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A NEW PINECONE FISH, *MONOCENTRIS REEDI*, FROM CHILE,
A NEW FAMILY RECORD FOR THE EASTERN PACIFIC

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Dr. Edwyn P. Reed¹ recently sent to me for identification a photograph of, and later at my request the dried specimen of, a pinecone fish of the family Monocentridae taken off the coast of Chile in the Juan Fernández Islands at a depth of 200 to 250 meters. A photograph of the specimen was also sent to H. W. Fowler, who published a note entitled "The Pinecone Fish, *Monocentris japonicus* (Houttuyn) at Juan Fernandes, Southeast Pacific" (Fish Culturist, reference below).

This unique specimen represents the first record for the family in the eastern Pacific. Upon comparison of the specimen with the three other known species referred to the family, I observed that it differed in several characteristics and represented a new species.

The occurrence in the eastern American Pacific of another of the tropical central-western Pacific fauna indicates once more that the eastern Pacific fish fauna is more closely related to that of the Indo-Pacific than formerly supposed. These two faunas have differentiated mostly on the species level and less so at the generic level.

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Monocentris reedi, new species

PLATE 1

Monocentris japonicus, Fowler, Fish Culturist (Philadelphia), vol. 34, No. 9, p. 65, fig., May 1955 (Juan Fernández Islands, Chile).

Monocentris, Reed, Inv. Zool. Chilenas, vol. 2, No. 8, p. 131, fig. 1955 (Juan Fernández Islands, Chile).

HOLOTYPE: USNM 164227. A dried specimen 92 mm. in standard length, taken in lobster traps in February 1955 off Más a Tierra Island, Juan Fernández Islands, off the coast of Chile, at depth of 200 to 250 meters by fishermen.

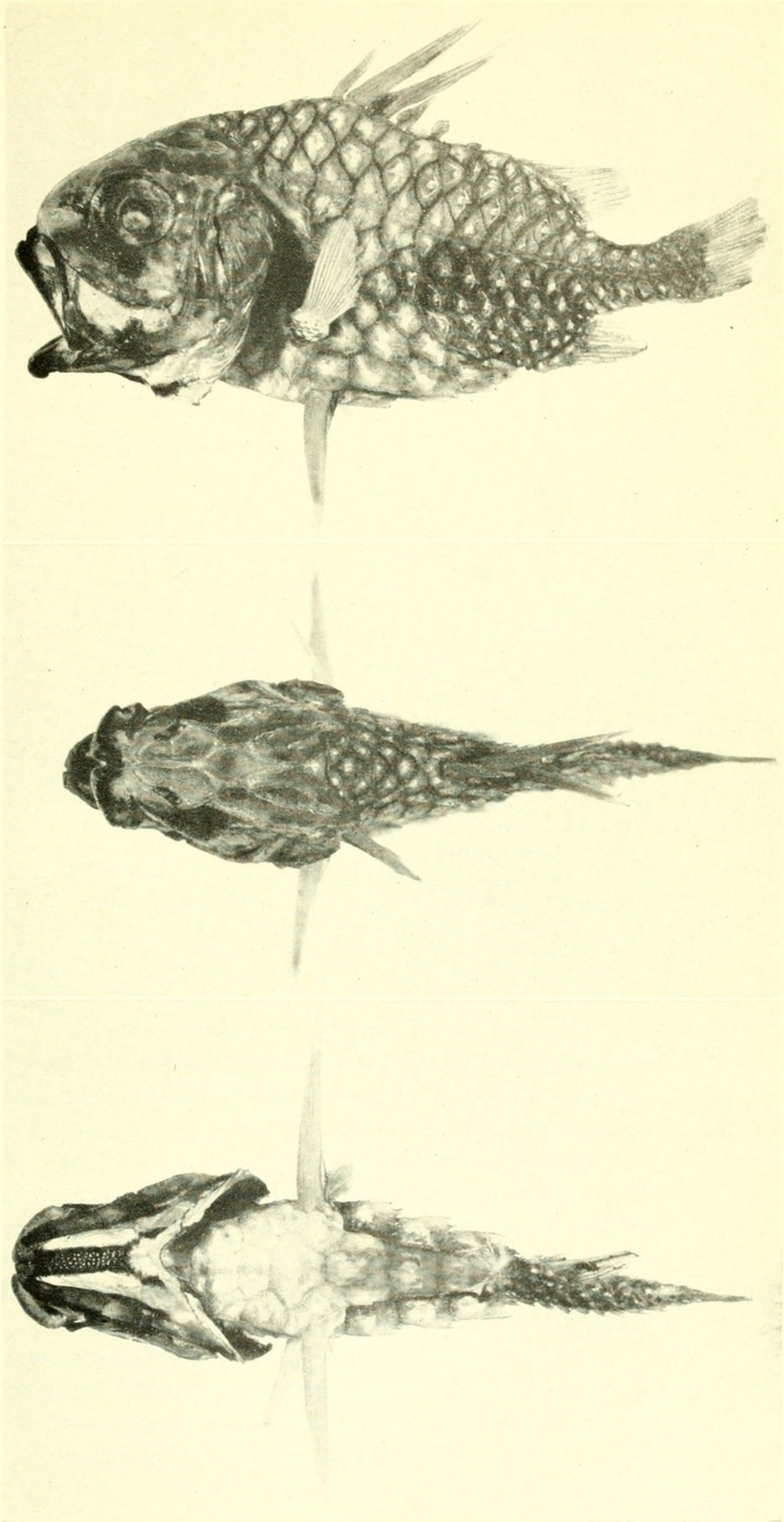
DESCRIPTION: The following counts were made: Dorsal rays VI,ii,10, with a rudiment of a seventh spine; anal i,10; pectoral ii;12-ii,12; pelvic I,iii; plates along lateral line from rear of head to base of caudal fin 18 on one side, 19 on the other; plates in a row from soft dorsal origin to lateral line 4, and from anal origin to lateral line (obliquely forward) 4. The details of arrangement of plates are illustrated in the photographs.

