ON A SECOND COLLECTION OF FISH FROM IRAQ.

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(Plates I and II.)

In February, 1943, Dr. Baini Prashad, Director, Zoological Survey of India, received through Dr. S. L. Hora, Director of Fisheries, Bengal, a second collection of fish from Iraq made by Mr. D. D. Belayew, Specialist in Fisheries, Directorate General of Agriculture, Baghdad, for determination. The collection was accompanied by photographs of 16 species and a list of the Arabic names of the fishes.

The material proved to be of great value as most of the freshwater species had been collected from their respective type localities. The earlier descriptions of some of Heckel's species have been amplified, as was done by Hora and Misra[1] in the first article of the series. Illustrations of two of Heckel's species are also included as Heckel's paper is not easily available in this country. The general classification of fishes adopted is according to Jordan[2].

It has been found that different species have sometimes the same Arabic name and that one species may sometimes have several different Arabic names. So, in specific determination much reliance should not be placed on the vernacular names given to various species as was pointed out by Hora and Misra[3] in their studies of the Poona fishes. Limits of distribution of each species are given in order to show the geographical relationship of the fauna.

LIST OF SPECIES.

Super Order TELEOSTEI.

Order ISOSPONDYLI

Family CLUPEIDAE

1. *Ilisha filigera* (V.).

Family DOROSOMIDAE

2. *Nematalosa nasus* (Bl.).

Family ENGRAULIDAE

3. *Thrissocles purava* (C. V.).

Order EVENTOGNATHI

Family CYPRINIDAE

4. *Abramis caeruleus* (Heck.).
5. *Alburnus scheitan* Heck.
6. *Aspius vorax* Heck.
7. *Barbus esocinus* (Heck.).
8. *Barbus xanthopterus* (Heck.).
9. *Barbus* (*Puntius*) *luteus* (Heck.).
10. *Barbus* (*Puntius*) *sharpeyi* Gthr.
11. *Barbus* (*Tor*) *grypus* Heck.

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[1] Hora, S. L. and Misra, K. S., *Journ. Roy. As. Soc. Bengal* (*Sci.*) IX, pp. 1-15 (1943).
[2] Jordan, D. S., *Classification of Fishes* (Stanford University, California: 1923).
[3] Hora, S. L. and Misra, K. S., *Journ. Bombay Nat. Hist. Soc.* XLIII, pp. 218-225 (1942).

Order NEMATOGNATHII

Family Tachysuridae

12. *Tachysurus thalassinus* (Rüpp.).

Order SYNENTOGNATHI

Family Belonidae

13. *Strongylura strongylura* (van Hass.).

Order HETEROSOMATA

Family Soleidae

14. *Synaptura orientalis* (Bl. Schn.).

Super Order ACANTHOPTERYGII.

Order PERCOMORPHI

Family Mugilidae

15. *Mugil* (*Liza*) *hishni* Misra.

Family Pampidae

16. *Chondroplites chinensis* (Euphras.).

17. *Pampus argenteus* (Euphras.).

Family Pomadasidae

18. *Pomadasys argyreus* (C. V.)

Family Sciaenidae

19. *Johnius belengerii* (C. V.).

20. *Pseudosciaena sina* (C. V.).

Order GOBIOIDEA

Family Gobiidae

21. *Boleophthalmus dussumieri* C. V.

SYSTEMATIC ACCOUNT.

Ilisha filigera (*V.*).

1847. *Pellona filigera*, Valenciennes, *Hist. Nat. Poiss.* XX, p. 332 (type locality Coromandel; Bombay[1]).

1878. *Pellona filigera*, Day, *Fish. India*, p. 648, pl. clxv, fig. 5.

1923. *Ilisha filigera*, Norman, *Ann. Mag. Nat. Hist.* (9) XI, p. 10.

Arabic name : *Abou-Avena.*

A single salted and dried specimen, 335 mm. in total length, which has been assigned to *Ilisha filigera*, was collected from the Persian Gulf. Mr. Belayew also sent a photograph of a specimen, 316 mm. in total length to facilitate determination.

Ilisha filigera is distributed in the seas of India, Philippines and Indo-China.

Nematalosa nasus (Bl).

1795. *Clupea nasus*, Bloch, *Naturg. ausland. Fische* IX, p. 116, pl. cccexxix, fig. 1 (type locality : Malabar).

1878. *Chatoessus nasus*, Day, *Fish. India*, p. 634, pl. clx, fig. 4.

1887. *Chatoessus nasus*, Boulenger, *Proc. Zool. Soc. London*, p. 666 (Muscat).

1917. *Nematalosa nasus*, Regan, *Ann. Mag. Nat. Hist.* (8) XIX, p. 313.

[1] Where more than one locality is given by the author, the first one is regarded as the type locality.

