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## A New Blenny from Bali and a New Threadfin from New Guinea

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The two fishes that are the subject of this paper were set aside several years ago as likely undescribed, which presumably is the case, because a recent search for them through the literature has been unsuccessful.

### *Blennius* [*Rhabdoblennius*] *baliensis*, new species

A little elongate, somewhat *Salarias*-like blenny, with jaws and attachment of teeth rather firm; a large posterior canine in the lower jaw; small, thread-like nasal, orbital and nuchal filaments, the nasal bifid (split almost to the base), others simple, the orbital about equal to half of diameter of eye, the others shorter; dorsal spines and rays little differentiated. Dorsal XII, 15; anal, 18.

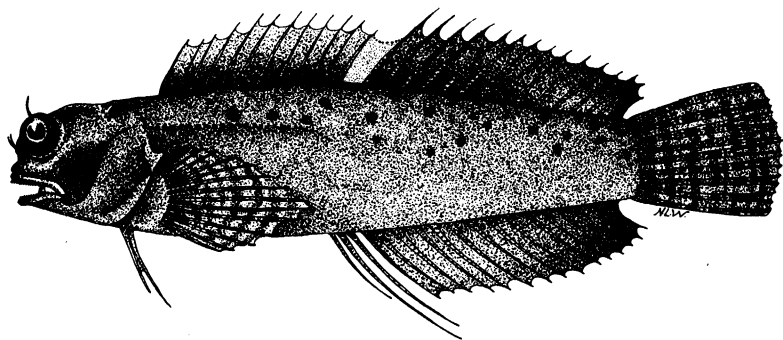


FIG. 1. *Blennius baliensis*, type. Standard length, 45 mm.

DESCRIPTION OF TYPE: A.M.N.H. No. 16987, the American Museum of Natural History, from Bali, collected in 1939 by the Michael Lerner Expedition, our only specimen.

Length to base of caudal, 45 mm. Depth in this length, 4; head, 4.2. Width of body, in head, 1.5; depth of peduncle, 1.5; eye, 4; snout, 4; maxillary, 2.6; width of mouth, 2; longest dorsal spine, 1.5; dorsal ray, 1.4; anal ray, 1.4, except the second and third (which are long and exserted), 1; caudal, 1; pectoral, 1; ventral, 1.6.

Dorsal rays, XII, 15; anal, 18; ventral, 2; nine central caudal rays branched, about three at each side simple.

Body well compressed, deepest about in the middle. Eye in the upper front corner of head, impinging on the vertical profile, directed obliquely forward and upward. Interorbital narrow, concave, a little greater than half of the diameter of eye; top of head with a low, firm keel. Jaws rather firm, and teeth firmly attached, little movable; small, in a comb-like row; two that are appreciably larger near the front of the upper, and at the front of the lower, jaw, which bears a large, heavy, posterior canine. The lower row of teeth is, as a matter of fact, set on the lower lip, which is fused with, but on one side of the fish has been torn from, the jaw. The lateral line ends with the beginning of a downward curve about over the anal origin. Origin of dorsal over margin of opercle, that of anal equidistant from its axil and center of eye. Dorsal spines and rays little differentiated, the twelfth spine short, but notch in fin probably negligible before the membrane was torn. First three anal rays long and exserted.

Dorsal and anal dusky posteriorly, the dorsal somewhat so at its base in front; caudal with dark cross-mottling, and faint dark bars on the pectoral; a vague dusky area on the preopercle, and scattered round dark spots on the sides, especially posteriorly; these are the only markings that remain.

This species is close to *B. nativitatis* Regan from Christmas Island (presumably in the Indian Ocean), which is more slender, with nasal filament simple, and a banded color pattern.

The genera *Blennius*, primarily Atlantic, and *Salarias*, Indo-Pacific, are reasonably standardized and, though related, quite different. Each comprises numerous abundant species. There are a few seemingly uncommon (at least in collections), more or less intermediate species in the Indo-Pacific, presently placed in the nominal genus *Rhabdoblennius*. But it seems that *Rhabdoblennius* is not well standardized and might be broken up into several genera, which would be nothing but a nomenclatural nuisance and demonstrate only that genera do not evolve according to a "blueprint" concept, which is granted. On the basis of our present

knowledge we concur with Norman's (1943) view that species of *Rhabdoblennius* are derived from others more nearly related to standard *Blennius* and belong at the base of the salariin stem. We also believe that a less confusing nomenclature is achieved, and one as much in line with the so far known facts of evolution, by partitioning them, as somewhat aberrant species, between *Blennius* and *Salarias* as the case may be, following tradition, rather than by recognizing *Rhabdoblennius* as a "catch-all," or by splitting it into possibly monotypic genera.

Several years ago some *Polynemus* collected by the Instituut voor de Zeevisscherij at Batavia, from the Meranbe River, New Guinea, were set aside as perhaps representing an undescribed form. They are not in good condition; the very fragile free pectoral rays are broken and many of the scales are missing, so that in only a few can the length of the former or count of the latter be determined with reasonable precision. However, 17 of the 19 specimens, which, though variable, seem to represent a single species and, with sufficient tangible differences from anything in the literature, warrant a new name. The other two seem to be different, with higher scale count, etc., and whereas not satisfactorily identifiable, have nothing sufficiently tangible to separate them from known forms.

