

New and Rare Stichaeid Fishes from the Okhotsk Sea

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Abstract Two stichaeid fishes were collected off the Okhotsk coast of Hokkaido in Japan. One represents a new species, *Stichaeus fuscus*, which differs from all other species of this genus in meristics, color pattern, shape of the pelvic fin, and body proportions. The other species is identified as *Soldatovia polyactcephala* (Pallas) and is redescribed.

During a fishery survey for pleuronectid fishes by the Hokkaido Abashiri Fisheries Experimental Station, two stichaeid fishes, *Stichaeus fuscus* sp. nov. and *Soldatovia polyactcephala* (Pallas) were collected at depths between 35 and 85 meters. The former species is described on the basis of 26 specimens, and compared with closely related species previously confused by earlier workers. The latter species is redescribed on the basis of 2 specimens, because it has also been confused with other similar-looking species of the genus *Chirolophis* and its occurrence in Japan was not properly documented.

Materials and methods

Specimens are deposited in the following institutions: the Laboratory of Marine Zoology, Faculty of Fisheries, Hokkaido University (HUMZ); the Department of Zoology, National Science Museum (Nat. Hist.), Tokyo (NSMT-P); the Hokkaido Abashiri Fisheries Experimental Station (AFES). Measurements follow Hubbs and Lagler (1958) except for the following four portions. The body depth is a vertical distance at the origin of the dorsal fin. Each length of the pectoral, pelvic and caudal fins is the length of the longest ray. Counts for the paired fin rays are made on the left side. Unpaired fin rays and vertebrae are counted on the basis of radiographs. The last adjective rays of dorsal and anal fins are counted as one each. Caudal fin rays are counted after the formula of Yatsu (1981). The urostyle is regarded as the last caudal vertebra. Counts of the cephalic sensory pores follow Makushok (1958).

Comparative materials. 36 specimens of *Stichaeus nozawai* from Hokkaido: HUMZ 54164 (342.5 mm

SL), 45°15'N, 143°05'E, 2 June 1976; HUMZ 78631 (320.6 mm SL), 44°12'N, 145°03'E, Kitami-Yamato Bank, 400–450 m deep, 14 Sep. 1978; HUMZ 79678 (280.7 mm SL), 44°11'N, 145°00'E, Kitami-Yamato Bank, 470–520 m deep, 11 Sep. 1978; HUMZ 90703 (346.0 mm SL), off Cape Notoro, Abashiri, 150–500 m deep, 8 May 1981; HUMZ 90975 (314.9 mm SL), off Cape Notoro, Abashiri, 1 June 1981; HUMZ 91976 (63.2 mm SL), 44°40'N, 142°51'E, off Omu, 50 m deep, 11 July 1981; HUMZ 92438 (125.0 mm SL), 45°26'N, 142°30'E, 75–85 m deep, 6 Oct. 1981; HUMZ 92606 (56.6 mm SL), HUMZ 92772 (45.6 mm SL), HUMZ 92773 (49.2 mm SL), 44°22'N, 143°35'E, off Lake Komuke, Abashiri, 60 m deep, 1 July 1979; HUMZ 93105 (162.2 mm SL), 44°25'N, 143°45'E, 150 m deep, 26 Aug. 1981; HUMZ 94022 (150.5 mm SL), 44°44'N, 143°01'E, off Horonai, 70 m deep, 2 July 1980; HUMZ 94023 (123.5 mm SL), 44°41'N, 143°10'E, off Omu, 90 m deep, 2 July 1980; HUMZ 94024 (115.4 mm SL), 44°43'N, 143°00'E, off Horonai, 60 m deep, 2 July 1980; HUMZ 94025 (75.4 mm SL), HUMZ 94026 (81.6 mm SL), 44°23'N, 143°41'E, off Yubetsu, 50–100 m deep, 28 June 1980; HUMZ 94077 (326.0 mm SL), Musashi Bank, 125–135 m deep, 19 Jan. 1982; HUMZ 95345 (272.2 mm SL), HUMZ 95346 (179.9 mm SL), HUMZ 95348–95353 (172.0–251.0 mm SL), HUMZ 95356–95362 (138.4–251.4 mm SL), 45°30'N, 142°38'E, 103 m deep, 31 May 1982; HUMZ 98568 (60.3 mm SL), 44°17'N, 143°40'E, off Yubetsu, 48 m deep, 10 June 1978; HUMZ 99034 (55.0 mm SL), 44°20'N, 143°33'E, off Lake Komuke, 45 m deep, 1 July 1979; HUMZ 99066 (51.7 mm SL), HUMZ 99067 (41.8 mm SL), 44°22'N, 143°35'E, off Lake Komuke, 60 m deep, 1 July 1979. 9 specimens of *Stichaeus grigorjewi* from Hokkaido: HUMZ 92550 (57.2 mm SL), HUMZ 92551 (63.2 mm SL), off Akkeshi, Kushiro, 30–60 m deep, 20 Aug. 1981; HUMZ 93012 (82.9 mm SL), HUMZ 93013 (111.6 mm SL), off Riruran, Kushiro, 52 m deep, 18 Aug. 1981; HUMZ 93030 (89.0 mm SL), HUMZ 93031 (80.7 mm SL), off Riruran, Kushiro, 55 m deep, 18 Aug. 1981; HUMZ 93037 (100.3 mm SL), HUMZ 93038 (57.2 mm SL),

