.93′E	116–123
IV	12	2008/07/17	*Takunan*	St.4	33°18.93′N,140°10.64′E–33°18.83′N,140°10.42′E	221–226
IV	13	2008/07/17	*Takunan*	St.5	33°19.22′N,140°10.77′E–33°19.12′N,140°10.43′E	205–201
IV	14	2007/11/26	*Tansei-Maru*	St.L-7-200	33°20.91′N,139°41.19′E–33°21.07′N,139°40.51′E	213–185

Table 1. (Continued)

Area	Stn. No.	Date	Collection		Position	Depth (m)
IV	15	2007/11/26	*Tansei-Maru*	St.L-7-300	33°19.48′N,139°40.80′E–33°19.11′N,139°40.93′E	341–361
IV	16	2007/11/26	*Tansei-Maru*	St.L-7-500	33°16.21′N,139°40.58′E–33°15.77′N,139°40.87′E	525–579
IV	17	2007/11/26	*Tansei-Maru*	St.L-7-800	33°11.47′N,139°38.53′E–33°10.92′N,139°39.11′E	769–680
IV	18	2007/11/26	*Tansei-Maru*	St.L-7-1300	33°12.20′N,139°33.13′E–33°10.90′N,139°32.86′E	1330–1324
V	1	2009/11/16	*Shin'yo-Maru*	St.SY09-01	27°44.05′N,142°09.19′E–27°44.01′N,142°09.15′E	109–108
V	2	2009/11/16	*Shin'yo-Maru*	St.SY09-04	27°44.99′N,142°10.52′E–27°44.79′N,142°10.40′E	159–152
V	3	2009/11/16	*Shin'yo-Maru*	St.SY09-05	27°45.10′N,142°11.05′E–27°44.78′N,142°10.89′E	193–172
V	4	2009/11/16	*Shin'yo-Maru*	St.SY09-06	27°45.42′N,142°11.83′E–27°45.13′N,142°11.57′E	301–237
V	5	2009/11/16	*Shin'yo-Maru*	St.SY09-07	27°45.75′N,142°12.54′E–27°45.41′N,142°12.10′E	499–365
V	6	2009/11/16	*Shin'yo-Maru*	St.SY09-09	27°41.13′N,142°11.11′E–27°41.00′N,142°10.88′E	124–112
V	7	2009/11/16	*Shin'yo-Maru*	St.SY09-10	27°41.61′N,142°11.88′E–27°41.54′N,142°11.61′E	148–139
VI	1	2008/10/24	*Koyo*	St.3	27°07.45′N,142°06.38′E–27°07.86′N,142°06.90′E	154–152
VI	2	2008/10/24	*Koyo*	St.5	27°04.49′N,142°06.78′E–27°04.55′N,142°07.03′E	128–117
VI	3	2008/10/24	*Koyo*	St.6	27°04.64′N,142°08.52′E–27°04.69′N,142°08.68′E	88–88
VI	4	2008/10/27	*Koyo*	St.11	27°03.62′N,142°08.89′E–27°03.66′N,142°08.88′E	56–62
VI	5	2008/10/28	*Koyo*	St.12	27°00.19′N,142°11.61′E–27°00.21′N,142°11.74′E	136–135
VI	6	2008/10/28	*Koyo*	St.13	26°58.07′N,142°09.07′E–26°57.81′N,142°09.06′E	150–152
VI	7	2008/10/28	*Koyo*	St.15	27°04.55′N,142°09.16′E–27°04.73′N,142°09.31′E	83–81
VI	8	2008/10/29	*Koyo*	St.17	27°05.02′N,142°15.22′E–27°04.86′N,142°15.21′E	70–69
VI	9	2008/10/29	*Koyo*	St.18	27°05.01′N,142°14.89′E–27°04.88′N,142°14.87′E	49–48
VI	10	2008/10/29	*Koyo*	St.19	27°06.07′N,142°18.56′E–27°06.06′N,142°18.76′E	175–176
VI	11	2008/10/29	*Koyo*	St.20	27°04.23′N,142°15.19′E–27°04.22′N,142°15.06′E	54–52
VI	12	2008/10/29	*Koyo*	St.21	27°03.84′N,142°15.44′E–27°03.70′N,142°15.23′E	95–98
VI	13	2008/10/30	*Koyo*	St.22	27°10.65′N,142°07.27′E–27°10.71′N,142°07.37′E	150–151
VI	14	2008/10/30	*Koyo*	St.25	27°07.31′N,142°07.70′E–27°07.03′N,142°07.64′E	129–127
VI	15	2009/07/10	*Koyo*	St.1	27°02.23′N,142°07.24′E–27°02.12′N,142°07.32′E	137–137
VI	16	2009/07/10	*Koyo*	St.7	27°01.72′N,142°07.39′E–27°01.93′N,142°07.28′E	138–136
VI	17	2009/07/11	*Koyo*	Futami, on rope		A.R
VI	18	2009/07/15	*Koyo*	St.21	27°13.09′N,142°09.19′E–27°13.19′N,142°09.23′E	136–136
VI	19	2009/07/15	*Koyo*	St.27	27°06.29′N,142°13.88′E–27°06.28′N,142°14.01′E	81–83
VI	20	2009/07/15	*Koyo*	St.28	27°07.05′N,142°10.68′E–27°07.02′N,142°10.69′E	52–52
VI	21	2009/07/16	*Koyo*	St.29	27°06.59′N,142°10.25′E–27°06.58′N,142°10.21′E	61–60
VI	22	2009/07/16	*Koyo*	St.30	27°07.22′N,142°10.60′E–27°07.28′N,142°10.58′E	52–50
VI	23	2009/07/16	*Koyo*	St.34	27°02.34′N,142°07.52′E–27°02.55′N,142°07.34′E	140–141
VI	24	2010/07/07	*Koyo*	St.19	27°04.82′N,142°08.95′E–27°04.75′N,142°09.06′E	87–91
VI	25	2010/07/08	*Koyo*	St.24	27°07.23′N,142°10.70′E–27°07.14′N,142°10.73′E	47–51
VI	26	2010/07/09	*Koyo*	St.26	27°04.68′N,142°11.72′E–27°04.68′N,142°11.56′E	36–41
VI	27	2010/07/09	*Koyo*	St.27	27°06.65′N,142°10.42′E–27°06.61′N,142°10.29′E	59–60
VI	28	2010/07/09	*Koyo*	St.30	27°00.14′N,142°12.11′E–27°00.16′N,142°11.91′E	147–139
VI	29	2009/11/18	*Shin'yo-Maru*	St.SY09-16	27°04.91′N,142°10.37′E–27°04.98′N,142°10.43′E	60
VI	30	2009/11/18	*Shin'yo-Maru*	St.SY09-18	27°06.11′N,142°08.89′E–27°06.07′N,142°09.06′E	101–98

Table 1. (Continued)

Area	Stn. No.	Date	Collection		Position	Depth (m)
VI	31	2009/11/18	*Shin'yo-Maru*	St.SY09-20	27°09.74′N,142°06.76′E–27°09.72′N,142°06.83′E	157–159
VI	32	2009/11/18	*Shin'yo-Maru*	St.SY09-21	27°12.80′N,142°05.13′E–27°12.81′N,142°05.33′E	161–159
VI	33	2009/03/19	*Tansei-Maru*	St.TW-01-03	27°01.45′N,142°05.79′E–27°01.48′N,142°05.87′E	221–194
VI	34	2009/03/19	*Tansei-Maru*	St.TW-02-01	27°03.01′N,142°04.84′E–27°03.01′N,142°04.87′E	191–190
VI	35	2009/03/19	*Tansei-Maru*	St.TW-02-02	27°03.00′N,142°05.00′E–27°02.99′N,142°05.04′E	182–187
VI	36	2009/03/19	*Tansei-Maru*	St.TW-02-03	27°03.03′N,142°05.29′E–27°03.00′N,142°05.40′E	166–166
VI	37	2009/03/19	*Tansei-Maru*	St.TW-02-04	27°02.94′N,142°07.17′E–27°02.95′N,142°07.25′E	141–152
VII	1	2009/07/13	*Koyo*	St.8	26°45.20′N,142°06.44′E–26°45.38′N,142°06.55′E	98–102
VII	2	2009/07/13	*Koyo*	St.9	26°45.64′N,142°05.75′E–26°45.87′N,142°05.88′E	102–118
VII	3	2009/07/13	*Koyo*	St.10	26°50.25′N,142°07.09′E–26°50.40′N,142°07.18′E	146–151
VII	4	2009/07/14	*Koyo*	St.13	26°34.10′N,142°10.79′E	97
VII	5	2009/07/14	*Koyo*	St.14	26°34.03′N,142°10.80′E–26°34.04′N,142°10.81′E	92–93
VII	6	2009/07/14	*Koyo*	St.15	26°24.79′N,142°10.92′E–26°24.81′N,142°10.92′E	107–109
VII	7	2010/07/05	*Koyo*	St.2	26°41.33′N,142°10.39′E–26°41.44′N,142°10.33′E	115–115
VII	8	2010/07/05	*Koyo*	St.3	26°45.32′N,142°05.99′E–26°45.30′N,142°06.28′E	106–92
VII	9	2010/07/05	*Koyo*	St.4	26°45.08′N,142°05.94′E–26°45.05′N,142°06.20′E	101–98
VII	10	2010/07/05	*Koyo*	St.6	26°44.29′N,142°06.23′E–26°44.29′N,142°06.37′E	76–73
VII	11	2010/07/05	*Koyo*	St.9	26°35.02′N,142°14.94′E–26°34.98′N,142°14.90′E	90-82
VII	12	2010/07/06	*Koyo*	St. 11	26°38.98′N,142°11.85′E–26°38.95′N,142°11.96′E	94–83
VIII	1	2009/03/18	*Tansei-Maru*	St.TE-02(2)	27°17.99′N,142°44.00′E–27°18.08′N,142°43.96′E	2855–2840
VIII	2	2009/03/19	*Tansei-Maru*	St.TW-05-01	27°05.02′N,142°00.36′E–27°05.03′N,142°00.58′E	1515–1477
VIII	3	2009/03/19	*Tansei-Maru*	St.TW-05-02	27°05.04′N,142°00.84′E–27°05.03′N,142°01.08′E	1430–1325
IX	1	2009/03/16	*Tansei-Maru*	St.KK-01-2(1)	26°40.00′N,140°55.54′E–26°39.99′N,140°55.63′E	173–165

1977), but no other species of polychaetes has been recorded from this area until now. The polychaetes in the three areas, off Toshima I., off Hachijōjima I. and Mukojima I., are reported for the first time.

In this survey polychaetes were collected from 103 stations, in depths between 31 and 2855 m, distributed from Sagami Bay to the Ogasawara Islands. The samples were collected by the R/V *Rinkai-Maru* of the Misaki Marine Biological Station, Graduate School of Science, The University of Tokyo, the R/V *Tansei-Maru* of the Independent Administrative Institution, Japan Agency for Marine-Earth Science and Technology: JAMSTEC, the T/V *Shin'yo-Maru* of the Tokyo University of Marine Science and Technology, the R/V *Takunan* of the Hachijō Branch, Tokyo Metropolitan Islands Area Research and Development Center of Agriculture, Forestry and Fisheries and the R/V *Koyo* of the Tokyo Metropolitan Ogasawara Fisheries Center. Sampling was carried out by the biological dredges. Details regarding sampling sites (Station number, latitude and longitude, depth) in the areas I–IX are given in Table 1. Three figures provide the detailed map of all localities mentioned in the text (Figs. 1–3).

A total of 202 species and 38 indeterminable species in 42 families of polychaetes were recognized. Five species, *Australonoe japonica* (from off Chichijima I.), *Lepidonotus takunanae* (from off Hachijōjima I.), *Lepidonotus specklus* (from off Hahajima I.), *Eunice pusilla* (from off Toshi-

ma I. and Hachijōjima I.) and *Lumbrineriopsis paucidentata* (from off Hachijōjima I. and Mukojima I.) are new to science. Ten species, *Paleanotus chrysolepis* and *Paleanotus debilis* (Chrysopetalidae), *Eupanthalis edriophthalma* (Acoetidae), *Neanthes unifasciata* (Nereididae), *Eranno bifrons* (Lumbrineridae), *Ampharete finmarchica* and *Schistocomus hiltoni* (Ampharetidae), *Lanice conchilega* and *Lanice seticornis* (Terebellidae) and *Euchone capensis* (Sabellidae) are newly added to the Japanese polychaetous fauna. Thirty-eight indeterminable species could not be identified to species due to fragments, damaged or juvenile individuals.

The bulk of the collections, including type-specimens, has been deposited at the Showa Memorial Institute, Tsukuba Research Center, National Museum of Nature and Science.

Description of Species

Order **Phyllodocida**

Family **Chrysopetalidae** Ehlers, 1864

Paleanotus chrysolepis Schmarda, 1861

Paleanotus chrysolepis: Augener, 1913: 76–78; Day, 1957: 66; Day, 1967a: 116–117, fig. 2. 1. l–m.

Materials. NSMT-Pol. S 2511, KY09 St.21 (3), NSMT-Pol. S 2512, KY09 St.30 (1).

Description. Three short anterior fragments examined. Prostomium round with two lateral antennae extending forward and short median antenna arising between two pairs of eyes. Palps stout and truncate. Peristomium with dorsal and ventral tentacular cirri. Paleae not covering centre of dorsum. Paleae nearest mid-dorsal line symmetrical with apex in middle, others asymmetrical with apex nearer inner margin; each with 16–20 ribs of equal size, rib on outer margin coarsely beaded. Dorsal cirri slender and imperfectly formed. Neuropodia with heterogomph falcigers with unidentate tips.

The species is newly added to the Japanese polychaetous fauna.

Distribution. South Africa, California, S.W. Australia; Japan (Chichijima Is.).

Paleanotus debilis (Grube, 1855)

Chrysopetalum debile: Fauvel, 1923: 123, fig. 44r–u.

Paleanotus debilis: Day, 1962: 635; Day, 1967a: 117, fig. 2. 1. g–k; Chambers and Muir, 1997: 52–53, fig. 5.

Materials. NSMT-Pol. S 2513, Tak07-9 St.5 (1), NSMT-Pol. S 2525, TW02-04 (2); NSMT-Pol. S 2514, KY09 St.28 (1); NSMT-Pol. S 2563, KY10 St.4 (1), NSMT-Pol. S 2564, KY10 St.27 (1).

Description. All body missing posterior ends. Prostomium oval with two pairs of eyes, tapered median antenna and two lateral antennae. Palps stout. Peristomium with few paleae and two pairs of tentacular cirri. Caruncle ovoid, about half length of prostomium, extending posteriorly. Dorsal cirri small and situated in bulbous cirrophore on notopodia below paleae. Ventral cirri projecting from large cirrophores below neuropodia. Central paleae of each row symmetrical with apex in middle; rest asymmetrical with apex inclined towards central one. Each palea with 6–8 narrow inner ribs and serrated edges. Neuropodia extending beyond notopodia. Neurosetae falcigerous with unidentate appendages with minute serrations along cutting edge.

The species is newly added to the Japanese polychaetous fauna.

Distribution. North Atlantic, Mediterranean Sea, Red Sea, Indian Ocean; Japan (Hachijōjima I., Chichijima Is., Hahajima I.).

Family **Aphroditidae** Malmgren, 1867

Aphrodita sibogae (Horst, 1916)

Aphroditella sibogae Horst, 1916: 66; Horst, 1917: 50, pl. 11, figs. 8–10.

Aphrodita sibogae: Hutchings and McRae, 1993: 307, fig. 60, tab. 1; Imajima, 1997a: 152–153, fig. 2a–t; Imajima, 2001a: 38; Imajima, 2003: 23–26.

Material. NSMT-Pol. S 1951, L-1-200 (1).

Distribution. Indonesian Archipelago; Japan

(Sagami Sea, Tosa Bay).

Laetmonice dolichoceras (Haswell, 1883)

Laetmonice dolichoceras: Hutchings and McRae, 1993: 325–327, figs. 38a–f, 39a–k, 59E, table 6; Imajima, 2007: 37–39, fig. 14.

Materials. NSMT-Pol. S 2499, KY09 St. 29 (1); NSMT-Pol. S 2517, KY10 St. 24 (1).

Distribution. Australia; Japan (Tokara Is., Tanegashima I., Chichijima Is.).

Laetmonice japonica McIntosh, 1885

Laetmonice japonica McIntosh, 1885: 50–51, pl. 8, fig. 1, pl. 4A, fig. 13, pl. 5A, figs. 9, 10; Imajima, 2006: 324; Imajima, 2009: 47.

Materials. NSMT-Pol. S 1589, L-3-500 (1), NSMT-Pol. S 1590, L-2′-350 (1).

Distribution. Yellow Sea; Japan (Hokkaido to Okinawa I., Toshima I.).

Laetmonice producta Grube, 1877

Laetmonice producta Grube, 1877: 512–513; Imajima, 2006: 324–325; Imajima, 2009: 47–48.

Materials. NSMT-Pol. S 1591, L-3-300 (1), NSMT-Pol. S 1592, L-3-400 (2), NSMT-Pol. S 1593, L-2′-200 (3).

Distribution. Australia, off Kerguelen; Japan (off Sanriku to around Nansei Islands, Toshima I.).

Pontogenia dentata Imajima, 2003

Pontogenia dentata Imajima, 2003: 31–37, figs. 17a–l, 18a–j, 19a–k; Imajima, 2005: 55.

Materials. NSMT-Pol. S 1972, L-2-100 (4).

Distribution. Japan (Sagami Bay to Kyūshū).

Pontogenia sagamiana Imajima, 2003

Pontogenia sagamiana Imajima, 2003: 40–46, figs. 23a–k, 24a–p, 25a–p; Imajima, 2006: 325.

Materials. NSMT-Pol. S 1594, L-2-100 (3).

Distribution. Japan (Sagami Bay, Sagami Sea, Amami-Ōshima I.).

Family **Polynoidae** Malmgren, 1867

Subfamily **Iphioninae** Baird, 1865

Iphione treadwelli Pettibone, 1986

Iphione treadwelli Pettibone, 1986: 19–21, fig. 7; Hanley and Burke, 1991: 43–45, fig. 13A–F; Imajima, 2005: 55–59, figs. 15A–E, 16A–E, 17A–G.

Materials. NSMT-Pol. S 1973, Tak07-9 St. 5 (4), NSMT-Pol. S 1974, Tak07-9 St. 10 (1); NSMT-Pol. S 1975, L-7-200 (1); NSMT-Pol. S 1976, KY09 St. 7 (1), NSMT-Pol. S 1977, KY09 St. 9 (1), NSMT-Pol. S 2217, KY09 St. 14 (2), NSMT-Pol. S 1978, KY09 St. 21 (1); NSMT-Pol. S 2518, KY10 St. 3 (1), NSMT-Pol. S 2519, KY10 St. 4 (1), NSMT-Pol. S 2520, KY10 St. 6 (1), NSMT-Pol. S 2560, KY10 St. 30 (1).

Distribution. Hawaiian Islands, Chesterfield Islands; Japan (Amami-Ōshima I., Okinawa I., Hachijōjima I., Chichijima Is., Hahajima I.).

Subfamily **Arctonoinae** Hanley, 1989

Australaugeneria michaelseni Pettibone, 1969 (Figs. 4A–D, 5A–E, 6A–N)

Australaugeneria michaelseni Pettibone, 1969: 22–25, figs. 11, 12; Imajima, 2001b: 15, fig. 3.

Materials. NSMT-Pol. S 2221, KY09 St. 9 (2).

Description. Of two anterior fragments devoided posterior end, larger one 12 mm long, 4 mm wide including setae for 29 segments, others 10 mm long, 4.5 mm wide including setae for 19 segments. Body dorsally flattened, tapering slightly posterioly.

Prostomium bilobed, wider than long, without distinct cephalic peaks. Two pairs of eyes, anterior pair lying dorsolaterally at widest part of prostomiun, posterior pair lying dorsally near posterior margin of prostomium (Fig. 4A, B). Ceratophore of median antenna large, cylindrical, inserted in anterior notch; style long, slender, gradually tapering to filiform tip (Fig. 4D). Ceratophore of lateral antennae slightly shorter than median one, inserted ventrally on underside of prostomium; styles short, slender, about 2/3 as long as median antenna. Palps thick, gently tapering to tips. Tentacular segment with dorsal and ventral tentacular cirri tapering gradually to filiform tips, without setae (Fig. 4B, D). Pharynx ex-

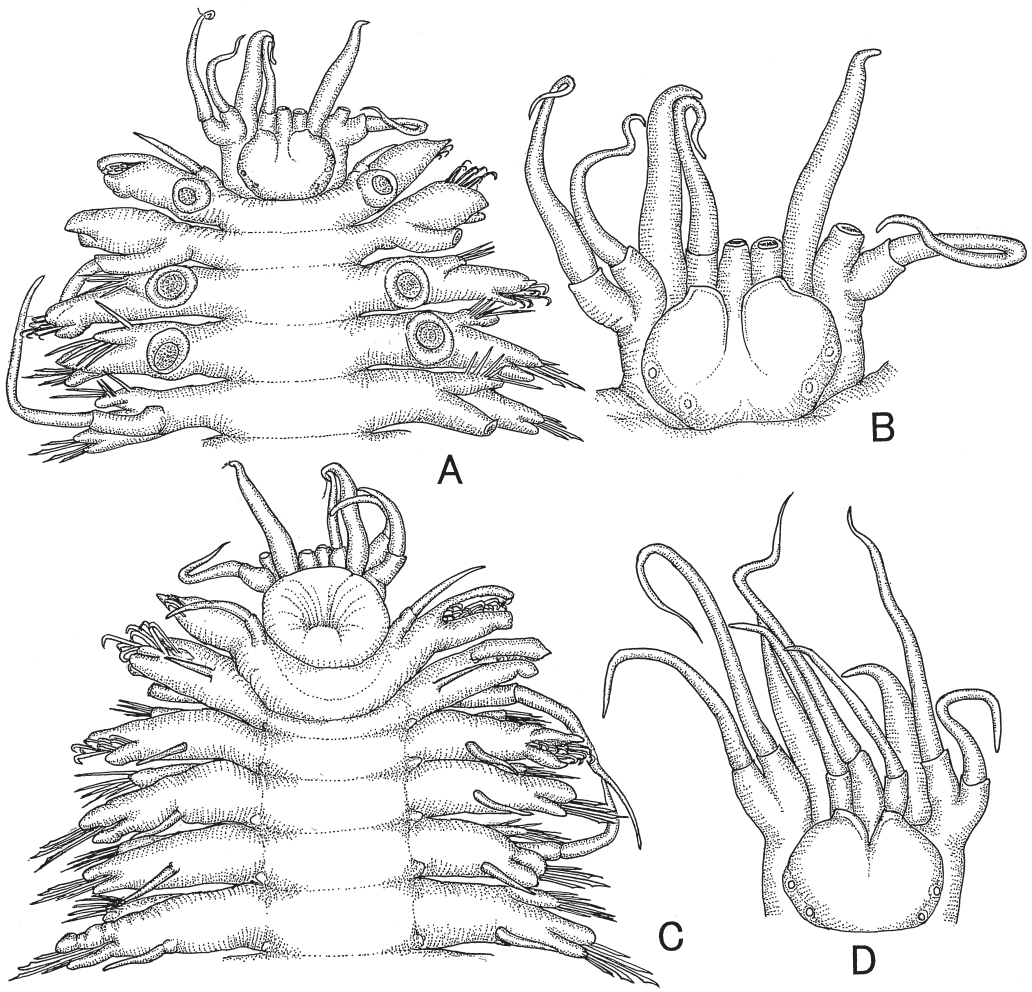

Fig. 4. *Australaugeneria michaelseni* Pettibone. ——A, anterior end, dorsal view, × 20; B, prostomium and tentacular cirri from same, dorsal view, × 42; C, anterior end, ventral view, × 20; D, prostomium and tentacular cirri from others, × 42.

tended ventrally, at right angles to body (Fig. 4C); distal end encircled with 9 pairs of papillae and 2 pairs of light colored jaws.

Elytra 15 pairs, on segments 2, 4, 5, 7 alternate segments to 21, 23, 26, 29 and 32. Elytra soft, translucent, without tubercles or papillae (Fig. 6A).

Segment 2 (buccal segment) with first pair of elytra without dorsal nuchal fold; notosetae lacking, neurosetae strongly hooked; ventral buccal cirri longer than following ventral cirri (Figs. 4A, C, 5A). All parapodia subbiramous; notopodia smaller than neuropodia, with projecting acicular lobes (Fig. 5D, E). Dorsal cirri with large, cylindrical cirrophores on posterior sides of notopodia; styles long, tapering to filiform tip (Fig. 5E). Notosetae few in number stout, tapering to entire tips, with or without spinous rows (Fig. 6B–F). Neuropodia long, deeply notched dorsally and ventrally, forming subequal anterior and posterior rounded lobes; presetal neuropodial lobes of segments 2, 3 and 4 enlarged, hoodlike (Fig. 5A–C). Neurosetae on segments 2, 3 and 4 of several kinds enclosed in enlarged hoodlike presetal neuropodial lobes; stout golden hooks (Fig. 6G), slender, with wider basal regions and short sec-

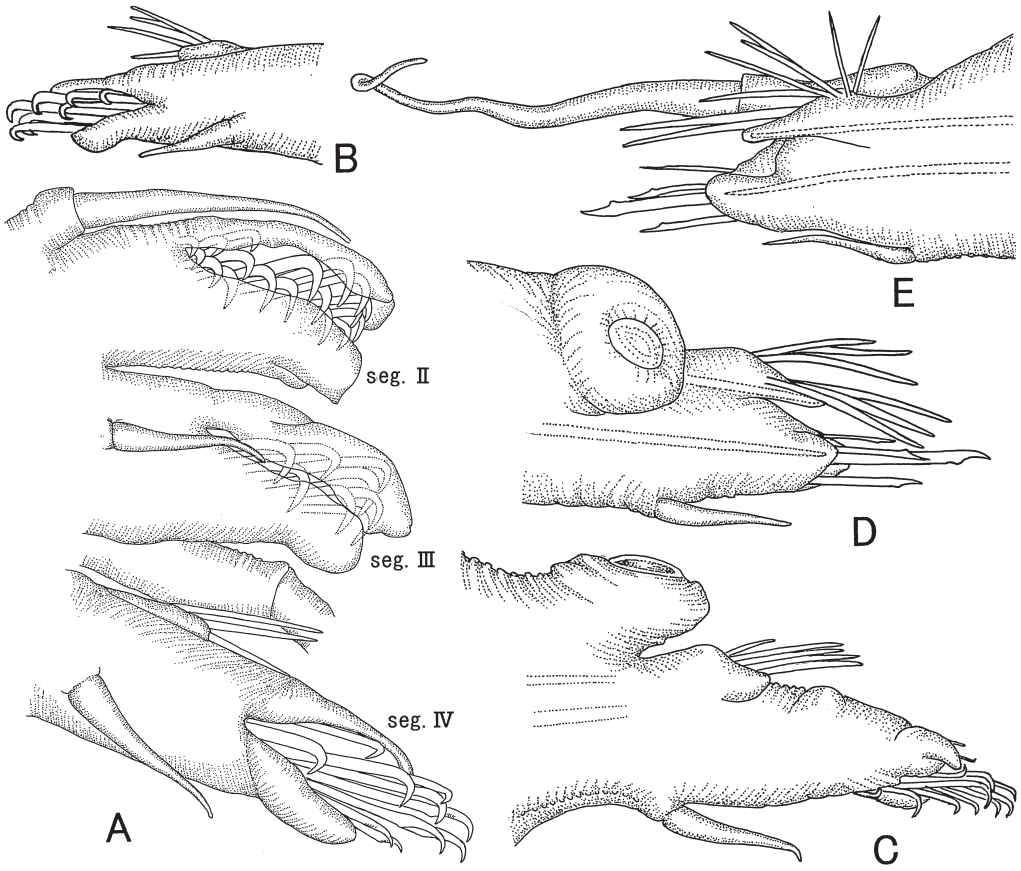

Fig. 5. *Australaugeneria michaelseni* Pettibone. ——A, left parapodia from segments 2, 3, 4, ventral view, × 67; B, right parapodium from segment 3, ventral view, × 45; C, left parapodium from segment 4, anterior view, × 40; D, left parapodium from segments 11, anterior view, × 40; E, right parapodium from segment 12, anterior view, × 40.

ondary tooth (Fig. 6H) or with rounded tip (Fig. 6I). Neurosetae on latter parapodia few in number; upper ones more slender, with stouter basal portions and bified tips (Fig. 6J, K); lower neurosetae stout, with short spinous regions and slightly hooked tips (Fig. 6L). Nephridial papillae beginning on segment 17.

Distribution. Southwest Australia; Japan (Kushimoto, Hahajima I.).

Medioantenna clavata Imajima, 1997

Medioantenna clavata Imajima, 1997b: 14–18, figs. 7a–f, 8a–e, 9a–j.

Materials. NSMT-Pol. S 2222, KY09 St. 21 (2).

Distribution. Japan (Sagami Bay, Chichijima Is.).

Paradyte levis (Marenzeller, 1902)

Scalisetosus levis Marenzeller, 1902: 575–576, pl. 3, fig. 12; Imajima and Hartman, 1964: 39.

Paradyte levis: Pettibone, 1969: 16; Imajima, 1997b: 6–9, figs. 3a–f, 4a–g.

Materials. NSMT-Pol. S 2230, KY09 St. 7 (1), NSMT-Pol. S 2231, KY09 St. 8 (1), NSMT-Pol. S 2232, KY09 St. 14 (2).

Distribution. Japan (Sagami Bay to Tsushima Strait, Chichijima Is., Hahajima I.).

Showascalisetosus shimizui Imajima, 1997

Showascalisetosus shimizui Imajima, 1997b: 10–13, figs. 5a–j, 6a–f; Imajima, 2001b: 24–25, fig. 10.

Materials. NSMT-Pol. S 1805, Tak08 St. 1 (1),

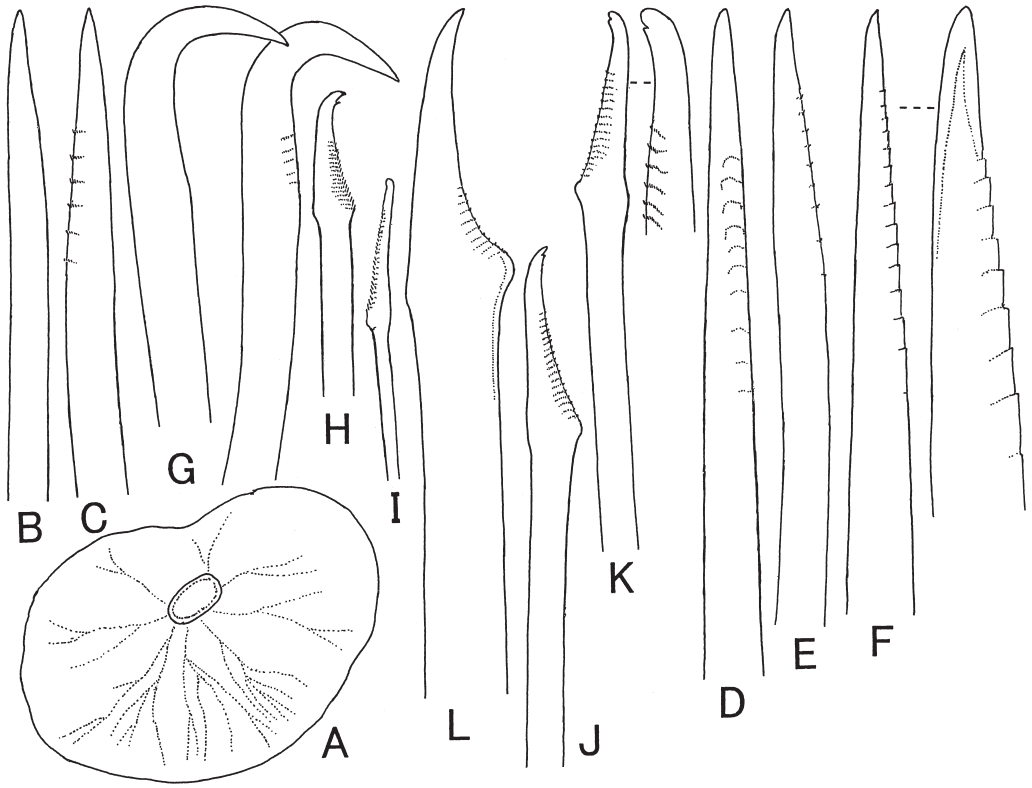

Fig. 6. *Australaugeneria michaelseni* Pettibone. ——A, elytron, × 17; B, C, notosetae from segment 4, × 303; D, notosetae from segment 11, × 303; E, F, notosetae from segment 12, × 303, with detail of distal region, × 612; G, neuropodial hooks from segment 4, × 303; H, I, neurosetae from same, × 303; J, K, upper neurosetae from segment 12, × 303, with detail of distal region, × 612; L, lower neuroseta from same, × 303.

NSMT-Pol. S 1984, Tak08 St. 4 (1).

Distribution. Japan (Sagami Bay, Hachijōjima I.).

