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## A NEW GENUS AND SPECIES OF FISH FROM THE GULF OF MEXICO (Family Emmelichthyidae)

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In July, 1952, several small fishes were taken from the stomach of a snapper handlined in 40–50 fathoms on Campeche Banks off Cabo Catoche, Yucatan Peninsula. The specimens were sent to me for identification by Messrs. Stewart Springer and Harvey Bullis, of the United States Fish and Wildlife Service, Pascagoula, Mississippi.

One of these small fishes, the second known specimen of *Centropyge argi* Woods and Kanazawa, was subsequently described and reported (see Woods, 1952). Another was a small emmelichthyid, in good condition except that the tips of the jointed fin rays were missing. In attempting to identify this specimen, it became evident that the emmelichthyid represented an undescribed genus and species. The specimen was later examined by Dr. Leonard P. Schultz, Curator of Fishes, United States National Museum, who concurred with my belief. I take pleasure in naming the genus in honor of Dr. Schultz. The figure was prepared by Miss Carol Reusch.

### **Schultzea**, new genus

*Type species*.—*Schultzea campechanus*, new species.

*Diagnosis*.—This genus resembles *Cypselichthys* Steindachner and Döderlein but differs in having much shorter dorsal and anal fins, in lacking teeth on the jaws and the vomer, and in having the nostril openings widely separated.

The genus *Dipterygonotus* Bleeker, although very similar to *Schultzea*, differs in having XIII to XV dorsal spines and 9 to 12 anal rays while *Schultzea* has X, 12; also, the interorbital is scaled, and this area is naked in *Schultzea*.

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**Schultzea campechanus**, new species

*Holotype*.—United States National Museum no. 174973, Campeche Bank, Oregon Station 592-A, lat.  $23^{\circ} 39.5' N.$ , long.  $88^{\circ} W.$ , about 135 miles north of Cape Catoche, Yucatan Peninsula, Mexico. From snapper stomach, caught in 45 fathoms, June 21, 1952. Standard length 78.3 mm.

*Diagnosis*.—As for the genus.

*Description*.—Dorsal rays X, 12; anal rays III, 7; pectoral rays ii, 15; scales in lateral line to base of caudal 54/55; gill rakers 24 on lower limb, one at angle, 10 on upper limb.

Depth of body 4.54, length of head 3.26, both in standard length; snout 4.45, eye 3.08, interorbital 4.9, upper jaw 2.45, least depth of caudal peduncle 3.25, length of caudal peduncle 1.3, length of fourth dorsal spine 2.22, of ninth spine 3.43, of tenth spine 3.0, length of pectoral fin 1.35, length of pelvic fin 1.78, length of upper caudal lobe 1.5, length of lower caudal lobe 1.4, all in length of head.

Body elongate, fusiform, slightly compressed; maxillary almost wholly exposed, the premaxillary processes and the maxillary forming a convex snout; lower jaw projecting beyond upper, fitting into a notch between premaxillaries; jaws and vomer toothless, the vomer strongly developed and curved forward and downward to floor of mouth cavity anterior to tongue, forming a peculiar cylindrical projection; spiny part of dorsal fin shorter than soft part; spiny dorsal scarcely emarginate, the fourth spine longest, spines diminishing in length to ninth, which is only a little shorter than the tenth, which is shorter than the first soft rays; dorsal and anal fins not scaled, no scaly sheath basally, last rays not elongate; nostrils widely separated, anterior nostril with a low flap; maxillary, snout, preorbital and interorbital not scaled, scales on top of head extending forward only as far as posterior margin of pupils; preopercle serrate; interopercle and opercle serrate on margin near their suture; opercle bearing three spines, the middle one much longer and stronger than others.

*Discussion*.—This new species resembles *Cypselichthys japonicus* Steindachner and Döderlein, *Dipterygonotus leucogrammicus* Bleeker and *D. gruveli* Chabanaud. From the first it differs greatly in the number of rays in the dorsal and anal fins, in lacking teeth on jaws and vomer, and also in the form of the preopercular margin and arrangement of nostrils (see table). No specimen of *C. japonicus* has been available for comparison. From the two species of *Dipterygonotus*, *Schultzea campechanus* differs chiefly in the shape of the spiny dorsal fin, in the position of the nostril pores and in having the



