Discovery of the Morid Fish *Halargyreus johnsonii* in the Western North Pacific

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During the Deep Sea Research carried out by the Iwate Fisheries Experimental Station, two specimens of *Halargyreus johnsonii* Günther (Fig. 1) were taken with an otter trawl net fished at depths of 1260～1275 m, off Ôzuchi (39°16′N, 142°19′E), Iwate Prefecture, on July 21, 1977.

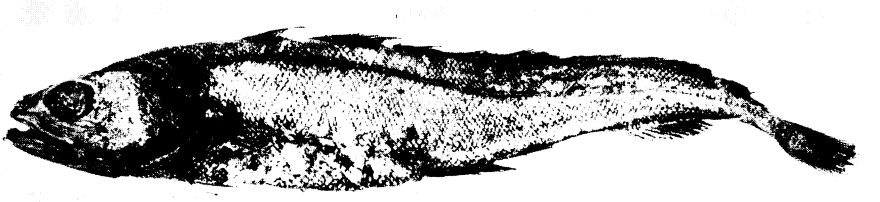

Fig. 1. *Halargyreus johnsonii*, HUMZ 69320, 421 mm SL, female.

These specimens are deposited in the Ichthyological collection at the Laboratory of Marine Zoology, Hokkaido University (HUMZ 69320, 421 mm in SL, female, Fig. 1) and the Iwate Fisheries Experimental Station (IFES 593, 414 mm in SL, male). An otolith used for comparison was the right sagitta of HUMZ 69320 (Fig. 2). Counts and measurements were made in accordance with Templeman (1968), and otolith terminology followed Fitch and Barker (1972).

Counts. First dorsal fin rays 1 (rudimentary first dorsal fin ray) +6; second dorsal fin rays 54; pectoral fin rays 16; pelvic fin rays 6; anal fin rays 47～48; total caudal fin rays 38～42; vertebrae 17～18+34～35 (urostylar vertebra is counted as one).

Measurements. Measurements in mm of body parts and their percentages of standard length: standard length 414～421, head length 109.0～113.0 (25.9～27.3%); head depth 65.4～67.1 (15.8～15.9%); head width 43.1～44.3 (10.2～10.7%); snout length 28.0～29.0 (6.7～7.0%); eye diameter 24.3～25.7 (5.9～6.1%); interorbital width 24.3～26.4 (5.9～6.3%); body depth 77.0～77.1 (18.3～18.6%); body depth at anal 63.4～65.0 (15.1～15.7%); body width 39.8～43.3 (9.5～10.5%); upper jaw length 51.0～53.8 (12.1～13.0%); lower jaw length 62.1～65.0 (14.8～15.7%); tip of snout to anus 209.0～209.2 (49.7～50.5%); tip of snout to first dorsal fin 123.5～124.4 (29.5～29.8%); tip of snout to second dorsal fin 151.5～152.0 (36.1～36.6%); tip of snout to anal fin 212.3～214.2 (50.4～51.7%); depth of caudal peduncle 10.0～10.6 (2.4～2.6%); width of caudal peduncle 5.4～5.6 (1.3%); first dorsal fin length 64.6 (15.3%); second dorsal fin length 33.8 (8.0%); pectoral fin length 51.5～64.0) (12.4～15.2%); pelvic fin length 81.6 (19.4%); anal fin length 32.5～32.9 (7.7～7.9%).

Otolith. Sagitta measuring 12.9 mm in length, 5.6 mm in ostium and 7.3 mm in cauda, inflated anteriorly and narrow posteriorly (Fig. 2). Lower rim of cauda slightly bowed out posteriorly. Ratio of height to length 1:2.0. Inner face of sagitta with a

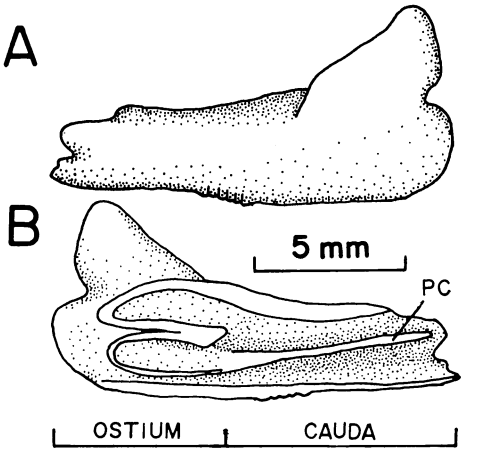

Fig. 2. Right sagitta of *Halargyreus johnsonii*: A, outer face and B, inner face. PC, posterior colliculum.

deep chamber formed in cauda and bifurcated by the posterior colliculum (bladelike thin ridge).

