

New, Rare or Uncommon Fishes from Japanese Waters. VIII. A Record of *Rhamphocottus richardsoni*

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On December 2, 1962, while fishing with hook and line with his father, Mr. Te-ruo YAMAMICHI found a singular red small fish in the mouth of a rockfish, *Sebastes oblongus* GÜNTHER, and sent the unusual fish to the present writer for study through courtesy of his teacher at Kadonohama Junior High School by the name of Mr. Magojirô SOTOKAWA and Mr. SATÔ, Hachinoe Branch Station, Tôhoku Fisheries Research Laboratory. The rockfish was taken 4 km. off Kadonohama, Taneichi Machi, Iwate Prefecture, at a depth of 40 m. The specimen received has been dried up, and is not in a good state, but certainly represents a species of *Rhamphocottus* which is believed not to have been recorded from the western part of the North Pacific. This genus has been placed either in the family Rhamphocottidae or in the large family of Cottidae. The present specimen, though somewhat different from the specimens previously reported upon from the eastern side of the North Pacific or from Alaska, is here tentatively identified as *Rhamphocottus richardsoni* GÜNTHER. The writer wishes to express here his sincere thanks to Messrs. YAMAMICHI, SOTOKAWA and SATÔ for their cooperation in getting the specimen of an additional species of fish to the Japanese fauna, and to Mr. Yoshiaki TOMINAGA for the trouble of taking a radiograph of the specimen.

Rhamphocottus richardsoni GÜNTHER

Kutchibashi-kadjika (new Japanese name)
Plate XII, figure 14

Rhamphocottus richardsoni GÜNTHER, 1874, pp. 369 & 370 (Fort Rupert, N. America).—BEAN, 1882 (1881), p. 252 (St. Paul, Kodiak I.).—JORDAN & STARKS, 1896, pp. 813–815, pl. 87 (Channel Rocks, near Point Orchard, Puget Sound).—JORDAN & EVERMANN, 1896–1900, pp. 2030 & 2031, pl. 307 (Channel Rocks, near Point Orchard, Puget Sound).—EVERMANN & GOLDSBOROUGH, 1907, p. 327, fig. 90 (Straits of Fuca; Albatross stations 4197, 4204, 4205, 4209, 4212).—CLEMENS & WILBY, 1961, pp. 319–321, fig. 303 (Pacific coast of Canada).—HERARD, 1961, pp. 251 & 252, pl. 106 (photo in colors).

The single dried specimen (Cat. No. ABE '62-1786) mentioned above measures *ca.* 50 mm. in total length and *ca.* 43 mm. in standard length. D_1 *ca.* V. D_2 11. Internurals for the first dorsal *ca.* 7, for the second dorsal 11. A. *ca.* 6. P. *ca.* 13 on either side. C. ii+6+5 (probably all unbranched). V. *ca.* 3 (left) & 3 (right) (divided, segmented and simple, that is, unbranched). Total number of vertebrae *ca.* 24. Length of snout 7 mm. on either side. Horizontal diameter of orbit 5 mm. on either

side. Length of head *ca.* 21 mm. (left) and *ca.* 22 mm. (right). The lower jaw projects beyond the upper. The dermal flap on the snout tip seems to be lacking. The dermal spines are close-set, nearly perpendicular to the surface of the body and sometimes branched at their tips.

The present writer is not in a position to discuss the relationship of Rhamphocottidae, Cottidae, and other families, but it may be stated here that the superficial resemblance between *Rhamphocottus* and *Zaniolepis* is striking.

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Explanation of plates XI and XII

Plate XI. *Rondeletia loricata*, new species. Holotype. After four months' preservation in formalin.

- Fig. 1. Left side view:
- Fig. 2. The first gill-arch and branchial cavity of the left side.
- Fig. 3. Buccal cavity.
- Fig. 4. The needle points at the minute pits arranged in paler straight lines on the side of the body. The pits are represented artificially; they are too small for the technique adopted here.
- Figs. 5 and 6. The right and left sides of the head and the anterior part of the trunk. It is regretted that the nostrils are not represented.
- Fig. 7. Ventral side of the head and trunk. The pelvic fins, vent and the coracoid on the left side are visible.

