

PROCEEDINGS  
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A NEW FAMILY OF JUGULAR ACANTHOPTERYGIANS.

BY THEODORE GILL AND HUGH M. SMITH.

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Among the fishes collected by the junior author in Japan in 1903 is a specimen in poor condition which can not be referred to any previously known family. The specimen, about 3 inches long, was obtained in May at Kagoshima, province of Satsuma, island of Kiushu, and was found among a miscellaneous lot of fishes caught in Kagoshima Bay by the local fishermen.

The fish is designated as representing a new genus and species (*Caristius japonicus*) of a peculiar family of jugular acanthopterygians (*Caristiidae*). The distinctive characters are the greatly compressed cuneiform body covered with cycloid scales; no lateral line; branchial apertures ample; high and elongated dorsal fin with the anterior rays crowded forward over the head and eyes; long anal fin; grooved or sheath-bearing abdomen between anal and ventrals; and jugular complete ventrals rooted below preopercles.

The vertebrae number about 40, and the vertebral column (as shown by skiagraph) is singularly deflected downward near and to the occipital condyle; the head is overhung by the extension of the flesh and dorsal fin above and forward; the mouth is large and obliquely cleft, being continued backwards under the eyes; the jaw teeth are slender, acute, and pluriserial; the lower lip is interrupted by a frenum in front; the eyes are large, their diameter being nearly one-half length of head. The height is



greatest above ventrals and is contained about  $1\frac{3}{4}$  times in total length without caudal.

The radial formula is approximately as follows: Dorsal, 34 (VI, 28 ?); anal, 21; caudal,  $x + 9 - 10 + x$ ; pectorals, 19; ventrals, I, 5 ? The rays above the hind head are elongated and almost as high as the body but those in front progressively diminish forward. The length of ventrals nearly equals the length of head.

The color of the body appears to have been tawny brown, with a silvery sheen and with traces of dark spots on the dorsal region, and the anal and ventrals were apparently blackish.

A detailed description and illustration will be given after the skeletonization of the fish.





Gill, Theodore and Smith, Hobart M. 1905. "A new family of jugular acanthopterygians." *Proceedings of the Biological Society of Washington* 18, 249–250.

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