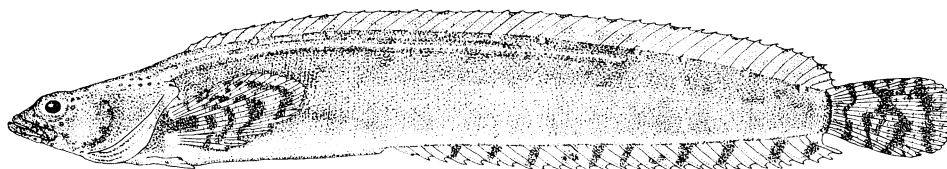


Fig. 1. *Stichaeus fuscus* sp. nov., holotype, HUMZ 92555 (78.6 mm SL, female).

off Chinbe, Kushiro, 45 m deep, 18 Aug. 1981; HUMZ 93043 (87.2 mm SL), off Daikokujima Island, Kushiro, 59 m deep, 18 Aug. 1981.

Stichaeus fuscus sp. nov.
(New Japanese name: Tsuchi-gaji)
(Figs. 1, 2, 3A)

Stichaeus nozawai: Honma, 1957: 110 (in part); Makushok, 1958: 120 (in part); Lindberg and Krasnyukova, 1975: 63 (in part).

Holotype. HUMZ 92555 (78.6 mm SL, female), 44°27'N, 143°23'E, off Shokotsu, Hokkaido, Japan, Okhotsk Sea, 50 m deep, 6 July 1979.

Paratypes. 25 specimens collected off the Okhotsk coast of Hokkaido: HUMZ 77854 (74.5 mm SL, female), 44°36'N, 143°02'E, off Omu, 35 m deep, 27 July 1978; HUMZ 92153 (57.3 mm SL, male), 43°58'N, 144°28'E, off Hamakoshimizu, 40 m deep, 1 July 1979; HUMZ 92535 (55.8 mm SL, male), 44°41'N, 142°56'E, off Horonai, 40 m deep, 19 Aug. 1981; HUMZ 92556 (73.0 mm SL, female), 44°27'N, 143°23'E, off Shokotsu, 50 m deep, 6 July 1979; HUMZ 92608 (55.8 mm SL, male), 44°22'N, 143°35'E, off Lake Komuke, 60 m deep, 1 July 1979; HUMZ 92770 (29.9 mm SL, sex unknown), HUMZ 92771 (29.6 mm SL, sex unknown), 44°17'N, 143°40'E, off Yanbetsu, 50 m deep, 26 June 1979; HUMZ 93836–93838 (28.3–35.8 mm SL, sex unknown), HUMZ 93839 (49.8 mm SL, male), HUMZ 93840 (63.0 mm SL, female), 44°17'N, 143°40'E, off Yanbetsu, 50 m deep, 26 June 1979; HUMZ 97291 (54.7 mm SL, male), 44°00'N, 144°40'E, off Shari, 60 m deep, 23 June 1982; HUMZ 98567 (56.0 mm SL, female), 44°17'N, 143°40'E, off Yubetsu, 48 m deep, 10 June 1978; HUMZ 98613 (78.2 mm SL, male), 44°17'N, 143°40'E, off Omu, 35 m deep, 28 Aug. 1979; HUMZ 98680 (58.7 mm SL, female), 44°01'N, 144°22'E, off Mokoto, 35 m deep, 13 July 1977; HUMZ 98992 (31.2 mm SL, sex unknown), HUMZ 98994 (52.1 mm SL, female), 43°59'N, 144°32'E, off Yanbetsu, 50 m deep, 26 June 1979; HUMZ 99073 (41.2 mm SL, sex unknown), HUMZ 99074 (36.7 mm SL, sex unknown), 44°02'N, 144°22'E, off Mokoto, 40 m deep, 13 July 1977; NSMT-P 23889 (66.5 mm SL, male), NSMT-P 23890 (74.2 mm SL, female), 44°36'N, 143°02'E, off Omu, 40 m deep, 21 July 1982; NSMT-P 23891 (56.0 mm SL, male), 43°59'N, 144°40'E, off Shari, 55 m