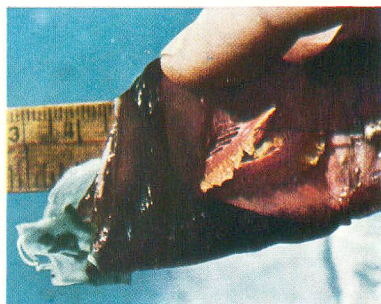
Plate XII.

- Figs. 8 and 9. The right pectoral girdle of *Rondeletia loricata*, new species.
 - Fig. 8: Seen from outside. Fig. 9: Seen from inside. Stained with alizarin.
- Figs. 10-13. *Barbourisia rufa* PARR. Cat. No. ABE 11094. After more than three years' preservation in formalin.
 - Fig. 10: General view.
 - Fig. 11: The needles point at the pectoral and pelvic fins.
 - Fig. 12: The needle points at a pore in the lateral line.
 - Fig. 13: The left branchial cavity, gills and the slit behind the fourth gill-arch.
- Fig. 14. *Rhamphocottus richardsoni* GÜNTHER. Cat. No. ABE '62-1786. Dried.

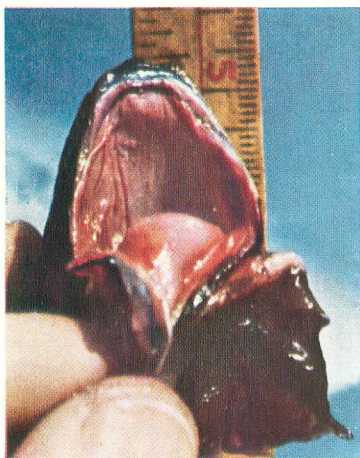
Plate XI



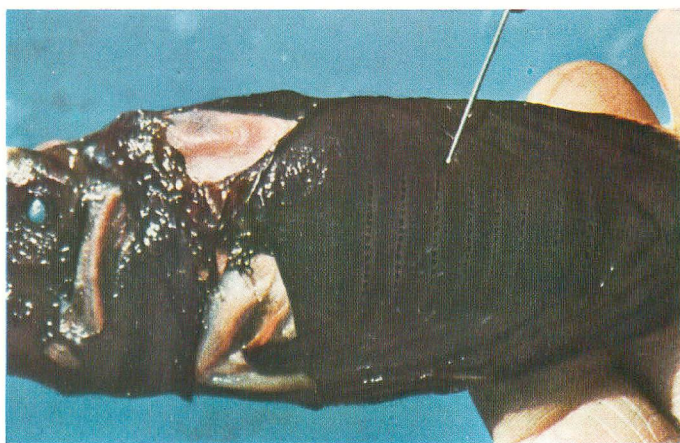
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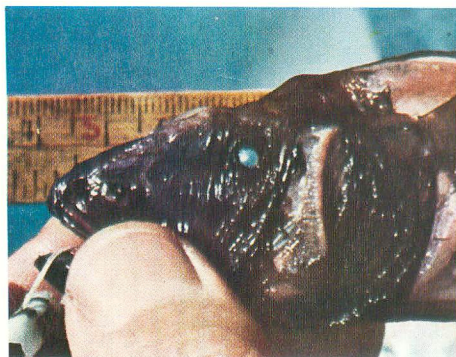
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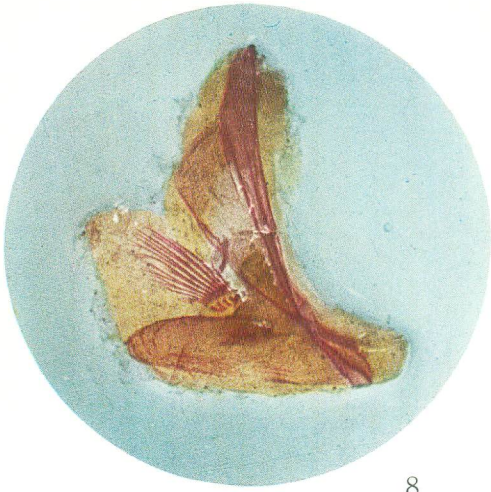