Arabi name : *Yaffoud.*

There are 3 specimens, 205 mm., 206 mm. and 210 mm. in total length which were collected from the Hor-el-Hammar Lake. In one specimen the last dorsal ray reaches halfway between the dorsal and caudal fins ; and in other two specimens nearly to the base of the caudal fin. This species is good eating but bony.

Nematalosa nasus is distributed in the seas and estuaries of Sokotra, South Arabia, India, Ceylon, Burma, Malay Peninsula, Malay Archipelago, China, Formosa, New Guinea, Australia.

Thrissocles purava (Ham.).

1822. *Clupea purava,* Hamilton, *Fish. Ganges,* pp. 238, 382 (type locality : Ganges esturies).

1878. *Engraulis purava,* Day, *Fish. India,* p. 628, pl. clvii, fig. 2 (Sind).

1941. *Thrissocles purava,* Fowler, *Bull. U. S. Nat. Mus.* (100) XIII, p. 677 (Philippines and adjacent seas).

Arabic name : *Shiha.*

There are 2 specimens of *Thrissocles purava* (Hamilton), 163 mm. and 186 mm. in total length, from the Hor-el-Hammar Lake. It attains at least 12 inches in length ; and is distributed in seas and estuaries of India, Malay Peninsula and Malay Archipelago.

Abramis caeruleus (Heck.).

1841. *Alburnus caeruleus,* Heckel, in Russegger's *Reisen* in *Europa, Asien und Africa* I, p. 1084, pl. xi, fig. 3 (type locality : Aleppo).

1868. *Abramis caeruleus,* Günther, *Cat. Fish. Brit. Mus.* VII, p. 308.

1884. *Abramis caeruleus,* Sauvage, *Nouv. Arch. Mus. Nat. Hist.* (2) VII, p. 6 (name only).

Arabic name : *Lassafa.*

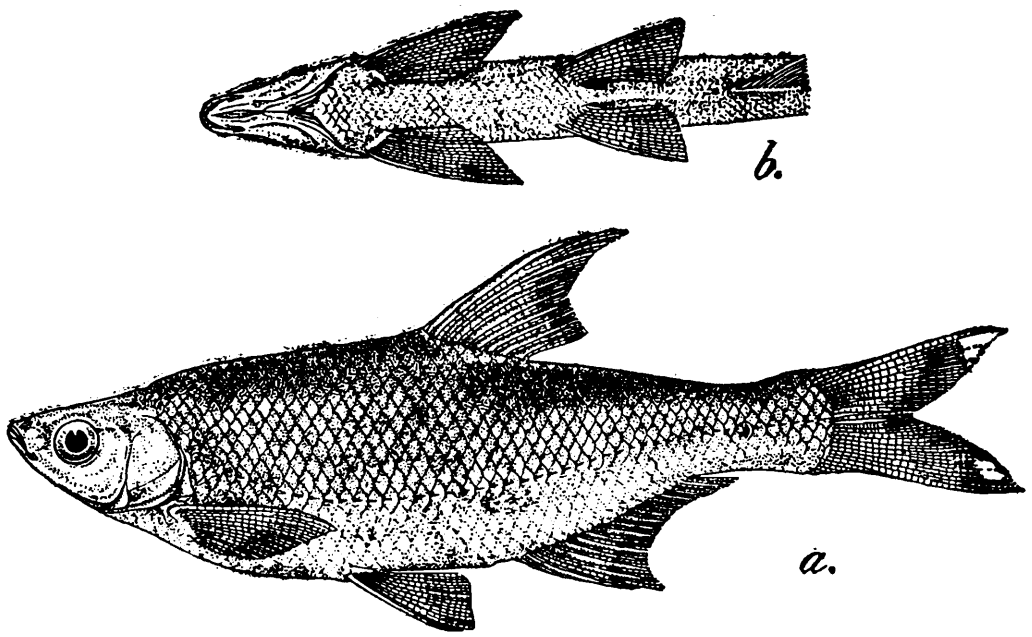
D.3/8 ; A.3/16 ; P.1/14 ; V.1/8 ; L.1.50 ; L.tr.11/6 ; C.19.

There is a single specimen, 176 mm. in total length, which was collected from Hor Abou-Nedjin, Iraq.

The body is elevated. The length of the head is contained 5·5 times in total length and 4·3 times in length without caudal. The depth of body is contained 3·8 times in total length and 2·8 times in length without caudal. The diameter of the eye is contained 3·1 times in the length of the head ; 1·1 times in the interorbital distance ; and 0·8 time in the length of the snout. The cleft of mouth is directed upwards. Both the jaws are equal. The lower labial fold is interrupted at the symphysis of the mandible. The body is covered with scales ; there are 50 scales in longitudinal series along the lateral line ; 4 rows between lateral line and the base of the pelvic fin.

The anal fin originates in advance of the last dorsal ray. The abdomen is round and is not keeled, both preventrally and postventrally. The tip of the dorsal fin is blackish.