Subfamily **Harmothoinae** Horst, 1917

Australonoe japonica sp. nov. (Fig. 7A–K)

Type Materials. Holotype, NSMT-Pol. S H 532: E. Chichijima I., 27°04.23′N, 142°15.19′E – 27°04.22′N, 142°15.06′E, 54–52 m, Oct. 2008 (KY08 St. 20: R/V *Koyo*). Paratypes, NSMT-Pol. S P 533: KY08 St. 6 (1); S P 534: same locality as holotype (2); S P 535: KY09 St. 29 (1).

Description. Holotype of largest specimen 21 mm long, 4.5 mm wide including parapodia for 39 setigerous segments; paratypes somewhat damaged and lacking posterior ends. Body dorsally flattened, tapering posteriorly, without color markings.

Prostomium bilobed, wider than long, with distinct cephalic peaks. Two pairs of eyes, anterior pair lying dorsolaterally at widest part of prostomium, posterior pair lying dorsally near posterior margin of prostomium, closer to midline. Ceratophore of median antenna large, inserted in anterior notch, style missing. Lateral antennae with short ceratophores, inserted ventrally on underside of prostomium; styles slender, smooth, tapering to filiform tips. Palps thick, gently tapering to tips, minutely papillated (Fig. 7A).

Tentacular segment not visible dorsally; tentaculophores lateral to prostomium, each with single seta; dorsal and ventral tentacular cirri missing; facial tubercles very prominent (Fig. 7B). Segment 2 with large nuchal fold (Fig. 7A), with first pair of elytrophores, biramous parapodia; ventral

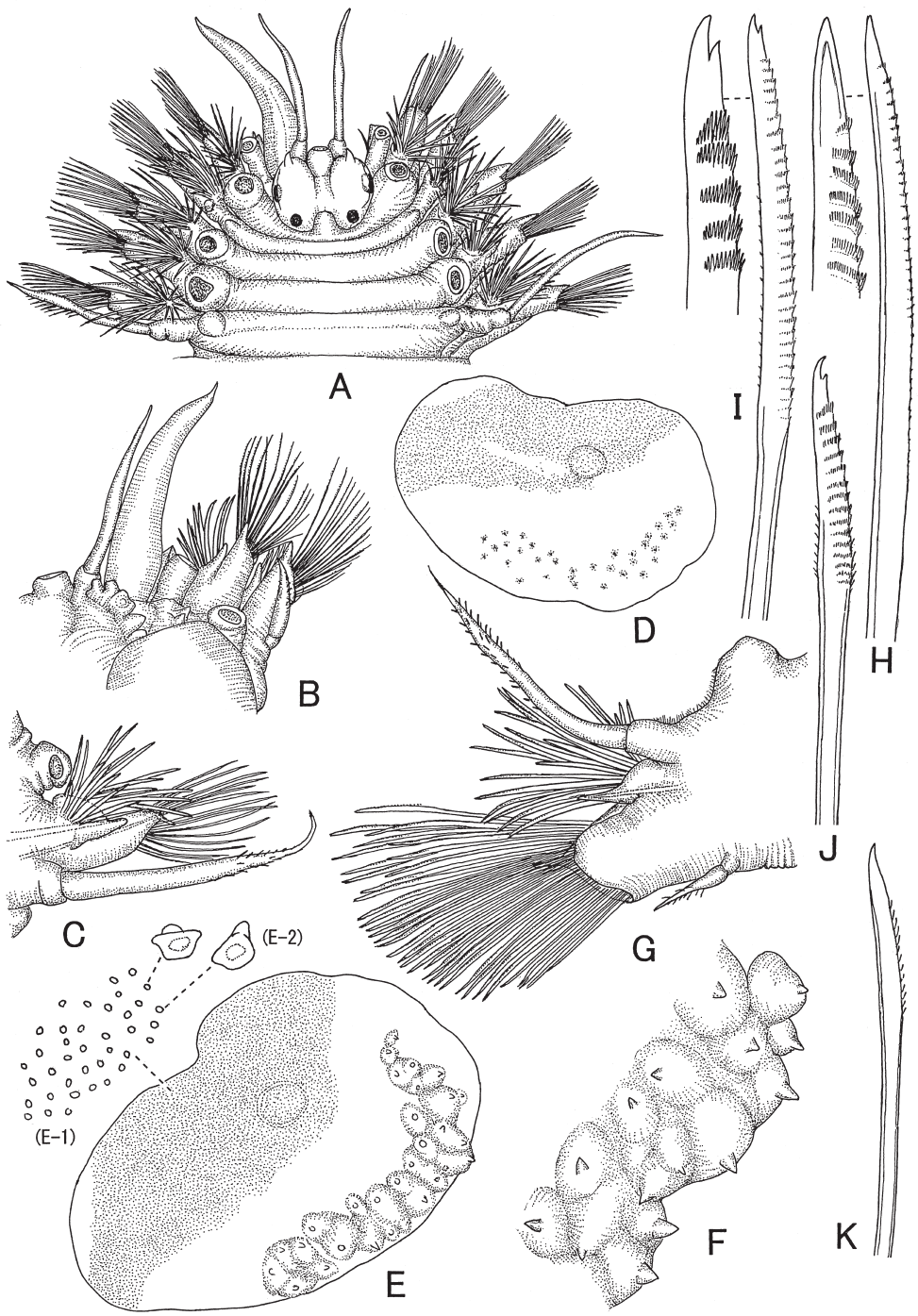

Fig. 7. *Australonoe japonica* sp. nov. ——A, anterior end, dorsal view, × 18; B, prostomium and buccal segment, ventrolateral view, × 24; C, left parapodium from segment 2, anterior view, × 27; D, 1st elytron, × 20; E, median elytra, × 20, with detail of microtubercles, (E-1), × 106, (E-2), × 604; F, cluster of mammiform tubercles on elytron, × 53; G, left parapodium from segment 22, posterior view, × 27; H, notoseta, × 150, with detail of distal tip, × 300; I, upper neuroseta from median parapodium, × 150, with detail of distal tip, × 300; J, middle neuroseta from same, × 150; K, lower neuroseta from same, × 150.

buccal cirri much longer than following ventral cirri, with clavate papillae (Fig. 7C).

Elytra 16 pairs, on segments 2, 4, 5, 7, alternate segments to 21, 23, 26, 29, 32 and 35, covering dorsum entirely. Elytra large, reniform, soft and flexible, without fringe papillae. Elytra of first pair small, reniform, inner elytral surface covered with numerous round microtubercles, and outer part of elytron with small, conical to blunt knobs (Fig. 7D). Remaining elytra with slightly folded over surface and with numerous microtubercles on inner elytral surface, each elytron with elongate cluster composed of opaque, mammiform tubercles on outer borders (Fig. 7E, F).

Parapodia biramous, similar along length of body. Notopodium smaller than neuropodium, conical, with prominent acicular extension. Neuropodium with longer, subtriangular presetal acicular lobe with supra-acicular digitiform process, and shorter, rounded postsetal lobe. Dorsal cirri with large, cylindrical cirrophores on posterior sides of notopodia; styles long, tapering to filiform tip. Ventral cirri shorter than neuropodium, cirriform, sparsely covered with minute papillae (Fig. 7G). Nephridial papillae beginning on segment 6, onwards.

Notosetae stouter than neurosetae; outer ones in palisade, short, with close-set spinous rows along convex edge; inner ones larger, with distinct numerous spinous rows below bare, tapered tips (Fig. 7H). Neurosetae long, straight; upper ones with longest spinous regions with many alternating rows of strong serrations below fine, bidentate tips (Fig. 7I); middle ones similar, but with fewer rows of serrations (Fig. 7J); lower ones with very few rows of fine serrations below unidentate tips (Fig. 7K). Pygidium with pair of anal cirri resembling dorsal cirri, anus terminal.

Remarks. The original generic diagnosis of *Australonoe* and the description of the type species *A. willani* were provided by Hanley (1993) from Western Australia. *Australonoe japonica*, the second species of *Australonoe*, can be distinguished from *A. willani* in the characteristics of the elytral tubercles.

The genus is reported as a part of the Japanese fauna for the first time.

Etymology. The species is named because it is the first species of the genus from Japanese waters.

Distribution. Japan (Chichijima Is.).

Harmothoe cylindrica Imajima, 1997

Harmothoe cylindrica Imajima, 1997b: 25–29, figs. 12a–h, 13a–i.

Materials. NSMT-Pol. S 2224, KY09 St. 7 (1), NSMT-Pol. S 2225, KY09 St. 13 (1), NSMT-Pol. S 2226, KY09 St. 14 (1), NSMT-Pol. S 2227, KY09 St. 21 (1), NSMT-Pol. S 2228, KY09 St. 29 (1), NSMT-Pol. S 2229, KY09 St. 30 (2).

Distribution. Japan (Sagami Bay, Sagami Sea, Chichijima Is., Hahajima I.).

Harmothoe forcipata (Marenzeller, 1902)

Evarne forcipata Marenzeller, 1902: 573, pl. 2, fig. 7; Imajima, 1997b: 21–25, figs. 10a–f, 11a–s; Imajima, 2001b: 40–41, fig. 23.

Materials. NSMT-Pol. S 1791, L-2-200 (4), NSMT-Pol. S 1792, L-2′-1000 (1).

Distribution. Japan (Sagami Bay, Sagami Sea, Suruga Bay).

Harmothoe imbricata (Linnaeus, 1767)

Aphrodita imbricata Linnaeus, 1767, p. 1084.

Harmothoe imbricata: Imajima, 1997b: 29–31, fig. 14a–l; Imajima, 2001b: 46–47, fig. 27; Imajima, 2009: 56.

Material. NSMT-Pol. S 1793, L-2-100 (1).

Distribution. Great Britain, Arctic and north Pacific oceans, Indian Ocean; Japan (Hokkaido to Kyūshū).

Paralepidonotus ampulliferus (Grube, 1878)

Paralepidonotus ampulliferus: Horst, 1915: 8; Day, 1967a: 47–48, fig. 1. 4. a–f; Hanley and Burke, 1990: 211–213, fig. 4A–J; Hanley, 1991: 1055–1062, figs. 1–5; Imajima, 1997b: 50–53, figs. 25a–g, 26a–j; Imajima, 2001b: 60–61, fig. 37.

Material. NSMT-Pol. S 1804, L-3-500 (1).

Distribution. Philippines, East Africa, Australia; Japan (Sagami Bay to Amakusa, Toshima I.).

Subfamily **Lepidastheniinae** Pettibone, 1989

Lepidasthenia interrupta (Marenzeller, 1902)

Halosydna interrupta Marenzeller, 1902: 570, pl. 1, fig. 2.

Lepidasthenia interrupta: Seidler, 1924: 163–164; Imajima, 1997b: 57–59, fig. 28a–k; Imajima, 2001b: 68–69, fig. 42.

Materials. NSMT-Pol. S 1801, Rin07 St. 1 (1); NSMT-Pol. S 1799, L-2-350 (1), NSMT-Pol. S 1800, L-2′-350 (1).

Distribution. Japan (off Sanriku to Tsushima Strait).

Lepidasthenia izukai Imajima and Hartman, 1964

Lepidasthenia izukai Imajima and Hartman, 1964: 22–23; Imajima, 1997b: 54–55, fig. 27a–n; Imajima, 2001b: 70–71, fig. 43; Imajima, 2006: 326.

Material. NSMT-Pol. S 1802, L-3-100 (1).

Distribution. Yellow Sea; Japan (off Sanriku to Kagoshima Bay, Toshima I.).

Subfamily **Lepidonotinae** Willey, 1902

Lepidonotus carinulatus (Grube, 1870)

Lepidonotus carinulatus: Marenzeller, 1902: 571, pl. 1, fig. 4; Imajima, 1997b: 95–98, figs. 45a–k, 46a–l; Imajima, 2001b: 94–95, fig. 57; Imajima, 2006: 327.

Materials. NSMT-Pol. S 2305, Rin07 St. 2 (1); NSMT-Pol. S 1794, L-2-200 (2), NSMT-Pol. S 1796, L-3-300 (2), NSMT-Pol. S 1797, L-3-400 (4), NSMT-Pol. S 1798, L-3-500 (2), NSMT-Pol. S 1795, L-2′-200 (3).

Distribution. Red Sea, Indian Ocean, Australia, Philippines; Japan (Sagami Bay to Amami-Ōshima I., Toshima I.).

Lepidonotus takunanae sp. nov. (Figs. 8A–F, 9A, 10A–C)

Lepidonotus cristatus var. *ornata* Potts, 1910: 333–334, pl. 18, figs. 6, 7.

Type Materials. Holotype, NSMT-Pol. S H 536: off Hachijōjima I., 33°21.81′N, 139°39.50′E – 33°21.98′N, 139°39.49′E, 146–147 m, Sep. 2007 (Tak07-9 St. 5; R/V *Takunan*). Paratype, NSMT-Pol. S P 537: L-7-200 (1).

Description. Holotype in median size 17 mm long, 5 mm wide including parapodia for 25 setigerous segments. Body flattened and fusiform, without color pattern on dorsal surface.

Prostomium bilobed, longer than wide; two pairs of eyes, anterior pair lying dorsolaterally at widest part of prostomium, posterior pair slightly closer to midline. Median antenna with large cylindrical ceratophore inserted in anterior notch; style of moderate length, cylindrical, smooth, tapering to subterminal swelling and filiform tip. Lateral antennae attached distally on anterior prolongations of prostomium; styles similar to median antenna. Palps stout basally, gently tapering to tips. Tentacular segment not visible dorsally. Tentaculophores long, slender, lateral to prostomium, each with single seta and 2 pairs of tentacular cirri. Second segment with first pair of elytra, biramous parapodia, and smooth ventral buccal cirri larger than following ventral cirri (Figs. 8A, 10A). Middorsal area of second segment with large, rectangular nuchal lobe with two small anterior protuberances. Pharynx with 9 pairs of soft papillae and 2 pairs of chitinous jaws.

Elytra 12 pairs, on segments 2, 4, 5, 7, alternate segments to 23. Elytra covering dorsum entirely, overlapping medially and posteriorly. First pair of elytra circular, without fringe of papillae, microtubercles and macrotubercles occurring around inner part of elytra; macrotubercles variable in size and shape, spined cone or thick, spinous tubercles with radiating basal spines (Fig. 8B); elytral surface with three basally flattened polygonal tubercles (Fig. 8B–2). Subsequent pairs of elytra reniform without marginal papillae; anterior half of each elytron covered with numerous spinose microtubercles, becoming larger towards elytral centre. Posterior half of each elytron with 2–5 large, characteristic macrotubercles arranged sideways (Fig. 9A), each bordered by basally flattened spines.

Parapodia biramous, similar along length of body. Notopodia smaller than neuropodia, conical

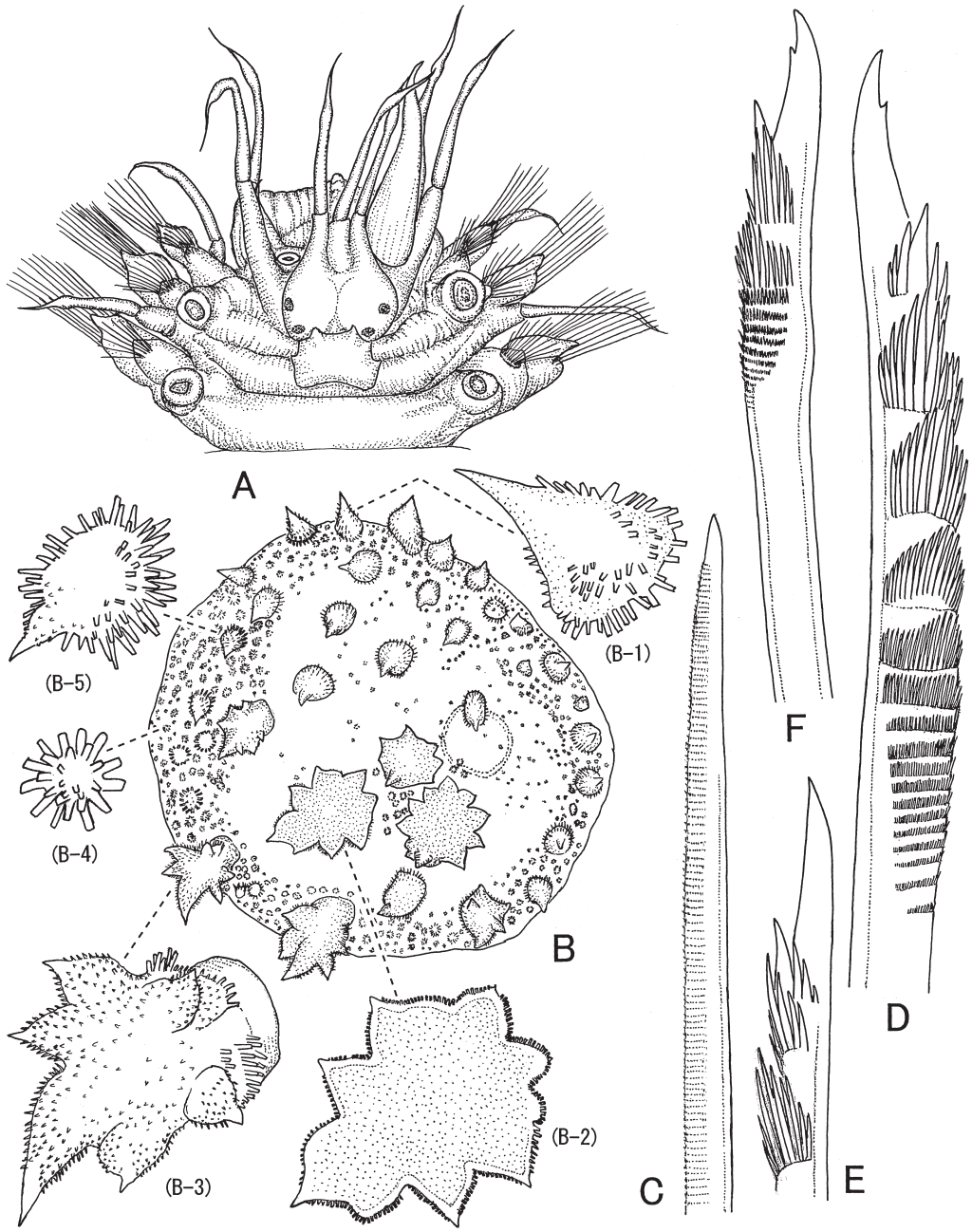

Fig. 8. *Lepidonotus takunanae* sp. nov. —— A, anterior end, dorsal view, × 17; B, right 1st elytron from segment 2, × 32, with detail of tubercles (B-1~5): (B-1, 5), × 160, (B-2), × 78, (B-3), × 112, (B-4), × 206; C, notoseta, × 230; D, upper bidentate neuroseta from 7th parapodium, × 245; E, upper unidentate neuroseta from same, × 245; F, lower bidentate neuroseta from same, × 245.

with short acicular lobe. Dorsal cirri with cirrophores large, much wider basally; styles long, cylindrical, smooth, tapering to subterminal swelling and filiform tips (Fig. 10C). Neuropodia with longer, subtriangular presetal acicular lobe without supra-acicular process, and shorter, rounded

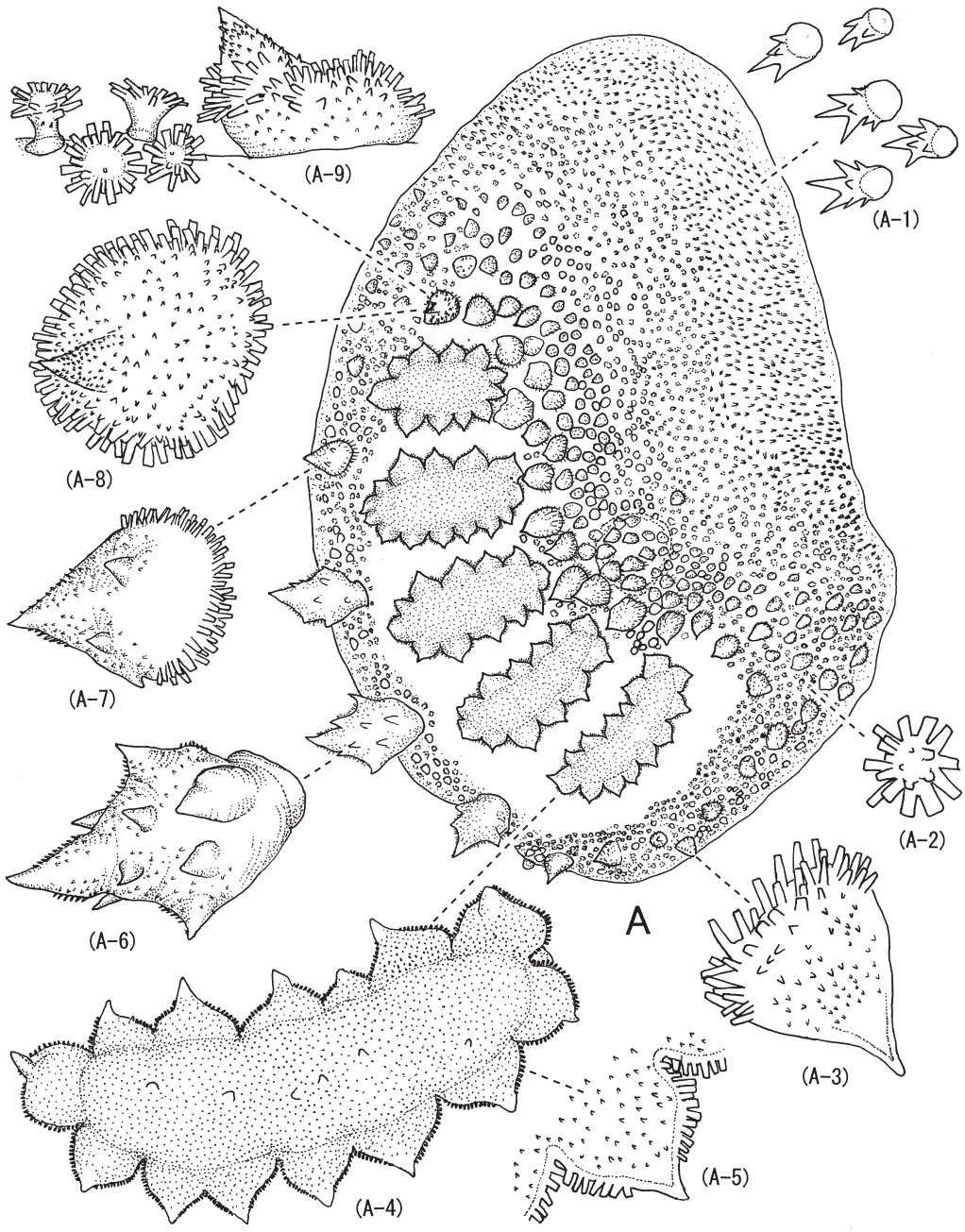

Fig. 9. *Lepidonotus takunanae* sp. nov. —— A, left 7th elytron from segment 13, × 26, with detail of tubercles (A-1~9): (A-1), × 213, (A-2, 3, 5, 8, 9), × 166, (A-4), × 80, (A-6), × 65, (A-7), × 116.

postsetal lobe. Ventral cirri short, smooth, tapering (Fig. 10C). Nephridial papillae beginning on segment 6, onwards.

Notosetae one kind of few setae, stout, stiff, with numerous spinous rows of serrations, below bare, tapered tips (Fig. 8C). Neurosetae of 1st parapodia much slender, with spinous rows below unidentate, slender hooked tips (Fig. 10B). Following neurosetae longer, straighter, with rows of spines and bidentate tip with secondary tooth

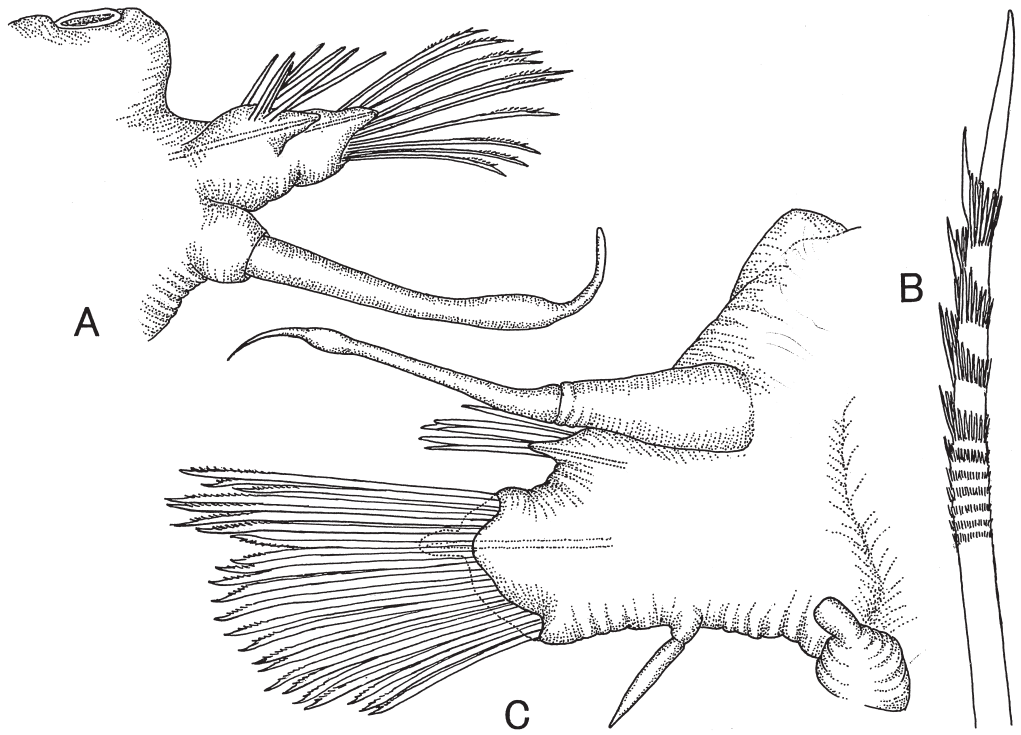

Fig. 10. *Lepidonotus takunanae* sp. nov. —— A, left elytragerous parapodium from segment 2, anterior view, × 45; B, neuroseta from same, × 274; C, left cirrigerous parapodium from segment 12, posterior view, × 33.

(Fig. 8D) or with unidentate tip (Fig. 8E) in upper acicular positions; lower neurosetae bidentate, with short spinous regions (Fig. 8F). Pygidium with pair of short anal cirri on short cirrophores.

Remarks. Potts (1910) originally described a specimen of this species as *L. cristata* var. *ornata*, but this species is sufficiently distinct from *L. cristatus* to warrant species rank. A variety and subspecific rank was not assigned prior to 1985, the name '*ornata*' is not available for use as a species name. Therefore I have assigned a new species name with type specimen and the type locality is off Hachijōjima Island.

Lepidonotus takunanae is most closely allied to *L. spinosus* Hanley and Burke (1991) from Chesterfield Islands in the characters of the prostomium, parapodia and basally flattened macrotubercles on posterior half of each elytron. However, *L. takunanae* can be distinguished in the characteristics of the elytral microtubercles from those of *L. spinosus*.

Etymology. The species is named after the R/V *Takunan*, which collected those characteristic specimens.

Distribution. Salomon in Indian Ocean; Japan (off Hachijōjima I.).

Lepidonotus tenuisetosus (Gravier, 1902)

Lepidonotus tenuisetosus: Uchida, 1982: 1–3, fig. 1–3; Imajima, 2001b: 101, fig. 62.

Material. NSMT-Pol. S 2306, KY08 St. 20 (1).

Distribution. Red Sea, Arabian Gulf; Japan (Sagami Bay to Ishigakijima I., Chichijima I.).

Lepidonotus specklus sp. nov. (Figs. 11A–E, 12A–G)

Type Material. Holotype, NSMT-Pol. S H 538: off N. Hahajima I., 26°50.25′N, 142°07.09′E – 26°50.40′N, 142°07.18′E, 146–151 m, Jul. 2009 (KY09 St. 10; R/V *Koyo*).

Description. Specimen somewhat damaged, 25 mm long, 7 mm wide including parapodia for 26

setigerous segments. Body dorsally flattened, tapering posteriorly; dorsal surface colorless. Ventral surface of body with blackish patterns at base of each parapodium, except median ventral part (Fig. 11B).

Prostomium bilobed, longer than wide. Two pairs of eyes, anterior pair larger, lying dorsolaterally at widest part of prostomium; posterior pair slightly closer to midline. Ceratophore of median antenna, large, cylindrical, inserted in anterior notch, style missing. Lateral antennae inserted terminally on anterior extensions of prostomium, with slender and smooth styles. Palps missing. Tentacular segment not visible dorsally, with very long tentaculophores lateral to prostomium, achaetous, with 2 pairs of dorsal and ventral tentacular cirri similar in shape and length to lateral antennae (Fig. 11A). Facial tubercle present. Second segment with first pair of elytra, biramous parapodia, and very long, smooth ventral buccal

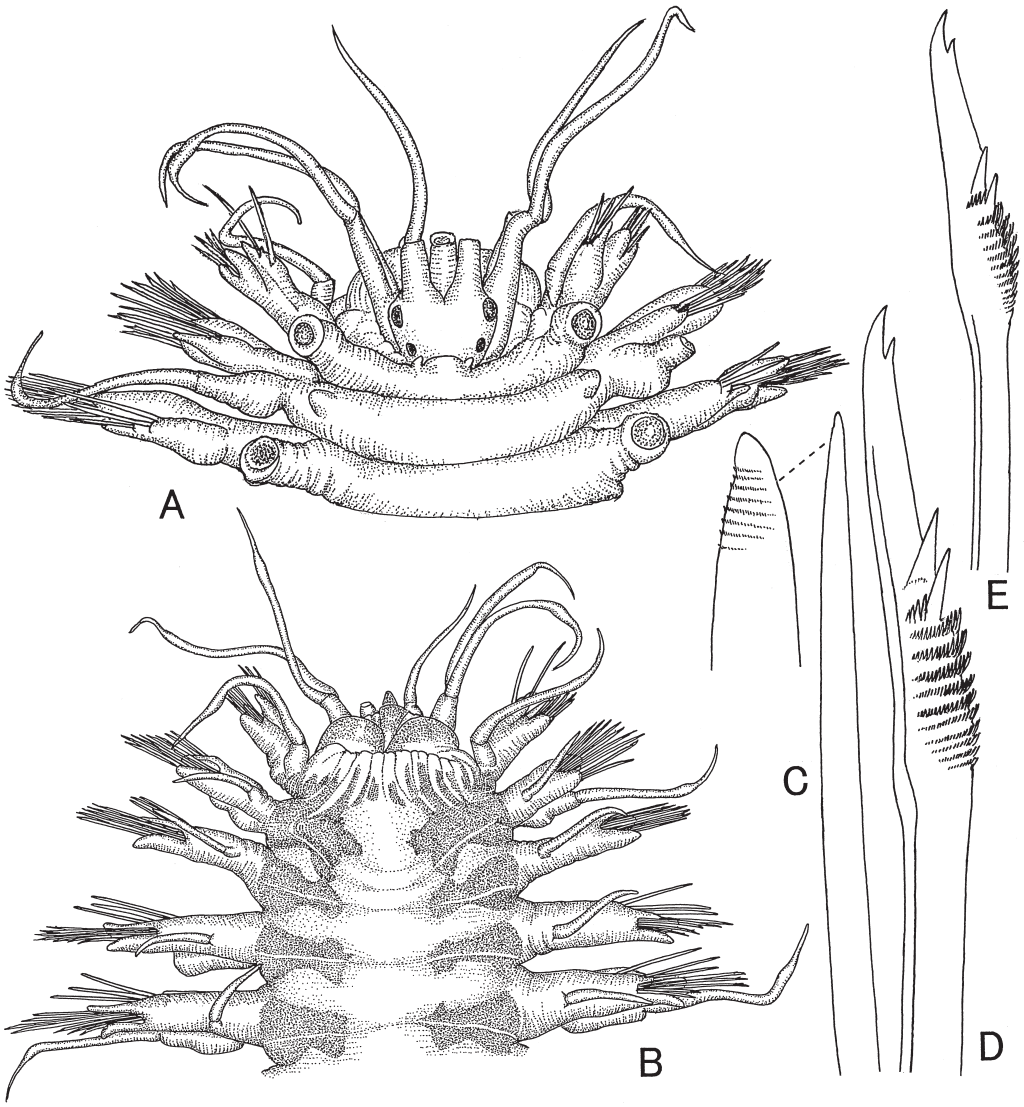

Fig. 11. *Lepidonotus specklus* sp. nov. —— A, anterior end, dorsal view, × 17; B, same, ventral view, × 13; C, notoseta, × 136, with detail of distal end, × 642; D, upper neuroseta, × 230; E, lower neuroseta, × 230.