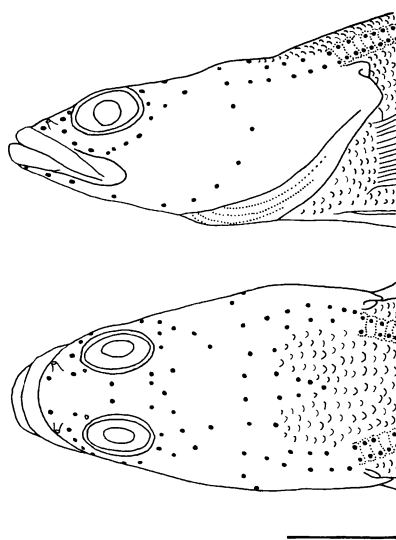


Fig. 2. Semidiagrams showing cephalic sensory and anterior lateral line pore series and squamation on head in *Stichaeus fuscus* sp. nov. Upper: lateral view of head; lower: dorsal view of head. Solid black spots show the cephalic sensory and lateral line pores. HUMZ 92555, holotype. Scale indicates 5 mm.

deep, 23 June 1982; NSMT-P 23892 (29.9 mm SL, sex unknown), 43°59'N, 144°32'E, off Yanbetsu, 50 m deep, 26 June 1979; NSMT-P 23893 (47.4 mm SL, male), 44°20'N, 143°33'E, off Lake Komuke, 45 m deep, 1 July 1979.

Diagnosis. Pelvic fin rays I, 3. Pores on lateral line arranged in two rows. Dorsal fin rays XLI–XLV. Anal fin rays I, 29–32. Pectoral fin rays usually 13. Innermost ray of pelvic fin the longest. Dorsal fin almost dusky brown without ocelli, horizontal or oblique dark bands.

Description. Meristics: Dorsal fin rays XLIII (XLI–XLV in 25 paratypes); anal fin rays I, 29 (I, 30–32); pectoral fin rays 13 (12–14); pelvic fin rays I, 3; caudal fin rays 4+6+6+2 (3–4+6+6+2–3); vertebrae 15+33=48 (14–15+33–34=