Abramis caeruleus was originally described from Aleppo ; and has been recorded for the first time from Hor Abou-Nedjin.



TEXT-FIG. 1.—*Abramis caerulsus* (Heck.).
a. lateral view : ×4/7 ; *b.* ventral surface of head and part of body : ×4/7.

Measurements in millimetres and scale counts.

Total length	176·0
Standard length	140·0
Length of head	31·5
Width of head	17·0
Height of head	24·0
Diameter of eye	10·0
Interorbital width	11·0
Length of snout	8·0
Depth of body	46·0
Width of body	15·0
Length of caudal peduncle	25·0
Least height of caudal peduncle	15·0
Length of dorsal spine	31·5
Longest ray of dorsal fin	34·5
Longest ray of pectoral fin	29·0
Longest ray of pelvic fin	22·0
No. of scales along L. 1	50
No. of scales between L. 1 and V.	4

Alburnus scheitan Heck.

1843. *Alburnus scheitan*, Heckel in Russegger's *Reisen in Europa, Asien und Africa* II, p. 264 (type locality : River Araxes).
1868. *Alburnus scheitan*, Günther, *Cat. Fish. Brit. Mus.* VII, p. 317.

Arabic name : *Smnan.*

D.2/8 ; A.3/12 ; P.1/15 ; V.2/7-8 ; L.1.70-72 ; L.tr.11/7 ; C.19.

There are 5 specimens, ranging from 105 mm. to 175 mm. in total length, which were collected from the Tigris River. As no suitable description of *Alburnus scheitan* is available, I fully describe this species,

The body is elongated. The length of the head is contained from 4·8 to 5·0 times in the standard length and from 5·9 to 6·1 times in the total length. The depth of body is nearly equal to the length of head, from 4·8 to 5·6 times in standard length, and from 5·9 to 7·0 times in total length. The diameter of the eye is contained from 2·7 to 3·1 times in length of head from 0·7 to 1·0 time in the interorbital distance, and from 0·77 to 0·88 times in the length of the snout. The cleft of the mouth is directed upwards, the lower jaw projecting beyond the upper. The least height of the caudal peduncle is contained from 2·4 to 2·7 in the length of the caudal peduncle. There are 12 gill-rakers on the lower limb of the anterior arch. They are slender, lanceolate and closely set; and are contained more than two times in the length of gill filaments. The abdomen behind the ventral is compressed into an edge. The body is covered with small scales; there are 70-72 scales in longitudinal series along the lateral line; 4½ rows between the lateral line and base of the ventral fin; 11/7 rows in the lateral transverse.

The dorsal fin is situated behind the pelvics. The anterior anal rays are behind the vertical from the last dorsal ray. The longest ray of the pectoral is nearly equal to the dorsal; and terminates at some distances from the root of the pelvics. The dorsal surface of the body above the lateral line is greyish and the lower surface is silvery. A lead-coloured band runs along and above the lateral line.

Alburnus scheitan Heckel which was originally described from the river Araxes, may turn out to be synonymous with *Alburnus mossulensis* Heckel when a large number of specimen of *Alburnus scheitan* is available for study. I do not see any difference of specific importance between them. *Alburnus scheitan* has been recorded for the first time from the river Tigris.

Measurements in millimetres and scale counts.

Total length	105·0	173·0	175·0
Standard length	85·0	140·0	144·0
Length of head	17·5	29·0	28·5
Width of head	8·0	14·0	14·0
Height of head	11·0	19·0	20·0
Diameter of eye	6·5	9·0	9·0
Interorbital width	5·0	9·0	9·0
Length of snout	5·0	7·0	8·0
Depth of body	15·0	29·0	28·0
Width of body	6·5	14·0	14·0
Length of dorsal fin	16·0	23·0	26·0
Longest ray of pectoral fin	15·5	27·0	26·0
Longest ray of pelvic fin	11·5	20·0	180
Length of caudal peduncle	19·0	32·0	30·0
Least height of caudal peduncle ..	7·0	12·5	12·0
No. of scales along L. l.	71	70	72
No. of scales between L. l. and V. ..	4½	4½	4½

Aspius vorax Heck.

(Plate I, fig. 1).

1841. *Aspius vorax*, Heckel, in Russegger's *Reisen in Europa, Asien und Africa* I, p. 1081, pl. x, fig. 3 (type locality : Tigris).

1868. *Aspius vorax*, Günther, *Cat. Fish. Brit. Mus.* VII, p. 311.

1874. *Aspius vorax*, Günther, *Ann. Mag. Nat. Hist.* (4) XIV, p. 37 (name only).

1884. *Aspius vorax*, Sauvage, *Nouv. Arch. Mus. Nat. Hist.* (2) VII, p. 7 (name only).