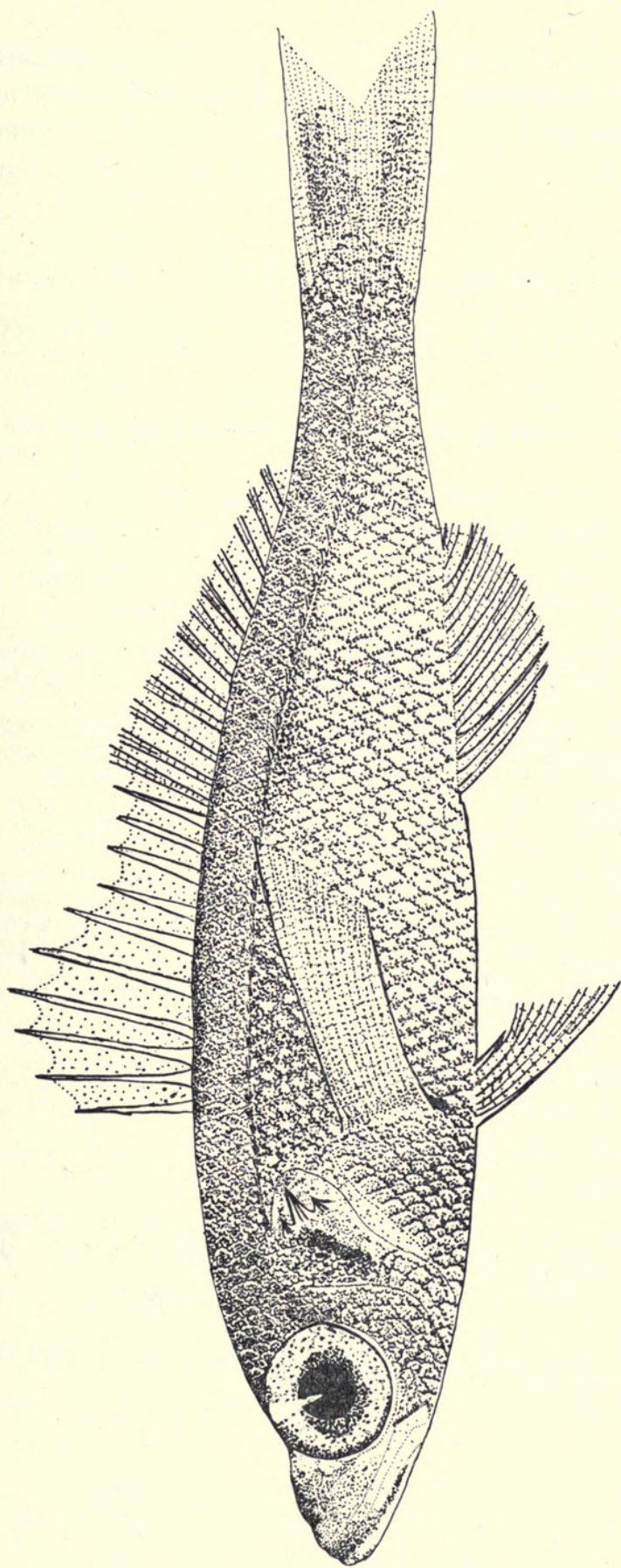


FIG. 40. *Schultzea campechanus*, new species. Type, USNM no. 174973; 78.3 mm. standard length. Campeche Banks, Yucatan Peninsula, Mexico.



mouth moderately protractile, the premaxillary processes reaching just past the anterior margin of the eye while in *Dipterygonotus* these processes extend past the middle of the eye. Four specimens of *D. leucogrammicus* and five of *D. gruveli* have been available for comparison.

	<i>Cypselichthys</i>	<i>Schultzea</i>	<i>Dipterygonotus</i>
Dorsal rays	X or XI, 25-27	X, 12	XIII to XV, I, 9 to 11
Anal rays	III, 23 or 24	III, 7	III, 9 to 12
Dorsal fin	slightly emarginate	slightly emarginate	last 4 or 5 rays short; hence deeply emarginate
Jaw teeth	in bands; sharp, fine	lacking	lacking
Vomerine teeth	teeth minute, in triangular patch	lacking	lacking
Premaxillary processes	"premaxillary strongly extensible"	short; only slightly longer than snout	long; as long as snout and eye together
Scalation of head	interorbital scaled; snout and maxillary naked	interorbital naked; snout and maxillary naked	interorbital scaled; snout and maxillary naked
Preopercular margin	entire	serrate	crenulate
Nostrils	close together	widely separated	close together; separated by narrow dermal isthmus

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