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The presence of Carasobarbus luteus (Heckel, 1843) and Heteropneustes fossilis (Bloch, 1797) in Khor al Zubair, North West of the Arabian Gulf, Basrah, Iraq.

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Khor al Zubair is a north west extension from the Arabian Gulf. The environmental characters of this area indicate a marine habitat. The annual changes in salinity and temperature ranges between 28- 47‰ and 12- 30c respectively.

Recently Khor al Zubair was connected by a waterway, Shatt al Basrah, to the greatest marsh area in the southern part of

Iraq that is Hor al Hammar. The latter, on the other hand is a freshwater environment where the salinity ranges between 1-2‰ annually.

The ichthyofauna of Khor al Zubair area is similar to that of the Arabian Gulf while ichthyofauna of the marsh area is a typical freshwater one and the species of fishes found in it are similar to those found in shatt al Arab, Euphrates and Tigris river with a minor difference in the species composition. The most important fish family found in the freshwater systems in Iraq, including the marsh areas, is the family cyprinidae and less importantly the family Heteropneustidae. The former family comprise over a fourty species and the genus **Barbus** alone contains over ten species. On the other hand, the family Heteropneustidae consists of one genus and species (Al- Daham, 1982).

Carasobarbus luteus (Heckel) was first described by Heckel in 1843 as **Systomus luteus** from Orontes and Tigris. Later this species was described from many localities such as Iraq (Mahdi, 1962; Khalaf, 1961) and Syria (Beckman, 1962). Recently, Karaman (1971) has revised the genus **Barbus** and new generic name, **Carasobarbus**, was assigned to this species.

Heteropneuetes fossilis (Bloch) was first described as **Silurus fossilis** by Bloch in 1797. Later the species was recorded in Iraq as **Heteropneustes fossilis** (Khalaf, 1961) and **Saccobranchus fossilis** (Mahdi, 1962).

Material and Method

Twenty speciemens of **Carasobarbus luteus** and ten speciemens of **Heteropneustes fossilis** were collected by a set net in Khor Al- Zubair area during January, 1985 where the fishes

make their first appearance. The morphometric and meristic characters of the two species were taken as shown in table 1.

Results and Discussion

The morphometric and meristic charactes of **C. luteus** and the **H. fossilis** appeared not differ significantly from those obtained from fishes collected from the marsh area and of the other freshwater systems in Iraq. The other morphological characters of the two species under consideration do not show much varation.

At the present, the two species **C. luteus** and **H. fossilis** are recorded for the first time from Khor al Zubair area. No. previous record for these species has been made from Khor al Zubair area. **C. luteus** observed as an active fish and appeared not affected by the high salinity in the area. On the other hand **H. fossilis** appeared to be moribund and was observed floating on the surface of the water with little movement.

In conclusion we may say that it is quite possible for the freshwater fauna of the marsh area to move acros the new water channel «Basrah river» and reach Khor al Zubair area, when salinity falls under the effect of the freshwater that enters the area during the low tide. Another possibility could happen the other way around in which we may find some marine fish species in the marsh area. The preliminary investigation revealed that some marine fish species have immigrated upstream through the Basrah river and reach the mid and northern extremities of the marsh areas in the last six months of 1985. This might indicate a future major changes to the ichthyofauna of both localities (Khor al Zubair & marsh area).

On a priori grounds it is likely that the freshwater immigrants are widely adaptable species. They should be euryhaline as well as eurythermal.

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Table 1. The average morphometric and meristic measurements of **C. luteus** and **H. fossilis** taken from Khor al- Zubair area.

Morphometric characters	**C. luteus**	**H. fossili**
Total length	18.76	15.70
Standard length	13.99	14.00
Head length	3.50	2.50
Predorsal fin length	6.58	4.80
Postdorsal fin length	10.40	5.00
Prepectoral fin length	3.61	-
Preanal fin length	7.84	5.8
Preanus length	11.78	5.3
Body depth at the pectoral	3.90	2.20
Body depth at the anal	3.01	2.70
Caudal peduncle length	2.17	
Caudal peduncle depth	1.91	1.10
Meristic characters		
Dorsal fin- ray count	10.00	6.00
Pectoral fin- ray count	14.00	6.00
Anal fin- ray count	7.00	

Summary

Carasobarbus luteus and **Heteropneustes fossilis** were recorded for the first time from Khor al Zubair area, North West of the Arabian Gulf. Their presence in this area is unexpected since they are a purely freshwater species. The causes for finding those species in such an area are discussed.

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الخلاصة

لقد تم تسجيل لأسماك الحمري وأبو الحكم وهي من الأسماك النهرية في منطقة خور الزبير، شمال غرب الخليج العربي بالقرب من مدينة البصرة. ولما كانت تواجد مثل هذه الأسماك في المنطقة المذكورة غير متوقع عليه فقد تم مناقشة الأسباب التي دفعت بهذه الأسماك للتواجد في مثل هذه البيئة.