Arabic name : *Shillik.*

D.2/9 ; A.2/11 ; P.1/17 ; V.1/8 ; L.1.96 ; L.tr.18/10 ; C.19.

There is only one specimen, 386 mm. in total length which was collected from the Tigris. Mr. Belayew also sent a photograph of a bigger specimen, 454 mm. in total length. The measurements and scale counts of the specimen examined by me are given below.

Aspius vorax has been recorded only from the Tigris river.

Measurements in millimetres and scale counts.

Total length	386·0
Standard length	335·0
Length of head	94·0
Width of head	39·0
Height of head	49·0
Diameter of eye	15·0
Length of snout	26·0
Interorbital width	20·0
Depth of body	74·0
Width of body	43·0
Length of dorsal fin	41·0
Length of pectoral fin	53·0
Length of ventral fin	41·0
Length of caudal peduncle	65·0
Least height of caudal peduncle	31·5
No. of scales along L. 1.	96

Barbus esocinus (Heck.).

(Plate I, fig. 2.)

1841. *Luciobarbus esocinus*, Heckel, in Russegger's *Reisen Europa, Asien und Africa* I, p. 1054, pl. iv, fig. 2 (type locality : River Tigris near Mossul).

1868. *Barbus esocinus*, Günther, *Cat. Fish. Brit. Mus.* VII, p. 86.

Arabic name : *Biz.*

D.3/8 ; A.3/5 ; P.1/18 ; V.2/8; L.1.76-78 ; C.19.

Mr. Belayew could not obtain a specimen of ' Biz ' of a suitable size for sending to India. Therefore he sent a photograph of a specimen, about 1,150 mm. in total length with its fins and pharyngeal bones to facilitate determination. The photograph of ' Biz ' with the help of fins, pharyngeal teeth and scale counts has been assigned to *Barbus esocinus* (Heckel). Pharyngeal teeth are arranged as 4, 3, 2/2, 3, 4,

Barbus esocinus (Heckel) is closely allied to *Barbus subquincunciatus* Gthr., but the two can be distinguished by the following table of characters.

Barbus esocinus (Heckel).	*Barbus subquincunciatus* Gthr.
1. Lateral line scale 76-78	1. Lateral line scale 82.
2. Lateral transverse scale 12/12.	2. Lateral transverse scale 16/16.

Barbus esocinus (Heckel) has been recorded only from the Tigris river.

Barbus xanthopterus (Heck.).

(Plate II, figs. 1, 2.)

1841. *Luciobarbus xanthopterus*, Heckel, in Russegger's *Reisen* in *Europa, Asien und Africa* I, p. 1053, pl. iv, fig. 1 (type locality : Tigris near Mossul).

1841. *Luciobarbus schejch*, Heckel, in Russegger's *Reisen* in *Europa, Asien und Africa* I, p. (1055 type locality : River Tigris near Mossul).

1868. *Barbus xanthopterus*, Günther, *Cat. Fish. Brit. Mus.* VII, p. 86.

1868. *Barbus scheich*, Günther, *Cat. Fish. Brit. Mus.* VII, p. 87.

1874. *Barbus scheich*, Günther, *Ann. Mag. Nat. Hist.* (4) XIV, p. 37.

1884. *Barbus xanthopterus*, Sauvage, *Nouv. Arch. Mus. Nat. Hist.* (2) VII, p. 30.

Arabic name : *Gattan* or *Nobbash.*

D.3/8 ; A.3/5 ; L.1.60.

Of the two specimens of *Barbus xanthopterus* which were collected from the Tigris, the larger, 491 mm. in total length, is a deep-bodied form, while the smaller, about 466 mm. in total length, is a shallow-bodied form. The serrated dorsal spine is comparatively more developed in the narrower form than in the other. The labial fold is interrupted in the middle.

In 1874, Günther (*loc. cit.*) thus wrote about *Barbus scheich* : " The examples are the first I have seen ; they vary considerably in the comparative length of the dorsal spine ; and I have no longer any doubt that *Luciobarbus xanthopterus* of Heckel and *Luciobarbus mystaceus* of the same author are founded on individual variations of the same species." In 1884, Sauvage (*loc. cit.*) agreeing with Günther put *Luciobarbus scheich* Heckel and *Luciobarbus mystaceus* Heckel under the synonymy of *Barbus xanthopterus* (Heckel). I have not seen any specimens of *Luciobarbus mystaceus*, but I agree with the views expressed by Günther and Sauvage.

An examination of the gonads of *Barbus xanthopterus* revealed that the deeper and narrower forms are respectively the females and males of *Barbus xanthopterus.* In the male the body is proportionately less deep, and the dorsal fin is more concave. The secondary sexual differences noted above can be made out clearly from a comparison of the drawings of a male and a female specimen reproduced on the plate.

Barbus xanthopterus has been recorded from the rivers Tigris and Euphrates.

Barbus (Puntius) luteus (Heck.).