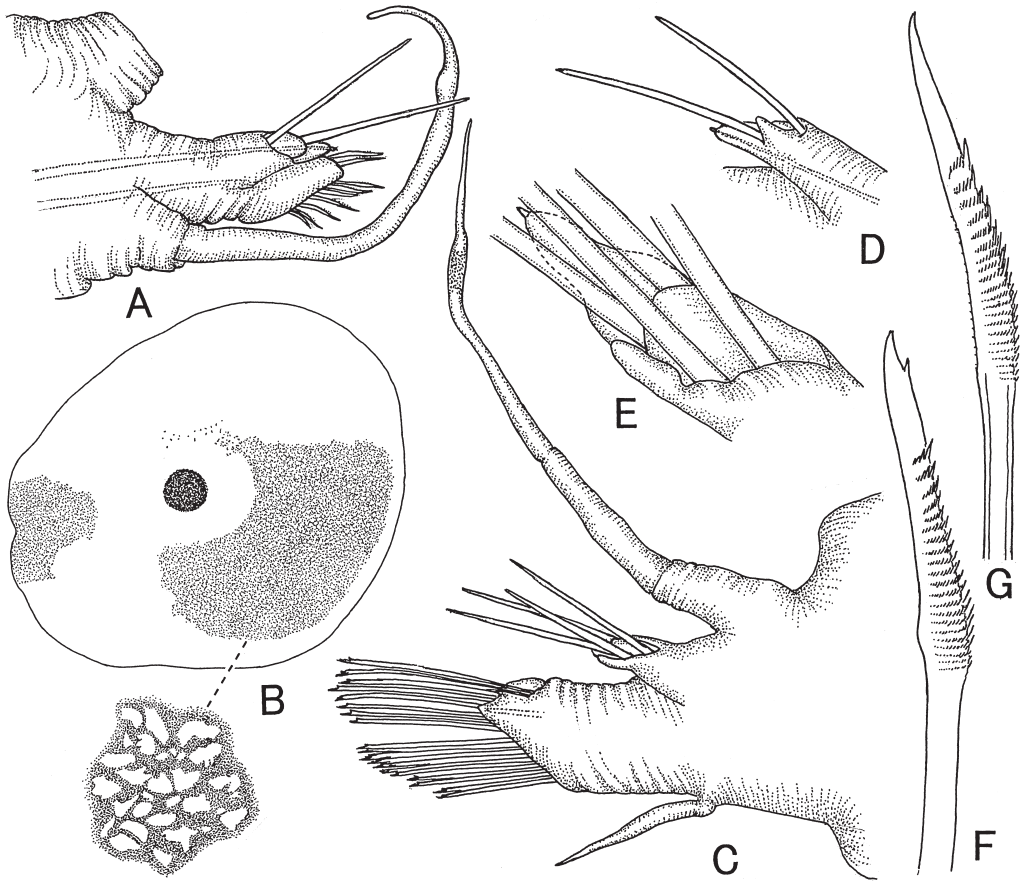

Fig. 12. *Lepidonotus specklus* sp. nov. —— A, left elytragerous parapodium from segment 2, anterior view, × 32; B, 10th left elytron, × 13, with detail of pigment area, × 270; C, right 9th parapodium, anterior view, × 22; D, left notopodium of segment 2, × 36; E, right notopodium from 9th parapodium, × 80; F, upper neuroseta from 1st parapodium, × 340; G, lower neuroseta from same, × 340.

cirri larger than following ventral cirri (Figs. 11B, 12A). Middorsal area of second segment with occipital fold with two small anterior protuberances.

Elytra 12 pairs, on segments 2, 4, 5, 7, alternate segments to 23. Elytra covering dorsum entirely, overlapping medially. Elytra subcircular without fringe of papillae; each of elytra with conspicuous circular, black spot at center of elytron and two patterns of blackish pigment on either side of circular spot (Fig. 12B).

Parapodia biramous and similar along length of body. Notopodium smaller than neuropodium, with sublate postsetal lobe and elongate acicular lobe (Fig. 12C–E). Neuropodium with triangular presetal lobe slightly longer than postsetal lobe, no distinct cirriform appendage. Dorsal cirri with cirrophores large cylindrical; styles very long, cylindrical, smooth, tapering to subterminal swelling and filiform tip (Fig. 12C). Ventral cirri short, smooth, tapering to tip. Nephridial papillae beginning segment 6, onwards.

Notosetae of one kind and few (2–4); each stout, simple, with fine spinous rows of serrations only near distal tip (Fig. 11C). In 1st parapodia neurosetae of supra-acicular group with serrations below bidentate tip (Fig. 12F); those of infra-acicular group with bidentate or unidentate tips (Fig. 12G). Following neurosetae longer, numerous, with spinous rows of serrations, below bidentate tips, distal row of spines much larger than the rest

(Fig. 11D, E). Pygidium with pair of anal cirri on short cirrophores.

Remarks. *Lepidonotus specklus* is characterized as follows: the elytra have a distinct, blackish central spot, and the notosetae are of one kind and few (2–4) in a fascicle; those are stout with very few rows of serrations only near distal end.

Etymology. The species named for the circular, blackish spot at the center of the elytron.

Distribution. Japan (Hahajima I.).

Nonparahalosydna pleiolepis (Marenzeller, 1879)

Polynoe (*Lepidonotus*) *pleiolepis* Marenzeller, 1879: 114–115, pl. 1, fig. 4.

Nonparahalosydna pleiolepis: Uschakov, 1982: 101–102, pl. 27, fig. 1–5; Imajima, 1997b: 85–89, figs. 40a–f, 41a–f, 42a–j; Imajima, 2001b: 106–107, fig. 65.

Material. NSMT-Pol. S 1803, L-1-500 (1).

Distribution. Yellow Sea; Japan (Sagami Bay to Ariake Sea).

Thormora jukesii Baird, 1865

Thormora jukesii Baird, 1865: 199–200; Imajima and Hartman, 1964: 27; Hanley and Burke, 1991: 75–77, fig. 25A–H; Hanley, 1993: 317–318.

Material. NSMT-Pol. S 1979, A.R (1).

Distribution. New Zealand, Indian Sea, Red Sea; Japan (Sagami Bay, Kushimoto, Chichijima I.).

Family **Acoetidae** Kinberg, 1858

Acoetes jogasimae (Izuka, 1912)

Panthalis jogasimae Izuka, 1912: 68–71, pl. 2, fig. 6, pl. 8, figs. 1–6.

Acoetes jogasimae: Pettibone, 1989: 98; Imajima, 1997b: 122–126, figs. 60a–i, 61a–o, 62a–j; Imajima, 2001b: 138–140, fig. 67.

Materials. NSMT-Pol. S 1980, L-1-700 (1), NSMT-Pol. S 1981, L-1-800 (2).

Distribution. Japan (Kashima Sea to Tosa Bay).

Eupanthalis edriophthalma (Potts, 1910) (Figs. 13A–I, 14A–E)

Panthalis edriophthalma Potts, 1910: 345, pl. 19, fig. 19, pl. 21, figs. 56, 57.

Eupanthalis edriophthalma: Augener, 1922: 10; Pettibone, 1989: 27–28, figs. 13, 14.

Material. NSMT-Pol. S 2223, KY08 St. 19 (1).

Description. Specimen missing posterior end, 14 mm long, 4 mm wide including parapodia, with 37 segments.

Prostomium oval, with faint median longitudinal groove, with two pairs of lateral sessile eyes, anterior pair twice as large as posterior pair. Lateral antennae with short ceratophores on anterior side of prostomium, with tapered styles, about 1.8 times longer than prostomium. Palps ventro-lateral to antennae, stout, tapered, smooth, about 2 times longer than prostomium (Fig. 13A). Tentacular segment distinct dorsally; tentaculophores lateral to prostomium, each with aciculum, without setae; dorsal and ventral tentacular cirri subequal in length, longer than lateral antennae, about as long as palps. Elytra delicate, oval, transparent, nearly covering dorsum; first pair largest, elongate-oval (Fig. 13B).

Second segment (first setiger) with first pair of elytrophores and ventral buccal cirri similar to tentacular cirri, longer than following ventral cirri (Fig. 13C). Notopodium small, rounded acicular lobe on anterodorsal side of larger neuropodium, without notosetae; neuropodium rounded, with neurosetae all similar, spinous, lanceolate (Fig. 13D). Pharynx not extended.

Notopodia of segments 3 to 8 similar to notopodia of segment 2, without notosetae (Fig. 13E). Dorsal cirri of segments 3, 6 and 8 with short cirrophores on posterodorsal sides of notopodia, with styles longer, subulate on segment 3 and shorter, basally inflated on segment 8. Upper neurosetae few, acicular, with distal aristae (Fig. 13F, G); numerous lower neurosetae slightly curved, slender lanceolate, with close-set spines distally (Fig. 13H, I). Middle row of neurosetae stout, acicular, with distal aristae.

From segment 9, notopodia forming rounded flattened lobes on anterodorsal sides of neuropodia, with internal spinning glands (Fig. 14A, B);

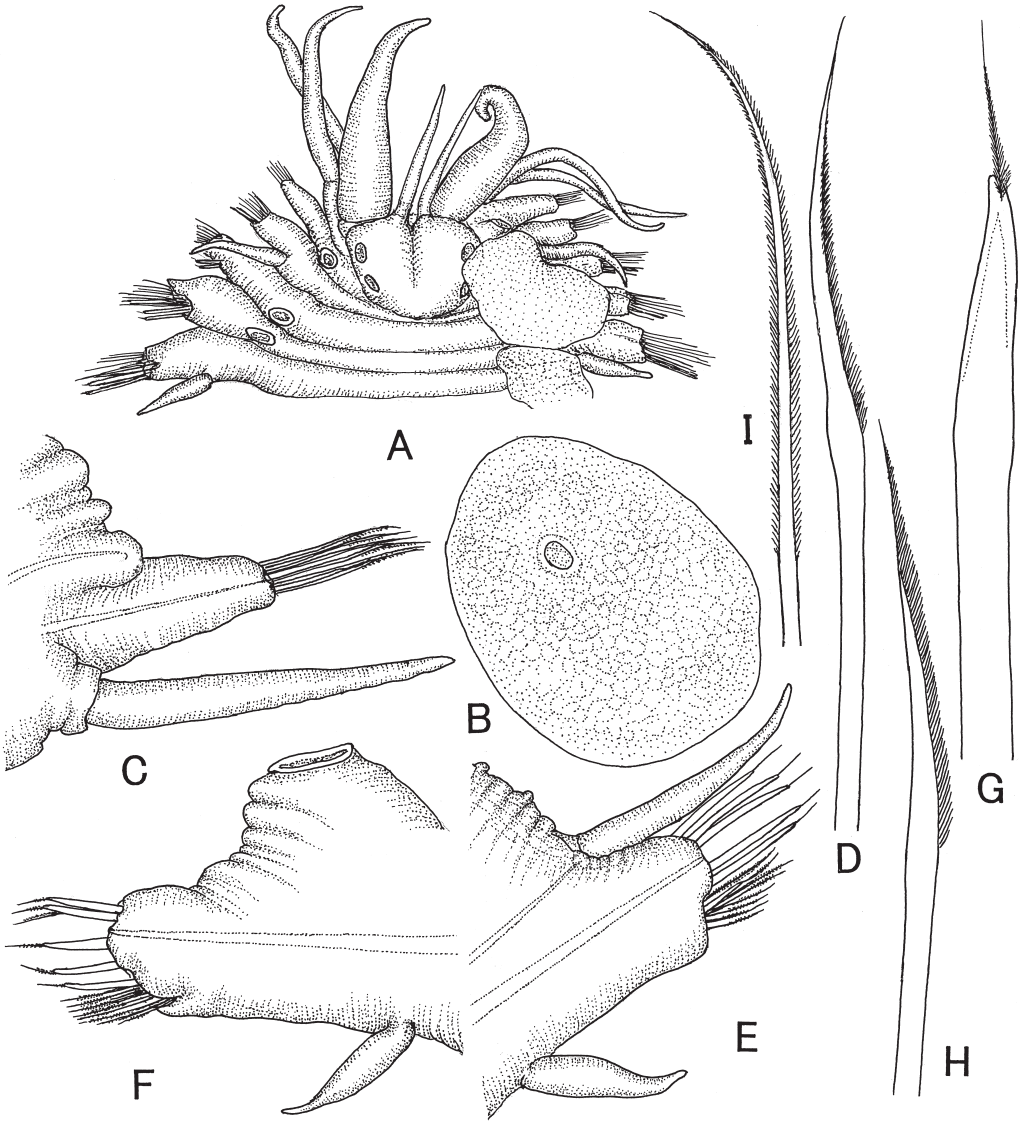

Fig. 13. *Eupanthalis edriophthalma* (Potts). ——A, anterior end, dorsal view, × 26; B, elytron, × 30; C, left parapodium from segment 2, posterior view, × 67; D, neuroseta from segment 2, × 338; E, left cirrigerous parapodium from segment 3, anterior view, × 67; F, elytragerous parapodium from segment 4, posterior view, × 67; G, stout aristate neuroseta, × 338; H, spinous lanceolate, × 338; I, pilose capillary, × 338.

notosetae few and short capillary on lower side. Neuropodia with presetal subconical acicular lobes and truncate postsetal lobes, with slightly developed lower bracts. Upper neurosetae emanating from upper anterior bract nearly hidden by notopodium, with neurosetae of 2 types: longer, tapering to slender tips, with continuous row of hairs perpendicular to stem (Fig. 14D), and shorter, more slender, with whorls of widely spaced spines (Fig. 14C). Middle neurosetae stouter, acicular with slightly hooked tips with distal spines, with hairy aristae, arranged in one row (Fig. 14E). Lower neurosetae similar to more anterior ones within lower bract, but arranged in one row. Dorsal cirri with short wide cirrophores, with styles short, inflated basally. Ventral cirri short, tapered.

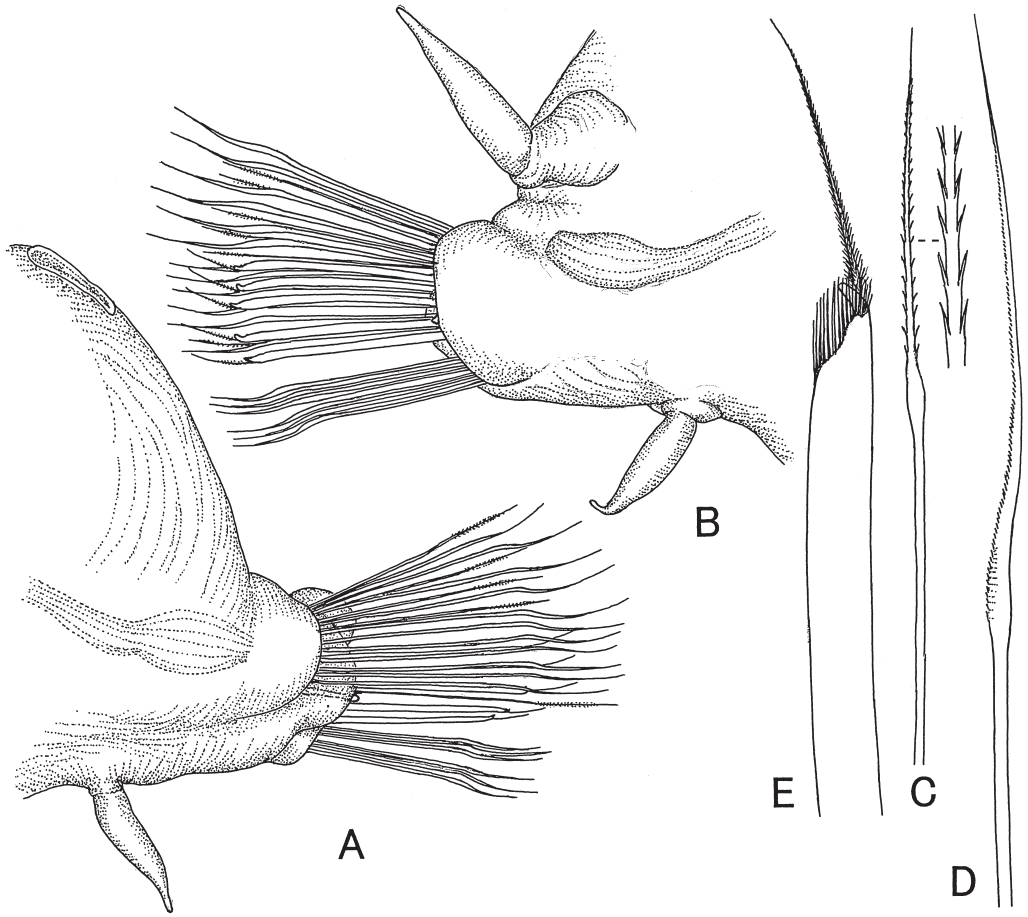

Fig. 14. *Eupanthalis edriophthalma* (Potts). ——A, elytragerous parapodium from segment 17, anterior view, × 60; B, cirrigerous parapodium from segment 18, posterior view, × 60; C, spinose capillary, × 355, with detail of distal part, × 680; D, capillary neuroseta, × 304; E, stout aristate neuroseta, × 304.

The species is new to the Japanese polychaetous fauna.

Distribution. Indian Ocean; Japan (Chichijima I.).

Family **Pholoidae** Kinberg, 1858

Pholoides dorsipapillatus (Marenzeller, 1893)

Pholoe dorsipapillata Marenzeller, 1893: 30, pl. 1, fig. 3A–D.

Pholoides dorsipapillatus: Pettibone, 1992a: 16–18, figs. 8–9; Imajima, 2001a: 44–47, figs. 7a–i, 8a–f; Imajima, 2003: 46–48, fig. 26a–h; Imajima, 2007: 197–198, fig. 58.

Materials. NSMT-Pol. S 2219, Tak07-9 St. 5 (1); NSMT-Pol. S 1982, KY08 St. 15 (1); NSMT-Pol. S 2220, KY09 St. 1 (1), NSMT-Pol. S 1983, KY09 St. 7 (6), NSMT-Pol. S 2215, KY09 St. 21 (1); NSMT-Pol. S 2561, KY10 St. 4 (1).

Distribution. Mid-Atlantic from Bermuda, Gulf of Mexico, Mediterranean Sea, Red Sea, South Africa; Japan (Sagami Bay to Tosa Bay, Mikura-jima I., Hachijōjima I., Chichijima Is., Hahajima I.).

Family **Sigalionidae** Malmgren, 1867

Euthalenessa festiva (Grube, 19875)

Leanira festiva Grube, 1875: 78.

Euthalenessa oculata: Okuda, 1939: 226.

Thalenessa digitata: Imajima and Hartman, 1964: 46.

Euthalenessa festiva: Pettibone, 1970a: 12–19, figs. 6–11; Imajima, 2003: 49–55, figs. 27a–h, 28a–f, 29a–e, 30a–c, 31a–m; Imajima, 2005: 60; Imajima, 2007: 79–80, fig. 21.

Materials. NSMT-Pol. S 1985, KY08 St. 17 (5), NSMT-Pol. S 1986, KY08 St. 18 (1); NSMT-Pol. S 1987, TW02-02 (1), NSMT-Pol. S 1988, TW02-04 (1); NSMT-Pol. S 2118, KY09 St. 13 (1), NSMT-Pol. S 2119, KY09 St. 30 (3); NSMT-Pol. S 2521, KY10 St. 2 (1), NSMT-Pol. S 2522, KY10 St. 24 (1), NSMT-Pol. S 2523, KY10 St. 26 (1).

Distribution. Philippines, Malay Archipelago, Australia, Marshall Islands; Japan (northern Honshū to Okinawa I., Chichijima Is., Hahajima I.).

Labiosthenolepis sibogae (Horst, 1917)

Leanira sibogae Horst, 1917: 115–117, pl. 24, figs. 1–3.

Labiosthenolepis sibogae: Pettibone, 1992b: 618–619, figs. 3, 4; Imajima, 2006: 335–338, figs. 7A–E, 8A–N; Imajima, 2007: 93–95, fig. 26.

Material. NSMT-Pol. S 1806, L-2-100 (1).

Distribution. Indo-Pacific, Australia; Japan (Sagami Bay to Okinawa I.).

Leanira coeca Horst, 1917

Leanira coeca Horst, 1917: 120–121, pl. 26, figs. 5–7; Imajima, 2001a: 51–54, figs. 12a–l, 13a–f, 14a–g; Imajima, 2007: 96–97, fig. 27.

Material. NSMT-Pol. S 1807, L-2′-600 (1).

Distribution. Malay Archipelago; Japan (Sagami Bay to Tosa Bay).

Neoleanira areolata (McIntosh, 1885)

Leanira areolata McIntosh, 1885: 151–153, pl. 21, fig. 3, pl. 25, figs. 8. 9, pl. 13A, fig. 1.

Neoleanira areolata: Pettibone, 1970b: 372–376, figs. 5, 6; Imajima, 2003: 56–59, figs. 32a–h, 33a–d, 34a–i; Imajima, 2007: 98–99, fig. 28; Imajima, 2009: 62.

Materials. NSMT-Pol. S 1808, L-1-800 (1), NSMT-Pol. S 1809, L-2-800 (1), NSMT-Pol. S 1810, L-2′-1000 (1).

Distribution. Japan (off Sanriku to Okinawa I.).

Neopsammolyce occidentalis (McIntosh, 1885)

Psammolyce occidentalis McIntosh, 1885: 146, pl. 22, fig. 5, pl. 23, figs. 2, 3, pl. 27, fig. 6, pl. 13A, figs. 14, 15.

Neopsammolyce occidentalis: Pettibone, 1997: 15, figs. 7, 8; Imajima, 2007: 100–102, fig. 29.

Material. NSMT-Pol. S 1811, L-2-100 (1).

Distribution. Caribbean Sea; Japan (Sagami Sea to Okinawa I.).

Pottsipelogenia gracilis (Potts, 1910)

Psammolyce gracilis Potts, 1910: 348, pl. 19, fig. 20, pl. 21, figs. 60, 61.

Pottsipelogenia gracilis: Pettibone, 1997: 71–74, figs. 51, 52; Imajima, 2007: 106–108, fig. 31.

Materials. NSMT-Pol. S 1812, KY08 St. 15 (3); NSMT-Pol. S 1989, KK01-02 (1).

Distribution. Indian Ocean; Japan (Tsukumo Bay, Amami-Ōshima I., Chichijima I., Hahajima I.).

Sigalion lituus Imajima, 2005

Sigalion lituus Imajima, 2005: 68–73, figs. 25A–G, 26A–E, 27A–D, 28A–M.

Material. NSMT-Pol. S 2524, KY10 St. 24 (1).

Distribution. Japan (Okinawa I., Chichijima Is.).

Sigalion shimodaensis Imajima, 2006

Sigalion shimodaensis Imajima, 2006: 338–342, figs. 9A–H, 10A–H, 11A–D; Imajima, 2007: 117–119, fig. 35.

Materials. NSMT-Pol. S 1990, KY08 St. 3 (1); NSMT-Pol. S 1991, SY09-20 (1).

Distribution. Japan (Shimoda, Chichijima I., Tanegashima I.).

Sigalion tanseimaruae Imajima, 2006

Sigalion tanseimaruae Imajima, 2006: 342–346, figs. 12A–G, 13A–G, 14A–E.

Material. NSMT-Pol. S 2120, KY09 St. 13 (1).

Distribution. Japan (Sagami Sea, Hahajima I.).

Sthenelais fusca Johnson, 1897

Sthenelais fusca Johnson, 1897: 185–186, pl. 9, figs. 60, 61, pl. 10, fig. 64; Imajima and Hartman, 1964: 45–46; Pettibone, 1971b: 1394–1395, figs. 1–3; Imajima, 1997a: 162; Imajima, 2007: 135–138, fig. 41.

Material. NSMT-Pol. S 1992, L-2′-500 (1).

Distribution. Central California to Peru; Japan (Hokkaido to Suruga Bay).

Sthenelais helenae Kinberg, 1855

Sthenelais helenae: Hartman, 1948b: 35, pl. 5, fig. 1, pl. 6, figs. 1–5; Pettibone, 1971a: 3–7, figs. 1–3; Imajima, 2007: 139–142, fig. 42.

Materials. NSMT-Pol. S 2368, L-3-500 (1); NSMT-Pol. S 1993, KY08 St. 15 (1); NSMT-Pol. S 1994, KY08 St. 21 (1); NSMT-Pol. S 1995, SY 09-01 (1).

Distribution. Chile to western Mexico; Japan (Hokkaido to Okinawa I., Toshima I., Mukojima I., Chichijima I.).

Sthenelanella uniformis Moore, 1910

Sthenelanella uniformis Moore, 1910: 391–395, pl. 33, figs. 105–112; Imajima, 2007: 148–150, fig. 45.

Material. NSMT-Pol. S 2121, KY09 St. 8 (1).

Distribution. California; Japan (Kushimoto to Tanegashima I., Hahajima I.).

Willeysthenelais suluensis Pettibone, 1971

Willeysthenelais suluensis Pettibone, 1971a: 18–21, fig. 12; Imajima, 2007: 159, fig. 49.

Material. NSMT-Pol. S 2562, KY10 St. 27 (1).

Distribution. Indonesia; Japan (off Shimoda, Chichijima Is.).

Family **Phyllodocidae** Williams, 1852

Subfamily **Eteoninae** Bergström, 1914

Eulalia bilineata (Johnston, 1840)

Eulalia bilineata: Fauvel, 1923: 162–163, fig. 58a–e; Imajima and Hartman, 1964: 61–62, pl. 13, figs. a–d; Imajima, 1988: 125; Pleijel and Dales, 1991: 100–101, fig. 29; Imajima, 2003: 77–78.

Materials. NSMT-Pol. S 2038, L-7-1300 (1), NSMT-Pol. S 2039, L-3-400 (2), NSMT-Pol. S 2040, L-2′-200 (2); NSMT-Pol. S 2041, Tak08 St. 4 (3).

Distribution. North Sea, Atlantic Ocean, Mediterranean Sea, California; Japan (Hokkaido to Tosa Bay, Toshima I., Hachijōjima I.).

Eulalia ornata Saint-Joseph, 1888

Eulalia ornata: Pleijel and Dales, 1991: 106–107, fig. 32A–D; Imajima, 2003: 78–79, fig. 47a–g.

Materials. NSMT-Pol. S 2042, Tak07-9 St. 5 (1); NSMT-Pol. S 2043, L-7-200 (1); NSMT-Pol. S 2044, Tak08 St. 3 (1); NSMT-Pol. S 2347, KY09 St. 30 (1).

Distribution. Atlantic coast of France, English Channel, Ireland; Japan (Sagami Bay, Hachijōjima I., Chichijima Is.).

Eumida sanguinea (Oersted, 1943)

Eumida sanguinea: Fauvel, 1936a: 58; Imajima and Hartman, 1964: 64–65, pl. 13, fig. e.

Materials. NSMT-Pol. S 2348, Tak07-9 St. 5 (5).

Distribution. Western and southern Europe, New Zealand, California; Japan (Hokkaido to Tanabe Bay, Hachijōjima I.).

Sige falsa (Day, 1960)

Eulalia (*Sige*) *falsa* Day, 1960: 303–304, fig. 6a–c.

Sige falsa: Pleijel, 1991: 261; Imajima, 2003: 87–89, fig. 53a–g.

Material. NSMT-Pol. S 2349, L-3-400 (1).

Distribution. False Bay, South Africa; Japan (Sagami Bay, Toshima I.).

Subfamily **Notophyllinae** Pleijel, 1991

Nereiphylla castanea (Marenzeller, 1879)

Carobia castanea Marenzeller, 1879: 127–128, pl. 3, fig. 2.

Nereiphylla castanea: Pleijel, 1991: 257; Blake, 1994: 166–168, fig. 4. 23; Imajima, 2003: 89–91, fig. 54a–k.

Material. NSMT-Pol. S 2350, Tak07-9 St. 5 (1).

Distribution. Indian Ocean, Australia, west

coast of North America; Japan (Hokkaido to Sagami Bay, Sagami Sea, Hachijōjima I.).

Notophyllum multicirris (Grube, 1878)

Phyllodoce (*Eulalia*) *multicirris* Grube, 1878: 100, pl. 6, fig. 4.

Notophyllum multicirris: Pleijel, 1991: 257; Kato and Pleijel, 2002: 1164–1166, fig. 14.

Material. NSMT-Pol. S 2351, Tak07-9 St. 9 (1).

Distribution. Philippines, Australia; Japan (Hachijōjima I., Okinawa I.).

Subfamily **Phyllodocinae** Örsted, 1843

Phyllodoce lineata tosaensis Imajima, 2001

Phyllodoce lineata tosaensis Imajima, 2001a: 56–57, fig. 15a–g; Imajima, 2003: 101–103, fig. 62a–h.

Materials. NSMT-Pol. S 2352, KY09 St. 14 (1); NSMT-Pol. S 2045, SY09-04 (1), NSMT-Pol. S 2046, SY09-18 (1).

Distribution. Japan (Tosa Bay, Sagami Bay, Sagami Sea, Mukojima I., Chichijima I., Hahajima I.).

Phyllodoce madeirensis Langerhans, 1880

Phyllodoce (*Anaitides*) *madeirensis*: Fauvel, 1923: 150–151, fig. 53d–h; Day, 1967a: 145, fig. 5.2.d–g.

Phyllodoce madeirensis: Okuda, 1937a: 269–270, fig. 10; Mountford, 1991: 161–166, figs. 2, 3A–C; Imajima, 2003: 103–107, fig. 63a–h; Imajima, 2005: 78.

Materials. NSMT-Pol. S 2353, Tak07-9 St. 5 (2); NSMT-Pol. S 2354, Tak08 St. 4 (1), NSMT-Pol. S 2355, Tak08 St. 5 (2); NSMT-Pol. S 2356, KY09 St. 7 (1), NSMT-Pol. S 2357, KY09 St. 8 (3), NSMT-Pol. S 2358, KY09 St. 14 (5), NSMT-Pol. S 2359, KY09 St. 28 (1), NSMT-Pol. S 2360, KY09 St. 30 (3).

Distribution. North Atlantic Ocean, Gulf of Mexico, Caribbean Sea, Gulf of Guinea; Japan (Sagami Bay, Sagami Sea, Okinawa I., Hachijōjima I., Chichijima Is., Hahajima I.).

Phyllodoce sp.

Materials. NSMT-Pol. S 2568, TW02-03 (1); NSMT-Pol. S 2569, KY10 St. 4 (3), NSMT-Pol. S 2570, KY10 St. 27 (3).

Family **Glyceridae** Grube, 1850

Glycera benhami Böggemann and Fiege, 2001

Glycera benhami Böggemann and Fiege, 2001: 31, figs. 2, 8c–d, 10; Böggemann, 2002: 48–49, figs. 40–42.

Glycera sp. A, Imajima, 2007: 243, fig. 80.

Materials. NSMT-Pol. S 2122, Tak07-9 St. 10 (1); NSMT-Pol. S 2123, L-2-100 (1); NSMT-Pol. S 2124, KY08 St. 12 (2), NSMT-Pol. S 2125, KY08 St. 22 (1), NSMT-Pol. S 2126, KY08 St. 25 (2); NSMT-Pol. S 2127, KY09 St. 1 (1), NSMT-Pol. S 2128, KY09 St. 8 (8), NSMT-Pol. S 2129, KY09 St. 13 (3), NSMT-Pol. S 2130, KY09 St. 14 (3), NSMT-Pol. S 2131, KY09 St. 15 (4), NSMT-Pol. S 2132, KY09 St. 21 (23), NSMT-Pol. S 2133, KY09 St. 28 (12), NSMT-Pol. S 2134, KY09 St. 29 (2), NSMT-Pol. S 2135, KY09 St. 30 (11), NSMT-Pol. S 2543, KY09 St. 34 (1); NSMT-Pol. S 2544, KY10 St. 4 (4), NSMT-Pol. S 2545, KY10 St. 6 (2), NSMT-Pol. S 2546, KY10 St. 11 (1), NSMT-Pol. S 2547, KY10 St. 27 (6).

Distribution. Tasman Sea, New Zealand; Japan (Mutsu Bay, Sagami Bay, Sagami Sea, Hachijōjima I., Chichijima Is.).

Glycera capitata Oersted, 1842

Glycera capitata: Imajima and Hartman, 1964: 161, pl. 35, fig. d; O'Connor, 1987: 183–184, fig. 13; Böggemann, 2002: 34–37, figs. 16–18; Imajima, 2007: 223, fig. 66; Imajima, 2009: 69.

Materials. NSMT-Pol. S 1996, SY09-21 (1); NSMT-Pol. S 2548, KY10 St. 27 (1).

Distribution. North Atlantic Ocean, Barents Sea, Indian Ocean, southwest Pacific; Japan (Hokkaido to Kagoshima Bay, Chichijima I.).

Glycera lapidum Quatrefages, 1866

Glycera lapidum: Böggemann, 2002: 37–40, figs. 19–21.

Materials. NSMT-Pol. S 2136, KY09 St. 1 (1),

NSMT-Pol. S 2137, KY09 St. 8 (1), NSMT-Pol. S 2138, KY09 St. 27 (1), NSMT-Pol. S 2139, KY09 St. 28 (3).

Distribution. Iceland, Mediterranean Sea; Japan (Sagami Bay, Sagami Sea, Chichijima Is., Hahajima I.).

Glycera nicobarica Grube, 1868

Glycera nicobarica Grube, 1868: 24–25, pl. 3, fig. 1; Böggemann, 2002: 57–58, figs. 67–69; Imajima, 2003: 112, fig. 67a–h; Imajima, 2006: 349; Imajima, 2007: 230–231, fig. 71.

Glycera chirori Izuka, 1912: 245–246, pl. 2, fig. 18, pl. 24, fig. 13.

Materials. NSMT-Pol. S 1602, Rin07 St. 1 (1); NSMT-Pol. S 1603, L-2-100 (1), NSMT-Pol. S 1604, L-2′-350 (3), NSMT-Pol. S 1838, KY08 St. 25 (1), NSMT-Pol. S 1839, KK-01-2 (1) (2), NSMT-Pol. S 1840, TW-02-01 (1), NSMT-Pol. S 2532, TW-02-04 (4); NSMT-Pol. S 2533, KY10 St. 27 (1), NSMT-Pol. S 2549, KY10 St. 30 (1).

