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NOTES ON THE ICHTHYOFAUNA OF THE FRESH WATERS
IN HOKKAIDO, JAPAN

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On the fresh water fishes of Hokkaido, many scholars have studied from the point of view of taxonomy and biogeography, e. g., TANAKA ('31), OKADA & IKEDA ('38) and MORI ('37). Recently a few species have been added by S. I. SATO ('51) and S. I. SATO & KOBAYASHI ('51): *Lampetra japonica kessleri* (ANIKIN) and *Cottus hangiongensis* MORI. In making further studies on the fishes, the workers have collected some rare fishes hitherto unrecorded from Hokkaido. In the present paper 3 species, *Pseudorasbora pumila* MIYADI, *Parasilurus asotus* (LINNAEUS) and *Leucopsarion petersi* HILGENDORF, are described as new occurrences, and some supplementary notes are added on *Cottus hangiongensis* MORI.

Here the workers wish to express cordial thanks to Mr. R. YUKI and Mr. T. MIYATANI for valuable aid in collecting the specimens.

Pseudorasbora pumila MIYADI

Nom. Jap. Shinai-motsugo

Pseudorasbora pumila; MIYADI, 1930, Sinai-numa; OKADA & MATSUBARA, 1938, p. 75, Gunma, Tokyo, Ōu district except Aomori; OKADA & NAKAMURA, 1948, p. 168, Northern Japan Proper from Kanto, Gifu.

Twelve specimens, measuring 35-58 mm in body length, collected from Nezaki, near Hakodate, in Oct., 1953.

D. 10; P. 12-13; A. 8-9; V. 8; Scales 34-35.

Head 3.50-3.88 in body length; depth 3.84-4.13. Eye 3.52-4.31 in head length; interorbital space 2.15-2.39; snout 2.56-2.87; maxillary 3.17-3.70; longest dorsal ray 1.36-1.57; pectoral fin 1.50-1.85; anal fin 1.69-2.09. Caudal peduncle 1.87-2.14 in depth of body. Lateral line absent or present only on first four or five scales, usually unequal in each side.

In Hokkaido this species inhabits only the pond of Nezaki.

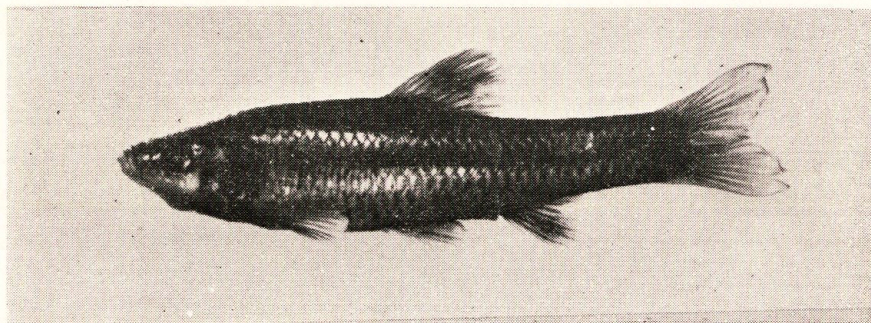


Fig. 1. *Pseudorasbora pumila* MIYADI, 69 mm in total length, from Nezaki

Parasilurus asotus (LINNAEUS)

Nom. Jap. Namazu

Parasilurus asotus; JORDAN & FOWLER, 1903, p. 903, Niigata, Morioka, Tana River, Kawatana, Sendai, Ichinoseki, Chikugo River at Kurume, Tsuchiura, Lake Biwa at Matsubara, and Formosa; JORDAN, TANAKA & SNYDER, 1913, p. 58, China, Japan; OKADA & MATSUBARA, 1938, p. 66, Japan proper, Shikoku, Kyushu, Korea, Formosa, China, Manchukuo; OKADA & NAKAMURA, 1948, p. 145, Japan except Hokkaido, Korea, China; TANAKA, 1952, p. 840, Asia except Ryukyu, Ogasawara and Hokkaido.

Two specimens measuring 103-360 mm in body length were collected by authors from the Matsukura River in Hakodate, in June and Sept., 1953.

D. 5; A. 76-77; P. I, 13; V. 12.

Head 3.89-4.55 in body length; depth 5.97-6.81; length of base of anal 1.66-1.80; maxillary barbel 3.63-5.80. Eye 7.85-10.82 in head length; interorbital space 2.02-2.33; snout 3.11-3.39; maxillary 2.42-2.69; depth of caudal peduncle 4.03-5.03; barbel on lower jaw 3.49-4.44; longest dorsal ray 2.59-2.78; anterior anal ray 1.90-2.81; ventral fin 2.59-2.72; upper pectoral ray 1.83-2.07. Length of pectoral spine 55.2-55.8 in pectoral ray. Body length 360 mm on larger one, while smaller one is 103 mm long.

