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ANTHIAS HUTOMOI, A NEW SPECIES OF SERRANID FISH FROM INDONESIA (PERCIFORMES, SERRANIDAE) [1])

by

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ABSTRACT

Anthias hutomoi, a member of the family Serranidae (subfamily Anthiinae) is described from 11 specimens taken by trawl at Seram, Indonesia. It appears to be allied to *Anthias cichlops* (BLEEKER,), but differs in several important respects, including head length, caudal shape, and counts for the lateral-line, soft dorsal rays, and pectoral rays.

IKHTISAR

Anthias hutomoi, yang termasuk suku Serranidae (anak-suku Anthiinae), dipertelakan dari 11 ekor ikan yang ditangkap dengan "beam trawl" di pulau Seram, Indonesia. Tampaknya ikan ini sangat dekat dengan *Anthias cichlops* (BLEEKER), tetapi berbeda dalam panjang kepala, bentuk ekor, dan jumlah sisik pada garis lateral, duri lemah sirip punggung, dan duri lemah sirip dada.

INTRODUCTION

The subfamily Anthiinae contains relatively small, colourful fishes which inhabit Indo-Pacific reefs. The majority of species are found in the tropics, but the group contains several cool-water representatives which are mainly confined to southern Australia and New Zealand.

The fishes are poorly known, primarily because many of the species inhabit relatively deep water below depths normally frequented by SCUBA divers. At least 10 species remain undescribed among the material presently lodged at the Australian Museum (Sydney), B.P. Bishop Museum (Honolulu), and the Western Australian Museum (Perth).

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Mar. Res. Indonesia Vol.16, 1976: 45-50

During January - February 1975, the authors participated in the Rumphius Expedition II, a multi-disciplinary marine biological investigation of the southern Maluku islands. Approximately 500 species were taken by a variety of methods which included beam trawling, rotenone ichthyocide, quinaldine, and underwater spearing. The collections contain several new species of fish including a species of *Anthias*, which is described below. Type specimens have been deposited at the Lembaga Oseanologi Nasional (LON = National Institute of Oceanology), LIPI (Indonesian Institute of Sciences), Jakarta, and the Western Australian Museum, Perth (WAM).

Anthias hutomoi new species

(Fig. 1, Table I)

Holotype

51.0 mm standard length; Seleman Bay, Seram, Maluku Islands, Indonesia, in 54 metres, beam trawl; coll. M. Hutomo, Burhanuddin and crew of Samudera, 19/1/1975; LON NCIP 3493.

Paratypes

6 specimens, 32.0-41.0 mm standard length; collected with holotype; LON NCIP 3494-3499; 4 specimens, 28.0-48.7 mm standard length; collected with holotype WAM P25199-001.

Diagnosis

A species of *Anthias* with the following combination of characters: Dorsal rays X, 13 to 15; anal rays III, 7; greatest body depth 2.9 to 3.0 in standard length; head length 2.8 to 3.1 in standard length; gill-rakers 34 to 36 (usually 25 to 26 on lower arch) ; two or three scale rows between dorsal fin and lateral-line; pored lateral-line scales 43 ton 47; third dorsal spine subequal to others; anal fin tip acute; caudal fin lunate.

Description

Counts and proportional measurements for the holotype are followed by the range for the paratypes in parentheses.

Dorsal rays X, 14 (X, 13 [1], X, 14 [7], X, 15 [2] ; anal rays III, 7; pectoral rays 17 (16 [4], 17 [6]); pored lateral-line scales 46 (43 [3], 44 [2], 46 [4], 47 [1]), scale rows between lateral-line and base of middle dorsal spines 2 (2 to 3); scale rows between lateral-line and origin of

ANTHIAS HUTOMOI

anal fin 15 (15 to 16); gill-rakers on first branchial arch 11 + 25 = 36 (34 [1], 35 [7], 36 [1]).

Body relatively elongate, depth 3.0 (2.9 to 3.0) in standard length, and compressed, width 1.7 (1.8 to 2.0) in depth; head length contained 3.1 (2.8 to 3.1) in standard length; snout 4.2 (4.4 to 5.6), eye 3.1 (2.8 to 3.0), interorbital 3.9 (3.5 to 4.0), least depth of caudal peduncle 2.5 (2.4 to 2.8), length of caudal peduncle 2.4 (2.4 to 2.7), all in head length.

