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QUISQUILIUS FLAVICAUDATUS, A NEW GOBIOID FISH FROM THE CORAL REEFS OF THE RED SEA

by

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With one text-figure

ABSTRACT

A new goboid species, *Quisquilius flavicaudatus*, was found in the Red sea. D VI, I 8; A I 8; P 16-17; LL 23-25; TR 6-7; PreD 6; GR 3 + 1 + 10; V I 5 partly fused by a delicate membrane. The caudal peduncle and caudal fins are yellow. Red spots are found on the head and on the front of the body.

The new species is distinguished from the other *Quisquilius* species in the Western Indian Ocean and the Red Sea by having the lowest count of soft dorsal rays and scales in LL and PreD.

INTRODUCTION

The genus *Quisquilius* (Jordan & Everman, 1903) is known from all over the Indian Ocean including the Red Sea and the Western Pacific (Koumans, 1953). In the Western Indian Ocean and the Red Sea this genus is represented by four species: *Q. cinctus* (Regan, 1908), *Q. inhaca* Smith, 1959, *Q. anthioides* Smith, 1959 and *Q. mendelssohni* Goren, 1978. A recent study of the fish fauna of the coral reefs in the Gulf of Elat (northern Red Sea) yielded an additional new species which was found in caves and holes in the coral reefs at various depths.

ABBREVIATIONS USED

A, D, P = anal, dorsal, pectoral fins; GR = number of gill rakers on anterior gill arch; LL = number of scales along the body; PreD = number of pre-dorsal scales; SL = standard length (in mm); TL = total length (in mm); TR = number of transverse scale series; RMNH = fish collection of the Rijksmuseum van Natuurlijke Historie, Leiden; TAU = fish collection of Tel Aviv University.

Quisquilius flavicaudatus nov. spec.

(fig. 1)

Holotype. — TAU 7743, Marsa Barecha (Sinai peninsula), 16.x.1979.

Paratypes. — TAU 7744, 4 spec., Marsa Barecha, 16.x.1979 (two of these specimens have now

been deposited in the RMNH fish collection, no. 28187); TAU 7747, 5 spec., Sharm e Sheikh (Sinai Peninsula) 15.x.1979 (two of these became RMNH 28186).

Additional material. — TAU 7746, 2 spec., Mukebla (Gulf of Elat, Sinai Peninsula), 24.ix.1979; TAU 7745, 3 spec., Marsa Barecha, 16.x.1979.

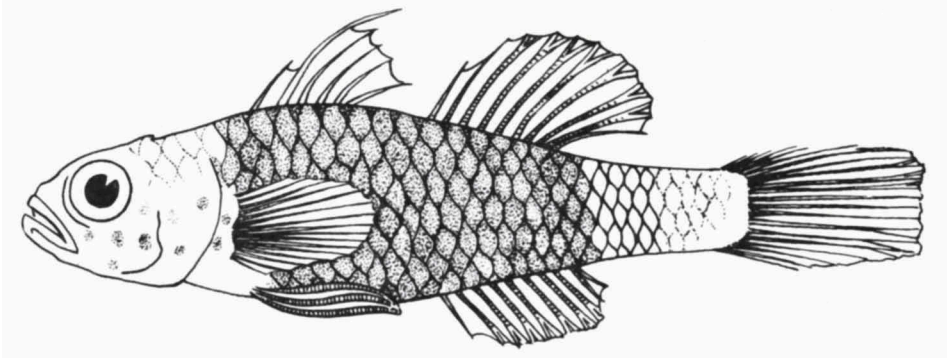


Fig. 1. *Quisquilius flavicaudatus* nov. spec., lateral view of the holotype (drawing by Mr. Z. Sheffer).

Diagnose. — A *Quisquilius* species with yellow caudal peduncle and caudal fin, and with red spots on head and front of body. D VI, I 8; A I 8; P 16-17; LL 23-25; TR 6-7; PreD 6; GR 3 + 1 + 10.