*Polynemus intermedius*, new species

A *Polynemus* of the estuarine *paradiseus* type, with small eye, projecting snout, seven long free pectoral rays, the longest of which reach at least to the base of, usually well onto, the caudal, but not beyond the filamentous tips of the unusually long caudal lobes. Seventeen specimens of 35 to 77 mm. standard length. Fifteen of 35 to 74 mm. (two specimens; for one of these, A.M.N.H. No. 20115, see beyond), have a very tiny spine, its tip evident, projecting from the scales in front of the seven normal spines of

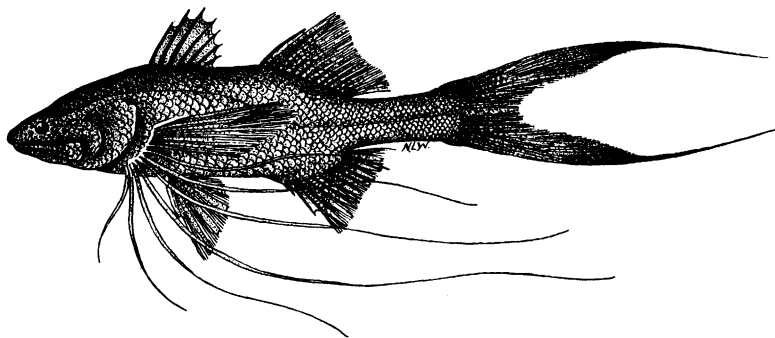


FIG. 2. *Polynemus intermedius*, type. Standard length, 77 mm.

the first dorsal fin. No trace of such could be found in a third specimen of 74 mm. and the largest of 77 mm. Scales (counted in four, estimated in 13), 50 to 55. Gill-rakers rather long, close-set, 16 to 21 counted on the lower limb of the first arch (in paratypes).

DESCRIPTION OF TYPE: A.M.N.H. No. 20114, the American Museum of Natural History, from the Merambe River, New Guinea, August, 1941, collected by the Instituut voor de Zeevisscherij.

Length to base of caudal, 77 mm. Depth in this length, 4.1; head, 3.2; caudal (inclusive of filamentous lobes), 1.5; pectoral (exclusive of free rays), 2.8. Eye in head, 8.6; snout, 4.3; interorbital, 3; maxillary (from end of snout), 1.6; length of peduncle, 1.5 (its depth half of its length); longest dorsal spines, about 2; rays of second dorsal, 1.5; of anal, 2; ventrals, 1.4; ventral base to anal origin, 1.2.

Dorsals, VII—I, 14; anal, III, 11; free pectoral rays, 7. Scales estimated as 55.

Body elongate, moderately compressed, back somewhat elevated, the profile slanting upward from the pointed but blunt-ended snout to the greatest depth, attained at the origin of the first dorsal. Snout well projecting beyond the lower jaw, and eye placed well forward, over slightly before the center of mouth. Dorsal origin and first anal spine apposed, its axil appreciably behind that of anal. First two anal spines very small, especially the first which is somewhat separated from the rest of the fin. Caudal deeply forked, its lobes narrowed, very long, becoming filamentous; longest free pectoral rays reaching back to past middle of caudal. Head (including maxillary), body, and fins scaled, except for the free pectoral rays, the lips, and apparently the end of the snout.

Colors faded, yellowish brown; top of head, back, upper sides, and dorsal and caudal fins with dark specks; narrowed to filamentous caudal lobes marked with blackish; pectoral plain.

The variation in our 17 specimens is considerable and beyond what can be reasonably attributed to size, loss, or breakage. It suggests that certain characters used to differentiate current species of this group may not hold. One of the 74-mm. specimens is perhaps most divergent from, and in some respects better preserved than, the type. To describe it (showing its tangible differences) and say the other 15 paratypes are variously intermediate between these two will give a fair idea of the variation. To designate it as a cotype (A.M.N.H. No. 20115) will make it convenient for reference, I trust without inconveniencing anyone.

Length to base of caudal, 74 mm. Depth in this length, 4; head, 3.6; caudal (inclusive of filamentous lobes), 2; pectoral (exclusive of free rays), 2.6. Eye in head, 8.6; snout, 4.3; interorbital, 3; maxillary (from

end of snout), 1.5; length of peduncle, 1.4 (its depth half its length); longest dorsal spines, 1.6; rays of second dorsal, 1.6; of anal, 1.6; ventrals, 1.6; ventral base to anal origin, 1.1.

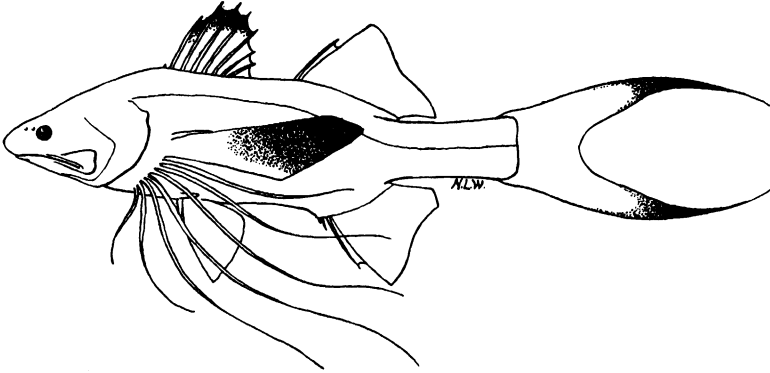


FIG. 3. *Polynemus intermedius*, cotype. Standard length, 74 mm.

Dorsals i, VII—I, 13; anal, III, 11; free pectoral rays, 7; scales, 53.

Profile slanting upward in a very gentle curve from bluntly pointed snout to the greatest body depth, attained at the origin of the first dorsal; eye placed well forward, definitely before the center of mouth. Axil of dorsal very slightly behind that of anal. First two anal spines very small, especially the first. They are close together, somewhat separated from the rest of the fin. Longest free pectoral rays reaching base of caudal.

More than the distal half of pectoral black on its upper part. A paratype of 71 mm. has a similar black area on the pectoral; otherwise pectorals are plain, except for a slight distal smudge on one or both in three or four specimens.





