

New record for some Arab Gulf fishes in the freshwater systems of Iraq

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During 1984 four specimens of *Thryssa hamiltonii* (Gray, 1835) and *strongylurus strongylurus* (Van Hasselt, 1823) were captured by a fisherman in the river Euphrates, south of Nasiriah province, Iraq, approximately 180 km north of Basrah city. In addition two other species were caught in the lower reaches of Tigris river *Bathygobius fuscus* (Ruppell, 1828) (one specimen) and

Euryglossa orientalis (Bloch & Scheider, 1801) (one specimen). They were subsequently deposited in the Marine Science Centre, Basrah, Iraq for preservation.

Identification

Thryssa hamiltonii (Gray, 1835)

Body oblong, compressed; abdomen keeled, serrated. Dorsal profile convex, convex, ventral more or less horizontal up to anal. Eyes with adipose lid. Upper jaw promissent. Cleft of mouth oblique; maxilla extending beyond gill opening. Teeth uniserial in jaws, smaller and in narrow band on palatine, none on vomer. A single dorsal fin; origin nearer to snout end than to caudal origin pectorals low, equal to head. pelvic is small. Anal moderate. caudal deeply forked, equal to head. No lateral line. A list of morphometric and meristic data for the specimen is presented in Table 1.

Other species of the genus *Thryssa* may occur in the lower reaches of Tigris and Euphrates and as it is most likely to be confused with *T. mystex*. The following key to species that may be found in the area is included.

- 1- Maxillary reaching pectoral base; abdominal scutes 25-27, the imaginary line of the snout pass through the middle of the eye *Thryssa mystex*
- 2- Maxilla nearly reach base of pectoral fin, the imaginary line of the snout pass over the upper edge of the eye *T.hamiltonii*
- 3- Maxilla long, to pectoral base or beyond4
- 4- Anal with 43-49, dorsal with 12-14 rays; mouth oblique; pre-pelvic scutes 14-17 *T. Parava*

Body elongated. Upper and lower jaws greatly elongated and a sharp teeth found on their margin; gill rakers absent. No spines in fins; anterior parts of dorsal and fins forming moderate lobes; pectoral fins not falcate. Caudal peduncle without lateral keels; caudal fin rounded or truncate, not emarginate or forked. Bases of dorsal and anal fins covered with scales.

colour: greenish above; silvery laterally, white ventrally. Some pigmentation are found on the dorsal and anal fins along middle of the rays. The black spot at base of the caudal fin the number of dorsal fin rays (12 to 15) make this species distinct from the remaining species of the genus *Strongylurus* (*S. leiura* and *s. incis*). Morphometric and meristic data for the specimen are presented in Table II.

***Bathygobius fuscus* (Rupprill, 1828)**

Body elongated, cylindrical anteriorly and compressed posteriorly. Head compressed. profile convex. snout obtuse, tip before lower margin of eye. Anterior nostril in a short tube. lips thick. Jaws subequal. Maxillary extends to below posterior part of eye, or not so far. Teeth in several rows; in upper jaw outer row enlarged. Tongue more or less bilobate. Scales of head, nape, breast and belly cycloid, on rest of body ctenoid. First dorsal fin lower than body pointed posteriorly. Anal fin shorter than second dorsal, pectoral fin rounded. Ventral fin obtusely rounded, caudal fin obtuse. The body proportions and the meristic data are shown in Table III.

***Euryglossa orientalis* (Bloch & Schneider, 1801)**

Body flat and oval, both contours equally arched. Eyes on the right side separated by a rather wide scaly interspace. Cleft of

mouth extending to below middle of eye or not quite as far; lower lip feebly fringed. Two tubular nostrils on ocular side in front of lower eye. Dorsal and anal fins joined to caudal fin; pectoral fin well developed, that on blind side somewhat shorter than that on eyed side; pelvic fins moderately Symmetrical, united basally. Scales on both sides ctenoid. This species may be distinguished from *Brachirus aspiros*, Bluker (*B. heterolepis*, Bluker) by the ctenoid scales on the blind side (Norman, 1910). A list of morphometric and meristic data for the specimen is presented in Table IV.

Discussion

The natural range of the Arab Gulf fishes is restricted to the northern reaches of the Shat al Arab river and their presence northward to the Qarmat Ali which marks the junction of the two great rivers (Tigris & Euphrates) demonstrates their ability to penetrate the saline reaches of the rivers of lower Mesopotamia.