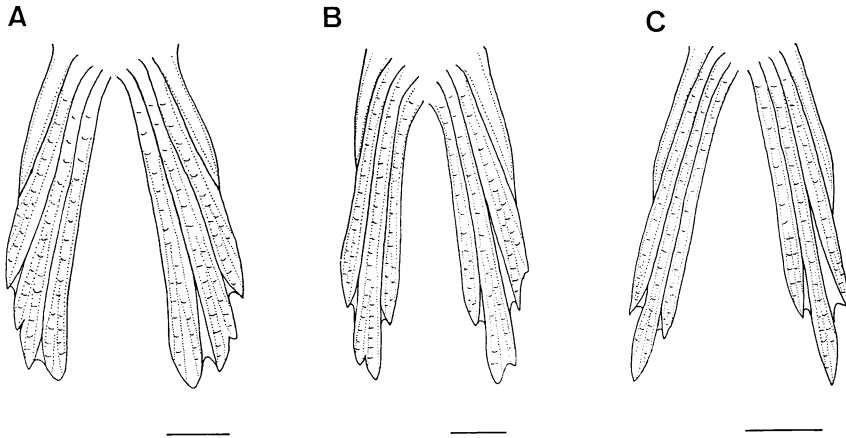


Fig. 3. Shapes of pelvic fin. A: *Stichaeus fuscus* sp. nov., HUMZ 92555, holotype; B: *S. nozawai*, HUMZ 94025; C: *S. grigorjewi*, HUMZ 93012. Scale indicates 1 mm.

47–49); number of dorsal spines behind lateral line 14 (9–18); number of lateral line scales with pores 102 (86–113).

Proportional measurements: Length of dorsal fin base 76.3% (67.1–76.0% in 25 paratypes) of standard length; length of anal fin base 50.9 (46.5–53.2); preanal length 46.3 (44.1–49.3); predorsal length 24.7 (24.2–28.3); head length 23.9 (23.3–29.0); body depth 11.7 (10.9–14.1). Depth of caudal peduncle 22.9% (19.4–27.4) of head length; length of pectoral fin 70.2 (62.2–75.0); length of pelvic fin 30.3 (25.6–36.6); length of caudal fin 68.1 (67.1–81.3); snout length 16.0 (15.3–22.0); length of upper jaw 34.0 (29.3–39.0); orbit diameter 18.1 (15.2–25.0); interorbital width 10.6 (4.9–13.8); postorbital length of head 64.9 (51.2–67.1).

Body cylindrical and compressed posteriorly. Head slightly depressed anteriorly. Both jaws covered with fleshy lips. Anterior half of lower lip slightly thickened. Lower lip slightly protruded forward beyond upper lip. Posterior end of upper jaw reaching a vertical through posterior margin of pupil. Anterior nostril forming a slender tube, its length about equal to a half of pupil diameter. Posterior nostril very indiscernible but present between posterior nasal pore and anterior margin of eye (Fig. 2). Gill membranes united with each other below the point of anterior one third of postorbital region, and the posterior margin widely free from isthmus. Upper margin of gill cover connected with temporal region by

membrane, and forming a siphon posteriorly.

Dorsal fin narrowly connected with base of caudal fin. Dorsal spines slender and slightly elongated posteriorly except for the last two short ones. Median dorsal spines about equal to a quarter of head length. Anal fin scarcely connected with base of caudal fin. Anal fin with a weak short spine and numerous branched rays. Anal soft rays almost equal in size, the median ones about equal to one third of head length. Membranes between anal soft rays slightly incised. Pectoral fin large, its length slightly longer than postorbital length. Pelvic fin with a weak short spine and 3 branched rays, the innermost ray the longest (Fig. 3A). Posterior margin of caudal fin almost truncate, but the corners slightly rounded.

Body covered with minute cycloid scales. Head scaleless. All fins scaleless except for bases of pectoral and caudal fins. Lateral line straight, running backward from postorbital pore series to near a point above the middle of anal fin base. Each lateral line scale transformed to an element of ossified lateral line canal, and usually pored up and downward. A series of free pit organs running on lateral median line of body, but very inconspicuous.

On cephalic sensory canals, mandibular, preopercular and nasal series regularly with 4, 6 and 2 pores each and arranged in one row; interorbital series with numerous pores, the anterior two just above middle of eye; postorbital and occipital series with numerous pores in irregular two rows;

occipital series extending backward on dorsal median line; infraorbital series almost arranged in one row except for a few posterior ones (Fig. 2).

Teeth on jaws conical, almost arranged in one row but forming a narrow band near symphysis of lower jaw. Teeth on prevomer conical and forming a small band. Teeth on palatine conical and usually arranged in one row.

Coloration. Body and head uniformly dark brown except for the pale ventral side. Small faint dots with blackish margin irregularly interspaced along base of dorsal fin. Dorsal fin almost dusky brown with blackish tips at intervals. Anal fin pale yellow with about 10 oblique blackish bands. Pectoral and caudal fins pale yellow and with irregular transverse dark bands. Base of

caudal fin rather blackish.