Distribution. Indian Ocean; Japan (Hokkaido to Ishigakijima I., Chichijima I., Hahajima I.).

Glycera okai Imajima, 2009

Glycera sp. C, Imajima, 2007: 246, fig. 82.

Glycera okai Imajima, 2009: 69–72, fig. 14A–J.

Material. NSMT-Pol. S 2140, L-1-800 (1).

Distribution. Japan (Hokkaido to Ariake Sea).

Glycera onomichiensis Izuka, 1912

Glycera onomichiensis Izuka, 1912: 244–245, pl. 24, figs. 10–12; Böggemann, 2002: 68–69, figs. 94–96; Imajima, 2003: 112–115, fig. 68a–f; Imajima, 2005: 78; Imajima, 2007: 232, fig. 72.

Materials. NSMT-Pol. S 1605, L-2-100 (1), NSMT-Pol. S 1997, KY09 St. 30 (1); NSMT-Pol. S 1998, SY09-07 (2).

Distribution. Yellow Sea; Japan (Hokkaido to Amami-Ōshima I. Mukojima I., Chichijima Is.).

Glycera oxycephala Ehlers, 1887

Glycera oxycephala Ehlers, 1887: 121, pl. 41, figs. 7–11; Imajima, 2007: 233, fig. 73.

Materials. NSMT-Pol. S 1606, L-3-300 (3), NSMT-Pol. S 1607, L-3-400 (2).

Distribution. Northwest Atlantic, Mediterranean Sea, Australia; Japan (Hokkaido to Tanegashima I., Toshima I.).

Glycera sagittariae McIntosh, 1885

Glycera sagittariae McIntosh, 1885: 346–347, pl. 42, fig. 8, pl. 22A, fig. 10; Imajima, 2007: 240–241, fig. 78.

Material. NSMT-Pol. S 2534, KY10 St. 24 (3).

Distribution. New Guinea; Japan (off Sanriku, Ishigakijima I., Chichijima Is.).

Glycera tesselata Grube, 1863

Glycera tesselata Grube, 1863: 41–42, pl. 4, fig. 4; Böggemann, 2002: 47–48, figs. 37–39; Imajima, 2003: 117, fig. 69h–l; Imajima, 2005: 81; Imajima, 2007: 242, fig. 79.

Materials. NSMT-Pol. S 1608, Rin07 St. 1 (1), NSMT-Pol. S 1609, Rin07 St. 2 (5); NSMT-Pol. S 1610, L-2-350 (1); NSMT-Pol. S 2141, KY09 St. 1 (1), NSMT-Pol. S 1999, KY09 St. 7 (1), NSMT-Pol. S 2142, KY09 St. 28 (1), NSMT-Pol. S 2143, KY09 St. 30 (1).

Distribution. Mediterranean Sea, North Atlantic Ocean, western Canada to California; Japan (Hokkaido to Ishigakijima I., Chichijima Is.).

Family **Goniadidae** Kinberg, 1866

Goniada japonica Izuka, 1912

Goniada japonica Izuka, 1912: 232–234, pl. 23, figs. 1–6; Imajima and Hartman, 1964: 239; Böggemann, 2005: 43–46, figs. 17–18.

Material. NSMT-Pol. S 2117, KY09 St. 1 (1).

Distribution. Australia, Taiwan; Japan (Sagami Bay, Sagami Sea, Goishi-ura, Chichijima Is.).

Family **Sphaerodoridae** Malmgren, 1867

Sphaerodoropsis biserialis (Berkeley and Berkeley, 1944)

Sphaerodorum biserialis Berkeley and Berkeley, 1944: 3–4, figs. 1–3.

Sphaerodoridium biserialis: Lützen, 1961: 415; Imajima, 1969: 154–155, fig. 3a–d.

Sphaerodoropsis biserialis: Hartman and Fauchald, 1971: 70; Imajima, 2007: 167, fig. 80.

Materials. NSMT-Pol. S 2578, TW-05-02 (2).

Distribution. Canadian Arctic Ocean; Japan (Ōtsuchi Bay to Amami-Ōshima I., Sagami Sea, Chichijima I.).

Family **Hesionidae** Malmgren, 1867

Hesiospina similis (Hessle, 1925)

Kefersteinia similis Hessle, 1925: 29–32, textfig. 10.

Hesiospina similis: Imajima and Hartman, 1964: 81, pl. 15, figs. a–f; Imajima, 2003: 134–136, fig. 79a–g, Imajima, 2006: 351.

Material. NSMT-Pol. S 2211, KY09 St. 28 (1).

Distribution. Japan (Sagami Bay, Sagami Sea, Chichijima Is.).

Leocrates auritus Hessle, 1925

Leocrates auritus Hessle, 1925: 18–20, fig. 5; Imajima, 2007: 441–442, fig. 136.

Materials. NSMT-Pol. S 1813, Tak07-9 St. 4 (1), NSMT-Pol. S 1814, Tak07-9 St. 5 (2), NSMT-Pol. S 1815, Tak07-9 St. 10 (1); NSMT-Pol. S 1816, L-7-200 (1); NSMT-Pol. S 1817, Tak08 St. 3 (1); NSMT-Pol. S 1818, KY08 St. 12 (1); NSMT-Pol. S 2000, KY09 St. 8 (2).

Distribution. Japan (Tokyo Bay to Yoronjima I., Hachijōjima I., Chichijima I., Hahajima I.).

Micropodarke sp.

Material. NSMT-Pol. S 2212, KY09 St. 8 (1).

Family **Pilargidae** St. Joseph, 1899

Synelmis albini (Langerhans, 1881)

Ancistrosyllis albini Langerhans, 1881: l07–108, fig. 16a–e.

Ancistrosyllis gracilis Hessle, 1925: 34–36, textfig. 12a–d; Imajima and Hartman, 1964: 86.

Synelmis albini: Pettibone, 1966: 191–195, figs. 19–21; Imajima, 1987: 157–158, fig. 4a–k; Imajima, 2001b: 188, fig. 91; Imajima, 2005: 83.

Materials. NSMT-Pol. S 1595, L-2-100 (1); NSMT-Pol. S 1819, KY08 St. 25 (1); NSMT-Pol. S 1820, TW01-03 (1); NSMT-Pol. S 1821, KY09 St. 1 (2), NSMT-Pol. S 2213, KY09 St. 21 (1); NSMT-Pol. S 2001, SY09-05 (1), NSMT-Pol. S 2002, SY09-21 (1); NSMT-Pol. S 2571, KY10 St. 4 (1), NSMT-Pol. S 2572, KY10 St. 27 (1).

Distribution. Widespread in tropical and subtropical oceans; Japan (Sagami Bay to Amami-Ōshima Is., Mikurajima I., Mukojima I., Chichijima Is., Hahajima I.).

Family **Syllidae** Grube, 1850

Subfamily **Exogoninae** Rioja, 1925

Exogone uniformis Hartman, 1961

Exogone uniformis Hartman, 1961: 73–74, pl. 6, fig. 1, pl. 7, figs. 1–4; Imajima, 1966b: 400, textfig. 4a–j; Imajima, 1996: 10, fig. 4; Imajima, 2003: 149.

Material. NSMT-Pol. S 1822, KY08 St. 6 (1).

Distribution. Southern California; Japan (Sagami Bay, Sagami Sea, Ōmura Bay, Chichijima I.).

Sphaerosyllis erinaceus Claparède, 1863

Sphaerosyllis erinaceus: Pettibone, 1963: 135–136, fig. 35a; Imajima, 1966b: 402–404, textfig. 5a–g; Imajima, 1996: 11, fig. 5; Imajima, 2003: 150; Imajima, 2006: 353.

Material. NSMT-Pol. S 1826, L-2-100 (1).

Distribution. Mediterranean Sea, Atlantic Ocean, Arctic Ocean, Yellow Sea; Japan (Hokkaido, Sagami Bay, Sagami Sea, Tsushima Strait).

Subfamily **Autolytinae** Rioja, 1925

Autolytus sp. A

Materials. NSMT-Pol. S 2007, L-3-400 (2); NSMT-Pol. S 2008, Tak08 St. 4 (2); NSMT-Pol. S 2597, TW-02-04 (1); NSMT-Pol. S 2009, KY09 St. 1 (1), NSMT-Pol. S 2321, KY09 St. 8 (2); NSMT-Pol. S 2580, KY10 St. 3 (1), NSMT-Pol. S 2581, KY10 St. 4 (1).

Autolytus sp. B

Materials. NSMT-Pol. S 2582, KY10 St. 27 (2).

Subfamily **Eusyllinae** Rioja, 1925

Eusyllis habei Imajima, 1966

Eusyllis habei Imajima, 1966a: 97–99, textfig. 31a–k; Imajima, 1996: 52, fig. 38.

Materials. NSMT-Pol. S 2003, Tak07-9 St. 10 (1); NSMT-Pol. S 2004, L-2-200 (1); NSMT-Pol. S 2005, KY08 St. 21 (1).

Distribution. Japan (Sagami Bay, Sagami Sea, Tsukumo Bay, Mukaishima, Hachijōjima I., Chichijima I.).

Eusyllis irregulata Imajima, 1966

Eusyllis irregulata Imajima, 1966a: 99–92, textfig. 28a–i; Imajima, 1996: 49, fig. 35.

Materials. NSMT-Pol. S 2594, TW-02-04 (1); NSMT-Pol. S 2595, KY09 St. 1 (2), NSMT-Pol. S 2596, KY09 St. 7 (4).

Distribution. Japan (off Cape Shiriyazaki, Chichijima Is.).

Odontosyllis fulgurans japonica Imajima, 1966

Odontosyllis fulgurans japonica Imajima, 1966a: 109–111, textfig. 35a–j.

Material. NSMT-Pol. S 2214, KY08 St. 21 (1).

Distribution. Japan (Uraga Strait, Tosa Bay, Chichijima I.).

Pionosyllis uraga Imajima, 1966

Pionosyllis uraga Imajima, 1966a: 114–116, textfig. 37a–g; Imajima, 2003: 145–146; Imajima, 2006: 353.

Material. NSMT-Pol. S 2006, KY08 St. 11 (1).

Distribution. Japan (Sagami Bay, Sagami Sea, Chichijima I.).

Subfamily **Syllinae** Rioja, 1925

Haplosyllis spongicola (Grube, 1855)

Haplosyllis spongicola: Hartman, 1945: 15–16; Imajima, 1966c: 220–221, textfig. 38a–h; Imajima, 1996: 66, fig. 49; Imajima, 2003: 153; Imajima, 2006: 354.

Materials. NSMT-Pol. S 1823, L-7-200 (24); NSMT-Pol. S 2322, KY09 St. 30 (7).

Distribution. Mediterranean Sea, Atlantic and Indian oceans, southern California to Panama, West Indian region; Japan (Asamushi to Korea Strait, Hachijōjima I., Chichijima Is.).

Haplosyllis spongicola tentaculata (Marion, 1879)

Haplosyllis spongicola tentaculata: Imajima, 1966c: 221–223, textfig. 38i–n; Imajima, 1996: 67, fig. 50; Imajima, 2003: 153–154; Imajima, 2005: 83; Imajima, 2006: 354.

Materials. NSMT-Pol. S 1824, Tak07-9 St. 9 (1); NSMT-Pol. S 1825, KY08 St. 11 (2); NSMT-Pol. S 2144, KY09 St. 8 (2), NSMT-Pol. S 2145, KY09 St. 13 (2), NSMT-Pol. S 2146, KY09 St. 28 (3), NSMT-Pol. S 2147, KY09 St. 30 (9).

Distribution. Gulf of Naples; Japan (Sagami Bay to Ariake Sea, Hachijōjima I., Chichijima Is., Hahajima I.).

Syllis spongiphila Verrill, 1885

Syllis spongiphila: Hartman, 1944a: 339, pl. 24, fig. 10; Imajima, 1966c: 250–251, textfig. 49l–s; Imajima, 1996: 80, fig. 63; Imajima, 2003: 157–158; Imajima, 2005: 83; Imajima, 2006: 354.

Materials. NSMT-Pol. S 2323, Tak07-9 St. 5 (1), NSMT-Pol. S 2324, Tak07-9 St. 6 (2); NSMT-Pol. S 1827, Tak08 St. 5 (1); NSMT-Pol. S 2325, KY09 St. 21 (2).

Distribution. Massachusettes, Falkland Islands; Japan (Hokkaido, off Sanriku, Sagami Bay, Tosa Bay, Hachijōjima I., Chichijima Is.).

Trypanosyllis* (*Trypanedenta*) *taeniaformis (Haswell, 1886)

Syllis taeniaformis Haswell, 1886: 741–742, pl. 50, figs. 4, 5.

Trypanosyllis (*Trypanedenta*) *taeniaformis*: Imajima and Hartman, 1964: 127–128, pl. 30, figs. h–k; Imajima, 2005: 84; Imajima, 2006: 354.

Materials. NSMT-Pol. S 1828, L-7-200 (1); NSMT-Pol. S 1829, Tak08 St. 5 (2); NSMT-Pol. S 1830, KY08 St. 6 (1); NSMT-Pol. S 2010, KY09 St. 28 (1), NSMT-Pol. S 2011, KY09 St. 29 (1), NSMT-Pol. S 2012, KY09 St. 30 (4); NSMT-Pol. S 2573, KY10 St. 27 (1).

Distribution. Southeastern Australia, Red Sea; Japan (Sagami Bay to Kyūshū, Hachijōjima I., Chichijima Is.).

Trypanosyllis (***Trypanosyllis***) sp.

Materials. NSMT-Pol. S 2307, KY09 St. 8 (1), NSMT-Pol. S 2308, KY09 St. 14 (1).

Typosyllis aciculata Treadwell, 1945

Typosyllis aciculata Treadwell, 1945: 1–2, figs. 1–5; Reish, 1950: 1–5, figs. 1–8; Licher, 1999: 92–94, fig. 44.

Materials. NSMT-Pol. S 2326, Tak07-9 St. 10 (1); NSMT-Pol. S 2327, Tak08 St. 5 (1); NSMT-Pol. S 2328, KY09 St. 1 (4), NSMT-Pol. S 2329, KY09 St. 8 (3), NSMT-Pol. S 2330, KY09 St. 14 (2), NSMT-Pol. S 2331, KY09 St. 21 (1), NSMT-Pol. S 2332, KY09 St. 28 (2), NSMT-Pol. S 2333, KY09 St. 30 (7); NSMT-Pol. S 2529, KY10 St. 6 (1), NSMT-Pol. S 2530, KY10 St. 19 (1).

Distribution. California, Mexico, South China Sea; Japan (Sagami Bay, Hachijōjima I., Chichijima Is., Hahajima I.).

Typosyllis alternata (Moore, 1908)

Syllis alternata Moore, 1908: 323–325, figs. a–f.

Typosyllis alternata: Hartman, 1948a: 21; Imajima, 1966d: 273–275, textfig. 58a–l; Imajima, 2005: 84; Imajima, 2009: 80.

Materials. NSMT-Pol. S 2334, Tak07-9 St. 5 (2), NSMT-Pol. S 2335, Tak07-9 St. 6 (2); NSMT-Pol. S 2309, L-2-800 (1), NSMT-Pol. S 2310, L-3-400 (1); NSMT-Pol. S 2311, KY08 St. 6 (1), NSMT-Pol. S 2312, KY08 St. 15 (1), NSMT-Pol. S 2313, KY08 St. 25 (6); NSMT-Pol. S 2336, KY09 St. 1 (1), NSMT-Pol. S 2337, KY09 St. 7 (3), NSMT-Pol. S 2338, KY09 St. 21 (3).

Distribution. Alaska, California, Vancouver Island; Japan (Hokkaido, Sagami Bay to Kyūshū, Toshima I., Hachijōjima I., Chichijima I.).

Typosyllis cornuta (Rathke, 1843)

Ehlersia (*Syllis*) *cornuta*: Langerhans, 1879: 537.

Langerhansia cornuta: Hartman, 1959: 210; Imajima, 1966d: 256–259, textfig. 51a–o.

Typosyllis cornuta: Licher, 1999: 57–64, figs. 27, 28; Imajima, 2001a: 61; Imajima, 2003: 164–165; Imajima, 2005: 84; Imajima, 2006: 355.

Materials. NSMT-Pol. S 2013, L-7-1300 (2); NSMT-Pol. S 2339, KY08 St. 21 (1); NSMT-Pol. S 2340, KY09 St. 30 (2).

Distribution. Arctic, Atlantic, Indian and Pacific oceans, Mediterranean Sea; Japan (Hokkaido to Kyūshū, Hachijōjima I., Chichijima Is.).

Typosyllis hyalina (Grube, 1863)

Syllis (*Typosyllis*) *hyalina*: Fauvel, 1923: 262–263, fig. 98a–c; Rullier, 1964: 159–160.

Syllis hyalina: Berkeley and Berkeley, 1948: 74, figs. 107, 108.

Typosyllis hyalina: Imajima, 1966: 271–273, textfig. 57a–k; Imajima, 1996: 89, fig. 72.

Material. NSMT-Pol. S 2583, KY10 St. 9 (1).

Distribution. Mediterranean Sea, California, North Atlantic Ocean, Australia; Japan (Hokkaido to Sagami Bay, Tsukumo Bay, Hahajima Is.).

Typosyllis maculata Imajima, 1966

Typosyllis maculata Imajima, 1966d: 277–279, textfig. 59a–m.

Material. NSMT-Pol. S 2314, A.R (1).

Distribution. Japan (Kii-Shirahama, Tsukumo Bay, Chichijima Is.).

Typosyllis prolifera (Krohn, 1852)

Syllis (*Typosyllis*) *prolifera*: Fauvel, 1923: 261–262, fig. 97a–g.

Typosyllis prolifera: Imajima, 1966d: 292–294, textfig. 65a–n; Imajima, 2003: 166; Imajima, 2006: 356.

Materials. NSMT-Pol. S 2014, Tak07-9 St. 8 (1); NSMT-Pol. S 2015, L-3-400 (3), NSMT-Pol. S 2016, L-2′-200 (3); NSMT-Pol. S 2017, Tak08 St. 4 (2), NSMT-Pol. S 2018, Tak08 St. 5 (1); NSMT-Pol. S 2019, KY08 St. 25 (1); NSMT-Pol. S 2315, KY09 St. 30 (12).

Distribution. Mediterranean Sea, Atlantic and Indian oceans; Japan (Hokkaido, Sagami Bay to Kyūshū, Toshima I., Hachijōjima I., Chichijima Is.).

Typosyllis regulata Imajima, 1966

Typosyllis regulata Imajima, 1966d: 289–292, textfig. 64a–n; Imajima, 2003: 166–167; Imajima, 2005: 84; Imajima, 2006: 356.

Materials. NSMT-Pol. S 2020, KY09 St. 1 (1); NSMT-Pol. S 2601, KY10 St. 3 (2), NSMT-Pol. S 2602, KY10 St. 4 (2).

Distribution. Japan (Sagami Bay, Sagami Sea, Amami-Ōshima I., Okinawa I., Chichijima Is., Hahajima Is.).

Typosyllis variegata (Grube, 1860)

Syllis (*Typosyllis*) *variegata*: Fauvel, 1923: 262, textfig. 97h–n.

Typosyllis variegata: Imajima and Hartman, 1964: 137–138, pl. 34, figs. a–i; Imajima, 1996: 100, fig. 83.

Materials. NSMT-Pol. S 2316, KY09 St. 28 (7); NSMT-Pol. S 2603, KY10 St. 6 (2), NSMT-Pol. S 2604, KY10 St. 27 (10).

Distribution. Western and southern Europe, Indo-Pacific areas; Japan (Hokkaido to Kyūshū, Chichijima Is., Hahajima I.).

Typosyllis spp.

Materials. NSMT-Pol. S 2341, KY09 St. 7 (42), NSMT-Pol. S 2342, KY09 St. 13 (1), NSMT-Pol. S 2343, KY09 St. 14 (3), NSMT-Pol. S 2344, KY09 St. 15 (1), NSMT-Pol. S 2345, KY09 St. 28 (4), NSMT-Pol. S 2346, KY09 St. 30 (12).

Family **Nereididae** Johnston, 1845

Ceratonereis mirabilis Kinberg, 1866

Ceratonereis mirabilis: Hartman, 1948b: 71–72; Imajima and Hartman, 1964: 141–142; Day, 1967a: 324; Imajima, 1972a: 64–66, figs. 13, 17; Imajima, 2003: 170.

Materials. NSMT-Pol. S 1831, KY08 St. 20 (1); NSMT-Pol. S 2189, KY09 St. 13 (1), NSMT-Pol. S 2190, KY09 St. 14 (4), NSMT-Pol. S 2191, KY09 St. 28 (3), NSMT-Pol. S 2192, KY09 St. 30 (15), NSMT-Pol. S 2574, KY09 St. 34 (1); NSMT-Pol. S 2575, KY10 St. 4 (1), NSMT-Pol. S 2576, KY10 St. 27 (1).

Distribution. Brazil, Gulf of Mexico, Red Sea, Indian Ocean; Japan (Mutsu Bay to Amami-Ōshima I., Chichijima Is., Hahajima I.).

Neanthes caudata (delle Chiaje, 1828)

Nereis (*Neanthes*) *caudata*: Day, 1967a: 321–322, fig. 14. 9. f–j.

Neanthes caudata: Hartman, 1968: 525, figs. 1–5; Imajima, 1972a: 105–108, figs. 31, 37; Imajima, 2003: 171–172.

Material. NSMT-Pol. S 2361, KY09 St. 13 (1).

Distribution. Mediterranean Sea, Southern California to Mexico, New Zealand, Australia, Philippines; Japan (Hokkaido to Kyūshū, Hahajima I.).

Neanthes unifasciata (Willey, 1905) (Figs. 15A–E, 16A –M)

Nereis unifasciata Willey, 1905: 271–272, pl. 4, figs. 85–88; Fauvel, 1953: 182–183, fig. 92a–h.

Nereis (*Neanthes*) *unifasciata*: Day, 1967: 318, fig. 14. 7. u–y.

Materials. NSMT-Pol. S 2362, KY08 St. 6 (1), NSMT-Pol. S 2363, KY08 St. 20 (2); NSMT-Pol. S 2364, KY09 St. 28 (5), NSMT-Pol. S 2365, KY09 St. 29 (1), NSMT-Pol. S 2366, KY09 St. 30 (3).

Description. Complete specimen 39 mm long, 4 mm wide including parapodia for 103 setigerous segments. Body robust, flattened, color yellowish brown in spirit, without pigmented pattern.

Prostomium hexagonal, with straight, narrow, entire anterior margin. Frontal antennae longer than half length of prostomium. Two pairs of eyes circular, conspicuous, anterior pair lying dorsolaterally at widest part of prostomium. Palps thick, each with globular palpostyle. Peristomium about twice as long as first setiger; four pairs of slender tentacular cirri with short, thick cirratophores; longest one extending to setiger 4, smooth, tapering towards tips (Fig. 15A, B).

Pharynx with thick, blackish brown jaws curving more towards tips, with 4 teeth to low undulations distally (Fig. 15C). Paragnaths conical or slender coniform (Fig. 15D), dark brown, arranged as follows: Area I = 6 in longitudinal row; II = 11 (right) − 12 (left) in oblique arcs; III = 16

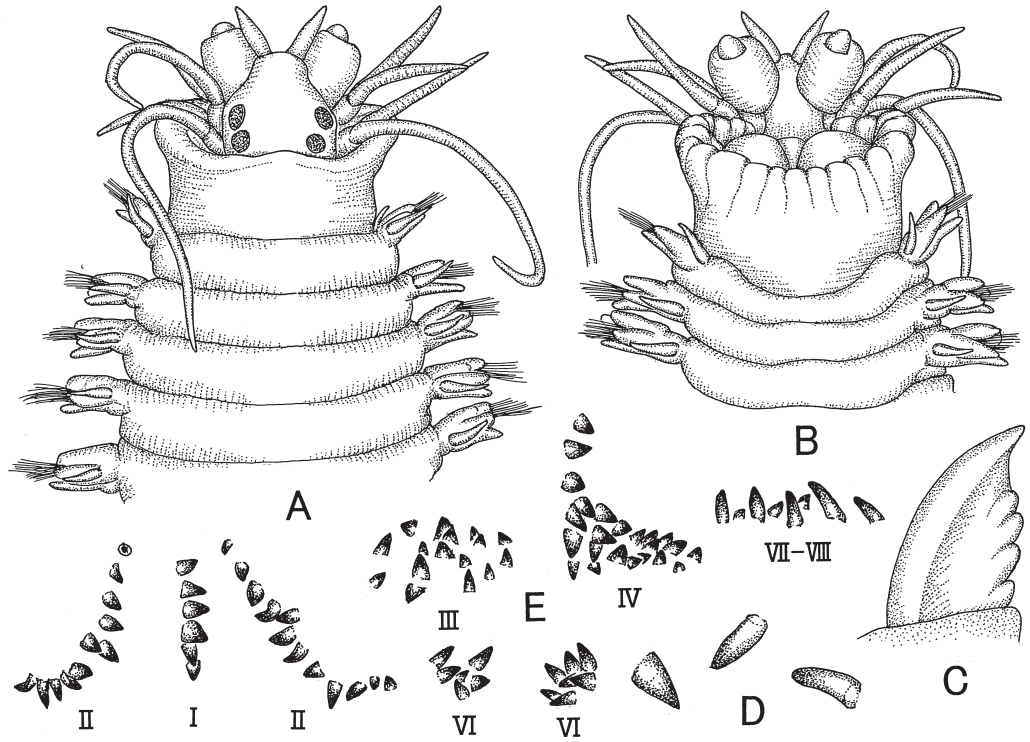

Fig. 15. *Neanthes unifasciata* (Willey). ——A, anterior end, dorsal view, × 15; B, same, ventral view, × 15; C, jaw, × 30; D, 3 paragnaths, × 68; E, paragnaths in areas I − VIII, × 34.

in small oval patch; IV = 25 in oblique crescent; V = 0; VI = 6 − 7 in small oval patch; VII − VIII = 8 in single row, alternating large and small paragnaths (Fig. 15E).

First 2 parapodia uniramous (Fig. 16A). Dorsal cirri subulate, subequal in length of notopodial ligules. Neuropodial acicular lobes subtriangular; neuropodial ligules subequal in size and shape to notopodial ligules. Ventral cirri short, subulate. Upper bundle of neurosetae homogomph spinigers and heterogomph falcigers; lower bundle of neurosetae heterogomph spinigers and heterogomph falcigers. Following parapodia of anterior region (Fig. 16B, C) with three notopodial ligules and subulate dorsal cirrus; intermediate ligule shorter than outer ligules. Neuropodia with presetal and postsetal ligules, both ligules subequal in size and shape. Ventral cirri short, subulate. Notopodia with homogomph spinigers with minute serrations along cutting margin (Fig. 16D). Neuropodia with homogomph spinigers with long appendages and heterogomph falcigers (Fig. 16E) in upper bundle, and heterogomph spinigers (Fig. 16F) and heterogomph falcigers (Fig. 16G, H) in lower bundle; neuropodial falcigers of 5th parapodium with straight, moderately long appendages and coarsely serrated margin. In median and posterior parapodia notopodia still with three ligules but intermediate ones reduced to very small ligules (Fig. 16I) and completely reduced in more posterior parapodia (Fig. 16J). Dorsal cirrus becoming slender posteriorly. Appendages of stout neuropodial falcigers distally reflexed and with or without few serrations along cutting margin (Fig. 16K, L). Acicula black, occurring singly in each noto- and neuropodium (Fig. 16M). Pygidium with ventral slender anal cirri and dorsal anus.

The species is newly added to the Japanese polychaetous fauna.

Distribution. Tropical Indo-west-Pacific; Japan (Chichijima Is.).

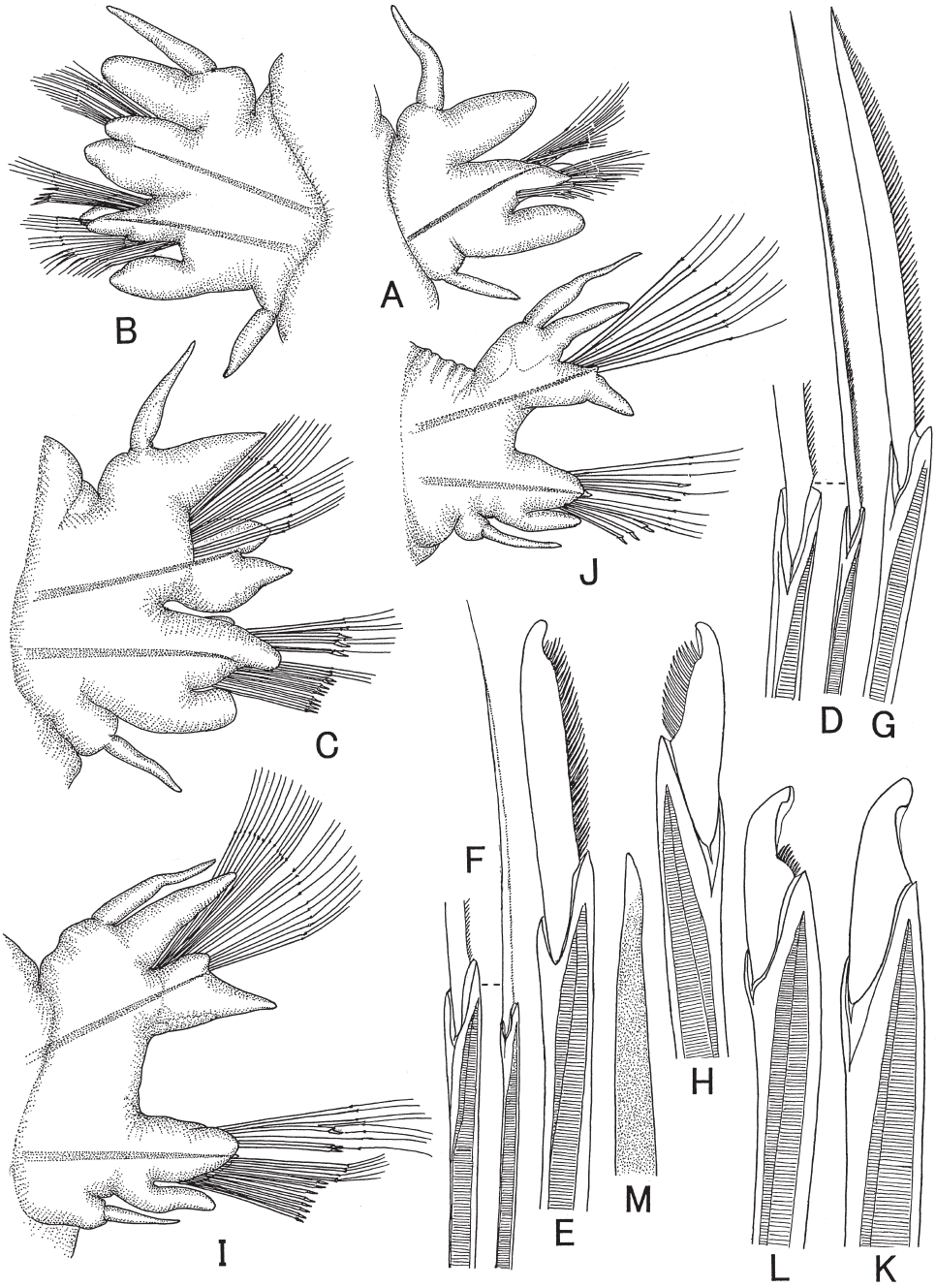

Fig. 16. *Neanthes unifasciata* (Willey). ——A, 2nd left parapodium, anterior view, × 34; B, 5th right parapodium, anterior view, × 34; C, 13th right parapodium, posterior view, × 34; D, notopodial homogomph spiniger, × 270, with detail of distal part of shaft, × 545; E, neuropodial heterogomph falciger of upper bundle from 5th parapodium, × 545; F, heterogomph spiniger of lower bundle from same, × 270, with detail of distal part of shaft, × 545; G, heterogomph falciger of lower bundle from same, × 545; H, heterogomph falciger of lower bundle from 13th parapodium, × 545; I, 30th right parapodium, posterior view, × 34; J, 70th right parapodium, same view, × 34; K, heterogomph falciger of lower bundle from 30th parapodium, × 545; L, same from 70th parapodium, × 545; M, aciculum, × 466.

Neanthes spp.

Materials. NSMT-Pol. S 2369, KY08 St. 19 (1); NSMT-Pol. S 2370, KY09 St. 1 (2), NSMT-Pol. S 2371, KY09 St. 7 (9), NSMT-Pol. S 2372, KY09 St. 8 (3), NSMT-Pol. S 2373, KY09 St. 14 (2), NSMT-Pol. S 2374, KY09 St. 21 (2), NSMT-Pol. S 2375, KY09 St. 28 (1), NSMT-Pol. S 2376, KY09 St. 30 (1).

Nereis abyssa Imajima, 2009

Nereis abyssa Imajima, 2009: 82–85, figs. 19A–F, 20A–J.

Materials. NSMT-Pol. S 2367, L-2′-1000 (2).

Distribution. Japan (off Sanriku, Sagami Bay, Sagami Sea.).

Nereis sp.

Materials. NSMT-Pol. S 2377, Tak07-9 St. 8 (1); NSMT-Pol. S 2378, L-1-800 (1), NSMT-Pol. S 2379, L-3-400 (1); NSMT-Pol. S 2380, L-7-200 (1); NSMT-Pol. S 2381, Tak08 St. 3 (1).