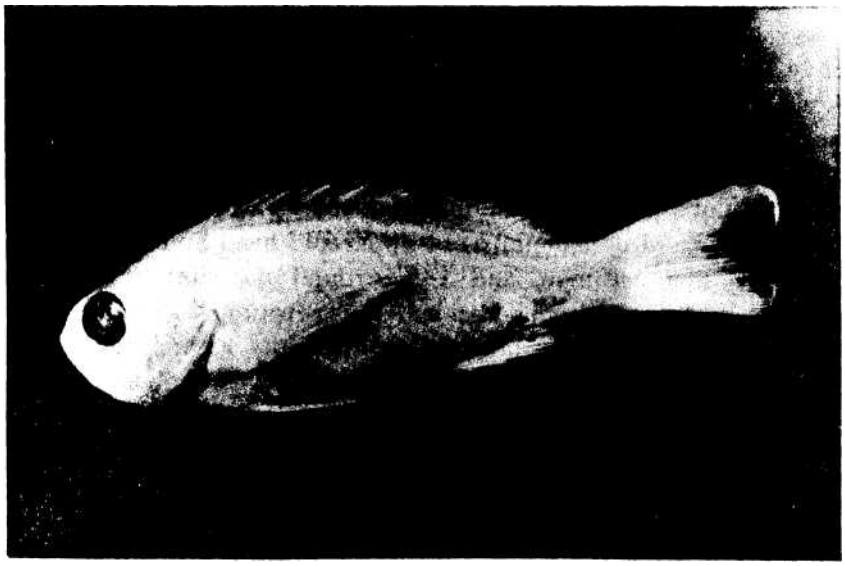

Figure 1. *Anthias hutomoi* n. sp.

Mouth oblique, terminally located, maxillary flared posteriorly and extending to a vertical through posterior portion of pupil; teeth of upper jaw consisting of inner band of depressible canines and outer band of larger fixed canines with enlarged tusk-like canine at front corner (visible externally when mouth is closed); additional pair of equally large teeth medial to and behind tusk-like teeth, these directed posteriorly and medially; lower jaw with large retorse tusk on each side of symphysis and smaller tusk at middle of each dentary; anterior part of lower jaw with band of very small canines terminating at about middle of dentary, then continuing as a single row of moderate sized canines posterior to tusk; vomer and palatines with narrow bands of small canines; pair of nasal openings on each side of snout; anterior nares about 1/2 diameter

Mar. Res. Indonesia Vol.16, 1976: 45-50

of posterior openings, with elevated rim, especially prominent on posterior edge. Head pores situated as follows: four on mandible; five to six on preorbital-suborbital; three on supraorbital, including two relatively close-set pairs on each side of interorbital space; two on each side of snout median to and slightly dorsal of large posterior nasal opening; one between anterior nasal opening and snout tip; series of inconspicuous pores across nape and from upper corner of eye to upper edge of gill opening.

Angle and hind edge of preopercle serrate; opercle series with a few weak serrae and two snout spines near upper corner; scales of head and body ctenoid; squamulae absent; base of spinous dorsal generally scaleless, although a few scales on membranous portion between posteriormost spines; scales present on basal portion of soft dorsal, anal, and covering most of caudal fin; maxilla scaled, without supplemental bone; predorsal scales extending to snout tip, anteriormost embedded in mucous layer and occasionally not apparent; head and body completely scaled except lips, isthmus, and area around nostrils; preopercle with four oblique scale rows and additional two rows on lower limb; circumpeduncular scales about 21; lateral-line gradually ascending from upper corner of gill opening to within three scale rows below about sixth dorsal spine, then gradually descending to middle of side of caudal peduncle where it continues in a straight line to base of caudal fin.

