

## DESCRIPTION OF A NEW SPECIES OF SCULPIN FROM JAPAN.

By DAVID STARR JORDAN and EDWIN CHAPIN STARKS,  
*Of the Leland Stanford Junior University.*

In the present paper is given a description of a new species of Sculpin belonging to the genus *Cottunculus*, dredged by the U. S. Fish Commission steamer *Albatross* in Japan.

**COTTUNCULUS BREPHOCEPHALUS** Jordan and Starks, new species.

Head  $2\frac{1}{3}$  in length without caudal; depth  $3\frac{1}{4}$ . Dorsal VI-16; anal 12. Eye  $4\frac{1}{2}$  in head; maxillary  $2\frac{1}{3}$ .

Head considerably wider than deep, flat on top; the nape somewhat produced, the rostral region evenly rounded; jaws equal or the lower very slightly included; maxillary reaching to below middle of eye; rather sharp villiform teeth in moderate bands on jaws and vomer; the bands of equal width on premaxillaries and mandible, wider in front than at sides; vomerine patches small, narrower than those on jaws, and having a wider interval between than that between premaxillary bands. Interorbital space wide and flat; between iris  $2\frac{1}{3}$  in head, the bone only half as wide. Nostrils ending in short tubes, the anterior separated from the posterior a distance equal to half the length of eye. Head without spines; a pair of very slight tubercles may be felt between eyes and one on upper part of preopercle, but the occipital, the suborbital, the preopercle, and the other spines as possessed by *Cottunculus microps* and *C. thompsoni* are entirely absent.

Origin of dorsal directly above upper end of gill-opening, the length of the fourth spine  $4\frac{1}{2}$  in head, the rays toward the posterior end the longest,  $2\frac{1}{4}$  in head, the tips of the last rays, when fin is depressed, reach to the rudimentary caudal rays, or slightly beyond the tips of anal rays. Origin of anal midway between tip of lower jaw and anterior third of caudal rays, its posterior or longest rays a little shorter than those of dorsal. Pectoral reaching to above base of fourth

anal ray, its upper 6 rays branched, its lower (14) rays simple. Length of ventrals  $2\frac{3}{4}$  in head. Caudal truncate, rounded at its outer corners. Skin entirely smooth.

Color in spirits: Back and dorsal dusky, with fine blackish points surrounding light spots; under parts and lower fins without color, probably pinkish or red in life; a row of 6 or 7 large light spots along side from opercle flap to base of middle caudal rays; light clouded



COTTUNCULUS BREPHOCEPHALUS.

areas above and on dorsal; a dusky band extending downward and backward from eye, and some dusky, irregular spots on opercle; top of head colorless; caudal crossed by a broad band of dusky, the tip colorless. Peritoneum black; inside of gill-covers white.

This species may be known by the absence of blunt spines and by the coloration.

The type was dredged by the U. S. Fish Commission steamer *Albatross* in Suruga Bay in 94 fathoms, Station 3704. It is 13 cm. in length, and bears the number 50591, U.S.N.M.