1841. *Systomus luteus*, Heckel, in Russegger's *Reisen* in *Europa, Asien und Africa* I, p. 1016, pl. vi, fig. 1 (type locality : Orontes and Tigris).

1868. *Barbus luteus*, Günther, *Cat. Fish. Brit. Mus.* VII, p. 141.

1943. *Barbus (Puntius) luteus*, Hora and Misra, *Journ. Roy. As. Soc. Bengal (Sci.)* IX, p. 4, text-fig. 2.

Arabic name : *Binni Hamour ; Binni Himri* or *Binni* of *Shifatha.*

D.3/10, P.1/15 ; V.1/8 ; A.2/6 ; L.1.28 ; L.tr. 5/4.

There are 4 specimens ranging between 210 mm. and 260 mm. in total length, which were collected from Shifatha.

Barbus (Puntius) luteus is stated to be found in the Hors and the Rivers Shatt-al-Arab, Tigris, Euphrates and Dialeh.

Barbus (Puntius) sharpeyi Gthr.

1874. *Barbus sharpeyi*, Günther, *Ann. Mag. Nat. Hist.* (4) XIV, p. 38, pl. ix (type locality : Tigris, Baghdad).

Arabic name : *Binni.*

D.3/8 ; P.1/17 ; V.1/8 ; A.3/5 ; L.1.30 ; L.tr.4/5.

There is a single specimen, 295 mm. in total length, which has been assigned to *Barbus (Puntius) sharpeyi* Gthr. Günther (*loc. cit.*) described and figured *Barbus sharpeyi* from Baghdad, on the River Tigris and stated that its vernacular name was " Aradah " I have now examined a specimen of the same species from the river Tigris which was received under a different Arabic name " Binni "; it agrees in all respects with Günther's description of the species. There are few tubercles on the snout and the labial fold is interrupted in the middle. The colouration is uniform but the tips of the pectoral, ventral and caudal fins are dusky.

Barbus (Puntius) sharpeyi is closely allied to *Barbus (Puntius) luteus* Heckel but the two can be distinguished by the following characters.

Barbus (Puntius) sharpeyi (Gthr.)	*Barbus (Puntius) luteus* (Heck.).
1. D.11-12	1. D. 13-14
2. Scales along L. 1.30-31	2. Scales along L. 1.28
3. 3½ Scales between L. 1. and V.	3. 2½ Scales between L. 1. and V.
4. Barbels absent	4. A pair of short maxillary barbel.

Both *Barbus (Puntius) sharpeyi* and *Barbus (Puntius) luteus* are characterised by having a smooth dorsal spine. *Barbus (Puntius) sharpeyi* has been recorded only from the river Tigris.

Barbus (Tor) grypus Heck.

1841. *Barbus grypus*, Heckel, in Russegger's *Reisen* in *Europa, Asien und Africa* I, p. 1048, pl. iii, fig. 1 (type locality : Tigris near Mossul).

1841. *Labeobarbus kotschyi*, Heckel, in Russeger's *Reisen* in *Europa, Asien und Africa* I, p. 1049, pl. iii, fig. 2 (type locality : Tigris near Mossul).

1868. *Barbus grypus*, Günther, *Cat. Fish. Brit. Mus.* VII, p. 109.

1868. *Barbus kotschyi*, Günther, *Cat. Fish. Brit. Mus.* VII, p. 109.

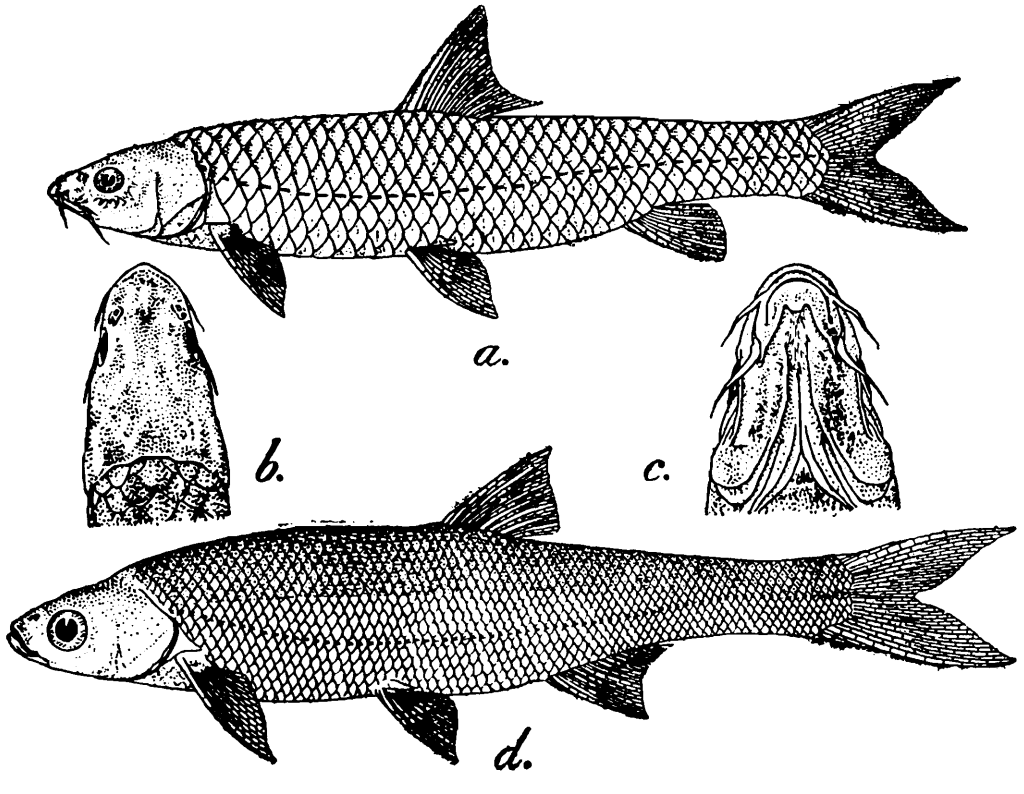
1874. *Barbus kotschyi*, Günther, *Ann. Mag. Nat. Hist.* (4) XIV, p. 37.