Distribution. Southern Okhotsk Sea, and off Sado Island in the Japan Sea (Honma, 1957).

Etymology. Specific name is the Latin (meaning "dark"), and named after the ground color of the body.

Remarks. It is clear that *Stichaeus fuscus* sp. nov. is included in the genus *Stichaeus* in having the single lateral line, the two rows of pores on the postorbital and occipital sensory canals, and the large pectoral fin which is slightly longer than two thirds of the head length. In the genus *Stichaeus*, *S. fuscus* is similar to *S. grigorjewi* and *S. nozawai* in that the pelvic fin is made of a spine and 3 soft rays, and in that pores on the lateral line are usually arranged in two rows. However,

Table 1. Dorsal and anal fin ray counts of *Stichaeus nozawai* in some major works.

	Jordan and Snyder (1902a), original	Honma (1957)	Makushok (1958)	Lindberg and Krasnyukova (1975)
Locality	Otaru, Hokkaido	Off Sado Is., Niigata Pref.	?	From Sakhalin to Kuril I.
Number of specimens	1	2	34	83
Standard length (mm)	255	100.0–177.0	?	46–596
Dorsal fin rays	LI	XLIII–L	XLIII–LI	XLI–LI
Anal fin rays	I, 37	I, 30–36	I–II, 33–37	I, 31–39

Table 2. Frequency distributions of meristics in *Stichaeus fuscus* sp. nov. and *S. nozawai*.

	Specimens examined	Dorsal spines															
		41	42	43	44	45	46	47	48	49	50	51					
<i>S. fuscus</i> sp. nov.	26	1	4	13	7	1											
<i>S. nozawai</i>	37									1	16	20					
		Anal soft rays															
		29	30	31	32	33	34	35	36	37	38						
<i>S. fuscus</i> sp. nov.	26	1	3	18	4												
<i>S. nozawai</i>	37							2	12	22	1						
		Pectoral fin rays															
		12	13	14	15	16											
<i>S. fuscus</i> sp. nov.	26	1	23	2													
<i>S. nozawai</i>	37				36	1											
		Dorsal spines behind lateral line															
		4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	
<i>S. fuscus</i> sp. nov.	20						1	4	4	3	3	2	2	0	0	1	
<i>S. nozawai</i>	35	1	1	4	5	12	7	4	0	0	1						

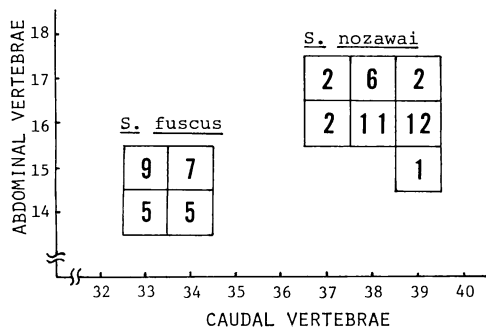


Fig. 4. Relation between the number of abdominal and caudal vertebrae in *Stichaeus fuscus* sp. nov. and *S. nozawai*. The numeral in the square shows the number of specimens examined.

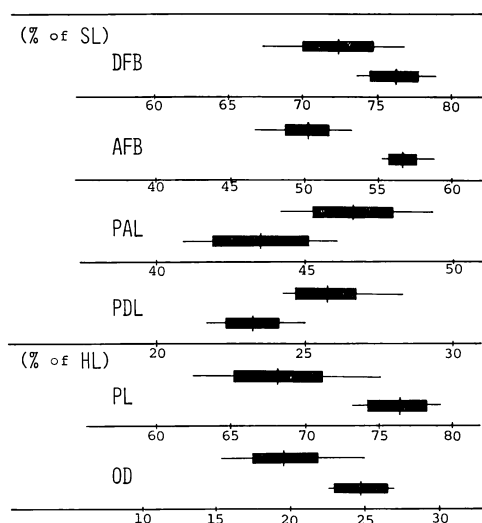


Fig. 5. Comparison of proportional measurements between *Stichaeus fuscus* sp. nov. and *S. nozawai*. Upper line of each item: *Stichaeus fuscus* sp. nov., 26 specimens, 28.3–78.6 mm SL. Lower line of each item: *S. nozawai*, 10 specimens, 41.8–81.6 mm SL. DFB: length of dorsal fin base; AFB: length of anal fin base; PAL: preanal length; PDL: predorsal length; HL: head length; PL: length of pectoral fin; OD: orbit diameter. The horizontal line, the solid black bar and the vertical short line show the range, the standard deviation and the arithmetical mean respectively.