Nicon sp.

Materials. NSMT-Pol. S 2021, Tak07-9 St. 9 (1); NSMT-Pol. S 2022, L-3-500 (1); NSMT-Pol. S 2023, KY08 St. 11 (3); NSMT-Pol. S 2382, KY09 St. 7 (6); NSMT-Pol. S 2577, TW02-04 (5).

Platynereis dumerilii (Audouin and Milne-Edwards, 1833)

Platynereis dumerilii: Fauvel, 1953: 218–219, fig. 111a–f; Imajima, 1967: 422–423, fig. 6a–e; Imajima, 1972a: 80–82, figs. 20, 22; Imajima, 2003: 178.

Materials. NSMT-Pol. S 1832, KY09 St. 1 (3), NSMT-Pol. S 2193, KY09 St. 8 (2), NSMT-Pol. S 2194, KY09 St. 28 (4), NSMT-Pol. S 2195, KY09 St. 30 (7); NSMT-Pol. S 2531, KY10 St. 24 (8).

Distribution. Atlantic, Pacific and Indian oceans, Mediterranean Sea; Japan (Sagami Bay to Amami-Ōshima I., Chichijima Is., Hahajima I.).

Rullierinereis misakiensis (Imajima and Hayashi, 1969)

Nicon misakiensis Imajima and Hayashi, 1969: 11–12, pl. 3, figs. a–k; Imajima, 1972a: 55–57, figs. 9a–j, 11; Imajima, 1996: 114, fig. 91.

Rullierinereis misakiensis: Wu and Sun, 1979: 106–108, fig. 7A–J.

Materials. NSMT-Pol. S 2383, KY09 St. 28 (2), NSMT-Pol. S 2384, KY09 St. 30 (3).

Distribution. South China Sea; Japan (Sagami Bay, Chichijima Is.).

Family **Nephtyidae** Grube, 1850

Aglaophamus jeffreysii (McIntosh, 1885)

Nephthys jeffreysii McIntosh, 1885: 162.

Aglaophamus jeffreysii: Imajima and Hartman, 1964: 155–156; Imajima and Takeda, 1985: 86–89, figs. 13a–f, 14a–k.

Material. NSMT-Pol. S 1833, KY08 St. 17 (1).

Distribution. Japan (Wakasa Bay, Amakusa, Kagoshima Bay, Chichijima I.).

Aglaophamus malmgreni (Théel, 1879)

Nephthys malmgreni Théel, 1879: 26, pl. 1, fig. 17, pl. 2, fig. 17.

Aglaophamus malmgreni: Pettibone, 1956: 557; Imajima and Takeda, 1985: 68–70, fig. 6a–n; Imajima, 2009: 88.

Materials. NSMT-Pol. S 1596, L-1-500 (2), NSMT-Pol. S 1597, L-2′-350 (1).

Distribution. Arctic Ocean, Bering Sea, north Japan Sea; Japan (off Sanriku to Tsushima Strait).

Aglaophamus verrilli (McIntosh, 1885)

Nephthys verrilli McIntosh, 1885: 163–164, pl. 26, figs. 6, 7, pl. 32A, fig. 8.

Aglaophamus verrilli: Rainer and Hutchings, 1977: 316–320, figs. 7–11, 41, table 3; Imajima and Takeda, 1985: 80–81, fig. 11a–p; Kirkegaard, 1995: 37.

Material. NSMT-Pol. S 1598, L-3-500 (1).

Distribution. Australia, North America to Panama, Indian Ocean; Japan (Enshū-Nada to Kagoshima Bay, Toshima I.).

Inermonephtys japonica Imajima and Takeda, 1985

Inermonephtys japonica Imajima and Takeda,

1985: 59–63, fig. 2a–q; Imajima, 2003: 179–200; Imajima, 2009: 88.

Materials. NSMT-Pol. S 1599, L-1-200 (1), NSMT-Pol. S 1600, L-2-100 (1).

Distribution. Japan (off Sanriku to Kagoshima Bay).

Nephtys paradoxa Malm, 1874

Nephthys paradoxa: Fauvel, 1914: 199.

Nephtys paradoxa: Hartman, 1944a: 335, 339, pl. 15, fig. 6; Fauchald, 1968: 13–15, figs. 1A, 2B, 3C; Imajima and Takeda, 1987: 50–52, figs. 5a–i, 6; Imajima, 2006: 358; Imajima, 2009: 89.

Materials. NSMT-Pol. S 1601, L-1-500 (2).

Distribution. North Atlantic Ocean, Bering Strait, Greenland; Japan (off Sanriku, Sagami Sea, off Tango Peninsula).

Family **Paralacydoniidae** Pettibone, 1963

Paralacydonia paradoxa Fauvel, 1913

Paralacydonia paradoxa Fauvel, 1913: 54, fig. 55; Pettibone, 1963: 184–186, fig. 46; Imajima, 2001b: 200, fig. 93; Imajima, 2003: 180–182, fig. 90a–j; Imajima, 2006: 359; Imajima, 2009: 90.

Materials. NSMT-Pol. S 1834, L-2-100 (1), NSMT-Pol. S 1835, L-2-350 (1), NSMT-Pol. S 1836, L-7-1300 (2), NSMT-Pol. S 1837, L-2′-350 (1).

Distribution. Mediterranean Sea, South Africa, off southern California; Japan (Ōtsuchi Bay to Amami-Ōshima I., Hachijōjima I.).

Order **Amphinomida**

Family **Amphinomidae** Savigny, 1818

Chloeia flava (Pallas, 1766)

Chloeia flava: McIntosh, 1885: 8–13, pl. III, figs. 1–3, pl. IA, figs. 7–9; Izuka, 1912: 223–225, pl. 2, fig. 4, pl. 22, figs. 3–5; Imajima and Hartman, 1964: 50–51; Imajima, 2003: 182–183.

Materials. NSMT-Pol. S 2162, L-3-400 (1); NSMT-Pol. S 2565, TW02-04 (1); NSMT-Pol. S 2566, KY10 St. 6 (1).

Distribution. Indian Ocean, Australia, Philippines, South China Sea; Japan (Sagami Bay to Tosa Bay, Toshima I., Chichijima Is., Hahajima I.).

Chloeia fusca McIntosh, 1885

Chloeia fusca McIntosh, 1885: 14–15, pl. 2, figs. 1, 2, pl. IA, figs. 14–15, pl. IIA, figs. 1–2; Takahashi, 1938a: 202–204, textfig. 8a–d; Imajima and Hartman, 1964: 51.

Materials. NSMT-Pol. S 2163, Tak07-9 St. 5 (3); NSMT-Pol. S 2164, Tak07-9 St. 8 (1); NSMT-Pol. S 2165, Tak08 St. 5 (1), NSMT-Pol. S 2166, KY08 St. 17 (1); NSMT-Pol. S 2167, KY09 St. 1 (2), NSMT-Pol. S 2168, KY09 St. 7 (2), NSMT-Pol. S 2169, KY09 St. 28 (2), NSMT-Pol. S 2170, KY09 St. 30 (2), NSMT-Pol. S 2171, SY09-04 (2), NSMT-Pol. S 2172, SY09-09 (1), NSMT-Pol. S 2173, SY09-20 (1); NSMT-Pol. S 2526, KY10 St. 24 (1) , NSMT- Pol. S 2527, KY10 St. 27 (1).

Distributions. Molucca Islands, Bay of Bengal, Australia; Japan (Izu Peninsula, Hachijōjima I., Mukojima I., Chichijima Is.).

Eurythoe complanata (Pallas, 1766)

Eurythoe complanata: Potts, 1909: 367, pl. 46, fig. 20; Fauvel, 1932: 45; Okuda, 1937a: 263–264, figs. 1–2; Imajima and Hartman, 1964: 51.

Materials. NSMT-Pol. S 2196, KY09 St. 13 (1), NSMT-Pol. S 2515, KY09 St. 30 (1); NSMT-Pol. S 2528, KY10 St. 6 (4).

Distribution. Caribbean Sea, Marshall Islands, Australia, South Africa, Palau Islands; Japan (Ishigakijima I., Chichijima Is., Hahajima I.).

Notopygos gardineri Potts, 1909

Notopygos gardineri Potts, 1909: 362, pl. 45, fig. 8, pl. 46, figs. 6–8; Monro, 1939: 165–166; Imajima, 2003: 184–186, figs. 91a–c, 92a–l.

Materials. NSMT-Pol. S 2174, Tak07-7 St. 4 (1), NSMT-Pol. S 2175, Tak07-7 St. 7 (1); NSMT-Pol. S 2176, Tak07-9 St. 5 (18), NSMT-Pol. S 2177, Tak07-9 St. 8 (1); NSMT-Pol. S 2178, L-7-200 (2), NSMT-Pol. S 2179, L-7-800 (1); NSMT-Pol. S 2180, Tak08 St. 4 (3), NSMT-Pol. S

2181, Tak08 St 5 (3); NSMT-Pol. S 2182, KY08 St. 19 (1); NSMT-Pol. S 2183, KY09 St. 13 (2), NSMT-Pol. S 2184, KY09 St. 29 (2), NSMT-Pol. S 2219, KY09 St. 30 (1).

Distribution. Indian Ocean, Tahiti; Japan (Sagami Bay, Hachijōjima I., Chichijima Is., Hahajima I.).

Pherecardia sp.

Materials. NSMT-Pol. S 2185, KY09 St. 1 (1), NSMT-Pol. S 2186, KY09 St. 8 (2), NSMT-Pol. S 2187, KY09 St. 14 (1), NSMT-Pol. S 2188, KY09 St. 15 (1); NSMT-Pol. S 2567, KY10 St. 4 (1).

Family **Euphrosinidae** Williams, 1851

Euphrosine polyclada Imajima, 2003

Euphrosine polyclada Imajima, 2003: 194–197, figs. 98a–i, 99a–i; Imajima, 2007: 476–477, fig. 148.

Materials. NSMT-Pol. S 2024, L-2-100 (1), NSMT-Pol. S 2516, KY09 St. 7 (1).

Distribution. Japan (Ōtsuchi Bay, Sagami Bay, Sagami Sea, Tsushima I., Chichijima I.).

Order **Eunicida**

Family **Onuphidae** Kinberg, 1865

Subfamily **Hyalinoeciinae** Paxton, 1986

Anchinothria macrobranchiata (McIntosh, 1885)

Nothria macrobranchiata McIntosh, 1885: 320–322, pl. 41, figs. 6, 7, textfigs. 77, 78.

Anchinothria macrobranchiata: Paxton, 1986a: 28; Imajima, 1999: 13–16, figs. 7a–g, 8a–l; Imajima, 2009: 93.

Material. NSMT-Pol. S 1611, L-2′-1000 (1).

Distribution. Japan (Sagami Bay, Sagami Sea).

Hyalinoecia tubicola (O.F. Müller, 1776)

Nereis tubicola Müller, 1776: 18.

Hyalinoecia tubicola: Izuka, 1912: 97–98, pl. 11, figs. 1–4; Orensanz, 1974: 114–117, fig. 13; Imajima, 1999: 31–34, figs. 18a–h, 19a–s; Imajima, 2005: 88.

Materials. NSMT-Pol. S 1612, Rin07 St. 2 (1); NSMT-Pol. S 1613, Tak07-9 St. 8 (1); NSMT-Pol. S 1614, L-2-100 (1), NSMT-Pol. S 1615, L-3-500 (2); NSMT-Pol. S 1841, Tak08 St. 4 (3), NSMT-Pol. S 1842, Tak08 St. 5 (1); NSMT-Pol. S 1843, KY08 St. 3 (2), NSMT-Pol. S 1844, KY08 St. 13 (1); NSMT-Pol. S 1845, TW-02-04 (2); NSMT-Pol. S 1846, KY09 St. 1 (1), NSMT-Pol. S 2025, KY09 St. 8 (3); NSMT-Pol. S 2026, SY09-07 (1), NSMT-Pol. S 2027, SY09-09 (1), NSMT-Pol. S 2028, SY09-10 (1); NSMT-Pol. S 2535, KY10 St. 11 (1), NSMT-Pol. S 2550, KY10 St. 30 (2).

Distribution. East Atlantic from Greenland to south Africa, Indian Ocean, California; Japan (Bōsō Peninsula to Tanegashima I., Toshima I., Hachijōjima I., Mukojima I., Chichijima Is., Hahajima I.).

Nothria itoi Maekawa and Hayashi, 1989

Nothria itoi Maekawa and Hayashi, 1989: 68–70, fig. 5a–m; Imajima, 1999: 40–42, figs. 22a–j, 23a–p; Imajima, 2006: 360.

Materials. NSMT-Pol. S 1616, Rin07 St. 2 (8).

Distribution. Japan (Kashima Sea to Tosa Bay, Wakasa Bay).

Nothria otsuchiensis Imajima, 1986

Nothria otsuchiensis Imajima, 1986: 108–110, fig. 8a–r; Imajima, 1999: 46–51, fig. 26a–f; Imajima, 2006: 360.

Materials. NSMT-Pol. S 1617, L-2-100 (6), NSMT-Pol. S 2386, L-2′-200 (2), NSMT-Pol. S 2387, L-3-200 (1), NSMT-Pol. S 2388, L-3-300 (1), NSMT-Pol. S 1618, L-3-500 (9).

Distribution. Japan (Ōtsuchi Bay to Kagoshima Bay, Toshima I.).

Subfamily **Onuphinae** Audouin and Milne Edwards, 1833

Onuphis imajimai Maekawa and Hayashi, 1989

Onuphis imajimai Maekawa and Hayashi, 1989: 77–79, fig. 10a–k; Imajima, 2001a: 73.

Materials. NSMT-Pol. S 1619, Rin07 St. 1 (1), NSMT-Pol. S 1620, Rin07 St. 2 (18); NSMT-Pol. S 1622, L-1-700 (62), NSMT-Pol. S 1623, L-1-

800 (286), NSMT-Pol. S 1621, L-1-500 (2), NSMT-Pol. S 2389, L-2′-200 (1), NSMT-Pol. S 2390, L-2′-350 (1), NSMT-Pol. S 2029, L-2′-600 (1), NSMT-Pol. S 2030, L-2′-700 (1).

Distribution. Japan (Wakasa Bay, Sagami Bay, Sagami Sea, Tosa Bay).

Paradiopatra okai Imajima, 1999

Paradiopatra okai Imajima, 1999: 77–81, figs. 43a–i, 44a–j; Imajima, 2001b: 284–285, fig. 133.

Materials. NSMT-Pol. S 2031, L-3-500 (2).

Distribution. Japan (Ōtsuchi Bay, Sagami Bay to Amami-Ōshima I., Toshima I.).

Paradiopatra simplex Imajima, 1999

Paradiopatra simplex Imajima, 1999: 81–84, figs. 45a–j, 46a–j, 47a–n; Imajima, 2001b: 286–287, fig. 134.

Material. NSMT-Pol. S 2032, L-3-500 (1).

Distribution. Japan (Suruga Bay, Toshima I.).

Paradiopatra striata (Uschakov, 1950)

Onuphis parva striata Uschakov, 1950: 193, fig. 25; Uschakov, 1955: 234, figs. 74b, 77j.

Paradiopatra striata: Imajima, 1986: 110–114, fig. 9a–t; Imajima, 1999: 84–88; Imajima, 2001a: 74; Imajima, 2006: 361.

Materials. NSMT-Pol. S 1624, L-1-500 (10), NSMT-Pol. S 2391, L-2-800 (4), NSMT-Pol. S 2033, L-2′-350 (1).

Distribution. Sea of Okhotsk; Japan (Hokkaido to Kagoshima Bay).

Paradiopatra unica Imajima, 1999

Paradiopatra unica Imajima, 1999: 88–92, figs. 48a–h, 49a–m; Imajima, 2005: 88; Imajima, 2006: 361.

Materials. NSMT-Pol. S 1625, Rin07 St. 1 (5); NSMT-Pol. S 2392, SY09-21 (1).

Distribution. Japan (off Oga Peninsula to Amami-Ōshima I., Chichijima I.).

Paradiopatra willemoesii (McIntosh, 1885)

Nothria willemoesii McIntosh, 1885: 322–327, pl. 26A, figs. 1–4, pl. 35A, fig. 1, pl. 41, figs. 4–10.

Paradiopatra willemoesii: Paxton, 1986a: 38; Imajima, 1999: 92–95, figs. 50a–h, 51a–g, 52a–o, 53a–b.

Materials. NSMT-Pol. S 1699, L-2-100 (2).

Distribution. Amboina, Port Darwin; Japan (Sagami Bay to Kagoshima Bay).

Rhamphobrachium* (*Spinigerium*) *brevibrachiatum (Ehlers, 1875)

Diopatra brevibrachiata Ehlers, 1875: 49–52, pl. 3, figs. 11–21.

Rhamphobrachium (*Spinigerium*) *brevibrachiatum*: Paxton, 1986b: 89–92, fig. 9a–g; Imajima, 1999: 102–108, figs. 56a–f, 57a–s.

Materials. NSMT-Pol. S 1626, L-2-100 (15), NSMT-Pol. S 1628, L-3-300 (1), NSMT-Pol. S 1629, L-3-400 (1), NSMT-Pol. S 1627, L-2′-200 (1); NSMT-Pol. S 2034, KY08 St. 21 (1), NSMT-Pol. S 2035, KY08 St. 25 (1).

Distribution. English Channel to Mediterranean Sea, Florida; Japan (Sagami Bay to Ōshima Strait, Toshima I., Chichijima I.).

Rhamphobrachium* (*Spinigerium*) *hutchingsae Paxton, 1986

Rhamphobrachium (*Spinigerium*) *hutchingsae* Paxton, 1986b: 94–97, fig. 12a–l; Imajima, 1999: 108–109, figs. 58a–l, 59a–k; Imajima, 2001b: 298–299, fig. 140.

Materials. NSMT-Pol. S 2216, Tak08 St. 5 (1); NSMT-Pol. S 2036, SY09-20 (1).

Distribution. Solomon Islands, Australia; Japan (Sagami Bay, Suruga Bay, Hachijōjima I., Chichijima I.).

Family **Eunicidae** Savigny, 1818

Eunice annulicirrata Miura, 1986

Eunice annulicirrata Miura, 1986: 294–297, figs. 22, 23; Imajima, 2007: 315–316, fig. 90.

Materials. NSMT-Pol. S 1631, Tak07-9 St. 10 (2); NSMT-Pol. S 2047, KY08 St. 15 (1), NSMT-Pol. S 2048, KY08 St. 20 (1); NSMT-Pol. S 2049, KY09 St. 1 (1); NSMT-Pol. S 2151, KY09 St. 8 (3), NSMT-Pol. S 2152, KY09 St. 14 (1), NSMT-

Pol. S 2153, KY09 St. 28 (10), NSMT-Pol. S 2154, KY09 St. 29 (1), NSMT-Pol. S 2155, KY09 St. 30 (8), NSMT-Pol. S 2551, KY09 St. 34 (1); NSMT-Pol. S 2552, KY10 St. 26 (1), NSMT-Pol. S 2553, KY10 St. 27 (6).

Distribution. Japan (Sagami Bay to Tanegashima I., Hachijōjima I., Chichijima Is., Hahajima Is.).

Eunice antennata (Lamarck, 1818)

Eunice antennata: Imajima, 1967: 433–435, fig. 10a–n; Imajima, 2007: 319–320, fig. 92.

Materials. NSMT-Pol. S 1630, Tak07-9 St. 4 (1); NSMT-Pol. S 2156, KY09 St. 30 (1).

Distribution. Atlantic Ocean, Indian Ocean; Japan (off Bōsō Peninsula to Ishigakijima I., Hachijōjima I., Chichijima Is.).

Eunice australis Quatrefages, 1866

Eunice australis: Fauchald, 1992: 74, fig. 17g–l; Imajima, 2007: 324–325, fig. 94.

Materials. NSMT-Pol. S 1632, Tak07-9 St. 5 (4).

Distribution. New Zealand; Japan (Sagami Sea, Niijima I., Hachijōjima I.).

Eunice curticirrus Knox, 1960

Eunice (*Nicidion*) *curticirrus* Knox, 1960: 125–126, figs. 190–195.

Eunice curticirrus: Fauchald, 1992: 119, fig. 36f–j, tables 33, 40; Imajima, 2007: 326–327, fig. 95.

Materials. NSMT-Pol. S 2084, Tak07-9 St. 5 (2), NSMT-Pol. S 2202, Tak07-9 St. 6 (2); NSMT-Pol. S 2085, KY09 St. 7 (2), NSMT-Pol. S 2157, KY09 St. 8 (1).

Distribution. Chatham Islands; Japan (Sagami Sea, Hachijōjima I., Chichijima Is., Hahajima I.).

Eunice fauchaldi Miura, 1986

Eunice fauchaldi Miura, 1986: 297–301, figs. 24–27; Imajima, 1997a: 183–184; Imajima, 2001a: 74–75; Imajima, 2005: 89; Imajima, 2006: 361–362; Imajima, 2007: 330–331, fig. 97.

Materials. NSMT-Pol. S 1633, Rin07 St. 2 (10); NSMT-Pol. S 2203, Tak07-9 St. 5 (9), NSMT-Pol. S 1634, Tak07-9 St. 8 (1); NSMT-Pol. S 1635, L-1-200 (1), NSMT-Pol. S 2050, L-2-100 (11), NSMT-Pol. S 2051, L-2′-200 (7); NSMT-Pol. S 2052, Tak08 St. 3 (1), NSMT-Pol. S 2197, Tak08 St. 5 (1); NSMT-Pol. S 2198, KY08 St. 21 (1), NSMT-Pol. S 2199, KY08 St. 22 (1), NSMT-Pol. S 2200, KY08 St. 25 (3); NSMT-Pol. S 2554, TW02-04 (2); NSMT-Pol. S 1847, KY09 St. 1 (4), NSMT-Pol. S 2201, KY09 St. 7 (3), NSMT-Pol. S 2204, KY09 St. 8 (9), NSMT-Pol. S 2205, KY09 St. 15 (3), NSMT-Pol. S 2206, KY09 St. 21 (13), NSMT-Pol. S 2555, KY09 St. 30 (4).

Distribution. Japan (Sagami Bay to Tosa Bay, Hachijōjima I., Chichijima Is., Hahajima I.).

Eunice medicina Moore, 1903

Eunice medicina Moore, 1903: 441–444, pl. 25, figs. 49–51; Izuka, 1912: 125–126, pl. 14, fig. 8; Imajima and Hartman, 1964: 257; Fauchald, 1992: 214–216, fig. 71a–e, tables 41, 42; Imajima, 2007: 346–347, fig. 105.

Materials. NSMT-Pol. S 2053, L-2-100 (7); NSMT-Pol. S 2054, L-3-300 (3); NSMT-Pol. S 2055, L-3-400 (2).

Distribution. Japan (Sagami Sea, Tosa Bay, Toshima I.).

Eunice microprion Marenzeller, 1879

Eunice microprion Marenzeller, 1879: 135–136, pl. 5, fig. 1; Izuka, 1912: 116–117, pl. 13, fig. 10; Imajima and Hartman, 1964: 252; Fauchald, 1992: 219–221, fig. 73a–k, tables 27, 29; Imajima, 2007: 348–349, fig. 106.

Materials. NSMT-Pol. S 1639, Rin07 St. 2 (1), NSMT-Pol. S 2158, L-2′-500 (2).

Distribution. East China Sea; Japan (Sagami Sea, Nansei Is.).

Eunice mucronata Moore, 1903

Eunice mucronata Moore, 1903: 437–440, pl. 25, figs. 42–45; Imajima and Hartman, 1964: 257–258; Imajima, 2001a: 75; Imajima, 2006: 362; Imajima, 2007: 354–355, fig. 109; Imajima, 2009: 99–100.

Materials. NSMT-Pol. S 1636, Rin07 St. 1 (12), NSMT-Pol. S 1637, Rin07 St. 2 (37), NSMT-Pol.

S 1638, L-2-200 (7); NSMT-Pol. S 2056, L-2-800 (3); NSMT-Pol. S 2057, L-2′-200 (26); NSMT-Pol. S 2058, L-2′-350 (1); NSMT-Pol. S 2059, L-2′-500 (1).

Distribution. Japan (Ōtsuchi Bay, Sagami Bay to Tosa Bay).

Eunice pusilla sp. nov. (Figs. 17A–H, 18A–G)

Type Materials. Holotype, NSMT-Pol. S H 539: off Hachijōjima I., 33°19.22′N, 140°10.77′E – 33°19.12′N, 140°10.43′E, 205–201 m, Jul. 2008 (Tak08 St. 5: R/V *Takunan*). Paratypes, NSMT-Pol. S P 540: Tak07-9 St. 5 (2); S P 541: St.L-7-500 (1); S P 542: St. L-3-100 (1).

Description. Holotype-specimen lacking posterior end 45 mm long, 3 mm wide including parapodia for 98 setigers. Largest complete paratype 78 mm long, 3.5 mm wide including parapodia for 95 setigers. Anterior body with convex dorsum and flattened ventrum and dorsoventrally flattened posteriorly. Body cavity fulled by oocytes.

Prostomium distinctly shorter and narrower than peristomium. Prostomial lobes frontally rounded, well separated medially. Antennae in a horseshoe, similar in thickness. Ceratophores ring-shaped in all antennae, without anticulations. Ceratostyles strongly articulated with cylindrical, drop-shaped distally; maximum number of articulations 7 in lateral antenna; palps reaching posterior edge of anterior peristomial ring. Dark eyes between bases of palps and lateral antennae. Peristomium about as wide as anterior part of body; anterior ring slightly flaring anteriorly. Peristomial cirri to middle of posterior peristomial ring, with 5–6 cylindrical or drop shaped articulations (Fig. 17A).

First setigers with short, neuropodial acicular lobes; notopodial cirri long, digitiform with 4 distinct articulations; ventral cirri short and thick (Fig. 17B). Following all neuropodial acicular lobes obliquely truncate with acicular emerging above midline. Pe- and postsetal lobes low, transverse folds. Notopodial cirri becoming slender and shorter posteriorly, reduced to half length by setiger 40 (Fig. 17C–G). Ventral cirri basally inflated from setiger 7 through setiger 25. Inflated bases large, scoop-shaped with narrow tips tapering, broadly conical (Fig. 17C, D). From setiger 26 inflated bases rapidly reduced, completely missing by setiger 30.

Branchiae from setiger 6 to setigers 40–50. Anterior branchiae digitiform filaments, length of about 1/3 of notopodial cirri (Fig. 17C, D), branchiae decreasing in size posteriorly. In last several branchial setigers branchiae becoming short tubercles on dorsal base of notopodial cirri (Fig. 17F).

Neuropodial superior fascicle with marginally serrated limbate setae and pectinate setae (Fig. 17D–G). Pectinate setae tapering, flat, with 10–11 teeth, one marginal tooth distinctly longer than all other teeth (Fig. 18A). Inferior fascicle with compound heterogomph falcigers with stout, nearly triangular bidentate blades (Fig. 18B, C). Proximal teeth larger than distal teeth, sharp-tipped, directly laterally. Hoods asymmetrically bluntly pointed. Distal portion of shafts and hoods covered with surficial spines. Subacicular hooks first present from setiger 25, present in all setigers thereafter. Hooks dark, proximal teeth larger than distal teeth, directed obliquely distally (Fig. 18D). Aciculae paired, black, tapering, slightly curved dorsally (Fig. 18E). Mandibles with slender sclerotized shafts and high calcareous cutting plates (Fig. 18F). Maxillae hard and calcified; maxillary formula: Mx I=1+1, Mx II=5+5, Mx III=9+0, Mx IV=3+8, Mx V=1+1, Mx VI=1+1 (Fig. 18G). Pygidium with dorsal anus and paired ventral anal cirri with 5–6 articulations (Fig. 17H).

Remarks. *Eunice pusilla* resembles *E. nicidioformis* Treadwell (1906) from off Hawaiian Islands and *E. unibranchiata* Imajima (2006) from Japan in that: the single branchial filaments are present from setiger 6; the antennae have distinct cylindrical or drop-shaped articulations and bidentate subacicular hooks are first present from setiger 25. However, *E. pusilla* differs from *E. nicidioformis* in that the posterior branchiae are single short digitiform and afterward disappering instead of branchiae form a vascularized sleeve around the base of the notopodial cirri. The bran-

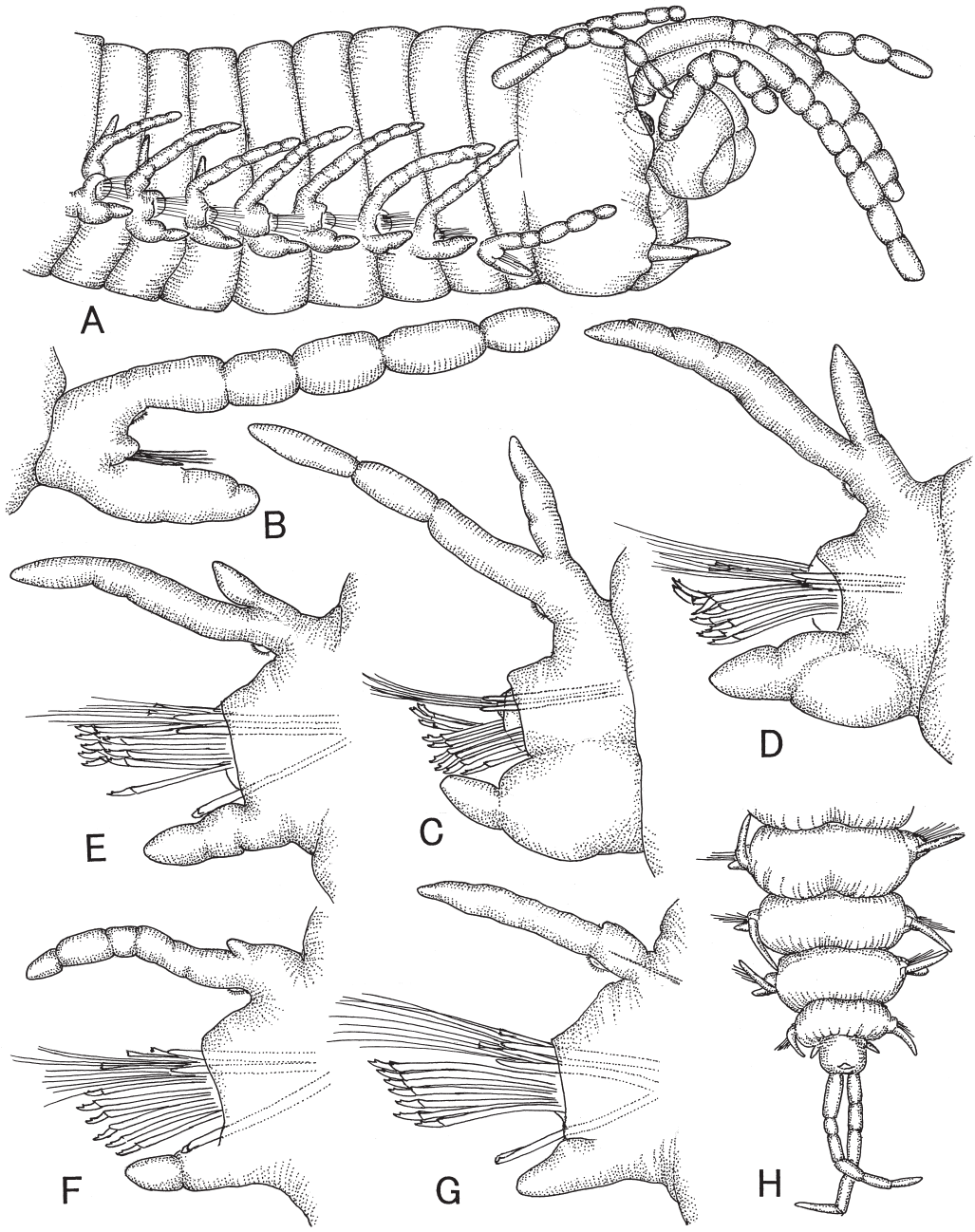

Fig. 17. *Eunice pusilla* sp. nov. ——A, anterior end, lateral view, × 17; B, right parapodium from setiger 1, posterior view, × 54; C, same from setiger 10, anterior view, × 54; D, same from setiger 20, same view, × 54; E, same from setiger 30, same view, × 54; F, same from setiger 40, same view, × 54; G, same from setiger 70, same view, × 54; H, posterior end from paratype, dorsal view, × 17.

chiae of *Eunice unibranchiata* are as long as dorsal cirri in the most setigers.

Etymology. The species is named for having the reduced branchiae.

Distribution. Japan (Toshima I., Hachijōjima I.).