1884. *Barbus grypus*, Sauvage, *Nouv. Arch. Mus. Nat. Hist.* (2) VII, p. 33.

D.3/8 ; A.3/5 ; P.1/13 ; V.1/7 ; L.1·38 ; C.19.

Though in 1868, Günther (*loc. cit.*) recognised *Barbus kotschyi* (Heckel) as a distinct species, he was doubtful about its validity. It is better to quote his words about *Barbus kotschyi* : " This species is so closely allied to *B. grypus*, that we cannot help thinking that the labial lobes may prove to be not a character of specific value." Again in 1874 he (*loc. cit.*) wrote thus : " *Barbus Kotschyi*, Heck., with which most probably *Barbus grypus* (Heck.) is identical." In 1884, Sauvage relegated *Barbus kotschyi* (Heckel) to the synonymy of *Basbus grypus* Heckel.

I have examined a single specimen, 317 mm. in total length, which was collected from the Tigris. Mr. Belayew sent a photograph of a specimen, 857 mm. in total length. I feel certain that the species from the Tigris under report is generically not different from a number of Indian species grouped under *Tor* Gray with *Cyprinus tor* Hamilton as the genotype. A full description of *Barbus grypus* Heckel from its type locality is given here.



Text-fig. 2.—*a*. Lateral view of *Barbus* (*Tor*) *grypus* Heck. : ×2/7 ; *b*. dorsal surface of the head of the same : ×4/7 ; *c*. ventral surface of the head of the same ×4/7 ; *d*. lateral view of *Alburnus scheitan* Heck.: ×4/7.

Barbus grypus is an elongated and subcylindrical fish. The snout is pointed anteriorly and behind the anal fin the caudal peduncle becomes considerably narrow. The length of the head is greater than the depth of the body ; it is contained 5·7 times in the total length and 4·8 times in the standard length. The depth of the body is contained 1·05 times in the length of the head. The diameter of the eye is contained 5 times in the length of head ; 1·3 times in the length of snout ; and 1·8 times in the interorbital distance. The least height of the caudal peduncle is contained 1·8 times in its length.

The mouth is small; its gape does not extend to below the eyes. The lips are fleshy and continuous at the angles of the mouth; the posterior lip is produced into a median lobe and the post labial groove is continuous. There are two pairs of barbels. The rostral barbels are equal to the diameter of the eye. The maxillary barbels are contained 1·2 times in the diameter of the eye. The body is covered with large scales; there are 38 scales in longitudinal series along the lateral line; $2\frac{1}{2}$ rows between the lateral line and the base of the pelvic fin; $4\frac{1}{2}$ rows between the lateral line and the base of the dorsal fin; 12 scales before the dorsal fin and 12 round the caudal peduncle. There is a well developed scaly appendage in the axil of the pelvic fin.

The dorsal fin is slightly in advance of the pelvics and commences slightly nearer to the snout than the base of the caudal fin. The last dorsal spine is very strong, entire and bony; it is contained 1·3 times in the length of the head and 1·2 times in the depth of the body. The longest ray of the pectoral fin is nearly equal to the last dorsal spine. The pectoral fin is separated from the pelvics by a considerable distance. The longest ray of the anal fin is shorter than those of the dorsal, pectoral and pelvic. The caudal fin is deeply emarginate with both the lobes pointed.

Barbus (*Tor*) *grypus* Heckel has been recorded from the Tigris and the Euphrates.

Measurements in millimetres and scale counts.