S. fuscus differs from *S. grigorjewi* in that the latter has always more than 52 dorsal spines and 42 anal soft rays. On the other hand, *S. fuscus* may have been confused with *S. nozawai*, since Honma (1957), Makushok (1958) and Lindberg and Krasnyukova (1975) erroneously interpreted

the number of dorsal spines and anal soft rays of *S. nozawai* to be more variable (Table 1). In contrast, these characters are not so variable, but rather useful in distinguishing *S. fuscus* from *S. nozawai*, as well as the number of pectoral fin rays (Table 2). Similarly, vertebral counts do not overlap between the two species (Fig. 4). Therefore, the wide variation of meristics as interpreted by earlier workers was caused by the confusion of these two species, and many specimens of the undescribed species must have been inadvertently included in the descriptions of *S. nozawai* by earlier workers.

While there are distinct differences between *S. fuscus* and *S. nozawai* in the above meristics, the number of dorsal spines posterior to the lateral line, which was previously used to identify the species of the genus *Stichaeus* (Tarantetz, 1936), shows a wide variation and is not necessarily useful in their identification (Table 2).

In addition to the meristics, the uniform color pattern of the dorsal fin (Fig. 1) and the longest innermost pelvic fin ray (Fig. 3A) are characteristic of *S. fuscus*, since all other species of this genus have horizontal or oblique dark bands, or ocelli on the dorsal fin, and their innermost ray of the pelvic fin is shorter than the adjacent outer ray (Fig. 3B, C).

Some proportional measurements also indicate differences between *S. fuscus* (28.3–78.6 mm SL) and young specimens (41.8–81.6 mm SL) of *S. nozawai* (Fig. 5). As for the lengths of dorsal and anal fin bases, preanal and predorsal lengths, these differences probably reflect meristic differences to some extent. As for the length of pectoral fin and orbit diameter, *S. fuscus* has the slightly shorter pectoral fin and the smaller eye than those of *S. nozawai*.

Compared to *S. nozawai* and *S. grigorjewi*, *S. fuscus* is as small as *S. punctatus* and *S. ochriamkini* in the mature size, since the largest specimen of *S. fuscus* (78.6 mm SL, female) has large ovary. *S. fuscus* occurs sympatrically with the young of *S. nozawai*, although the latter species moves into deeper water when it reaches larger size.

***Soldatovia polyactcephala* (Pallas)**
(Japanese name: Kita-fusa-ginpo)
(Figs. 6, 7)

Blennius polyactcephalus Pallas, 1811: 179.

Soldatovia polyactcephala: Tarantetz, 1937: 153.

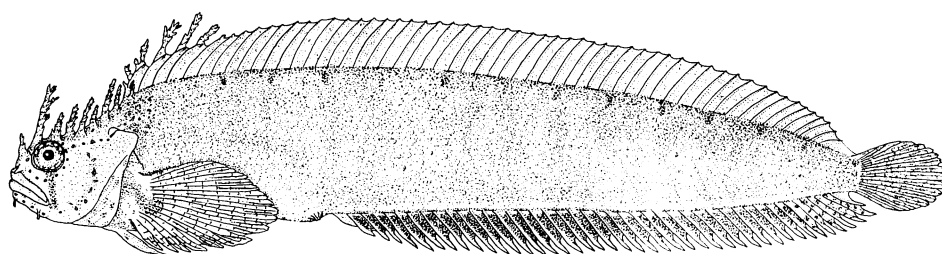


Fig. 6. *Soldatovia polyactocephala* (Pallas), HUMZ 103762 (139.3 mm SL, male).