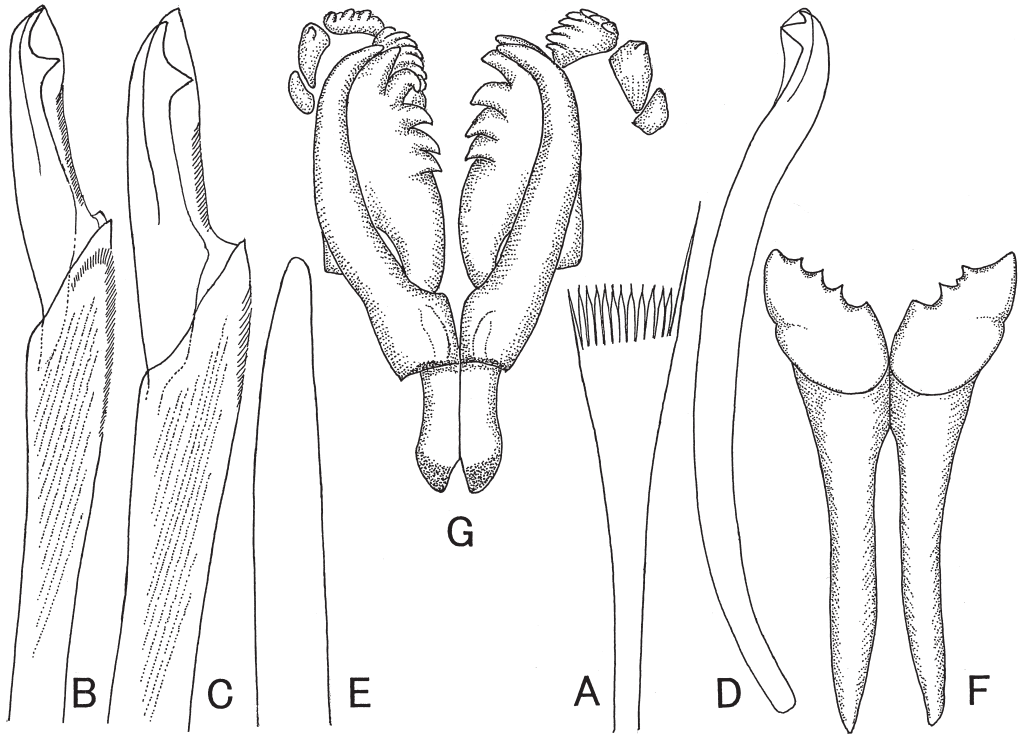

Fig. 18. *Eunice pusilla* sp. nov. ——A, pectinate seta from 40th parapodium, × 890; B, C, compound heterogomph falcigers, × 610; D, subacicular hook, × 120; E, aciculum, × 287; F, mandibles, × 20; G, maxillae, × 23.

Eunice tanseiae Miura, 1986

Eunice tanseiae Miura, 1986: 308–310, figs. 32, 33; Imajima, 2007: 364–365, fig. 114.

Material. NSMT-Pol. S 2060, Tak07-9 St. 4 (1).

Distribution. Japan (Sagami Sea, Kii Channel, Hachijōjima I.).

Eunice unibranchiata Imajima, 2006

Eunice unibranchiata Imajima, 2006: 358–362, figs. 15a–g, 16a–j; Imajima, 2007: 366–367, fig. 115.

Materials. NSMT-Pol. S 2086, L-2-100 (2).

Distribution. Japan (Kujūkuri beach to Sagami Sea, Tanegashima I.).

Eunice vittata (delle Chiaje, 1828)

Eunice vittata: Moore, 1903: 435; Fauvel, 1923: 404–405, fig. 158h–n; Imajima and Hartman, 1964: 258; Imajima, 2007: 368–369, fig. 116.

Materials. NSMT-Pol. S 2207, Tak07-9 St. 5 (1); NSMT-Pol. S 1848, Tak08 St. 5 (1); NSMT-Pol. S 2061, KY08 St. 15 (2); NSMT-Pol. S 2062, KY09 St. 29 (1), NSMT-Pol. S 2063, KY09 St. 30 (1); NSMT-Pol. S 2556, KY10 St. 2 (1).

Distribution. Mediterranean Sea, Mexico Bay, New Zealand, Indian Ocean; Japan (Sagami Bay, Ōmura Bay, Hachijōjima I., Chichijima Is.).

Eunice yamamotoi Miura, 1986

Eunice yamamotoi Miura, 1986: 285–287, figs. 13, 14; Imajima, 2006: 366; Imajima, 2007: 370–371, fig. 117.

Materials. NSMT-Pol. S 2208, Tak07-7 St. 4 (4); NSMT-Pol. S 2087, Tak07-9 St. 10 (3); NSMT-Pol. S 2088, L-2-100 (1), NSMT-Pol. S 2089, L-7-200 (1), NSMT-Pol. S 2209, L-7-300 (1); NSMT-Pol. S 2090, KY09 St. 8 (1); NSMT-Pol. S 2210, SY09-09 (1).

Distribution. Japan (Sagami Bay to Amami-Ōshima I., Hachijōjima I., Mukojima I., Hahajima Is.).

Lysidice ninetta Audouin and Milne-Edwards, 1833

Lysidice ninetta: Fauvel, 1923: 411–412, fig. 162a–g; Day, 1967a: 403, fig. 17. 8. g–i; Imajima, 2006: 366; Imajima, 2007: 378, fig. 121.

Materials. NSMT-Pol. S 1640, Rin07 St. 2 (5); NSMT-Pol. S 1641, Tak07-9 St. 10 (2); NSMT-Pol. S 1642, L-7-200 (1); NSMT-Pol. S 2579, KY10 St. 27 (2).

Distribution. Red Sea, Mediterranean Sea, Atlantic Ocean; Japan (Hokkaido to Tosa Bay, Hachijōjima I., Chichijima Is.).

Marphysa kinbergi McIntosh, 1910

Marphysa kinbergi McIntosh, 1910: 451–452, pl. 74, figs. 9, 9a, pl. 83, figs. 6–6b; Imajima, 2007: 383–384, fig. 124.

Material. NSMT-Pol. S 2037, L-1-200 (1).

Distribution. Off Cape Finisterre; Japan (Kashima Sea to Kagoshima Bay).

Nematonereis hebes Verrill, 1900

Nematonereis hebes: Gathof, 1984: 40-4–40-6, figs. 40-1, 2a-g; Imajima, 2007: 395, fig. 130.

Materials. NSMT-Pol. S 2159, KY09 St. 30 (2), NSMT-Pol. S 2559, KY10 St. 27 (2).

Distribution. Gulf of Mexico; Japan (Matoya Bay to Okinawajima I., Chichijima Is.).

Palola siciliensis (Grube, 1840)

Eunice siciliensis Grube, 1840: 83; Okuda, 1937a: 279–280, figs. 22–23.

Palola siciliensis: Hartman, 1944b: 131; Imajima and Hartman, 1964: 261; Imajima, 2007: 397, fig. 131.

Materials. NSMT-Pol. S 2160, KY09 St. 21 (1), NSMT-Pol. S 2161, KY09 St. 30 (1); NSMT-Pol. S 2536, KY10 St. 6 (1).

Distribution. Mediterranean Sea, tropical Indo-west-Pacific, western Africa; Japan (Ōtsuchi Bay, Sagami Sea, Chichijima Is., Hahajima I.).

Family **Lumbrineridae** Malmgren, 1867

Eranno bifrons Kinberg, 1865 (Fig. 19A–J)

Eranno bifrons Kinberg, 1865: 567; Orensanz, 1990: 78–80, pl. 20.

Lumbrineris bifrons: Hartman, 1948b: 95, pl. 14, figs. 10–13; Orensanz, 1973: 357–359, pl. 5, figs. 1–6.

Materials. NSMT- Pol. S 2116, L-2-350 (2).

Description. Largest incomplete specimen lacking posterior end 31 mm long, 2 mm wide for 77 setigers. Prostomium depressed conical, with nuchal organs at dorsolateral junction, but no visible eyespots (Fig. 19A). First peristomial segment longer than second one; both segments partly fused ventrally to lower lip of globular papillae.

First parapodia from setiger 1 comparatively large, with low presetal lobe and small flattened, bluntly rounded postsetal lobe (Fig. 19B). Subsequent parapodia becoming gradually larger. In setiger 16, postsetal lobe subtriangular (Fig. 19C) and becoming posteriorly slender lobe (Fig. 19D). Simple, hooded hooks appearing from first parapodia, together with limbate setae; hooks with long hood and a fang surmounted by 8 teeth in tandem (Fig. 19E). Hooded hooks becoming stout and increasing in number (Fig. 19C, F). Upper limbate setae gradually replaced by hooded hooks and disappearing from setiger 44; lower limbate setae disappearing from setiger 37. Hooded hooks becoming thicker and hoods shortening posteriorly, with large main fang and irregular crest bearing about 10 teeth (Fig. 19G). Aciculae yellowish, numbering four in anterior, two in posterior parapodia; those distally taperd and projecting from parapodial lobe (Fig. 19C, D).

Maxillae elipsoidal. Maxillary carriers about as long as forceps (Mx I) and distally tapering. Mx I large, rounded, falcate; Mx II much smaller, only about 1/2 as long as Mx I, with 5 large teeth; Mx III elongate, hard plates with black single tooth; Mx IV large, rounded, soft plates with single tooth; Mx V small, rounded, soft plates; partially fused with Mx IV. Mx II with reduced aliform expansions and long, broad ligaments associated with their bases; lateral supports long and slender (Fig. 19H, I). Mandibles slightly longer than maxillae, shafts white, separated about 1/3 of their length, with crescentic cutting edge (Fig.

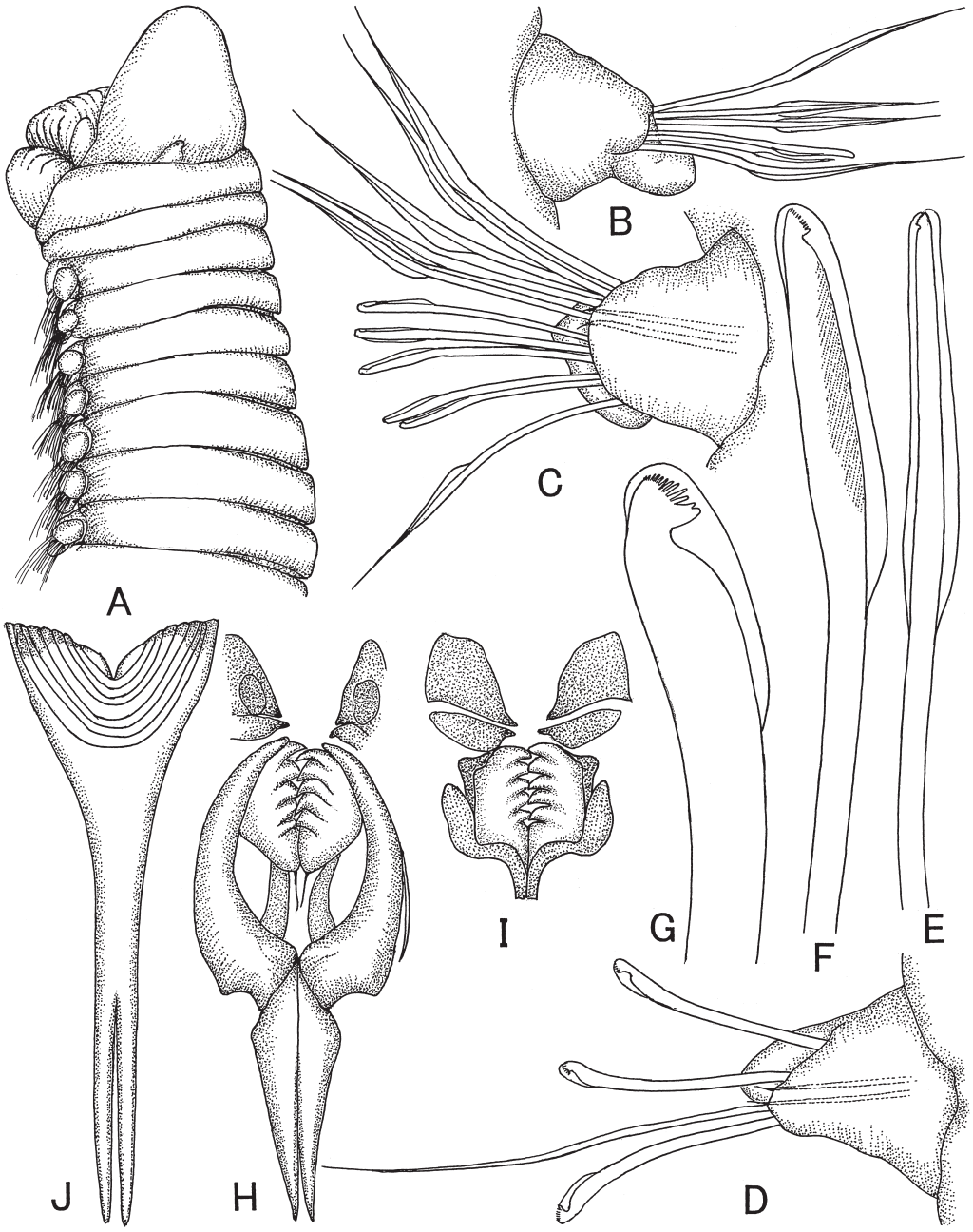

Fig. 19. *Eranno bifrons* Kinberg. ——A, anterior end, dorso-lateral view, × 33; B, left parapodium from setiger 1, anterior view, × 130; C, right parapodium from setiger 16, anterior view, × 130; D, left parapodium from setiger 70, anterior view, × 130; E, hooded hook from first parapodium, × 612; F, hooded hook from 16th parapodium, × 612; G, hooded hook from 70th parapodium, × 612; H, maxillae, dorsal view, × 32; I, Mx II, III, IV of maxillae, ventral view, × 36; J, mandibles, × 32.

19J).

The species is reported for the first time from Japanese waters.

Distribution. Southwestern Atlantic, South Sandwich Islands, off Patagonia; Japan (Sagami Bay, Sagami Sea).

Eranno bifurcata (McIntosh, 1885)

Lumbriconeris bifurcata McIntosh, 1885: 241–243, pl. 36, figs. 10–12, pl. 17, fig. 16, textfigs. 7, 8.

Eranno bifurcata: Imajima, 2001b: 342, fig. 143; Imajima, 2009: 102–103.

Materials. NSMT-Pol. S 1643, L-1-800 (2), NSMT-Pol. S 2236, L-2-100 (1), NSMT-Pol. S 2237, L-2-350 (1).

Distribution. Pacific coast of North America; Japan (Sagami Bay, Sagami Sea).

Eranno tosaensis Imajima, 2001

Eranno tosaensis Imajima, 2001a: 76–78, figs. 20–21; Imajima, 2009: 103.

Material. NSMT-Pol. S 2238, Rin07 St. 2 (1); NSMT-Pol. S 2239, L-1-200 (1), NSMT-Pol. S 2240, L-2′-350 (2).

Distribution. Japan (Sagami Sea, Tosa Bay).

Lumbrinerides sp.

Material. NSMT-Pol. S 2440, KY09 St. 30 (1).

Lumbrineriopsis paucidentata sp. nov. (Fig. 20A–M)

Type Materials. Holotype, NSMT-Pol. S H 543: E off Mukojima I., 27°45.42′N, 142°11.83′E – 27°45.13′N, 142°11.57′E, 301–237 m, Nov. 2009 (St. SY09-06: R/V *Shin'yo-Maru*). Paratypes, NSMT-Pol. S P 544: Tak07-9 St. 9 (2).

Description. Holotype lacking posterior end 29 mm long, about 1 mm wide including parapodia for 70 setigers. Body of uniform width with tapering posteriorly.

Prostomium conical, 2.5 times longer than basal wide, with short acute tip. Peristomium composed of 2 subequal apodus segments, each segment equal in length to setiger 1. Eyes and nuchal organs absent (Fig. 20A).

Parapodia of first 5 setigers small, with rounded setal lobes and small digitate postsetal lobes (Fig. 20B); parapodia fully developed from setiger 6; setal lobes blunt, conical; postsetal lobes prolonged, digitiform and erect, about 2 times as long as presetal one (Fig. 20C). Posterior parapodia becoming slender, postsetal lobes gradually reduced to posteriorly (Fig. 20D). All parapodia with broadly limbate setae (Fig. 20B–E) in supra-acicular positions and simple hooded hooks in infra-acicular positions throughout. Anterior hooded hooks slender, with long hood (Fig. 20F, G), hooks becoming thicker and hoods shortening posteriorly (Fig. 20H–J). Hooks bidentate, with 1–3 small cylindrical teeth between two main teeth (Fig. 20G–J). Aciculae blackish, numbering 2 in each parapodium.

Maxillae symmetrical. Maxillary carriers longer than forceps, laterally incised and basally slender (Fig. 20K). Maxillae I (forceps) falcate, not reaching to anterior borders of Mx II (Fig. 20L), Mx II with 4 comparatively large teeth on each side; Mx III with 2 teeth close to each other; Mx IV with 1 large distal tooth and 5 to 6 minute denticles in one row (Fig. 20K). Mandibles delicate, about as long as maxillary carriers and Mx I–III, widely flared anteriorly, posteriorly long, narrow, fused, with small posterior notch (Fig. 20M).

Remarks. *Lumbrineriopsis paucidentata* is most closely allied to *L. tsushimaensis* Imajima and Higuchi (1975) from Japan, in the many characteristics. However, *L. paucidentata* is distinguished from *L. tsushimaensis* in that the maxillae IV have one large distal tooth and 5 to 6 minute denticles in one row instead of one large tooth and 12 to 13 minute denticles in one now.

Etymology. The species is named for the few denticles of the Maxillae IV than the known species.

Distribution. Japan (Hachijōjima I., Mukojima I.).

Lumbrineris inflata Moore, 1911

Lumbrineris inflata Moore, 1911: 289–291, pl. 19, figs. 128–132, pl. 20, figs. 133, 134; Imaji-

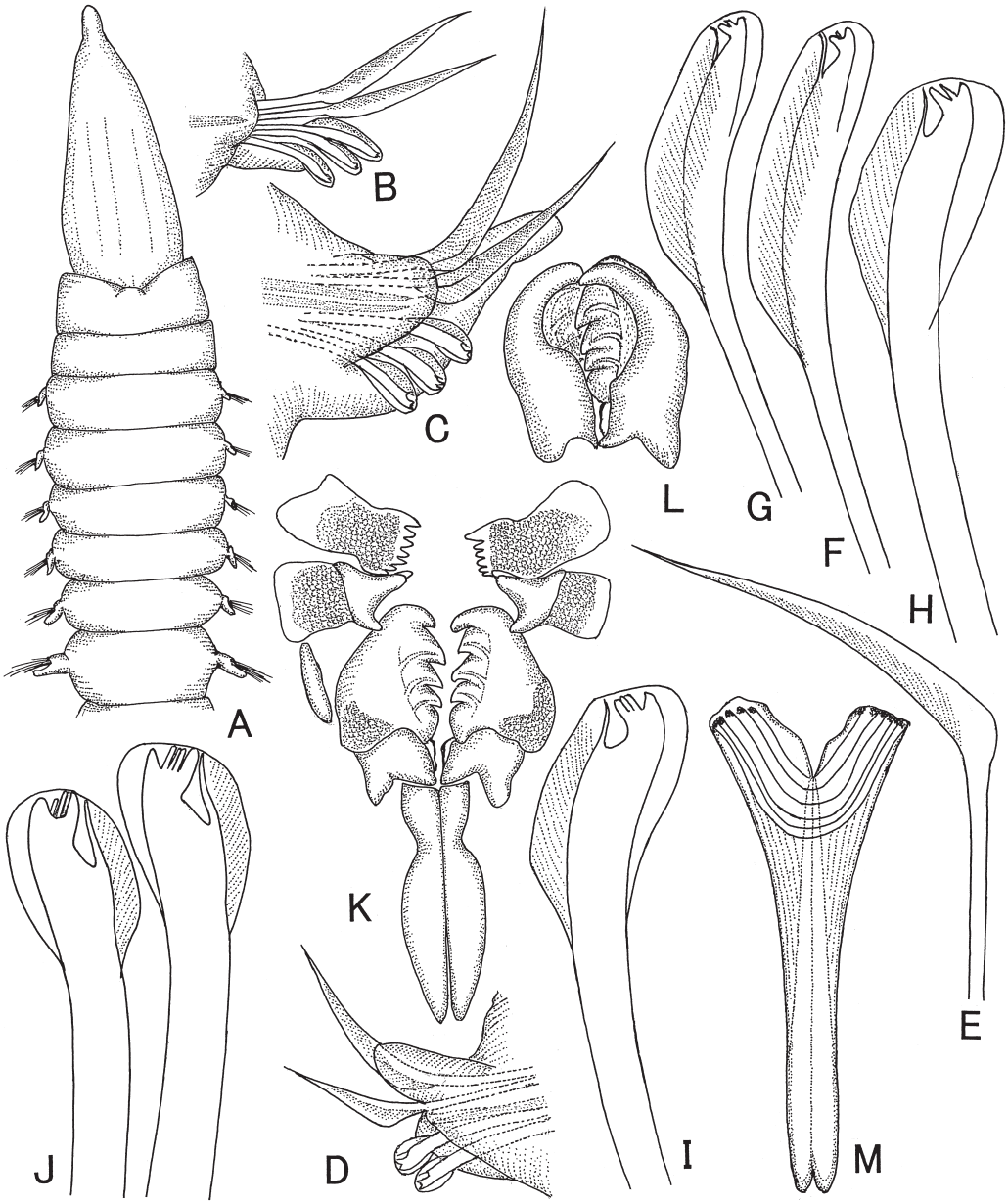

Fig. 20. *Lumbrineriopsis paucidentata* sp. nov. ——A, anterior end, dorsal view, × 26; B, left parapodium from setiger 1, anterior view, × 150; C, same from setiger 10, same view, × 150; D, same from setiger 70, posterior view, × 150; E, limbate seta from 10th parapodium, × 214; F, G, hooded hooks from first parapodium, × 605; H, I, hooded hooks from 10th parapodium, × 605; J, hooded hooks from 70th parapodium, × 605; K, maxillae, ventral view, × 70; L, maxillae I and II, dorsal view, × 74; M, mandibles, × 70.

ma and Higuchi, 1975: 20–22, fig. 7a–l; Imajima, 1994: 112; Imajima, 1997a: 185; Imajima, 2009: 103.

Material. NSMT-Pol. S 1644, Tak07-7 St. 4 (1).

Distribution. Northeast Pacific, south to Gulf of California; Japan (Hokkaido to Suruga Bay, Hachijōjima I.).

Lumbrineris japonica (Marenzeller, 1879)

Lumbriconereis japonica Marenzeller, 1879: 137–138, pl. 5, fig. 3.

Lumbrineris japonica: Imajima and Higuchi, 1975: 30–32, fig. 12a–n; Imajima, 2001a: 78–79.

Materials. NSMT-Pol. S 1645, Rin07 St. 1 (11), NSMT-Pol. S 1646, Rin07 St. 2 (1), NSMT-Pol. S 1647, L-1-800 (5), NSMT-Pol. S 1648, L-2-800 (1), NSMT-Pol. S 1649, L-2′-350 (2), NSMT-Pol. S 2091, L-2′-700 (3), NSMT-Pol. S 1650, L-2′-1000 (1), NSMT-Pol. S 1849, KY08 St. 25 (2).

Distribution. Indo-Pacific areas, Pacific of California south to western Mexico; Japan (Hokkaido to Kyūshū, Chichijima I.).

Lumbrineris latreilli (Audouin and Milne-Edwards, 1834)

Lumbrineris latreilli: Hartman, 1944b: 158–159, pl. 9, figs. 213–216; Pettibone, 1963: 258–260, fig. 67a–c; Imajima, 2001a: 79.

Materials. NSMT-Pol. S 1651, Rin07 St. 2 (1); NSMT-Pol. S 1652, L-2-100 (3), NSMT-Pol. S 2317, L-2′-200 (2), NSMT-Pol. S 1653, L-2′-350 (1); NSMT-Pol. S 2092, KY09 St. 29 (1).

Distribution. Atlantic, Pacific and Indian oceans, Mediterranean Sea; Japan (Hokkaido to Kyūshū, Chichijima Is.).

Lumbrineris sphaerocephala (Schmarda, 1861)

Lumbrineris sphaerocephala: Yang and Sun, 1988: 195–196, fig. 88H–L; Imajima, 2001b: 356, fig. 157; Imajima, 2005: 91.

Materials. NSMT-Pol. S 1654, L-1-200 (2); NSMT-Pol. S 2318, KY09 St. 8 (1).

Distribution. Indo-Pacific Ocean, New Zealand, South China Sea; Japan (Sagami Sea, Niijima I., Oki I., Okinawa Is., Chichijima I., Hahajima I.).

Ninoe japonica Imajima and Higuchi, 1975

Ninoe japonica Imajima and Higuchi, 1975: 14–15, fig. 4a–k; Imajima, 2006: 374.

Materials. NSMT-Pol. S 1655, L-2-200 (1), NSMT-Pol. S 1656, L-2′-200 (1), NSMT-Pol. S 1657, L-2′-350 (1).

Distribution. Japan (Sagami Bay, Sagami Sea).

Ninoe palmata Moore, 1903

Ninoe palmata Moore, 1903: 456–457, pl. 26, figs. 68–71; Imajima and Higuchi, 1975: 10–14, fig. 3a–m; Imajima, 1997a: 184; Imajima, 2006: 374.

Materials. NSMT-Pol. S 1658, Rin07 St. 1 (1), NSMT-Pol. S 1659, Rin07 St. 2 (1), NSMT-Pol. S 1660, L-2′-200 (2).

Distribution. Yellow Sea; Japan (Sagami Bay, Sagami Sea).

Scoletoma longifolia (Imajima and Higuchi, 1975)

Lumbrineris longifolia Imajima and Higuchi, 1975: 24–26, fig. 9: Imajima, 1994: 112; Imajima, 2009: 104.

Lumbriconeris debilis Uschakov and Wu, 1962: 65, pl. 3k–m.

Materials. NSMT-Pol. S 2319, L-2′-200 (1), NSMT-Pol. S 2320, L-2′-350 (1).

Distribution. Yellow Sea; Japan (Hokkaido to Kyūshū).

Family **Oenonidae** Kinberg, 1865

Arabella iricolor (Montagu, 1804)

Arabella iricolor: Fauvel, 1923: 438–439, fig. 175a–h; Day, 1967a: 446, fig. 17. 18. i–m; Imajima, 1997a: 187.

Materials. NSMT-Pol. S 1852, Tak07-9 St. 10 (1); NSMT-Pol. S 1850, L-1-200 (2); NSMT-Pol. S 1851, L-7-200 (1).

Distribution. Cosmopolitan in temperate and tropical waters; Japan (Sagami Bay, Sagami Sea, Suruga Bay, Hachijōjima I).

Drilonereis robustus (Moore, 1903)

Laranda robusta Moore, 1903: 454–455, pl. 26, figs. 64, 65.

Drilonereis robustus: Imajima and Hartman, 1964: 266; Imajima, 2001a: 79; Imajima, 2006: 375.

Materials. NSMT-Pol. S 1853, Rin07 St. 1 (4), NSMT-Pol. S 1854, Rin07 St. 2 (3); NSMT-Pol.

S 1855, L-1-700 (1), NSMT-Pol. S 1856, L-1-800 (2), NSMT-Pol. S 1857, L-1-200 (3), NSMT-Pol. S 1858, L-2-100 (1), NSMT-Pol. S 1859, St. L-2′-350 (3), NSMT-Pol. S 1860, L-2′-1000 (1).

Distribution. Japan (Sagami Bay, Sagami Sea, Suruga Bay, Tosa Bay).

Family **Lysaretidae** Kinberg, 1865

Oenone fulgida (Savigny, 1818)

Aglaurides fulgida: Hartman, 1944b: 185–186, pl. 14, figs. 303–307.

Oenone fulgida: Ebbs, 1966: 539–545, figs. 11a–j, 12a–j; Imajima, 1967: 435–437, fig. 11a–m; Imajima, 1997a: 187–188.

Materials. NSMT-Pol. S 2093, L-3-200 (1); NSMT-Pol. S 2094, KY09 St. 28 (1); NSMT-Pol. S 2557, KY10 St. 6 (1), NSMT-Pol. S 2558, KY10 St. 27 (2).

Distribution. Red Sea, Indian Ocean, California; Japan (Sagami Bay, Sagami Sea, Noto Pen., Suruga Bay, Toshima I., Chichijima Is.).

Family **Dorvilleidae** Chamberlin, 1919

Dorvillea rubrovittata (Grube, 1855)

Dorvillea (*Dorvillea*) *rubrovittata*: Hartman, 1944b: 187–189; Pettibone, 1961: 182; Day, 1967a: 457–458, fig. 17. 21. k–m; Imajima, 1992: 132–136, figs. 2a–r, 3a–i.

Materials. NSMT-Pol. S 2100, L-2′-500 (2).

Distribution. Adriatic, Mediterranean Sea, West Africa; Japan (Sagami Bay, Sagami Sea, Cape Shiono-misaki, Kagoshima Bay).

Dorvillea similis (Crossland, 1924)

Staurocephalus (*Dorvillea*) *similis* Crossland, 1924: 100–106, figs. 119–126.

Dorvillea (*Dorvillea*) *similis*: Reish, 1968: 220; Imajima, 1992: 143–146, figs. 9a–t, 10a–j.

Dorvillea similis: Imajima, 2001b: 406–407, fig. 167; Imajima, 2006: 376.

Materials. NSMT-Pol. S 2101, Tak07-9 St. 5 (1); NSMT-Pol. S 2441, Tak07-9 St. 6 (1); NSMT-Pol. S 2102, L-7-200 (4); NSMT-Pol. S 2103, Tak08 St. 4 (1), NSMT-Pol. S 2104, Tak08 St. 5 (1); NSMT-Pol. S 2105, KY09 St. 14 (5), NSMT-Pol. S 2106, KY09 St. 29 (1); NSMT-Pol. S 2537, KY10 St. 6 (1), NSMT-Pol. S 2584, KY10 St. 27 (1).

Distribution. Suez, Marshall Islands, northwest of Sumatra; Japan (Ōtsuchi Bay to Ishigakijima I., Hachijōjima I., Chichijima Is., Hahajima I.).

Schistomeringos rudolphi (delle Chiaje, 1828)

Schistomeringos rudolphi: Jumars, 1974: 104–106, fig. 1; Imajima, 2001b: 416, fig. 174.

Material. NSMT-Pol. S 2442, SY09-16 (1).

Distribution. Mediterranean Sea, east coast of North America; Japan (Hokkaido to Tanegashima I., Chichijima I.).

Order **Orbiniida**

Family **Paraonidae** Cerruti, 1909

Aricidea* (*Acmira*) *simplex Day, 1963

Aricidea suecica simplex Day, 1963: 364–365, fig. 3a–b.

Aricidea (*Acmira*) *simplex*: Blake, 1996a: 63–64, fig. 2. 18; Imajima, 1997a: 193; Imajima, 2001b: 433, fig. 178; Lovell, 2002: 45–46, fig. 7A–C; Imajima, 2009: 116–117.

Aricidea neosuecica nipponica Imajima, 1973: 263–265, fig. 5a–f.

Materials. NSMT-Pol. S 2095, Rin07 St. 2 (1); NSMT-Pol. S 2096, L-2-350 (1); NSMT-Pol. S 2097, L-2-800 (1), NSMT-Pol. S 2098, L-2′-200 (1); NSMT-Pol. S 2586, TW-05-02 (1).

Distribution. South Africa, Atlantic Ocean, New Zealand, California; Japan (Miyako Bay to Kagoshima Bay, Tsushima Strait, Chichijima I.).

Aricidea* (*Allia*) *antennata Annenkova, 1934

Aricidea antennata Annenkova, 1934: 658, figs. 2, 3.

Aricidea uschakovi: Imajima, 1973: 256–258, fig. 1a–k.

Aricidea (*Allia*) *antennata*: Imajima, 2001b: 439, fig. 184; Imajima, 2006: 377.

Material. NSMT-Pol. S 1861, L-2-350 (1).

Distribution. North Japan Sea, Southern California; Japan (Hokkaido to Kagoshima Bay).

Levinsenia gracilis (Tauber, 1879)

Levinsenia gracilis: Mesnil and Caullery, 1898: 135–137; Blake, 1996a: 33–34, fig. 2. 1; Imajima, 1997a: 193; Imajima, 2006: 378; Imajima, 2009: 118.

Paraonis gracilis minuta Hartmann-Schröder, 1965: 197–198, figs. 181–182; Imajima, 1973: 284–285, fig. 16a–f.

Material. NSMT-Pol. S 2099, L-2-350 (1).

Distribution. Cosmopolitan in continental shelf and slope depths; Japan (Hokkaido to Suruga Bay).

Paradoneis nipponica (Imajima, 1973)

Paraonides nipponica Imajima, 1973: 290–291, fig. 19a–j.

Paradoneis nipponica: Imajima, 2001b: 447, fig. 192.

Material. NSMT-Pol. S 1862, Rin07 St. 2 (1).

Distribution. Japan (Yamada Bay to Amakusa).

Order **Spionida**

Family **Poecilochaetidae** Hannerz, 1956

Poecilochaetus sp.

Material. NSMT-Pol. S 2425, KY09 St. 30 (1).

Family **Spionidae** Grube, 1850

Laonice cirrata (Sars, 1851)

Laonice cirrata: Fauvel, 1927: 38, fig. 12a–e; Day, 1967b: 480, fig. 18.6. h–k; Imajima, 2006: 378–379; Imajima, 2009: 119.

Materials. NSMT-Pol. S 2107, L-2-200 (1), NSMT-Pol. S 2108, L-2-350 (1), NSMT-Pol. S 2109, L-2′-350 (11), NSMT-Pol. S 2110, L-2′-600 (1); NSMT-Pol. S 1863, KY08 St. 25 (1); NSMT-Pol. S 2585, TW-02-04 (1).