Total length	317·0
Standard length	266·0
Length of head	55·0
Height of head at occipit	34·5
Width of head	33·5
Diameter of eye	11·0
Length of snout	15·3
Interorbital width	20·0
Depth of body	52·0
Width of body	32·5
Length of caudal peduncle	45·0
Least height of caudal peduncle	25·0
Longest ray of dorsal fin	44·0
Length of dorsal spine	41·0
Longest ray of pectoral fin	40·0
Longest ray of pelvic fin	38·0
Longest ray of anal fin	36·0
Length of rostral barbel	11·0
Length of maxillary barbel	14·0
No. of scales along L. l.	38
No. of scales between L. l. and V.	$2\frac{1}{2}$
No. of predorsal scales	12
No. of scales round caudal peduncle	12

Tachysurus thalassinu (Rüpp.).

1837. *Bagrus thalassinus*, Rüppell, *Neue Wirbelth., Fische*, p. 75, pl. xx, fig. (type locality : Massaua, Red Sea).

1877. *Arius thalassinus*, Day, *Fish-India*, p. 463, pl. civ, fig. 4 and pl. cvi, fig. 1.

1887. *Arius thalassinus*, Boulenger, *Proc. Zool. Soc. London*, p. 665 (Muscat).

1938. *Tachysurus thalassinus*, Fowler, *List Fish. Malaya*, p. 50.

Arabic name : *Tchim.*

There is a single specimen, 260 mm. in total length, of *Tachysurus thalassinus* from Hor-el-Hammar Lake. Mr. Belayew sent photographs of two much larger specimens. Besides the produced and pointed snout, this specimen differs from *forma typica* in the shorter maxillary, outer and inner mandibular barbels and the presence of granulations on the snout as had been observed by Boulenger (*loc. cit.*) in his specimens from Muscat. These differences would seem to be sufficiently significant for the recognition of varietal differences, but since I have only a single specimen, I refrain from giving it a new name. The species is said to attain a large size and is distributed from the Red Sea through the Arabian sea, India, to the Malay Archipelago and beyond. It is known to ascend tidal rivers ; and has been recorded for the first time from the Hor-el-Hammar Lake, Iraq.

Strongylura strongylura (van Hass.).

1823. *Belone strongylura*, van Hasselt, *Alegemein Konst-en-Letterb.* I, p. 131 (type locality : Batavia, Java).

1877. *Belone strongylura*, Day, *Fish. India*, p. 512, pl. cxviii, fig. 6.

1922. *Tylosurus strongylura*, Weber and de Beaufort, *Fish. Indo-Austral. Archipel.* IV, p. 121.

1938. *Strongylura strongylura*, Fowler, *List Fish. Malaya*, p. 73.

Arabic name : *Mahiyat-en-Nebi.*

Strongylura strongylura is represented by a single specimen, 437 mm. in total length, which was collected from the Hor-el-Hammar Lake. Mr. Belayew sent the photograph of a specimen about 584 mm. in total length. There is a round bluish-black spot in the centre near the root of the caudal fin. This species attains 2 feet or more in length ; and is known from seas, estuaries and tidal rivers of India, Burma, Ceylon, Malay Peninsula, Malay Archipelago, Siam, Cochin China, Formosa and North Australia. The species has been recorded for the first time from Iraq.

Synaptura orientalis (Bl. Schn.).

1801. *Pleuronectes orientalis*, Bloch and Schneider, *Syst. Ichth.*, p. 157 (type locality : Tranquebar).

1877. *Synaptura orientalis*, Day, *Fish. India*, p. 429, pl. xciii, fig. 4, pl. xciv, fig. 2.

1928. *Brachirus orientalis*, Norman, *Rec. Ind. Mus.* XXX, p. 179, text-fig. 3.

Arabic name : *Mislak.*

Synaptura orientalis is represented by a single specimen, 222 mm. in total length, which was collected from that portion of the Hor-el-Hammar Lake which is under tidal influence. The species coming from the Persian Gulf passes the summer in the Hor-el-Hammar Lake and returns in the autumn to the Persian Gulf through the river Shat-el-Arab.

According to Norman (*loc. cit.*), it attains upto 240 mm. in total length. *Synaptura orientalis* is distributed from the Persian Gulf, through the Malay Peninsula and Malay Archipelago to China and Australia.

Mugil (Liza) hishni Misra.

1943. *Mugil (Liza) hishni*, Misra, *Journ. Roy. As. Soc. Bengal (Sci.)* IX, p. 10, text fig. 5 (type locality : Rivers and Hors Iraq).

Arabic name : *Hishni* or *Hashnoun.*

There are 7 specimens of *Mugil (Liza) hishni* ranging between 96 mm. and 140 mm. in total length which were collected from the channels of Shifatha, which are connected with the Euphrates river through the Habbaniyah Lake and Bahroul-Melah Depression. These agree in all respects with my previous description of the species. The species is distributed in the Rivers and Hors, Iraq.