Materials examined. 2 specimens collected off Sawaki, Okhotsk coast of Hokkaido: AFES 508 (104.7 mm SL, male), 44°37'N, 143°13'E, 70 m deep, 20 Aug. 1980; HUMZ 103762 (139.3 mm SL, male), 44°38'N, 143°15'E, 85 m deep, 3 July 1980.

Diagnosis. Two rows of cirri on dorsal head, the anterior 2 pairs on supraorbital region, the following 5 pairs on postorbital head. Posterior corner of gill cover directed slightly upward, its postero-dorsal margin never connected with temporal region by dermal membrane. Postorbital canal with 6 pores (present materials), or 5 pores (Makushok, 1958). The length of pelvic fin longer than 40% of head length.

Description. Meristics: Dorsal fin rays LVI; anal fin rays I, 42–43; pectoral fin rays 14; pelvic fin rays I, 4; caudal fin rays 4–5+6–7+6–7+4; vertebrae 15+46=61.

Proportional measurements: Length of dorsal fin base 79.4–85.8% of standard length; length of anal fin base 57.7–61.4; preanal length 36.6–42.0; predorsal length 16.8–17.0; head length 15.8–17.4; body depth 15.9–16.1. Depth of caudal peduncle 30.5–31.9% of head length; length of pectoral fin 89.0–103.6; length of pelvic fin 44.0–47.3; length of caudal fin 74.2–75.0; snout length 22.3–23.1; length of upper jaw 35.2–35.9; orbit diameter 20.0–24.2; interorbital width 16.4–17.0; postorbital length of head 57.1–59.5.

Body compressed and tapered posteriorly. Snout blunt and short, its length about equal to orbit diameter. Both jaws covered with broad fleshy lips. Anterior nostril forming a slender tube, its length slightly longer than pupil diameter. Posterior nostril very indiscernible but present between posterior nasal pore and eye. Gill membranes united with each other and forming a wide free fold across isthmus. Posterior corner of gill cover directed slightly upward, and its postero-dorsal margin free from temporal region and in



Fig. 7. Semidiagrams showing cirri pattern, the cephalic sensory pores, lateral line pores and squamation on head in *Soldatovia polyactocephala* (Pallas). Upper: lateral view of head; lower: dorsal view of head. Solid black spots show the cephalic sensory and lateral line pores. White open circles on dorsal view of head show the location of the cirri. HUMZ 103762. Scale indicates 10 mm.

consequence not forming a siphon (Fig. 7).

Dorsal fin slightly connected with base of caudal fin. Dorsal spines slender and rigid, and the median ones almost equal to a half of head length. Anal fin scarcely connected with base of caudal fin, and with a weak spine and branched soft rays. Anal soft rays almost equal in size, and the median ones about equal to a half of head length. Membranes between anal soft rays distinctly incised. Pectoral fin oval and its length equal to head length. Membranes of lower pectoral fin slightly incised. Pelvic fin relatively large, its posterior tip extending backward beyond lowermost ray of pectoral fin. Innermost ray of pelvic fin distinctly shorter than the adjacent outer ray. Caudal fin oval.

Minute cycloid scales spreading almost over body, but not extending forward to the point below dorsal origin at antero-dorsal body (Fig. 7). Head scaleless. All fins scaleless except for bases of pectoral and caudal fins. Lateral line made of rudimental ossified canal and limited only above base of pectoral fin. Lateral line canal with 2 or 3 pores arranged in one row (Fig. 7). Two series of free pit organs present inconspicuously, one running straight from just behind lateral line to about a half of body, the other one running along lateral median line of body.

Cirri on head: A small cirrus present on snout just between anterior nostrils; 2 pairs of cirri on supraorbital region, the anterior ones longer than the posterior and about 2 times as long as orbit diameter; 5 pairs of cirri on postorbital dorsal head and arranged regularly, the second ones slightly situated on outer side than the others; a pair of small cirri beside base of first dorsal spine; cirrus on each tip of anterior four dorsal spines reduced in size posteriorly; a few minute cirri along preopercular margin and between lateral line pores; 2 pairs of small cirri on chin (Fig. 7).