Authors collected only two specimens from the Matsukura River in Hakodate, this species seems to be propagated naturally at the Matsukura River and Goryokaku Pond in Hakodate, and it is known to inhabit also in the waters near Shimamatsu in the vicinity of Sapporo.

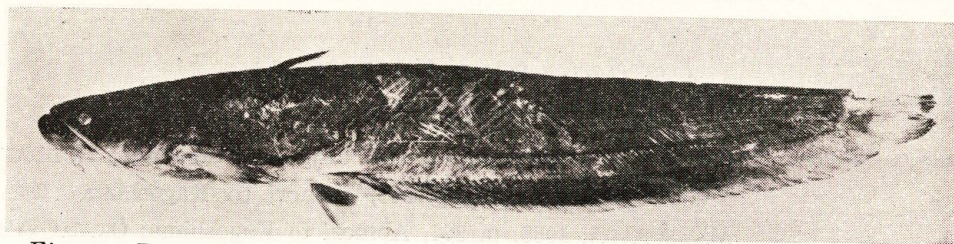


Fig. 2. *Parasilurus asotus* (LINNAEUS), 405 mm in total length, from the Matsukura River

Cottus hangiongensis MORI

Nom. Jap. Kankyo-kajika

Cottus hangiongensis; MORI, 1930, p. 54, Kai-nei in Korea; SATO & KOBAYASHI, 1951, p. 129, Southern Hokkaido.

In a previous paper (1951) observations were reported on 31 specimens, measuring 50-127 mm in body length, collected from the Daitobetsu, Moheji and Hekirichi Rivers in Southern Hokkaido.

Here are described 6 specimens, 60-116 mm in body length, collected from the Shiriuchi

River, in July 1949.

D. VIII-IX, 19-24; P. 13-14; A. 15-17; V. I, 4.

Head 3.28-3.76 in body length; depth 4.72-5.84. Depth of caudal peduncle 2.71-3.24 in head length; snout 3.00-3.41; maxillary 1.84-2.60; interorbital space 6.09-8.41; diameter of orbit 3.36-4.53; ventral fin 1.38-1.63. Length of snout to vent in body length 1.77-1.94; vent to caudal 2.02-2.06.

Preopercular spine is only one stout spine, usually covered by skin, lateral line above the middle of body, reaching to caudal. Palatines toothless, teeth in broad bands on jaws, narrower on vomer. Color in formalin grayish or brown, two black spots on caudal peduncle. Males are rather dark gray in spawning season, and females are usually light brown in the same season.

This species seems to live in Hokkaido, while hitherto unknown from Japan Proper.

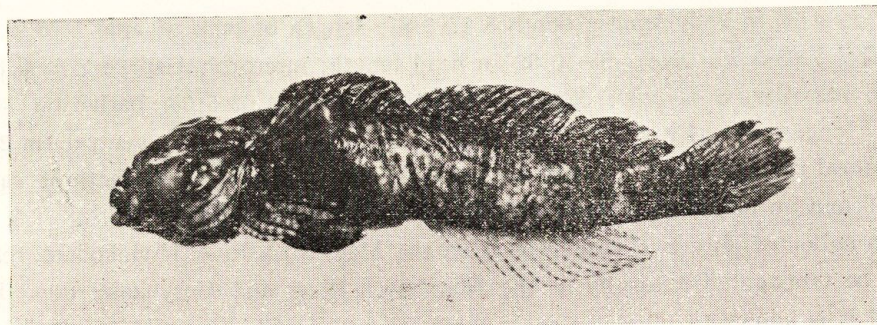


Fig. 3. *Cottus hangiongensis* MCRI, 139 mm in total length, from the Hekirichi River

Leucopsarion petersi HILGENDORF

Nom. Jap. Shiro-uwo

Leucopsarion petersi; JORDAN & SNYDER, 1902, p. 125, Niigata, Hiroshima; JORDAN, TANAKA & SNYDER, 1913, p. 363, Aomori to Kagoshima; OKADA & MATSUBARA, 1938, p. 364, Aomori to Kagoshima; OKADA & NAKAMURA, 1948, p. 201, all Japan except Hokkaido, Southern Korea.

Eight specimens were collected from the Moheji River, measuring 34-40 mm in body length.

D. 12-14; A. 16-18; P. 12-16.

Head 4.35-5.02 in body length; depth 7.71-10.4; depth of caudal peduncle 10.8-13.0; distance from snout to soft dorsal 1.50-1.61; distance from snout to anal fin 1.67-1.79. Snout 2.77-3.62 in head length; maxillary 2.14-2.45; interorbital space 2.96-3.74; eye 4.14-5.12; longest dorsal ray 1.74-2.67; pectoral ray 1.31-1.66; anal ray 1.74-2.56; caudal ray 1.24-1.57; ventral ray 3.40-4.53.