Description. — A small fish, less than 30 mm in total length. Body and head compressed. Mouth oblique with projecting lower jaw. Maxilla extending to below the anterior part of eye. Posterior nostril in front of eye, anterior nostril close to upper lip, both in short tubes. Tongue bilobed. Several rows of teeth on each jaw, the outer enlarged. A short and almost unrecognisable longitudinal ridge on cheek. A vertical ridge behind preopercle. Gill opening wide, reaching to below mideye. Isthmus narrow. Gill rakers 3 + 1 + 10.

Vertebrae 26, including urostyle.

Dorsal fins: VI, I 8; Anal fin: I 8; Pectoral fin: 16-17; ventral fin: I 5. First dorsal fin low, its height about 60% of body depth. Second and third spines are the longest and reach to the insertion of the second dorsal fin. Pectoral fin reaches to below the origin of second dorsal fin. Pelvic fins are fused partly at their base with a delicate membrane which continues along 2/3 of the inner pelvic rays. The pelvics reach the insertion of the anal fin.

Ctenoid scales along the body 23-25. Six to seven transversal series of scales. Six predorsal scales. No scales on preopercle and cheek.

Colour (preserved). — Body and head brownish. The caudal peduncle and caudal fin yellow. In freshly preserved specimens red spots on head, prepelvic, predorsal and pectoral base. These spots disappear after several days in alcohol.

TABLE I

Measurements and body proportions (in mm)

	Holotype		Paratypes TAU 7744				Paratypes TAU 7747			
Total length	25.0	25.7	26.2	23.5	20.1	19.4	18.8	—	16.8	15.2
Standard length	19.8	21.2	21.3	18.9	16.0	15.4	15.0	14.7	13.8	12.5
Head length	6.2	5.8	5.9	5.5	4.5	4.6	4.4	4.3	4.1	3.3
Body depth	4.5	4.5	4.6	3.9	3.7	3.5	3.3	3.2	3.0	2.8
Distance between snout tip and first dorsal fin	7.1	7.7	7.5	6.9	6.4	5.6	5.5	5.5	5.2	4.7
Distance between snout tip and second dorsal fin	11.0	11.7	11.3	10.0	8.8	8.1	8.0	8.0	7.5	6.4
Distance between snout tip and anal fin	11.5	10.8	11.4	10.6	9.0	8.4	8.2	8.1	7.7	6.5
Eye diameter	2.1	1.6	1.9	1.5	1.3	1.3	1.2	1.2	1.2	1.1

Standard length 79-82% of total length. Head length 22-25% of TL and 27-31% of SL; Body depth 17-18% of TL and 21-23% of SL; Snout tip - first dorsal fin distance 28-32% of TL and 35-40% of SL; Snout tip - second dorsal fin distance 42-45% of TL and 53-55% of SL; Snout tip - anal fin distance 42-46% of TL and 51-58% of SL; Eye diameter 28-33% of head length.

REMARKS

Quisquilius flavicaudatus nov. spec. differs from other Western Indian Ocean congeneric species by having fewer scales along the body (26 or more in other species), fewer predorsal scales (ten or more in the others) and fewer dorsal branched rays (nine or more in the others). Its colour pattern is unique and can be distinguished easily from the patterns of the others.

KEY TO QUISQUILIUS SPECIES OF THE WESTERN INDIAN OCEAN AND THE RED SEA

1. Dorsal fin with 8 soft rays; A I 8; LL 23-25; TR 6-7; PreD 6; GR 3 + 1 + 10
..... *flavicaudatus* nov. spec. 2
- Dorsal fin with more than eight rays. More than 9 predorsal scales 2
2. 35-38 scales along the body; A I 9-10; TR 10-13; PreD 18-19; Second D I 10-11; GR 3 + 1 + 9 *cinctus* (Regan) 3
- Less than 34 scales along the body and less than 9 anal rays 3
3. 32 scales along the body; 18 predorsal scales; TR 11; second D I 10; A I 8; GR 4 + 1 + 10 *anthioides* Smith 4
- Less than 30 scales along the body and less than 18 predorsal scales 4
4. 15-16 predorsal scales; TR 14; LL 27-28; second D I 10-11; A I 8
..... *inhaca* Smith
- 10-13 predorsal scales; TR 7-8; LL 26-28; Second D I 9; A I 8; GR 1 + 1 + 11
..... *mendelssohni* Goren

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