On cephalic sensory canals, mandibular series with 4 pores; preopercular series with 6–7 pores; nasal series with 2 pores; interorbital series with 7 pores; postorbital series with 6 pores; occipital series with 3 pores. All pore series arranged in one row (Fig. 7).

Teeth on both jaws alternately arranged in 2 rows at the bases, but in one row at the tips and forming a single cutting edge as a whole. Each tip of tooth on both jaws slightly pointed. Pre-vomer and palatine toothless.

Coloration. Body light orange except for whitish belly. Ten or more small brown spots present below base of dorsal fin. Anal fin brown except for creamy margin and base, and a part of posterior portion with brown dots. Pectoral fin pale white except for middle base with a brown blotch. Pelvic fin white. Caudal fin white with narrow light brown bands. Vertical brown band below eye. Dermal rim of eye and cirri on head having pale white and brownish bands alternately.

Distribution. Kamchatka (type locality), off Cape Aniwa in Sakhalin, Okhotsk coast of Hokkaido.

Remarks. The present species is clearly distinguishable from all other chirolophine fishes by examining the positions of the head cirri and the conditions of the dorsal margin of the posterior gill cover, as shown in the diagnosis. In Japanese waters, however, this species was confused with other species of the genus *Chirolophis* and erroneously considered to be a common fish in Hokkaido (i.e. Kobayashi, 1962; Ueno, 1966). In fact, there are few substantiating records of this species (i.e. Kamchatka—Pallas, 1811; Sakhalin—Taranetz, 1937), though Makushok (1958) and Lindberg and Krasnyukova (1975) afterwards quoted Taranetz's detailed but unpublished description and used his specimens. Consequently, the *S. polyactocephala* reported here indicates for the first time that the species is substantially distributed along the Okhotsk coast of Hokkaido.

Our data are slightly different from the Taranetz's description in Makushok (1958), in the numbers of the pelvic fin rays and the postorbital pores. Judging from the stability of these characters in the stichaeid fishes, the difference of the former character is probably due to the Taranetz's error and the difference of the latter character is recognized as variation in this species.

Nomenclaturally, the present species has been designated twice as the type species of a genus-group, that is, the genus *Soldatovia* which was established by Taranetz (1937) and the genus *Bryostemma* which was established by Jordan and Starks (1895). In this sense, the generic name *Soldatovia* is a junior objective synonym of the generic name *Bryostemma*. However, the specimen used by Jordan and Starks (1895) was to be described as new species, *Bryostemma decoratum*, by Jordan and Snyder (1902b). Judging from the

original description of Jordan and Snyder (1902b), the species *B. decoratum* is clearly different from the present species in having the following characters: posterior border of interorbital space with 3 short tentacles (tentacles are not arranged in 2 rows); occiput and napes with many pointed tentacles (tentacles are arranged in more than 2 rows); postero-dorsal margin of gill cover not incised (judging from the original figure). From the above facts, the genus *Bryostemma* is considered to have been established on the basis of the misidentified type species. In this study, the generic name *Soldatovia* is provisionally used for the present species, though the case must be referred to the International Commission on Zoological Nomenclature, to designate as the type species of the genus *Bryostemma* whichever nominal species will best serve stability and universality of nomenclature (provisions of Article 70 (b) of the International Code of Zoological Nomenclature).

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オホーツク海から得られたタウエガジ科の 1 新種および 1 稀種

三木 徹・丸山秀佳

北海道のオホーツク沿岸海域から採集されたタウエガジ科の 1 新種ツチガジ *Stichaeus fuscus* および 1 稀種キタフサギンボ *Soldatovia polyactcephala* を記載した。
ツチガジはこれまで近似種のタウエガジ *Stichaeus nozawai* と混同されていたが、背鰭棘数が 41~45 本で

少ないこと、腹鰭条は I, 3 で最も内側の軟条が他の軟条より伸長すること、背鰭は一様に暗色で明瞭な暗色斜走帯を持たないことなどによって、明瞭に識別される。

一方、キタフサギンボは従来フサギンボ属 *Chirolopsis* の種と混同されていたので、本種の特徴を明確にするため再記載した。また、本種は日本海域にも分布すること

が初めて確認された。

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