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CIRRISALARIAS BUNARES, NEW GENUS AND
SPECIES OF BLENNIID FISH FROM THE
INDIAN OCEAN

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The description of the new genus that follows is the first to appear in the Tribe Salariini since Smith-Vaniz and Springer's (1971) synopsis of the Tribe. The new genus, and species, is widely distributed in the Indian Ocean, where it is known from Ceylon and Grand Comore Island. It has probably escaped notice heretofore because of its small size (maximum known: 22.0 mm SL).

I follow the methods, abbreviations, and mode of presentation used by Smith-Vaniz and Springer (1971).

I wish to thank J. F. McKinney, formerly National Museum of Natural History (USNM) for alerting me to the existence of recently collected specimens of the new form at the California Academy of Sciences (CAS), and to the officials of that institution and the Academy of Natural Sciences, Philadelphia (ANSP) for the loan and gift of specimens. The collection of Comoran specimens was made possible by a grant from the Charline H. Breeden Foundation, John E. McCosker, principal investigator.

Cirrisalarias, new genus

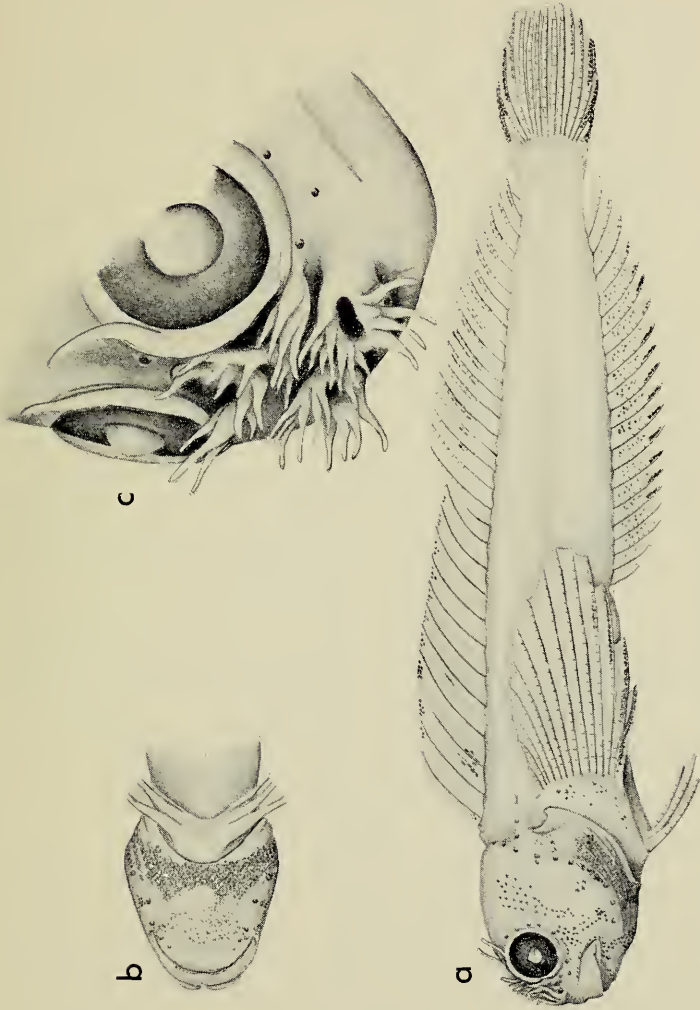
Diagnosis: Dentary a closed capsule with replacement teeth entering functional series through foramina in bone. Anterior and posterior canines absent. Premaxillary and dentary teeth immovable or nearly so, numbering 23 to 28 in upper jaw and 22 to 26 in lower jaw (based on ten specimens 12.5-22.0 mm SL). Vomer toothless. Dorsal-fin spines X to XII (rarely X or XI), segmented rays 16 or 17. Anal fin II,17 to

19 (rarely 17). Segmented caudal-fin rays 13, none branched. Pectoral-fin rays 14, dorsalmost ray reduced, difficult to detect except in skeletal preparations. Pelvic fin I,3. Vertebrae 10 + 26 or 27. Last epipleural rib on vertebra 13 to 15. Terminal anal-fin ray bound by membrane to caudal peduncle. Lateral-line reduced, consisting of 1 or 2 disconnected, bipored tubes on body in region below anteriormost one or two dorsal-fin spines. No scalelike flaps covering lateral-line pores. Preoperculo-mandibular pores without cirri. Single mid-dorsal supratermporal commissural pore. Upper lip without free dorsal margin. No cup-shaped fleshy disk or appendage behind lower lip. Gill membranes forming free fold across isthmus (gill opening not restricted to side of head). Fleshy, median occipital crest absent. Nuchal cirri absent. Supraorbital cirri varying from slender and simple to ribbonlike with palmately branched distal end, and small cirri on medial edge. Numerous cirri on rims of anterior and posterior nostrils. No cirri on interorbital region that are not associated with rims of posterior nostrils. Postcleithra consisting of two elongate bones, dorsal end of ventral element overlapping ventral end of dorsal element. Lateral extrascapular not fused with pterotic. Median ethmoid present. Infraorbital bones 4 (includes dermosphenotic of Springer, 1968). Rostral cartilage ossified (kinethmoid of Springer, 1968). Frontals fused together, at least anteriorly. Ventral hypural plate fused to urostylar centrum; hypural 5 autogenous; one epural, broad, apparently the result of fusion of two epurals. Nasal bones greatly compressed, curving laterally anteriorly and providing support for anteromesial margin of anterior nostril (all cirri of posterior nostril arising from skin above nasal bone). Anterior and posterior nostrils relatively large, each with greatest diameter equal to about one-third orbital diameter.