Distribution. Northern Norway, north Atlantic and Pacific oceans; Japan (Hokkaido to Sagami Bay, Sagami Sea, Chichijima I.).

Prionospio spp.

Materials. NSMT-Pol. S 2111, Rin07 St. 2 (5); NSMT-Pol. S 2112, L-2′-500 (1); NSMT-Pol. S 2420, KY08 St. 21 (1); NSMT-Pol. S 2421, KY09 St. 28 (1).

Scolelepis sp.

Material. NSMT-Pol. S 2422, KY09 St. 28 (1).

Spiophanes kroeyeri Grube, 1860

Spiophanes kroeyeri: Fauchald, 1972: 99, fig. 4c–d; Light, 1977: 79–80, fig. 5d; Imajima, 1991: 118–123, figs. 2a–d, 3a–h, 4a–o; Imajima, 1996: 230–231, fig. 183; Imajima, 1997a: 194; Imajima, 2006: 380; Imajima, 2009: 120.

Materials. NSMT-Pol. S 1661, L-2′-350 (1); NSMT-Pol. S 1864, L-2′-200 (3).

Distribution. Greenland, western Norway, Australia, Ross Sea; Japan (Ishikari Bay to Amami-Ōshima I.).

Spiophanes urceolata Imajima, 1991

Spiophanes urceolata Imajima, 1991: 132–136, figs. 10a–c, 11a–g, 12a–l; Imajima, 1997a: 195; Imajima, 2006: 380.

Materials. NSMT-Pol. S 2423, Rin07 St. 2 (1); NSMT-Pol. S 2424, L-2-100 (2).

Distribution. Japan (Kashima Sea to Tsushima Strait).

Family **Magelonidae** Cunningham and Ramage, 1888

Magelona sp.

Material. NSMT-Pol. S 2500, Tak07-9 St. 9 (1).

Family **Chaetopteridae** Malmgren, 1867

Mesochaetopterus sp. A

Materials. NSMT-Pol. S 2501, Rin07 St. 1 (22), NSMT-Pol. S 2502, Rin07 St. 2 (2); NSMT-Pol. S 2503, L-2′-200 (1), NSMT-Pol. S 2504, L-2′-350 (1); NSMT-Pol. S 2505, KK-01-02 (1) (4); Pol. S 2506, KY09 St. 1 (1).

Mesochaetopterus sp. B

Materials. NSMT-Pol. S 2507, L-2′-500 (18).

Mesochaetopterus sp. C

Materials. NSMT-Pol. S 2508, L-1-200 (8),

NSMT-Pol. S 2509, L-2-100 (29), NSMT-Pol. S 2510, L-2-200 (3).

Family **Cirratulidae** Carus, 1863

Aphelochaeta monilaris (Hartman, 1960)

Tharyx monilaris Hartman, 1960: 127–128, pl. 12, figs. 1–2; Hartman, 1969: 261–262; Imajima, 1994: 116–117, fig. 2a–g.

Aphelochaeta monilaris: Blake, 1991: 28; Petersen, 1999: 109.

Material. NSMT-Pol. S 2393, L-2′-350 (1).

Distribution. Southern California; Japan (Hokkaido, Sagami Bay, Sagami Sea).

Aphelochaeta sp.

Materials. NSMT-Pol. S 2394, L-2-350 (6), NSMT-Pol. S 2395, L-2′-350 (1), NSMT-Pol. S 2396, L-2′-500 (1), NSMT-Pol. S 2397, L-7-1300 (1); NSMT-Pol. S 2398, TE02 (2) (1).

Chaetozone setosa Malmgren, 1867

Chaetozone setosa Malmgren, 1867: 96, pl. 14, fig. 84; Uschakov, 1965: 279, fig. 110A–F; Blake, 1996b: 274–276, fig. 8. 1; Imajima, 1997a: 197; Imajima, 2009: 121.

Materials. NSMT-Pol. S 2399, L-2-350 (1), NSMT-Pol. S 2400, L-2′-350 (1).

Distribution. Arctic and subarctic seas; Japan (Hokkaido to Suruga Bay).

Chaetozone sp.

Material. NSMT-Pol. S 2401, L-2-350 (1).

Cirratulus cirratus (Müller, 1776)

Cirratulus cirratus: Fauvel, 1927: 94, fig. 33a–g; Hartmann-Schröder, 1971: 358–359, fig. 125; Imajima, 1997a: 197–198; Imajima, 2006: 381.

Materials. NSMT-Pol. S 1865, L-2-100 (1), NSMT-Pol. S 1866, L-2′-500 (1).

Distribution. Western and southern Europe, central and southern California; Japan (Hokkaido to Kii-Shirahama).

Dodecaceria sp.

Material. NSMT-Pol. S 2402, L-1-200 (1).

Order **Flabelligerida**

Family **Flabelligeridae** Saint-Joseph, 1894

Brada villosa (Rathke, 1843)

Brada villosa: Fauvel, 1927: 121; Okuda, 1937b: 53–54, pl. 2, fig. D; Imajima, 1997a: 199; Blake, 2000: 5–7, fig. 1. 1; Imajima, 2009: 123.

Materials. NSMT-Pol. S 1867, L-1-500 (1), NSMT-Pol. S 1868, L-2′-600 (1).

Distribution. Norway, Mediterranean Sea, Atlantic Ocean; Japan (Onagawa Bay to Suruga Bay).

Pherusa parmata (Grube, 1877)

Stylarioides parmatus: Fauvel, 1936a: 74–75; Okuda, 1937a: 299, fig. 43.

Pherusa parmata: Imajima and Hartman, 1964: 303; Day, 1967b: 658–659, fig. 32. 2. a–c; Imajima, 2006: 382.

Materials. NSMT-Pol. S 2113, L-3-500 (3), NSMT-Pol. S 2114, L-2′-350 (3), NSMT-Pol. S 2115, L-2′-500 (4).

Distribution. Philippines, Indo-Pacific areas, New Zealand, South Africa; Japan (Sagami Bay, Sagami Sea, Toshima I.).

Order **Capitellida**

Family **Capitellidae** Grube, 1862

Capitella sp.

Material. NSMT-Pol. S 2403, KY09 St. 1 (1).

Dasybranchus sp.

Materials. NSMT-Pol. S 2404, Rin07 St. 1 (6); NSMT-Pol. S 2405, KY09 St. 29 (5), NSMT-Pol. S 2406, KY09 St. 30 (4).

Decamastus sp.

Material. NSMT-Pol. S 2498, L-2′-500 (1).

Leiochrides sp.

Materials. NSMT-Pol. S 2407, L-2′-700 (1), NSMT-Pol. S 2408, L-3-100 (4).

Notomastus near ***latericeus*** Sars, 1851

Notomastus near *latericeus*: Green, 2002: 299–301, fig. 18A–J.

Materials. NSMT-Pol. S 2409, Rin07 St. 1 (7); NSMT-Pol. S 2410, L-1-500 (1), NSMT-Pol. S 2411, L-1-700 (1), NSMT-Pol. S 2412, L-1-800 (1), NSMT-Pol. S 2413, L-2-100 (2), NSMT-Pol. S 2414, L-2-350 (1), NSMT-Pol. S 2415, L-2′-350 (12), NSMT-Pol. S 2416, L-2′-600 (1), NSMT-Pol. S 2417, L-2′-700 (4).

Distribution. Atlantic Ocean, Mediterranean Sea, South West Africa, Indian Ocean, South Viet Nam; Japan (Matsushima Bay to Inland Sea).

Notomastus sp.

Materials. NSMT-Pol. S 2587, TW-02-04 (1), NSMT-Pol. S 2588, TW-05-02 (1).

Pseudoleiocapitella sp.

Material. NSMT-Pol. S 2418, L-1-800 (1).

Family **Maldanidae** Malmgren, 1867
Subfamily **Clymenurinae** Imajima and Shiraki, 1982

Clymenura* (*Cephalata*) *lankesteri (McIntosh, 1885)

Praxilla lankesteri McIntosh, 1885: 403–404, pl. 25A, fig. 3.

Clymenura (*Cephalata*) *lankesteri*: Imajima and Shiraki, 1982a: 16–19, figs. 3a–n, 4a–d; Imajima, 2001a: 82; Imajima, 2006: 384.

Materials. NSMT-Pol. S 1669, L-1-700 (2), NSMT-Pol. S 1670, L-1-800 (4), NSMT-Pol. S 1671, L-2-800 (1), NSMT-Pol. S 1672, L-2′-350 (2), NSMT-Pol. S 1673, L-2′-700 (2).

Distribution. West coast of Norway, Sea of Okhotsk; Japan (off Sanriku to Kyūshū).

Subfamily **Euclymeninae** Arwidsson, 1907

Clymenella complanata Hartman, 1969

Clymenella complanata Hartman, 1969: 435–436, figs. 1–3; Imajima and Shiraki, 1982b: 47–49, fig. 20a–k; Imajima, 2001a: 82; Imajima, 2006: 384.

Material. NSMT-Pol. S 1663, L-1-800 (1).

Distribution. California; Japan (off Sanriku to Kyūshū).

Clymenella koellikeri (McIntosh, 1885)

Praxilla Köllikeri McIntosh, 1885: 402–403, pl. 46, fig. 6, pl. 25A, fig. 2, pl. 37A, figs. 3, 8.

Clymenella Köllikeri: Imajima and Shiraki, 1982b: 52–54, figs. 23a–h, 24a–b; Imajima, 1997a: 203; Imajima, 2006: 384.

Materials. NSMT-Pol. S 1664, Rin07 St. 1 (4); NSMT-Pol. S 1665, L-2′-350 (3).

Distribution. Fiji Island; Japan (Kashima Sea to Suruga Bay, Kagoshima Bay, Tsushima I.).

Maldanella harai (Izuka, 1902)

Clymene harai Izuka, 1902: 111–113, pl. 3, figs. 9–12.

Maldanella harai: Fauvel, 1914: 260–261, pl. 23, fig. 1; Imajima and Hartman, 1964: 319–320; Imajima and Shiraki, 1982b: 55–56, fig. 25a–h.

Materials. NSMT-Pol. S 1682, Rin07 St. 1 (1); NSMT-Pol. S 1683, L-2′-200 (1).

Distribution. Atlantic and Indian oceans, Okhotsk Sea; Japan (off Sanriku to Suruga Bay, Tsushima I.).

Praxillella gracilis (Sars, 1861)

Praxillella gracilis: Arwidsson, 1907: 183–191, pl. 4, figs. 153–155, pl. 5, figs. 156–158, pl. 9, figs. 302–307, pl. 12, fig. 367; Berkeley and Berkeley, 1952: 50, figs. 101, 102; Imajima and Shiraki, 1982b: 61–63, fig. 28a–k; Imajima, 1997a: 203–204; Imajima, 2006: 385.

Materials. NSMT-Pol. S 1686, L-1-700 (7), NSMT-Pol. S 1687, L-1-800 (3), NSMT-Pol. S 1688, L-2′-350 (1), NSMT-Pol. S 1689, L-2′-700 (5).

Distribution. North Atlantic, Mediterranean Sea, Southern California to western Canada; Japan (Hokkaido to Tosa Bay, Tsushima I.).

Praxillella pacifica Berkeley, 1929

Praxillella affinis var. *pacifica* Berkeley, 1929: 313–314; Hartman, 1969: 475–476.

Praxillella pacifica: Imajima and Shiraki, 1982b: 58–60, fig. 27a–l.

Materials. NSMT-Pol. S 1690, L-1-700 (1), NSMT-Pol. S 1691, L-2-350 (1), NSMT-Pol. S 1692, L-2′-200 (1).

Distribution. Southern California north to western Canada; Japan (Hokkaido to Suruga Bay, Tsushima I.).

Subfamily **Lumbriclymeninae** Arwidsson, 1907

Clymenopsis cingulata (Ehlers, 1887)

Clymene cingulata Ehlers, 1887: 185–188, pl. 47, figs. 2–5.

Clymenopsis cingulata: Hartman and Barnard, 1960: 144–145; Imajima and Shiraki, 1982a: 30–32, fig. 12a–k.

Materials. NSMT-Pol. S 1666, Rin07 St. 2 (1); NSMT-Pol. S 1667, L-2′-350 (9), NSMT-Pol. S 1668, L-2′-500 (1).

Distribution. Southern California, Greenland; Japan (off Sanriku to Suruga Bay, Tsushima I.).

Lumbriclymene japonica (McIntosh, 1885)

Nicomache japonica McIntosh, 1885: 399–400, pl. 46, fig. 5, pl. 24A, fig. 20.

Lumbriclymene japonica: Imajima and Shiraki, 1982a: 26–28, figs. 9a–r, 10a–d; Imajima, 1997a: 201; Imajima, 2006: 386.

Material. NSMT-Pol. S 1674, L-2′-350 (1).

Distribution. Japan (off Sanriku to Suruga Bay, Tsushima I.).

Praxillura tanseiana Imajima and Shiraki, 1982

Praxillura tanseiana Imajima and Shiraki, 1982a: 29–30, fig. 11a–n.

Material. NSMT-Pol. S 1693, L-2-100 (1).

Distribution. Japan (Kashima Sea, Sagami Bay, Sagami Sea, Ariake Sea).

Subfamily **Maldaninae** Arwidsson, 1907

Chirimia biceps (Sars, 1861)

Asychis biceps: Arwidsson, 1907: 263–271, pl. 6, figs. 200–207, pl. 10, figs. 339–344; Imajima and Shiraki, 1982b: 77–80, fig. 37a–t.

Chirimia biceps biceps: Light, 1991: 139; Imajima, 1997a: 205; Imajima, 2009: 133.

Material. NSMT-Pol. S 1662, L-1-800 (1).

Distribution. Iceland, Greenland, California, Scotland, Atlantic coast of Europe, western Mexico; Japan (off Sanriku to Suruga Bay).

Maldane cristata Treadwell, 1923

Maldane cristata Treadwell, 1923: 9–10, figs. 5–8; Imajima and Shiraki, 1982b: 84–86, fig. 40a–n; Imajima, 1997a: 205–206: Imajima, 2006: 386.

Materials. NSMT-Pol. S 1675, Rin07 St. 1 (2), NSMT-Pol. S 1676, Rin07 St. 2 (5); NSMT-Pol. S 1677, L-1-700 (195), NSMT-Pol. S 1678, L-1-800 (40), NSMT-Pol. S 1679, L-2′-350 (3), NSMT-Pol. S 1680, L-2′-700 (3), NSMT-Pol. S 1681, L-2-800 (6).

Distribution. Southern California to western Mexico; Japan (off Sanriku to Kyūshū).

Metasychis gotoi (Izuka, 1902)

Metasychis gotoi Izuka, 1902: 109–111, pl. 3, figs. 1–8; Light, 1991: 139; Imajima, 1997a: 204–205; Imajima, 2001a: 86; Imajima, 2006: 387.

Asychis gotoi: Imajima and Shiraki, 1982b: 75–77, fig. 36a–l.

Materials. NSMT-Pol. S 1684, Rin07 St. 1 (1), NSMT-Pol. S 1685, L-1-200 (1).

Distribution. Indo-Pacific areas, Adriatic Sea, California; Japan (Hokkaido to Kyūshū).

Subfamily **Nicomachinae** Arwidsson, 1907

Nicomache sp.

Material. NSMT-Pol. S 2433, L-1-500 (1).

Subfamily **Rhodininae** Arwidsson, 1907

Rhodine loveni Malmgren, 1865

Rhodine loveni: Arwidsson, 1907: 64–74, pl. 2, figs. 39–52, pl. 7, figs. 235–236, pl. 11, figs. 346–347; Hartman, 1966: 72, pl. 23, figs. 9–11; Imajima and Shiraki, 1982a: 32–35, fig. 13a–m; Imajima, 1997a: 202; Imajima, 2006: 387.

Materials. NSMT-Pol. S 1694, Rin07 St. 1 (2), NSMT-Pol. S 1695, Rin07 St. 2 (3), NSMT-Pol. S

1696, L-2-350 (1), NSMT-Pol. S 1697, L-2′-350 (2), NSMT-Pol. S 1698, L-2′-500 (1).

Distribution. Arctic boreal; Japan (Hokkaido to Suruga Bay, Tsushima I.).

Order **Opheliida**
Family **Opheliidae** Malmgren, 1867

Armandia lanceolata Willey, 1905

Armandia lanceolata Willey, 1905: 288–289, pl. 5, fig. 120; Okuda, 1938a: 99; Imajima and Hartman, 1964: 306; Imajima, 2006: 388.

Material. NSMT-Pol. S 2426, KY09 St. 28 (1).

Distribution. Indo-Pacific areas; Japan (Sagami Bay, Sagami Sea, Kyūshū, Chichijima Is.).

Armandia simodaensis Takahashi, 1938

Armandia simodaensis Takahashi, 1938b: 152–154, 3 textfigs; Imajima and Hartman, 1964: 306–307; Imajima, 2006: 388.

Materials. NSMT-Pol. S 2427, Tak07-7 St. 2 (2).

Distribution. Japan (Sagami Bay, Sagami Sea, Hachijōjima I.).

Polyophthalmus sp.

Materials. NSMT-Pol. S 2428, KY09 St. 28 (1), NSMT-Pol. S 2429, KY09 St. 30 (1).

Travisia japonica Fujiwara, 1933

Travisia japonica Fujiwara, 1933: 91–103, pls. 1, 2, textfigs. 1–11; Uschakov, 1955: 324, fig. 120: H–J; Fauvel, 1936a: 75–78; Imajima and Hartman, 1964: 309.

Materials. NSMT-Pol. S 2430, L-3-300 (6), NSMT-Pol. S 2431, L-3-400 (5).

Distribution. West coast of south Sakhalin; Japan (Sagami Sea, Gogoshima I., Toshima I.).

Travisia sp.

Materials. NSMT-Pol. S 2432, L-1-800 (2).

Order **Oweniida**
Family **Oweniidae** Rioja, 1917

Myriochele danielsseni Hansen, 1879

Myriochele danielsseni Hansen, 1879: 270, tab. 2, figs. 9–11; Nilsen and Holthe, 1985: 22–23, figs. 5, 6, 12a; Imajima and Morita, 1987: 91–94, figs. 5a–i, 8a–b.

Material. NSMT-Pol. S 2443, L-3-300 (1).

Distribution. North Sea, Norwegian Sea; Japan (Ōtsuchi Bay to Tsushima Strait, Niijima I., Toshima I.).

Owenia sp.

Material. NSMT-Pol. S 2444, KY09 St. 7 (1).

Order **Terebellida**
Family **Sabellariidae** Johnston, 1865

Lygdamis giardi (McIntosh, 1885)

Sabellaria (*Pallasia*) *giardi* McIntosh, 1885: 421–422, pl. 47, fig. 7, pl. 26A, figs. 13–15.

Lygdamis giardi: Okuda, 1938b: 237–241, figs. 1–3; Imajima and Hartman, 1964: 324–325.

Materials. NSMT-Pol. S 2434, Tak07-9 St. 9 (7); NSMT-Pol. S 2538, TW-02-03 (2), NSMT-Pol. S 2539, TW-02-04 (1); NSMT-Pol. S 2435, KY09 St. 1 (4), NSMT-Pol. S 2436, KY09 St. 7 (2), NSMT-Pol. S 2445, KY09 St. 8 (1), NSMT-Pol. S 2446, KY09 St. 13 (1), NSMT-Pol. S 2437, KY09 St. 14 (2), NSMT-Pol. S 2447, KY09 St. 21 (1), NSMT-Pol. S 2448, KY09 St. 28 (2), NSMT-Pol. S 2438, KY09 St. 29 (2), NSMT-Pol. S 2449, KY09 St. 30 (1); NSMT-Pol. S 2540, KY10 St. 11 (1), NSMT-Pol. S 2541, KY10 St. 24 (1).

Distribution. South Australia; Japan (Sagami Bay, Sagami Sea, Ōsaka Bay, Hachijōjima I., Chichijima Is., Hahajima I.).

Sabellaria ishikawai Okuda, 1938

Sabellaria ishikawai Okuda, 1938b: 250–253, figs. 10–11; Imajima and Hartman, 1964: 326.

Material. NSMT-Pol. S 2439, L-2-100 (1).

Distribution. Japan (Sagami Bay, Sagami Sea, Suruga Bay, Omuda).

Family **Ampharetidae** Malmgren, 1867
Subfamily **Ampharetinae** Chamberlin, 1919

Ampharete finmarchica (Sars, 1864) (Fig. 21A–

M)

Ampharete finmarchica: Hartmann-Schröder, 1971: 458–459, fig. 158a–h; Holthe, 1986: 38, fig. 11, map 10; Hilbig, 2000a: 182–184, fig. 8. 4.

Ampharete arctica: Malmgren, 1866: 364, pl. 26, fig. 77; Hessle, 1917: 97–98, fig. 9; Hartman, 1969: 539–540, figs. 1–3.

Materials. NSMT-Pol. S 2064, Rin06-10-25 St. 1 (10), NSMT-Pol. S 2065, Rin06-10-25 St. 2 (8).

Description. Largest specimen 45 mm long, 7 mm wide at thorax, consisting of 14 thoracic setigers, 12 uncinigerous and 13 abdominal segments. Body slender, widest anteriorly, gradually tapering toward pygidium.

Prostomium trilobed anteriorly, with mid-superior lobe surrounded by inferior lobe, with nuchal organs at postectal corners of mid-superior lobe; eyespots absent (Fig. 21A). Segments 1 and 2 separated dorsally and ventrally, with segment 1 forming smooth lower lip (Fig. 21B). Buccal tentacles slender, with 2 longitudinal rows of short pinnae on ventral side (Fig. 21C).

Segment 2 with anterior 3 pairs of branchiae and paleae; branchiae subulate, usually not separated by dorsomedian gap and bases of inner branchiae fused for short length (Fig. 21A, B). Paleae short, wide, abruptly tapering to acute tips (Fig. 21D), some paleae appearing distally rounded (Fig. 21E), in crowded semicircular fascicles of 9–10 per fascicle. Segment 3 fused to segment 4, bearing bases of fourth pair of branchiae fused

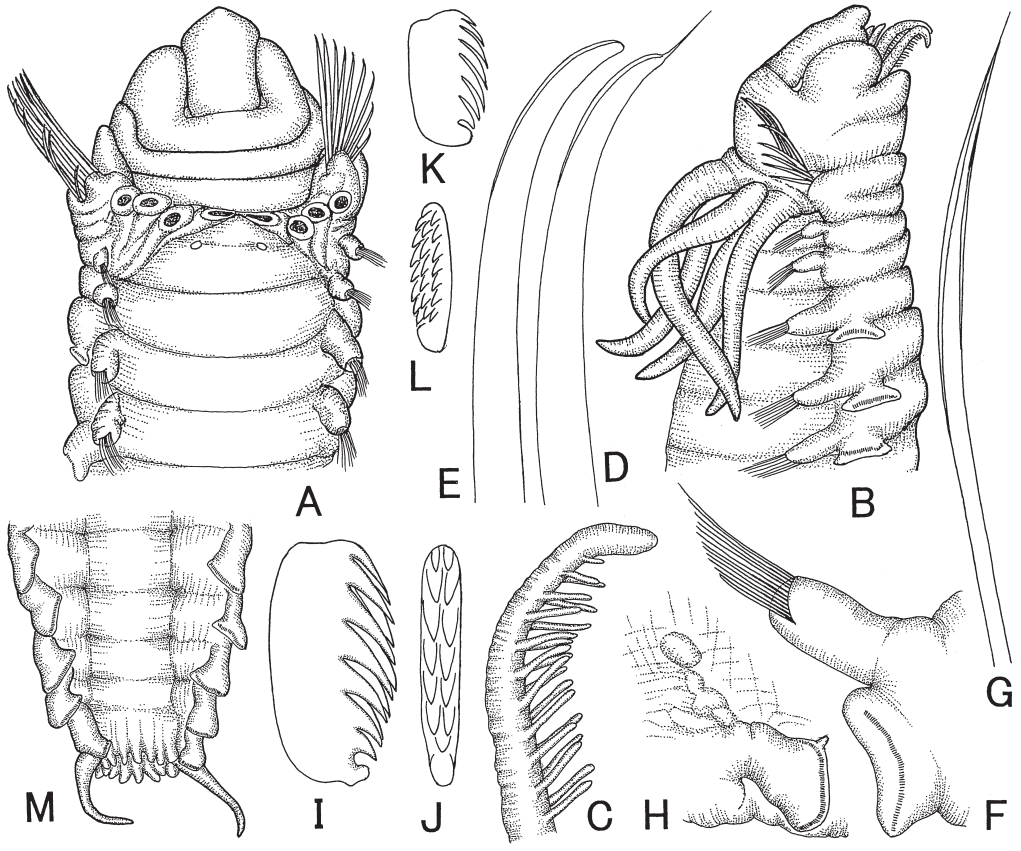

Fig. 21. *Ampharete finmarchica* (Sars). ——A, anterior end, dorsal view, × 14; B, same from others, lateral view, × 20; C, distal end of buccal tentacle, × 83; D, E, paleae, × 170; F, thoracic parapodium, anterior view, × 35; G, limbate notoseta, × 174; H, abdominal parapodium, anterior view, × 174; I, J, thoracic uncini, lateral and frontal views, × 690; K, L, abdominal uncini, lateral and frontal views, × 690; M, posterior end, ventral view, × 33.

to dorsal body wall; branchia emerging between inner and middle anterior pairs and 2 minute nephridial papillae just inside branchial bases, carrying small first pair of notopodia (Fig. 21A).

First 2 notopodia smaller than subsequent notopodia. Following notopodia cylindrical, with limbate notosetae, tapering to acute tip (Fig. 21F, G). Thoracic uncinigers first present on setiger 3; uncini with double row of 6 teeth above rostral point and basal prow (Fig. 21I, J), neuropodial cirri not present. Anterior abdominal segments with tiny, papilliform notopodial rudiments, posteriorly gradually decreasing and replaced by low glandular ridges above neuropodial lobes; neuropodial cirri very short (Fig. 21H). Abdominal uncini smaller and sometimes with 3 rows of teeth (Fig. 21K, L).

Pygidium short, with 2 slender lateral anal cirri and 8 dorsal and 7 ventral rounded papillae (Fig. 21M).

The species is newly added to the Japanese polychaetous fauna.

Distribution. Arctic Ocean, Alaska to northeastern South America; Japan (Sagami Bay).

Amphicteis mederi Annenkova, 1929

Amphicteis mederi Annenkova, 1929: 499–500, pl. 38, figs. 45–46, pl. 39, fig. 58; Uschakov, 1955: 376, fig. 139 K–M; Imajima, 2009: 151–153, figs. 52A–D, 53A–I.

Materials. NSMT-Pol. S 2066, L-2-100 (1), NSMT-Pol. S 2067, L-2-800 (7).

Distribution. Seas of Japan and Okhotsk; Kuril Islands; Japan (off Sanriku, Sagami Bay, Sagami Sea).

Anobothrus gracilis (Malmgren, 1866)

Ampharete gracilis Malmgren, 1866: 365, pl. 26, fig. 75.

Anobothrus gracilis: Levinsen, 1883: 162; Hilbig, 2000a: 192–194, fig. 8. 9; Imajima, 2009: 157–159, figs. 57A–G, 58A–H.

Materials. NSMT-Pol. S 2070, Rin06-10-26 St. 1 (7), NSMT-Pol. S 2071, L-2′-200 (2).

Distribution. Arctic Sea, boreal Atlantic Ocean, California; Japan (off Sanriku, Sagami Bay, Sagami Sea).

Anobothrus sp.

Material. NSMT-Pol. S 2592, TW-05-01 (1).

Auchenoplax crinita Ehlers, 1887

Auchenoplax crinita Ehlers, 1887: 209–214, pl. 44, figs. 10–16; Fauvel, 1936b: 95–96; Hartman, 1965: 216–217, pl. 47, figs. a–d; Imajima, 1997a: 210–211, fig. 13a–h; Imajima, 2009: 161–162.

Materials. NSMT-Pol. S 2072, Rin06-10-25 St. 1 (1), NSMT-Pol. S 2073, Rin07 St. 1 (3), NSMT-Pol. S 2074, Rin07 St. 2 (1), NSMT-Pol. S 2075, L-2′-200 (2).

Distribution. Atlantic of New England, northeastern South America, southern Florida; Japan (off Sanriku to Suruga Bay).

Glyphanostomum sp.

Material. NSMT-Pol. S 2591, TW-05-02 (1).

Lysippe labiata Malmgren, 1866

Lysippe labiata Malmgren, 1866: 367, pl. 26, fig. 78; Hessle, 1917: 109–110; Berkeley and Berkeley, 1956: 241; Hartman, 1965: 218; Imajima, 1972b: 14; Hilbig, 2000a: 206–207, fig. 8. 16; Imajima, 2009: 162, fig. 61A–M.

Materials. NSMT-Pol. S 2076, Rin06-10-25 St. 1 (1), NSMT-Pol. S 2077, Rin06-10-26 St. 1 (2); NSMT-Pol. S 2078, L-2-100 (1), NSMT-Pol. S 2079, L-2′-200 (1), NSMT-Pol. S 2080, L-2′-350 (3).

Distribution. Arctic, Greenland, Iceland, Denmark, Alaska to California, Sea of Japan; Japan (Hokkaido to Kagoshima Bay, Tsushima Is., Izu-Ōshima I.).

Schistocomus hiltoni Chamberlin, 1919 (Fig. 22A–I)

Schistocomus hiltoni Chamberlin, 1919: 17; Fauvel, 1932: 219–220, pl. 8, figs. 15–19; Fauvel, 1953: 411–412, fig. 216a–e.

Material. NSMT-Pol. S 2081, KY08 St. 22 (1).

Description. Specimen 21 mm long, 2.5 mm wide at thorax. Body with wide thorax, tapering

toward pygidium, consisting of 15 thoracic setigers and 32 abdominal segments.

Prostomium projecting forwards as simple hood with medially notched anterior margin; central part of prostomium concave dorsally and pigmented, with about 10 longitudinal furrows arising from anterior margin, without eyes and nuchal organs (Fig. 22A). Peristomium broad dorsally, ventrally with lower lip closing mough. Buccal tentacles numerous, smooth, slender to stout. Paleae absent. Four pairs of branchiae of two types on 3 visible setigerous segments; one pair of outer simple subulate branchiae and one pair of inner pinnate branchiae (Fig. 22B) on first setigerous segment, one pair of pinnate branchiae each on setigerous segments 2 and 3; posterior pair of pinnate branchiae located at most outsides than other branchiae (Fig. 22A).

Thoracic notopodia first present on segment 3, following notopodia cylindrical (Fig. 22C), with limbate notosetae, tapering to acute tip (Fig. 22D). Thoracic uncinigers first present on setiger 4, well-developed, padde-shaped, with numerous crowded uncini (Fig. 22C). Thoracic uncini with 5 teeth in single row above conspicuous rostral point and narrow basal prow (Fig. 22E, F). Abdominal parapodia consisting of abdominal notopodial rudiments, triangular flattened achaetous lobes and neuropodial pinnules with dorsal cirri (Fig. 22G), uncini with 6 teeth in single row over small basal prow (Fig. 22H, I). Pygidium short cylindrical, with terminal anus surrounded by circlet of 12 small papillae.

The species is newly added to the Japanese

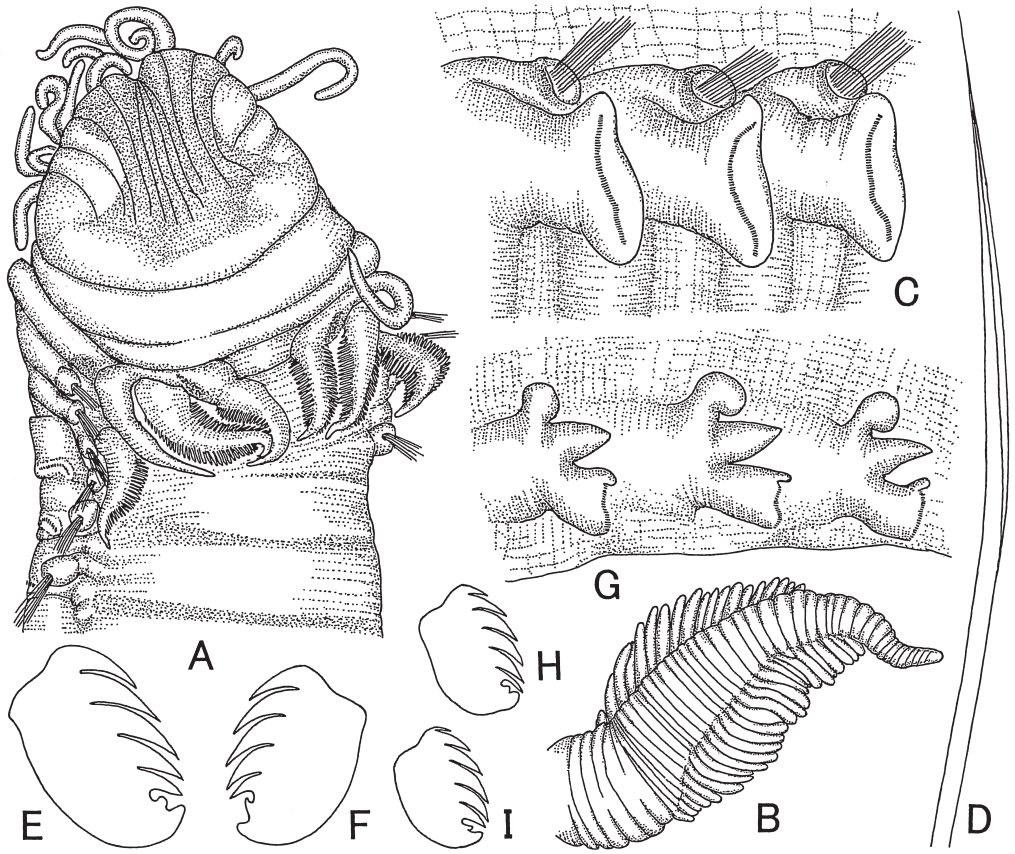

Fig. 22. *Schistocomus hiltoni* Chamberlin. ——A, anterior end, dorsolateral view, × 32; B, pinnate branchia, × 66; C, thoracic parapodia, anterior view, × 32; D, notoseta, × 144; E, F, thoracic uncini, lateral view, × 540; G, abdominal neuropodia, anterior view, × 32; H, I, abdominal uncini, lateral view, × 540.

polychaetous fauna.