Dorsal spines gradually increasing in length to third spine, remainder of spines about equal or slightly decreasing in length; first dorsal spine 6.7 (5.7 to 6.0), third dorsal spine 2.5 (2.1 to 3.1), last dorsal spine 2.9 (2.6 to 2.8), longest soft dorsal ray 2.3 (1.9 to 2.3), all in head length; second anal spine stouter than first and third spines; first anal spine 6.4 (5.2 to 5.8), second anal spine 2.4 (2.1 to 2.4), third anal spine 2.6 (2.2 to 2.5), all in head length; pectoral fins more or less pointed, middle rays longest, 1,5 (1.0 to 1.2) in head length; pelvic fins with filamentous tips reaching to level of anterior anal rays, their length 0.8 (0.9 to 1.3) in head length; caudal fin crescentic or emarginate with outer rays elongate, their length 0.8 (0.9 to 1.0) in haed length.

Colour of holotype in alcohol: head and body largely uniform yellowish-tan except slightly dusky patch on interorbital; most of scales of upper part of sides with fine pepper-like spotting on their basal portion giving overall appearance of transverse streak on each side; fins uniformly pale.

Colour in life: head and body rosy-pink with yellowish fins.

ANTHIAS HUT0M01

Remarks

The generic classification of tropical Anthiinae is poorly understood. Most species have been assigned to *Anthias* BLOCH. However, KATAYAMA (1960) ressurrected *Pseudanthias* BLEEKER for several species formerly included in *Anthias.* He stated that *Pseudanthias* differs from *Anthias* in having the ventrals not produced in ribbon-like fashion, no small auxiliary scale and no distinct angle in the lateral-line. These characters seem to be of minor importance and we prefer to follow the example of HEEMSTRA (1973) in preserving the use of *Anthias,* at least until revisionary studies now in progress by HEEMSTRA and RANDALL are completed.

A. hutomoi is possibly allied to *A. cichlops* (BLEEKER 1853). Both species have two to three scales above the lateral-line, similar gill-raker counts, an acute anal fin tip, and a body depth of 2.9 to 3.0 in standard length. However, they differ in several important respects including counts for the soft dorsal fin (13 to 15 rays, usually 14 for *hutomoi vs* 16 rays for *cichlops),* pectoral fin (16 to 17 rays *vs* 18 to 19), and pored lateral-line scale (43 to 47 [over half of specimens with *46* or 47] *vs* 41 to 45 for *cichlops).* In addition, the head of *hutomoi* is longer (2.8 to 3.1 in standard length *vs* 3.4) and the caudal is lunate rather than deeply forked as in *cichlops.*

The species is named *hutomoi* in honour of Mr. MALIKUSWORO HUTOMO of the Lembaga Oseanologi Nasional, Jakarta, who assisted in collecting the type specimens.

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Mar. Res. Indonesia Vol.16, 1976: 45-50

Table I. Morphometric proportions (in thousandths of the standard length) of selected types of *Anthias hutomoi*

CHARACTERS	Holotype		Paratypes	
	LON NCIP. 3493	WAM P25199-001	LON NCIP. 3495	LON NCIP. 3496
Standard length (mm)	51.0	48.7	38.5	34.4
Greatest body depth	333	350	337	343
Greatest body width	186	175	182	169
Head length	329	318	358	334
Snout length	78	72	78	64
Eye diameter	106	113	125	119
Interorbital width	104	90	91	87
Length of maxillary	137	154	161	151
Least depth of caudal peduncle	133	133	130	122
Length of caudal peduncle	137	133	143	122
Snout to origin of dorsal fin	313	324	338	349
Snout to origin of anal fin	647	650	675	640
Snout to origin of pelvic fin	373	353	431	349
Length of dorsal fin base	549	590	571	600
Length of anal fin base	153	164	182	166
Length of pectoral fin	216	308	317	320
Length of pelvic fin	402	339	286	265
Length of 1st dorsal spine	49	55	60	58
Length of 3rd dorsal spine	133	148	117	122
Length of last dorsal spine	112	123	128	119
Longest soft dorsal ray	141	164	169	145
Length of 1st anal spine	51	62	68	58
Length of 2nd anal spine	137	154	156	151
Length of 3rd anal spine	127	147	145	140
Longest soft anal ray	255	205	203	174
Length of caudal fin	411	349	351	377