Relationships: *Cirrisalarias* is a member of the group 21 *Salariini* (see Smith-Vaniz and Springer, 1971, p. 51, fig. 51), which includes those genera that have relatively few premaxillary and dentary teeth, and have the dentary replacement teeth generally making their appearance through foramina in the bone. All of the species belonging to this group are relatively small, have the terminal anal-fin ray bound by membrane to the caudal peduncle, and usually have 14 pectoral-fin rays (except *Medusablennius*, which has 13). *Cirrisalarias* will key to couplet 20 in Smith-Vaniz and Springer's (1971, p. 9) key, which separates *Medusablennius* and *Litobrancheus*. *Cirrisalarias* will key to neither of these two genera, but because of its superficially close resemblance to *Medusablennius* might be mistaken for that genus (only *Medusablennius* and *Cirrisalarias* in the Blenniidae have such large nos-

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FIG. 1. *Cirrisalarias bunares*, CAS 34623, male, paratype 17.3 mm SL. a, Lateral view; b, Ventral view of head; c, View of snout region. Drawn by J. R. Schroeder.



trils and so many cirri associated with the nostrils; they are also the two smallest-sized genera of blenniids: largest specimen of *Medusablennius*, 15.4 mm SL; largest specimen of *Cirrisalarias*, 22.0 mm SL). The following key couplets replace couplet 20 in Smith-Vaniz and Springer's key to the Salariini:

20. Head conspicuous for numerous cirri, which cover snout region; no nape cirri present; nostrils relatively enormous (but obscured by cirri), greatest dimension three times or less in orbital diameter; upper jaw teeth fewer than 30; infraorbital bones 2 or 4 20A
- Head with simple cirrus on rim of anterior nostril, above eye and on nape (nape cirrus minute); nostrils small, porelike, greatest dimension more than five times in orbital diameter; upper jaw teeth more than 35; infraorbital bones 5
.....*Litobranchus* Smith-Vaniz and Springer
- 20A. Upper lip without free dorsal margin extending around snout; pectoral-fin rays typically 14; no cirri in interorbital region that are not associated with rims of posterior nostrils; one mid-dorsal supratemporal commissural sensory canal pore; more than 20 teeth in either jaw; infraorbital bones 4
.....*Cirrisalarias* Springer
- Upper lip with free dorsal margin extending around snout; some cirri in interorbital area but not associated with rims of posterior nostrils; two mid-dorsal supertemporal commissural sensory canal pores (arranged one behind the other); less than 20 teeth in either jaw; infraorbital bones 2
.....*Medusablennius* Springer

Etymology: A combination of the Latin *cirri*, meaning tufts of hair, and *Salarias*, a genus of Blenniidae, referring to the numerous cirri on the head of this new salariinine genus. Gender: masculine.

Type-species: *Cirrisalarias bunares* Springer, new species.

***Cirrisalarias bunares*, new species**

Figure 1

Description: A small species (largest known specimen, 22.0 mm SL) with characters of the genus.

In preservative, males tend to be more heavily pigmented than females and usually have a dark smudge or chevron, which females lack, beneath the head. The body of neither sex shows evidence of color pattern, although specimens under 14 mm SL may exhibit indications of three or four faintly dusky bands separated by broader, pale interspaces in the region above the anal fin. The spinous dorsal fin of males and some females has a narrow distal dark margin, and in males much of the proximal portion may also be darkly pigmented. The segmented-ray portion of the dorsal fin exhibits dusky pigment dorsally. The anal

fin of males is dusky with a dark distal margin; that of females is immaculate. Both sexes have conspicuous dark pigment on the ventral rays of the pectoral fin and both lobes of the caudal fin; the other rays of these fins are less pigmented or immaculate.

Distribution: Known only from Grand Comore Island and Ceylon.

Etymology: From the Latin prefix *bu-*, meaning large, and *nares*, meaning nostrils, in reference to the large nostrils characterizing the genus; here used as a noun in apposition.

Holotype: CAS 33598, male, 19.8 mm SL; Grand Comore Island: N'Couni Reef, about 0.5 km N of Iconi; in surge channel at far end of small cove; rock and coarse coral sand bottom; depth: to 5 m; Pronox-fish. Collected by J. E. McKosker, S. Mead, D. Powell and J. Bredden, 1 March 1975. Original field number: JEM 75-29.

Paratypes: CAS 34623, 106 specimens, 10.8–20.1 mm SL, collected with the holotype. USNM 214974, 5 specimens, 16.5–22.0 mm SL, all cleared and stained, collected with the holotype. CAS 33607, 13.4 mm SL; Grand Comore Island: lava flow tidal flats about 1 km N of Hotel Coelacanth; depth: to 2 m; original field number JEM 75-4. USNM 214975, 3 specimens, 16.9–19.0 mm SL, same locality as CAS 33607; original field number JEM 75-2. ANSP 13400, 20 specimens, 10.4–16.6 mm SL, same locality as CAS 33607; surge channels, tidepools and over edge of dropoff; depth: to 5 m; original field number JEM 75-11. USNM 205453, 20.5 mm SL; Ceylon: Trincomalee (outside harbor), rocky area opposite Fort Frederick; depth: 0.6–6.1 m; original field number SV-69-121.

LITERATURE CITED

- SMITH-VANIZ, W. F., AND V. G. SPRINGER. 1971. Synopsis of the tribe Salariini, with description of five new genera and three new species (Pisces: Blenniidae). *Smithsonian Contrib. Zool.* 73:1–72, 51 figs.
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