Distribution. California, Madras Coast; Japan (Chichijima I.).

Sosane sulcata Malmgren, 1866

Sosane sulcata Malmgren, 1866: 368, pl. 26, fig. 79; Uebelacker, 1984b: 51–11 to 51–14, fig. 8; Hayashi and Hanaoka, 1997: 385–388, fig. 2a–f; Imajima, 2006: 391.

Materials. NSMT-Pol. S 2082, KY08 St. 13 (1), NSMT-Pol. S 2083, KY08 St. 25 (1).

Distribution. North Sea, Mediterranean Sea, Atlantic Ocean, Gulf of Mexico; Japan (Sagami Bay to Kagoshima Bay, Chichijima I.).

Subfamily **Melinninae** Chamberlin, 1919

Melinna cristata (Sars, 1851)

Melinna cristata: Wollebaek, 1912: 65–67, pl. 14, figs. 1–9; Hartman, 1965: 218–219; Mackie and Pleijel, 1995: 104–111, figs. 1–3, tab. 1; Imajima, 1997a: 209; Imajima, 2009: 162–163.

Materials. NSMT-Pol. S 1709, L-2′-350 (4).

Distribution. Arctic and boreal seas; Japan (off Sanriku to Suruga Bay).

Melinna elisabethae McIntosh, 1914

Melinna elisabethae: McIntosh, 1922: 86–88, pl. 119, fig. 1, pl. 125, figs. 2–2b; Uschakov, 1955: 363; Banse, 1979: 1549; Imajima, 1994: 121–122, fig. 3a–k.

Materials. NSMT-Pol. S 1785, Rin06-10-25 St. 2 (1); NSMT-Pol. S 1786, Rin07 St. 1 (1).

Distribution. Sea of Okhotsk, Puget Sound; Japan (Hokkaido, off Sanriku, Sagami Bay, Sagami Sea).

Melinnexis tetradentata Imajima, 2001

Melinnexis tetradentata Imajima, 2001a: 90–92, fig. 23a–o.

Material. NSMT-Pol. S 1790, KY08 St. 3 (1).

Distribution. Japan (Chichijima I., Tosa Bay).

Family **Trichobranchidae** Malmgren, 1866

Terebellides horikoshii Imajima and Williams, 1985

Terebellides horikoshii Imajima and Williams, 1985: 15–16, fig. 4d–f; Imajima, 2001b: 524, fig. 215.

Materials. NSMT-Pol. S 1869, L-1-700 (1), NSMT-Pol. S 1870, L-3-400 (1), NSMT-Pol. S 1871, L-2′-350 (4), NSMT-Pol. S 1872, L-2′-700 (1).

Distribution. Japan (Mutsu Bay to Suruga Bay, Toshima I.).

Terebellides kobei Hessle, 1917

Terebellides kobei Hessle, 1917: 140, pl. 1, fig. 9, textfig. 32; Imajima and Williams, 1985: 11–13, fig. 3a–c; Imajima, 1997a: 211–212; Imajima, 2001b: 527, fig. 218.

Materials. NSMT-Pol. S 1873, Rin07 St. 1 (1), NSMT-Pol. S 1874, L-1-700 (2), NSMT-Pol. S 1875, L-1-200 (1), NSMT-Pol. S 1876, L-2-350 (3), NSMT-Pol. S 1877, L-2-500 (1), NSMT-Pol. S 1878, L-2-800 (2), NSMT-Pol. S 1879, L-2′-350 (8).

Distribution. Japan (Hokkaido to Kyūshū).

Family **Terebellidae** Malmgren, 1867

Amphitrite oculata Hessle, 1917

Amphitrite oculata Hessle, 1917: 186; Fauvel, 1936a: 80–81; Okuda and Yamada, 1954: 193–194; Imajima and Hartman, 1964: 336.

Materials. NSMT-Pol. S 2450, L-1-100 (36), NSMT-Pol. S 2451, L-1-200 (1), NSMT-Pol. S 2452, KY08 St. 6 (1), NSMT-Pol. S 2453, KY08 St. 11 (2), NSMT-Pol. S 2454, KY08 St. 20 (1).

Distribution. Japan (Mutsu Bay, Tokyo Bay, Sagami Bay, Sagami Sea, Chichijima I.).

Lanice conchilega (Pallas, 1766)

Nereis conchilega Pallas, 1766: 131, pl. 9, figs. 14–22.

Lanice conchilega: Day, 1967b: 743–744, fig. 36. 8. n–r; Hilbig, 2000b: 254–256, fig. 9. 9.

Materials. NSMT-Pol. S 2455, KY08 St. 18 (1), NSMT-Pol. S 2464, KY08 St. 21 (5).

The species is newly added to the Japanese polychaetous fauna.

Distribution. North Atlantic Ocean, Mediterranean Sea, West Africa, Australia, southern and central California; Japan (Chichijima I.).

Lanice seticornis (McIntosh, 1885)

Terebella (*Lanice*) *seticornis* McIntosh, 1885: 448, pl. 49, fig. 4.

Materials. NSMT-Pol. S 2456, KY08 St. 5 (3), NSMT-Pol. S 2457, KY08 St. 19 (3), NSMT-Pol. S 2458, KY08 St. 21 (2), NSMT-Pol. S 2459, KY08 St. 25 (1); NSMT-Pol. S 2605, TW-01-03 (1); NSMT-Pol. S 2460, KY09 St. 1 (1), NSMT-Pol. S 2497, KY09 St. 7 (7), NSMT-Pol. S 2606, KY09 St. 8 (1).

The species is newly added to the Japanese polychaetous fauna.

Distribution. Argentina; Japan (Chichijima I., Hahajima I.).

Nicolea gracilibranchis (Grube, 1878)

Nicolea gracilibranchis: Marenzeller, 1884: 207, pl. 2, fig. 2; Hessle, 1917: 173; Fauvel, 1936a: 81–82; Okuda and Yamada, 1954: 194, textfig. 9; Imajima and Hartman, 1964: 341.

Materials. NSMT-Pol. S 2461, Tak07-9 St. 10 (10); NSMT-Pol. S 2462, L-3-200 (2); NSMT-Pol. S 2463, Tak08 St. 5 (1).

Distribution. Philippines, Indian Ocean, Hawaii; Japan (Matsushima Bay to Shimonoseki, Toshima I., Hachijōjima I.).

Pista fasciata, sensu McIntosh, 1885

Pista fasciata McIntosh, 1885: 452–453, pl. 49, fig. 5, pl. 27A, fig. 28, pl. 38A, fig. 3; Imajima and Hartman, 1964: 344.

Materials. NSMT-Pol. S 2465, Rin07 St. 2 (4); NSMT-Pol. S 2466, L-2-350 (1), NSMT-Pol. S 2467, L-2′-200 (1), NSMT-Pol. S 2468, L-2′-350 (1); NSMT-Pol. S 2598, KY10 St. 27 (1).

Distribution. Japan (Sagami Bay, Sagami Sea, Chichijima Is.).

Pista spp.

Materials. NSMT-Pol. S 2469, L-1-700 (1), NSMT-Pol. S 2470, L-2-100 (6), NSMT-Pol. S 2471, L-2′-200 (2); NSMT-Pol. S 2599, TW-02-04 (1); NSMT-Pol. S 2472, KY09 St. 14 (6), NSMT-Pol. S 2473, KY09 St. 28 (4), NSMT-Pol. S 2474, KY09 St. 29 (5).

Order **Sabellida**

Family **Sabellidae** Malmgren, 1867

Branchiomma cingulata (Grube, 1870)

Branchiomma cingulata: Johansson, 1927: 161–162; Imajima and Hartman, 1964: 335; Imajima, 1997a: 213–214; Imajima, 2006: 393.

Material. NSMT-Pol. S 2489, L-2-100 (1).

Distribution. Indo-Pacific areas, Australia; Japan (Sagami Sea).

Chone filicaudata Southern, 1914

Chone filicaudata Southern, 1914: 141, pl. 14–15, fig. 32; Fauvel, 1927: 337–339, fig. 117a–k; Day, 1967b: 776–777, fig. 37. 6. p–w; Imajima, 1982a: 160.

Materials. NSMT-Pol. S 2490, KY08 St. 11 (1), NSMT-Pol. S 2491, KY08 St. 17 (1), NSMT-Pol. S 2492, KY08 St. 22 (1); NSMT-Pol. S 2493, KY09 St. 1 (2), NSMT-Pol. S 2494, KY09 St. 7 (1).

Distribution. Ireland, North Carolina, Southern Africa; Japan (Sagami Bay, Chichijima Is.).

Chone sp.

Materials. NSMT-Pol. S 2542, KY10 St. 26 (2).

Euchone capensis Day, 1961

Euchone capensis Day, 1961: 540–542, fig. 14m–t; Day, 1967b: 776, fig. 37. 6. j–o.

Materials. NSMT-Pol. S 2495, L-2-200 (3).

The species is newly added to the Japanese polychaetous fauna.

Distribution. South Africa; Japan (Sagami Sea).

Pseudopotamilla sp.

Materials. NSMT-Pol. S 2496, L-3-100 (4).

Family **Serpulidae** Savigny, 1818

Ditrupa sp.

Material. NSMT-Pol. S 2593, TW02-04 (1).

Janita fimbriata (dell Chiaje, 1822)

Janita fimbriata: Zibrowius, 1972: 122; Imajima, 1979: 174–176, fig. 7a–o; Imajima, 2006: 394.

Materials. NSMT-Pol. S 1880, L-7-200 (1), NSMT-Pol. S 1881, KY09 St. 1 (1), NSMT-Pol. S 2475, KY09 St. 7 (4).

Distribution. Mediterranean Sea, Atlantic and Indian oceans, Malagasy; Japan (Sagami Bay, Cape Shiono-misaki, Hachijōjima I., Chichijima I.).

Paraprotis pulchra Imajima, 1979

Paraprotis pulchra Imajima, 1979: 179–181, fig. 9a–o; Imajima, 1996: 346, fig. 284; Imajima, 2006: 395.

Materials. NSMT-Pol. S 2478, Rin07 St. 2 (2); NSMT-Pol. S 2479, L-1-300 (1), NSMT-Pol. S 2480, L-2-100 (1), NSMT-Pol. S 2481, L-3-300 (1), NSMT-Pol. S 2482, L-2′-200 (6).

Distribution. Japan (Sagami Bay, Sagami Sea, Toshima I.).

Placostegus tridentatus (Fabricius, 1780)

Placostegus tridentatus: Wollebaek, 1912: 117–118, pl. 47, figs. 1–8, pl. 51, figs. 2–3; Zibrowius, 1973: 74–75; Imajima, 1978: 67–69, fig. 9a–l; Imajima, 1996: 343, fig. 281; Imajima, 2006: 395.

Materials. NSMT-Pol. S 2476, Tak07-9 St. 5 (1); NSMT-Pol. S 2477, KY08 St. 25 (1).

Distribution. Atlantic Oceans, Mediterranean Sea; Japan (Hokkaido to Tosa Bay, Hachijōjima I., Chichijima I.).

Protula sp.

Materials. NSMT-Pol. S 2483, KY09 St. 14 (1), NSMT-Pol. S 2484, KY09 St. 15 (2), NSMT-Pol. S 2485, KY09 St. 30 (2).

Serpula oshimae Imajima and ten Hove, 1984

Zopyrus Kaempferi Kinberg, 1867: 351.

Serpula cf. *kaempferi*: Imajima, 1978: 50–52, fig. 2; Imajima, 1979: 163; Imajima, 1982b: 40.

Serpula oshimae Imajima and ten Hove, 1984: 40–41.

Material. NSMT-Pol. S 2600, L-2-100 (1).

Distribution. Palau Islands; Japan (Sagami Sea, Izu-Ōshima I., Niijima I., Kushimoto, Okinawa I.).

Spirobranchus latiscapus (Marenzeller, 1884)

Pomatostegus latiscapus Marenzeller, 1884: 218–219, pl. 4, fig. 5.

Spirobranchus latiscapus: Fauvel, 1936a: 89; Imajima and Hartman, 1964: 373–374; Imajima, 1976: 137–138; Imajima, 1977: 106; Imajima, 1979: 176.

Materials. NSMT-Pol. S 2486, KY09 St. 7 (1), NSMT-Pol. S 2487, KY09 St. 8 (1).

Distribution. Sulu Sea, New Zealand, Hawaiian Islands; Japan (Izu-Ōshima I., Chichijima I., Hahajima I., Tanegashima I.).

Family **Spirorbidae** Pillai, 1970

Leodora sp.

Materials. NSMT-Pol. S 2488, KY08 St. 6 (250).

Summary of Result

A total of 202 determinable species, belonging to 42 families, were recognized by this survey. The breakdown illustrates the degree of their distributional character:

5 species are newly described.

10 species are newly added to the Japanese fauna.

105 species, or 51%, are known also from Sagami Bay and the Sagami Sea.

27 species, or 13%, are known also from off Toshima Island.

46 species, or 22%, are known also from off Hachijōjima Island.

8 species, or 4%, are known also from off Mukojima Island.

92 species, or 45%, are known also from areas around Chichijima Island.

39 species, or 18%, are known also from areas around Hahajima Island.

These data are analyzed in the Table 2.

Of these samples, the species-rich families

were Polynoidae and Syllidae (18 spp.), Eunicidae (17 spp.), Maldanidae (13 spp.) and Onuphidae (12 spp.).

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Table 2. Distribution of the polychaetes in the each area.

△ Previously known from Sagami Bay or Sagami Sea
● Examined specimen
A.R attachment on rope

Species	Sagami Bay	Sagami Sea	off Toshima I.	off Hachi-jōjima I.	off Mukoji-ma Is.	off Chichi-jima Is.	off Haha-jima Is.	Depth	Known also from Japan
Paleanotus chrysolepis						●		50–136	
Paleanotus debilis				●		●	●	52–152	
Aphrodita sibogae		△●						116–280	
Laetmonice dolichoceras						●		47–61	○
Laetmonice japonica	△	△●	●					321–551	
Laetmonice producta	△	△●	●					221–372	
Pontogenia dentata	△	●						104–113	
Pontogenia sagamiana	△	△●						104–113	
Iphione treadwelli				●		●	●	66–213	○
Australaugeneria michaelseni							●	102–118	○
Medioantenna clavata	△					●		136–136	
Paradyte levis	△	△				●	●	92–138	
Showascalisetosus shimizui	△			●				188–226	
Australonoe japonica						●		52–88	
Harmothoe cylindrica	△	△				●	●	50–138	
Harmothoe forcipata	△	△●						286–716	
Harmothoe imbricata	△	●						104–113	
Paralepidonotus ampulliferus	△		●					504–551	
Lepidasthenia interrupta	△	△●						104–364	
Lepidasthenia izukai	△	△	●					143–143	
Lepidonotus carinulatus	△	△●	●					198–551	
Lepidonotus takunanae				●				146–213	
Lepidonotus tenuisetosus	△					●		52–54	
Lepidonotus specklus							●	146–151	
Nonparahalosydna pleiolepis	△	△●						255–510	
Thormora jukesii	△					●		A.R	
Acoetes jogasimae	△	●						563–756	
Eupanthalis edriophthalma						●		175–176	
Pholoides dorsipapillatus	△	△		●		●	●	81–147	
Euthalenessa festiva	△	△				●	●	36–187	
Labiosthenolepis sibogae	△	△●						104–113	
Leanira coeca	△	△●						407–604	
Neoleanira areolata	△	△●						563–905	
Neopsammolyce occidentalis		△●						104–113	
Pottsipelogenia gracilis						●	●	81–173	○
Sigalion lituus						●		47–51	○
Sigalion shimodaensis		△				●		152–159	
Sigalion tanseimaruae		△					●	97	
Sthenelais fusca	△	△●						438–513	
Sthenelais helenae	△	△	●		●	●		81–551	
Sthenelanella uniformis							●	98–102	○
Willeysthenelais suluensis	△					●		59–60	
Eulalia bilineata	△	△●	●	●				221–1330	
Eulalia ornata	△			●		●		50–213	
Eumida sanguinea	△	△		●				146–147	
Sige falsa	△		●					342–372	
Nereiphylla castanea	△	△		●				146–147	

Table 2. (Continued).

Species	Sagami Bay	Sagami Sea	off Toshima I.	off Hachi-jōjima I.	off Mukoji-ma Is.	off Chichi-jima Is.	off Haha-jima Is.	Depth	Known also from Japan
Notophyllum multicirris				●				76–80	○
Phyllodoce lineata tosaensis	△	△			●	●	●	92–159	
Phyllodoce madeirensis	△	△		●		●	●	50–226	
Phyllodoce sp.						●	●	59–166	
Glycera benhami	△	●		●		●	●	50–151	
Glycera capitata	△	△				●		59–161	
Glycera lapidum	△	△				●	●	52–137	
Glycera nicobarica	△	△●				●	●	59–326	
Glycera okai		●						563–756	
Glycera onomichiensis	△	△●			●	●		50–499	
Glycera oxycephala		△	●					316–372	
Glycera sagittariae						●		47–51	○
Glycera tesselata	△	△●				●		50–364	
Goniada japonica	△	△				●		137–137	
Sphaerodoropsis biserialis		△				●		1325–1430	
Hesiospina similis	△	△				●		52–52	
Leocrates auritus	△	△		●		●	●	66–213	
Micropodarke sp.							●	98–102	
Synelmis albini	△	△●			●	●	●	59–221	
Exogone uniformis	△	△				●		88–88	
Sphaerosyllis erinaceus	△	△●						104–113	
Autolytus sp. A			●	●		●	●	92–372	
Autolytus sp. B						●		59–60	
Eusyllis habei	△	●		●		●		66–397	
Eusyllis irregulata						●		136–152	○
Odontosyllis fulgurans japonica	△					●		95–98	
Pionosyllis uraga	△	△				●		56–62	
Haplosyllis spongicola	△	△		●		●		50–213	
Haplosyllis spongicola tentaculata	△			●		●	●	50–102	
Syllis spongiphila	△	△		●		●		136–205	
Trypanosyllis (*Trypanedenta*) *taeniaformis*	△	△		●		●		50–213	
Trypanosyllis (*Trypanosyllis*) sp.							●	92–102	
Typosyllis aciculata	△			●		●	●	50–205	
Typosyllis alternata	△	△●	●	●		●		81–905	
Typosyllis cornuta	△	△		●		●		50–1330	
Typosyllis hyalina	△						●	82–90	
Typosyllis maculata						●		A.R	○
Typosyllis prolifera	△	△●	●	●		●		50–372	
Typosyllis regulata	△	△				●	●	92–137	
Typosyllis variegata	△	△				●	●	52–76	
Typosyllis spp.						●	●	50–138	
Ceratonereis mirabilis	△					●	●	50–141	
Neanthes caudata	△						●	97	
Neanthes unifasciata						●		50–88	
Neanthes spp.						●	●	50–176	
Nereis abyssa	△	●						681–716	
Nereis sp.		●	●	●				116–756	
Nicon sp.			●	●		●		56–551	
Platynereis dumerilii	△					●	●	47–137	

Table 2. (Continued).

Species	Sagami Bay	Sagami Sea	off Toshima I.	off Hachi-jōjima I.	off Mukoji-ma Is.	off Chichi-jima Is.	off Haha-jima Is.	Depth	Known also from Japan
Rullierinereis misakiensis	△					●		50–52	
Aglaophamus jeffreysii						●		69–70	○
Aglaophamus malmgreni	△	△●						255–510	
Aglaophamus verrilli			●					504–551	○
Inermonephtys japonica	△	△●						104–280	
Nephtys paradoxa	△	●						255–510	
Paralacydonia paradoxa	△	△●		●				104–1330	
Chloeia flava	△	△	●			●	●	73–372	
Chloeia fusca				●	●	●		47–207	○
Eurythoe complanata						●	●	50–97	○
Notopygos gardineri	△			●		●	●	50–769	
Pherecardia sp.						●	●	92–137	
Euphrosine polyclada	△	△●				●		104–138	
Anchinothria macrobranchiata	△	●						681–716	
Hyalinoecia tubicola	△	△●	●	●	●	●	●	83–1330	
Nothria itoi	△	●						198	
Nothria otsuchiensis	△	△●	●					104–551	
Onuphis imajimai	△	●						104–754	
Paradiopatra okai	△		●					504–551	
Paradiopatra simplex			●					504–551	○
Paradiopatra striata	△	●						255–905	
Paradiopatra unica	△	△●				●		104–161	
Paradiopatra willemoesii	△	●						104–113	
Rhamphobrachium (*Spinigerium*) *brevibrachiatum*	△	△●	●			●		95–372	
Rhamphobrachium (*Spinigerium*) *hutchingsae*				●		●		157–205	○
Eunice annulicirrata	△			●		●	●	36–141	
Eunice antennata	△			●		●		50–114	
Eunice australis		△		●				146–147	
Eunice curticirrus		△		●		●	●	98–147	
Eunice fauchaldi	△	△●		●		●	●	50–280	
Eunice medicina		△●	●					104–372	
Eunice microprion		●						198–513	
Eunice mucronata	△	△●						104–905	
Eunice pusilla			●	●				143–579	
Eunice tanseiae		△		●				112–114	
Eunice unibranchiata		△●						104–113	
Eunice vittata	△			●		●		50–205	
Eunice yamamotoi	△	△●		●	●		●	66–361	
Lysidice ninetta	△	●		●		●		59–213	
Marphysa kinbergi	△	●						116–280	
Nematonereis hebes						●		50–60	○
Palola siciliensis		△				●	●	50–136	
Eranno bifrons	△	△●						302–364	
Eranno bifurcata	△	△●						104–756	
Eranno tosaensis		●						116–280	
Lumbrinerides sp.						●		50–52	
Lumbrineriopsis paucidentata				●	●			76–301	
Lumbrineris inflata	△			●				79–80	

Table 2. (Continued)

Species	Sagami Bay	Sagami Sea	off Toshima I.	off Hachi-jōjima I.	off Mukoji-ma Is.	off Chichi-jima Is.	off Haha-jima Is.	Depth	Known also from Japan
Lumbrineris japonica	△	△●				●		104–905	
Lumbrineris latreilli	△	△●				●		60–326	
Lumbrineris sphaerocephala		●					●	98–280	
Ninoe japonica	△	●						221–397	
Ninoe palmata	△	△●						104–223	
Scoletoma longifolia	△	●						221–326	
Arabella iricolor	△	△●		●				66–280	
Drilonereis robustus	△	△●						104–756	
Oenone fulgida	△	△	●			●		52–198	
Dorvillea rubrovittata	△	△●						438–513	
Dorvillea similis		△		●		●	●	59–226	
Schistomeringos rudolphi	△					●		60	
Aricidea (*Acmira*) *simplex*	△	△●				●		198–1430	
Aricidea (*Allia*) *antennata*	△	●						302–364	
Levinsenia gracilis	△	△●						302–364	
Paradoneis nipponica	△	●						198	
Poecilochaetus sp.						●		50–52	
Laonice cirrata	△	△●				●		127–756	
Spiophanes kroeyeri	△	△●						221–326	
Spiophanes urceolata	△	△●						104–198	
Prionospio spp.		●				●		52–513	
Scolelepis sp.						●		52–52	
Magelona sp.				●				76–80	
Mesochaetopterus sp. A		●				●	●	104–326	
Mesochaetopterus sp. B		●						438–513	
Mesochaetopterus sp. C		●						104–397	
Aphelochaeta monilaris	△	●						321–326	
Aphelochaeta sp.		●		●		●		302–2855	
Chaetozone setosa	△	●						302–364	
Chaetozone sp.		●						302–364	
Cirratulus cirratus	△	△●						104–513	
Dodecaceria sp.		●						116–280	
Brada villosa		△●						255–604	
Pherusa parmata	△	△●	●					321–551	
Capitella sp.						●		137–137	
Dasybranchus sp.		●				●		50–131	
Decamastus sp.		●						438–513	
Leiochrides sp.		●	●					143–728	
Notomastus near *latericeus*	△	△●						104–756	
Notomastus sp.						●		141–1430	
Pseudoleiocapitella sp.		●						563–756	
Clymenura (*Cephalata*) *lankesteri*		△●						321–905	
Clymenella complanata	△	●						563–756	
Clymenella koellikeri	△	△●						104–326	
Maldanella harai	△	△●						104–223	
Praxillella gracilis	△	△●						321–756	
Praxillella pacifica	△	△●						221–754	
Clymenopsis cingulata	△	△●						198–513	
Lumbriclymene japonica	△	△●						321–326	
Praxillura tanseiana	△	●						104–113	

Table 2. (Continued)

Species	Sagami Bay	Sagami Sea	off Toshima I.	off Hachi-jōjima I.	off Mukoji-ma Is.	off Chichi-jima Is.	off Haha-jima Is.	Depth	Known also from Japan
Chirimia biceps	△	△●						563–756	
Maldane cristata	△	△●						104–905	
Metasychis gotoi	△	△●						104–280	
Nicomache sp.		●						255–510	
Rhodine loveni	△	△●						104–513	
Armandia lanceolata	△	△				●		52	
Armandia simodaensis	△	△		●				31	
Polyophthalmus sp.						●		50–52	
Travisia japonica		△	●					316–372	
Travisia sp.		●						563–756	
Myriochele danielsseni	△	△	●					316–328	
Owenia sp.						●		136–138	
Lygdamis giardi	△	△		●		●	●	47–166	
Sabellaria ishikawai	△	●						104–113	
Ampharete finmarchica	●							93–111	
Amphicteis mederi	△	●						104–905	
Anobothrus gracilis	△	●						221–502	
Anobothrus sp.						●		1477–1515	
Auchenoplax crinita	△●	△●						100–223	
Glyphanostomus sp.						●		1325–1430	
Lysippe labiata	●	●						100–502	
Schistocomus hiltoni						●		150–151	
Sosane sulcata	△	△				●		129–152	
Melinna cristata		●						321–326	○
Melinna elisabethae	●	●						93–131	
Melinnexis tetradentata						●		152–154	○
Terebellides horikoshii	△	△●	●					321–754	
Terebellides kobei	△	△●						104–905	
Amphitrite oculata	△	●				●		52–397	
Lanice conchilega						●		48–98	
Lanice seticornis						●	●	95–221	
Nicolea gracilibranchis	△		●	●				66–205	
Pista fasciata	△	△●				●		59–364	
Pista spp.		●				●	●	52–754	
Branchiomma cingulata		△●						104–113	
Chone filicaudata	△					●		56–151	
Chone sp.						●		36–40	
Euchone capensis		●						286–397	
Pseudopotamilla sp.			●					143–143	
Ditrupa sp.						●		141–152	
Janita fimbriata	△			●		●		136–213	
Paraprotis pulchra	△	●	●					104–328	
Placostegus tridentatus	△	△●		●		●		127–147	
Protula sp.						●	●	50–109	
Serpula oshimae		●						104–113	
Spirobranchus latiscapus						●	●	98–138	○
Leodora sp.						●		88–88	

相模湾から小笠原諸島産の多毛環虫類

今島　実

本州のほぼ中央部に位置する相模湾と相模灘の多毛類の分類学的研究は Marenzeller（1879）によって始められ，江ノ島の東海岸と横浜沖などから 30 種報告した．その後相次いで外国船が調査した結果が報告され，日本人では飯塚 啓が 1902 年から研究を始め，1912 年に大著を出版している（Izuka，1912）．その後 Okuda（1938）と Imajima（1982，1997，2003）がそれぞれ報告している．独立行政法人国立科学博物館では，相模湾から相模灘の海域およびその沿岸地域の生物相の実態と特性を明らかにする総合調査を他機関の調査船や漁船の協力のもとに 2001 年から 2005 年にかけて実施した．この調査により，多毛類は 48 科 289 種と 44 未確定種が確認され，この中には 4 新種と 18 日本初記録種が含まれていた（Imajima，2006）．

海産動物の分布は主として海流に支配され，また各海域の環境による種分化があり得るので，相模湾から相模灘にかけての海産動物相が南方海域の動物相と如何なる関連性があるかを追求し，合わせて相模湾・相模灘動物相の起源を明らかにする目的で，国立科学博物館では 2006 年から 2010 年にかけ，相模湾から伊豆諸島，小笠原諸島の海産動物相の調査を行った．小笠原諸島は相模湾から約 1000km 離れた亜熱帯の海洋島であって，黒潮の主流とはかなり離れ，北赤道海流から北方に途中で枝分かれした流れと，黒潮から分岐して南または西へ向かう小笠原海流に支配され，生物地理学的にもまた分類学的にも興味深い海域である．小笠原諸島の海産無脊椎動物は弘田（1894）以来，太平洋戦争前の 1940 年頃までは各分野の動物群に関する報告がなされた．1968 年に返還後，今島（1969，1970），重井（1970），Ooishi（1970）らの報告があるが，いずれもいくつかの限られた分野に関するものであった．国立科学博物館では昭和 51 年，52 年（1976，1977）に「伊豆・マリアナ島弧の自然史科学的総合研究」を実施し，多毛類は父島周辺からカンザシゴカイ科 18 種（Imajima，1977）が，また，大島・新島からカンザシゴカイ科 25 種（Imajima，1978）確認されたが，その他の科の種は未報告である．

本調査では，東京大学大学院理学研究科附属臨海実験所の臨海丸，独立行政法人海洋研究開発機構の淡青丸，東京海洋大学の神鷹丸，東京都島しょ農林水産総合センター八丈事業所のたくなん，東京都小笠原水産センターの興洋の協力のもとに 199 地点で生物ドレッジ他で底生動物の採集が行われた．その中で多毛類が採集されたのは，臨海丸により相模湾（area I）の 2 地点，臨海丸と淡青丸により相模灘（area II）の 18 地点，淡青丸により利島沖（area III）の 5 地点，淡青丸とたくなんにより八丈島沖（area IV）の 18 地点，神鷹丸により聟島沖（area V）の 7 地点，興洋，神鷹丸と淡青丸により父島周辺（area VI）の 37 地点，興洋により母島周辺（area VII）の 12 地点，淡青丸により父島から遠距離（area VIII）の 3 地点と母島から遠距離（area IX）の 1 地点の合計 103 地点であった（Table 1）．

相模湾と相模灘では現在までの数多くの調査で多毛類相はかなり解明されているが，利島沖，八丈島沖，聟島沖らの多毛類の知見は皆無であり，また父島周辺，母島周辺でもカンザシゴカイ科以外は知られていない．今回採集された多毛類の分類学的研究の結果，42 科，202 種と 38 未確定種が確認された．このうち次の 5 種，*Australonoe japonica*（父島），*Lepidonotus takunanae*（八丈島），*Lepidonotus specklus*（母島），*Eunice pusilla*（利島・八丈島），*Lumbrineriopsis paucidentata*（八丈島・聟島）は新種で，父島から 2 種，八丈島沖とほかから 3 種，母島周辺から 1 種採集された．また 10 種，*Paleanotus chrysolepis*（父島），*Paleanotus debilis*（父島），*Eupanthalis edriophthalma*（父島），*Neanthes unifasciata*（父島），*Eranno bifrons*（相模灘），*Ampharete finmarchica*（相模湾），*Schistocomus hiltoni*（父島），*Lanice conchilega*（父島），*Lanice seticornis*（父島），*Euchone capensis*（相模灘）は日本周辺海域から初めて記録され，父島周辺から 7 種採集された．38 未確定種はいずれも個体が不完全や幼体，または種の同定にかなりの時間が要され，後日の報告にゆだねるものである．

各種の出現海域は第 2 表（Table 2）に示された．相模湾，相模灘とその他の海域とは調査範

囲と採集頻度は全く異なるが，確定種のみで比較すると，相模湾と相模灘では既知種を含めて172 種に対し，利島沖で 27 種（16%），八丈島沖で 46 種（27%），聟島沖で 8 種（5%），父島周辺で 92 種（54%），母島周辺で 37 種（22%）であった．また相模湾・相模灘と聟島列島・父島列島・母島列島を含む小笠原諸島との種構成を比較すると，172：101 で小笠原諸島の種数は相模湾・相模灘の 59%である．しかし，今後の更なる調査でこの比率は当然変わる．シリス科の種構成は相模湾・相模灘と小笠原諸島がほぼ共通しているが，タケフシゴカイ科では相模湾・相模灘で 13 種に対し，小笠原諸島では皆無である．タケフシゴカイ科の個体は，薄い膜の表面に泥を付着させた棲管をつくるが，これに底質が適さないためと推測される．

研究された模式標本と一般標本はつくば市の独立行政法人国立科学博物館筑波研究資料センター昭和記念筑波研究資料館に保存される．