Chondroplites chinensis (Euphras.).

1788. *Stromateus chinensis*, Euphrasen, *Vat. Akad. Nya Handl. Stockholm* IX, p. 49, pl. ix.

1876. *Stromateus sinensis*, Day, *Fish. India*, p. 246. pl. liC, fig. 6.

1938. *Chondroplites chinensis*, Fowler, *List Fish. Malaya*, p. 115.

Arabic name : *Zoubeidae.*

There is a single specimen, 240 mm. in total length, of *Chondroplites chinensis* from the Hor-el-Hammar Lake. This fish is good eating; ascends estuaries; and is found in the seas of India, Malay Archipelago and China. *Chondroplites chinensis* has been recorded for the first time from Iraq.

Pampus argenteus (Euphras.).

1788. *Stromateus argenteus*, Euphrasen, *Vet. Akad. Nya Handl. Stockholm* IX, p. 53, pl. ix.

1875. *Stromateus cinereus*, Day, *Fish. India*, p. 247, pl. liii, fig. 3.

1938. *Pampus argenteus*, Fowler, *List Fish. Malaya*, p. 115.

Arabic name : *Zoubeidi.*

There is a single specimen about 225 mm. in total length which has been assigned to *Pampus argenteus* (Euphrasen); this was collected from the portion of Hor-el-Hammar Lake which is under tidal influence. The fish is much esteemed as food, and attains at least a foot in length. *Pampus argenteus* is distributed in the seas of India to the Malay Archipelago and beyond; and has been recorded for the first time from Iraq.

Pomadasys argyreus (C. V.).

1833. *Pristipoma argyreus*, Cuvier and Valenciennes, *Hist. Nat. Poiss.* IX, p. 485 (type locality : Coromandel).

1875. *Pristipoma guoraca*, Day, *Fish. India*, p. 75, pl. xx, fig. 1.

1936. *Pomadasys argyreus*, Weber and de Beaufort, *Fish. Indo-Austral. Archipel.* VII, p. 406.

Arabic name: *Nagrour.*

There is a single specimen, 207 mm. in total length, from the Persian Gulf, which has been assigned to *Pomadasys argyreus* (C. V.). The species is known from the seas of Portuguese East Africa, Seychelles, India, Ceylon, Andamans, Malay Peninsula, Malay Archipelago and New Hebrides ; and has been recorded for the first time from the Persian Gulf.

Johnius belengerii (C.).

1830. *Corvina belengerii,* Cuvier, *Hist. Nat. Poiss. V,* p. 120 (type locality: Malabar).

1875. *Sciaena belengeri,* Day, *Fish. India,* p. 191, pl. xliv, fig. 5.

1936. *Johnius belengeri,* Weber and de Beaufort, *Fish. Indo-Austral. Archipel.* VII, p. 535, figs. 98, 99, and 104.

Arabic name: *Tao-Tao.*

There are 3 specimens of *Johnius belengerii,* ranging between 178 mm. and 188 mm. in total length, which were collected from the Persian Gulf. The species is distributed in the seas of Ceylon, India, Malay, the Malay Archipelago, Formosa, New Guinea and North Australia. The present is the first record of the species from the Persian Gulf.

Pseudosciaena sina (C.).

1830. *Corvina sina,* Cuvier, *Hist. Nat. Poiss.* V, p. 122 (type locality: Pondicherry: Malabar: Japan).

1875. *Sciaena sina,* Day, *Fish. India,* p. 186, pl. xliv, fig. 2.

1892. *Sciaena sina,* Boulenger, *Proc. Zool. Soc. London,* p. 135 (Muscat).

1936. *Pseudosciaena sina,* Weber and de Beaufort, *Fish. Indo-Austral. Archipel.* VII, p. 513.

There is a single specimen, 213 mm. in total length from the Persian Gulf, which has been assigned to *Pseudosciaena sina* (C.). The species is found in the seas and brackish waters on the East Coast of Africa from Zanzibar to Natal, Madagascar, Arabia, Baluchistan, India, Ceylon, Malay Peninsula, Malay Archipelago, Southern China and Japan.

Boleophthalmus dussumierei C.V.

1837. *Boleophthalmus dussumierei,* Cuvier and Valenciennes, *Hist. Nat. Poiss.* XII, p. 207, pl. cccliv (type locality: Bombay).

1876. *Boleophthalmus dussumierei,* Day, *Fish. India,* p. 305, pl. lxiv, fig. 9.

1941. *Boleophthalmus dussumierei,* Koumans, *Mem. Ind. Mus.* XIII, p. 282.

Boleophthalmus dussumierei is respresented in the collection by a single specimen, 101 mm. in total length, from the Persian Gulf. It grows to 6 inches in length ; and has been recorded from Bombay, Sind and Mesopotamia.