Recently AL- Hassan & Hussain (1985) have recorded the presence of some Arab Gulf fishes in the water of shatt al Arab. *Euryplossa orientalis* was included among the list of species from lower reaches of shatt al Arab river near Hamdan village close to Abu al-khasib city. The remaining three species under investigation were not on the list of AL- Hassan & Hussain (1985).

The works of Mahdi (1962) and khalaf (1961) were considered as the only work on the fish fauna of Tigris & Euphrates rivers and neither show the presence of any Arab Gulf fishes

During the last ten years a new channel (shatt al Basrah) was dug to join the greater marsh area of the southern Iraq with the North west head of the Arab Gulf (khor al - zubair). So there is now a possibility for fish to swim across the channel and enter

either the Euphrates or Tigris which can tolerate low salinity. As far as the reasons behind their presence is concerned. This is the only explanation that can be given for their presence.

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Summary

The occurrence in the Tigris and Euphrates rivers of a specimens of *Thryssa hamiltonii* (Gray, 1835), *Strongylurus strongylurus* (Van Hasselt, 1823), *Bathygobius fuscus* (Ruppell, 1828) and *Euryglossa orientalis* (Bloch & Schneider, 1801) a fishes which are native to the Arab Gulf, is described. Some possible explanations were investigated.

الخلاصة

لقد تم تسجيل اربعة انواع من أسماك الخماج العربي في المياه الداخلية العراقية وقد وصفت وتم اعطاء بعض التعليقات حول تواجدها في المياه العذبة.

Table I. Morphometric and meristic data for

***Thryssa hAMILTONII* (Gray, 1845)**

Morphometric characters

Total length = 13.2 cm

standard length = 10.5 cm

pre orbital length = 0.4 cm

Head length = 2.2 cm

Inter orbital length = 0.7 cm

Eye diameter = 1.1 cm

pre pectoral length = 2.1 cm

post orbital length = 1.1 cm

pre dorsal length = 5.1 cm

post dorsal length = 6.0 cm

pre pelvic length = 3.7 cm

pre pelvic length = 5.7 cm

pre anus length = 5.3 cm

Meristic characters

Dorsal fin ray = 12

Pectoral fin ray = 13 + 13

Pelvic fin ray = 7 + 7

Anal fin ray = 42

Abdomenal Scuts = 26

**Table II. Morphometric & Meristic data for
Strongylurus strongylurus (Van Hasselt, 1823).**

Morphometric characters

Total length = 34.9 cm
standard length = 31.2 cm
Pre orbital length = 7.2 cm
Head length = 10.7 cm
Head width = 1.3 cm
Inter orbital length = 1.0 cm
Eye diameter = 0.9 cm
Post orbital length = 2.5 cm
Pre pectoral length = 11.2 cm
Pre dorsal length = 25.5 cm
Post dorsal length = 29.4 cm
Pre pelvic length = 19.3 cm
Pre anal length = 24.5 cm
pre anus length = 23.8 cm

Meristic characters

Dorsal fin ray = 15
Pectoral fine ray = 11 + 11
pelvic fin = 6
Anal fin ray = 17

Table III. Morphometric & Meristic characters of
Bathygobius fuscus (Ruppell, 1828)

Morphometric characters

Total length = 50.65 cm
Standard length = 40.60 cm
Pre dorsal 2 length = 22.40 cm
Pre dorsal I length = 14.40 cm
Head length = 11.40 cm
Pre ventral = 12.50 cm
Pelvic origin = 11.35 cm
Pre anal length = 23.10 cm
Pre anus length = 25.05 cm
Caudal length = 9.75 cm
Body depth at pelvic fin = 7.10 cm
Body depth at Anal fin = 7.05 cm

Meristic characters

Dorsal fin 1 = VI
Dorsal fin 2 = 1.9
Anal fin = 1.8
Pectoral fin = 19

**Table IV. Morphometric & Meristic characters of
Euryglanis orientalis (Bloch & Schneider, 1801).**

Morphometric characters

Total length = 13.0 cm

Standard length = 11.2 cm

Head length = 2.4 cm

Pre orbital orbital = 0.7 cm

Post orbital length = 1.3 cm

Pre pectoral length = 2.6 cm

Pre pelvic length = 2.3 cm

Meristic characters

Dorsal fine rays = 65

Pectoral fin rays = 8

Anal fin rays = 52

Caudal fin rays = 16