Remarks. This species is distinguishable from other morid fishes in having no teeth on the palatines and vomer, no barbel, an anal fin notched at the middle part, 5 or 6 pelvic fin rays, and a slightly projecting lower jaw.

The present two specimens agree with Günther's (1862) original description of the characters mentioned above, counts and proportional measurements.

This species has been recorded from moderate depths in the temperate waters of the Atlantic (Svetovidov, 1967; Templeman, 1968; Permitin, 1969; Haedrich and Horn, 1970; Haedrich and Polloni, 1974), South Pacific (Günther, 1887; Cohen, 1973) and Japan (Fitch and Brownell, 1968). Records from the Pacific Ocean are shown in Fig. 3.

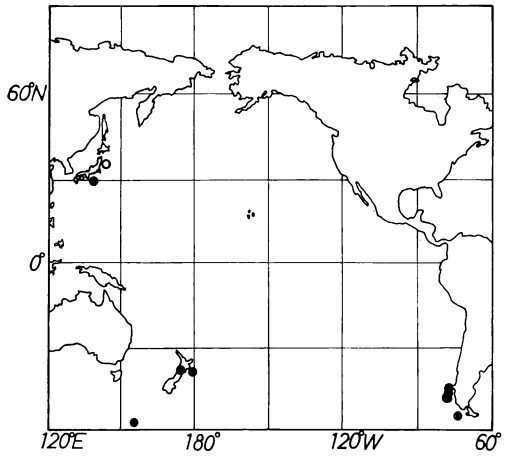

Fig. 3. Record of *Halargyreus johnsonii* in the Pacific Ocean. Open circle indicates the locality where the present specimens were caught; solid circles indicate the North Pacific (Fitch and Brownell, 1968) and South Pacific (Cohen, 1973) localities where this species was collected.

The only record from Japan was presented by Fitch and Brownell (1968) as "Morid No. 3" on the basis of otoliths from the stomach of the pygmy sperm whale, *Kogia simus*. These otoliths were subsequently identified as those of *H. johnsonii* by Fitch and Barker (1972). However, Cohen (1973) noted that as the closest known occurrence of *Halargyreus* to Japan was New Zealand, and as the otolith in question was described and figured by Fitch and Brownell (1968, Fig. 1, N) as being "badly digested", it seemed best to hold this record in abeyance until it could be verified by the capture of an entire specimen. The otolith examined here, characterized by the distinctive general shape with a deep chamber in the cauda of the inner surface, agrees well with figures and descriptions of this species given by Schmidt (1968), Karrer (1971) and Fitch and Barker (1972). Thus, the otoliths from Japan recorded by Fitch and Barker (1972) are clearly identified as those of *H. johnsonii*, and also Cohen's question is answered by this first appearance of entire specimens of this species from Japan.

Acknowledgments

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北太平洋におけるカラスダラ（新称）の出現

金山　勉・佐々木　達・佐々木　星

昭和 52 年度岩手県深海漁場開発調査期間中の 1977 年 7 月 21 日，岩手県大槌沖 (39°16′N, 142°19′E) の水深 1260～1275 m からトロール網により，チゴダラ科のカラスダラ，*Halargyreus johnsonii* が 2 個体採集された（体長 421 mm, 414 mm).

本種は下顎にひげを欠くこと，鋤骨と口蓋骨に歯がないこと，臀鰭が深く欠刻することおよび腹鰭が 6 軟条であることにより，他のチゴダラ科魚類から容易に区別される.

本種の北太平洋海域における唯一の記録は和歌山県太地沖で捕獲されたコマッコウの胃内容物から得られた耳石によってなされ，この海域での本種の分布が疑問視されていた．今回，日本から初めて完全な個体が得られ，本種の分布が確証された.

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