Certain measurements were made on the holotype, and these are expressed in thousandths of the standard length of 92 mm. as follows: Length of head 392; greatest depth 456; least depth of caudal peduncle 92; length of caudal peduncle from base of last anal ray to midbase of caudal fin 174; diameter of eye 130; length of snout 125; maxillaries or distance from tip of snout to rear of maxillary 201; bony interorbital space 120; length of first dorsal spine 102, of longest or second dorsal spine 267; length of pelvic spine 310.

See table 1 for counts made on *Monocentris japonicus* (Houttuyn) and *M. reedi*, new species.

DISCUSSION: The family Monocentridae has referred to it two genera—*Monocentris* Bloch and Schneider with *Gasterosteus japonicus* Houttuyn as genotype, from the western Pacific, and *Cleidopus* De Vis with *C. gloria-maris* De Vis as genotype, from Australia. The genus *Cleidopus* differs from *Monocentris* in having a patch of vomerine teeth, a luminous organ on each side of the mandible, a very narrow preorbital bone instead of no teeth on the vomer, no luminous organ on the mandible, and a broad preorbital bone.

Powell (Rec. Auckland Inst. Mus., vol. 2, p. 151, pl. 36, 1938, type locality Opoutama Beach, 40 miles south of Gisborne, New Zealand) described *Cleidopus neozelanicus*. He points out that this species is intermediate between *Monocentris* and *Cleidopus*. It agrees with *Monocentris* in having a broad preorbital and no luminous organs on mandible. It agrees with *Cleidopus* in having vomerine teeth. With this intermediate species, perhaps as Powell suggests, *Cleidopus* should be referred as a synonym to *Monocentris*. Anyway, regardless of the generic affinities which I cannot work out because of lack of material, *neozelanicus* differs from *reedi* in having vomerine teeth, a



Holotype of *Monocentris reedi*, new species.



Schultz, Leonard P. 1956. "A new pinecone fish, *Monocentris reedi*, from Chile, a new family record for the eastern Pacific." *Proceedings of the United States National Museum* 106(3365), 237–239.

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