Authors have specimens only from the Moheji River collected by Mr. T. Miyatani, in May, 1953.

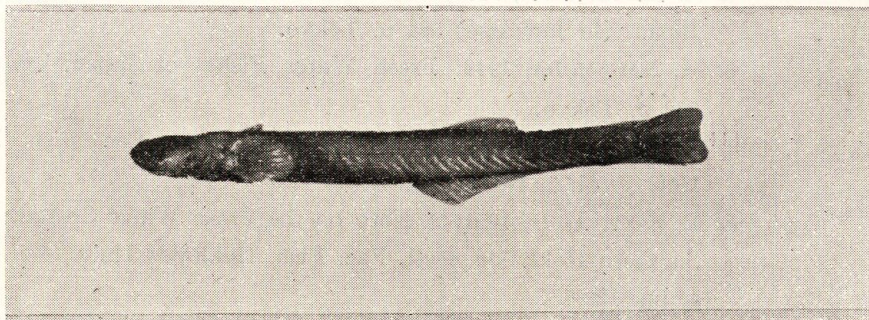


Fig. 4. *Leucopsarion petersi* HILGENDORF, 41 mm in total length, from the Moheji River

Bibliography

1. Hokkaido Fisheries Institute, 1929-1936; Report of Fisheries in Hokkaido. (in Japanese) Vol. 21, 22, 28, 29, 34, 36, 39.
2. JORDAN, D. S. & J. O. SNYDER, 1902; A Review of the Gobioid Fishes of Japan, with Description of Twenty-one New Species. Proc. U. S. Nat. Mus., Vol. 24, No. 1244, pp. 125-126.
3. _____ & H. W. FOWLER, 1903; A Review of the Cyprinoid Fishes of Japan. Proc. U. S. Nat. Mus., Vol. 26, No. 1334, pp. 840-841.
4. _____ & _____, 1903; A Review of the Siluroid Fishes or Catfishes of Japan. Proc. U. S. Nat. Mus., Vol. 26, No. 1338, pp. 903-904.
5. _____, S. TANAKA, & J. O. SNYDER, 1913; A Catalogue of the Fishes of Japan. Jour. Coll. Sci. Tokyo Imp. Univ., Vol. 33, pp. 1-479.
6. KOBAYASHI, H. 1935; Japanese Fresh Water Fishes and their Parasites. (in Japanese) 148 p. Tokyo.
7. MIYADI, D. 1930; Notes on a new Cyprinoid Fish, *Pseudorasbora pumila* sp. Nov. from Sinai-numa, Prov. Rikuzen. Ann. Zool. Jap., Vol. 12, No. 2, pp. 445-448.
8. MORI, T. 1930; On the Fresh Water Fishes from the Tuimen River, Korea, with Description of New Species. Jour. Chosen Nat. Hist. Soc., No. 11, pp. 54-70.
9. _____ 1937; Studies on the Geographical Distribution of Fresh Water Fishes in Eastern Asia. 88 p. Tokyo.
10. _____ 1952; Check List of the Fishes of Korea. Mem. Hyogo Univ. Agr., Vol. 1, No. 3, pp. 1-228.
11. OKADA, Y. & H. IKEDA, 1938; Contribution to the Study of the Freshwater Fish Fauna of Hokkaido, Japan. Sci. Rep. Tokyo Bunrika Daigaku, Vol. 3, pp. 133-162.

12. _____ & K. MATSUBARA, 1938; Keys to the Fishes and Fish-like Animals of Japan. (in Japanese) 584 p. Tokyo.
13. _____ & M. NAKAMURA, 1948; Fresh Water Fishes of Japan. (in Japanese) 208 p. Tokyo.
14. SATO, S. I. 1951; Studies on the Lampreys of Hokkaido. Bull. Fac. Fish. Hokkaido Univ., Vol. 1, No. 2, pp. 54-62.
15. _____ & K. KOBAYASHI, 1951; A Note on the Fresh Water Cottoid Fishes in Southern Hokkaido. Bull. Fac. Fish. Hokkaido Univ., Vol. 1, No. 3, 4, pp. 129-133.
16. TANAKA, S. 1931; On the Distribution of Fishes in Japanese Waters. Jour. Fac. Sci. Imp. Univ. Tokyo, Vol. 3, Pt. 1, pp. 1-90.
17. _____ 1952; Fishes of Japan. Vol. 31-48, pp. 559-960. (Rev. Ed.).
18. TOMIYAMA, I. 1936; Gobiidae of Japan. Jap. Jour. Zool., Vol. 7, No. 1, pp. 37-112.

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