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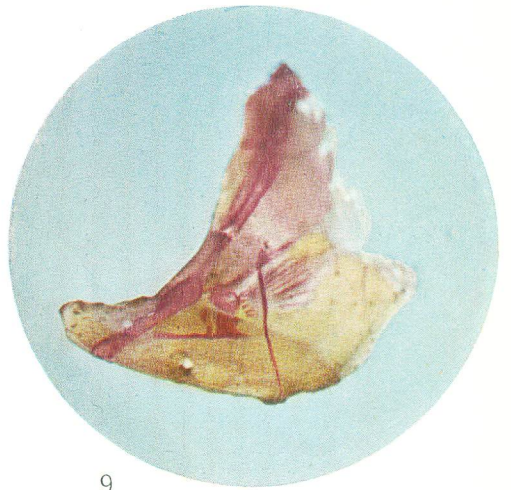


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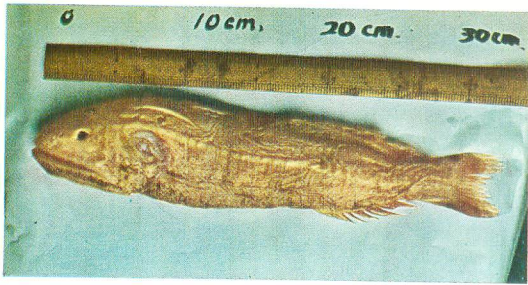
Plate XII



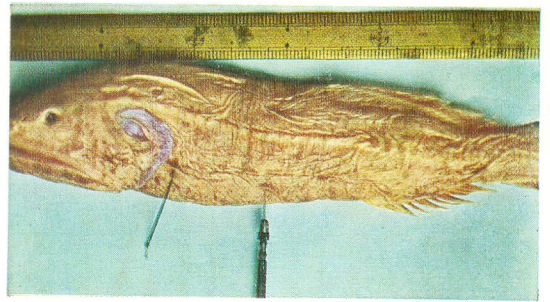
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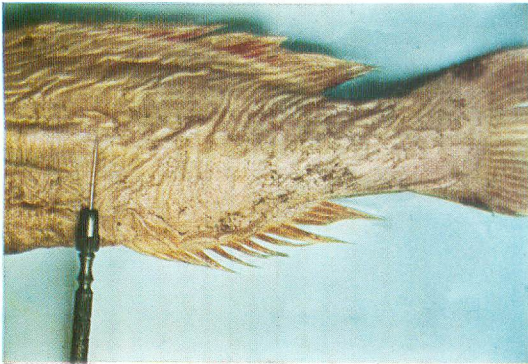
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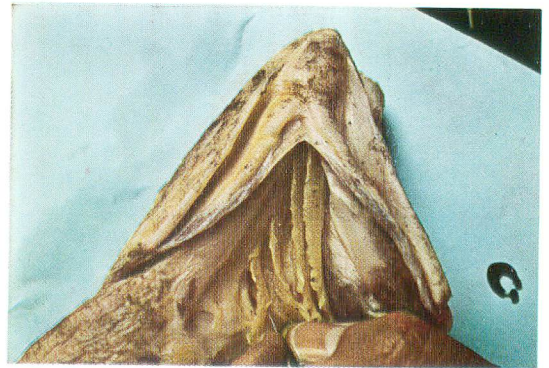
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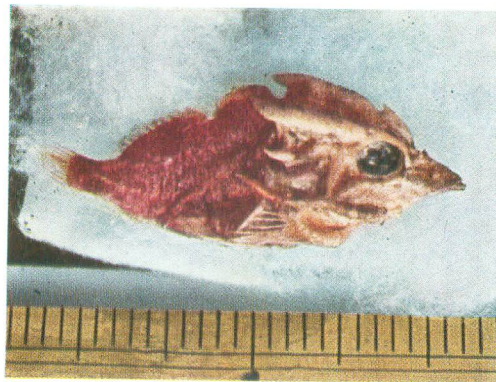
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