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CONTRIBUTIONS TO THE STUDY OF BAGRID FISHES. 18 REDESCRIPTION OF MYSTUS PELUSIUS SOLANDER, THE TYPE SPECIES OF THE GENUS MYSTUS SCOPOLI

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INTRODUCTION

Bagrid fishes of the genus *Mystus* Scopoli were previously known under the name *Macrones* Dumèril (1856) for a very long time. Since Dumeril's name was preoccupied in Insecta (Coleoptera), several other names as *Aoria* Jordan (1919), *Sperata* Holly (1939), *Aorichthys* Wu (1939) and *Macronoichthys* White and Moy Thomas (1940) were proposed. Unfortunately none of these names are available for some reason or other and hence *Mystus* Scopoli 1777, the earliest valid name was adopted. Jayaram (1962) discussed this problem in detail. Jayaram and Anuradha have discussed elsewhere (1984), the different usages of the name *Mystus*.

It may be mentioned here that though the generic name *Mystus* Scopoli (1777) was adopted, the determination of the type species of the genus was beset with many nomenclatural and zoological problems. Scopoli (1777) did not designate any particular species by name as the type. Jordan and Evermann (1917) selected *Bagrus halepensis* Valenciennes (*Mystus cirris octo capito longioribus* Gronow, No. 388) as the type species of *Mystus* Scopoli. Valenciennes (1839) gave this name *Bagrus halepensis* for the fish included by Russell (1756) in his Natural History of Aleppo. Solander (1794) gave binomial names to fishes cited by Russell in his aforesaid work and *Bagrus halepensis*

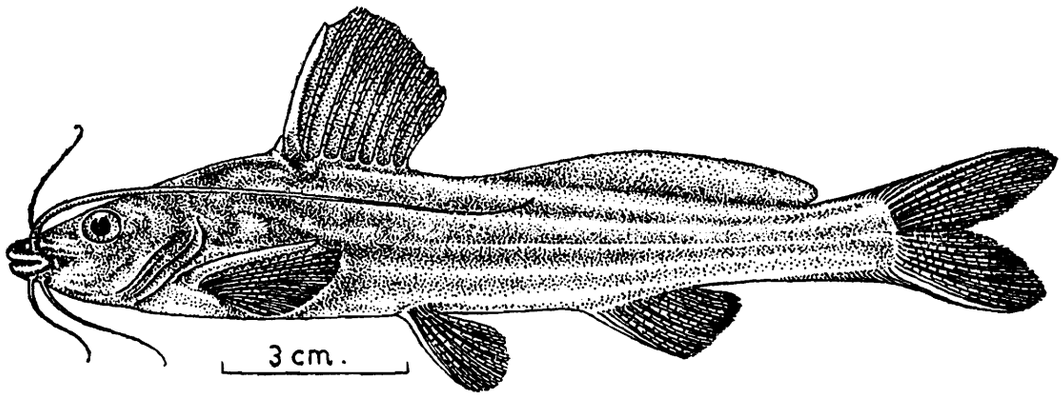

Fig. 1. Lateral view of *Mystus pelusius pelusius* Solander.

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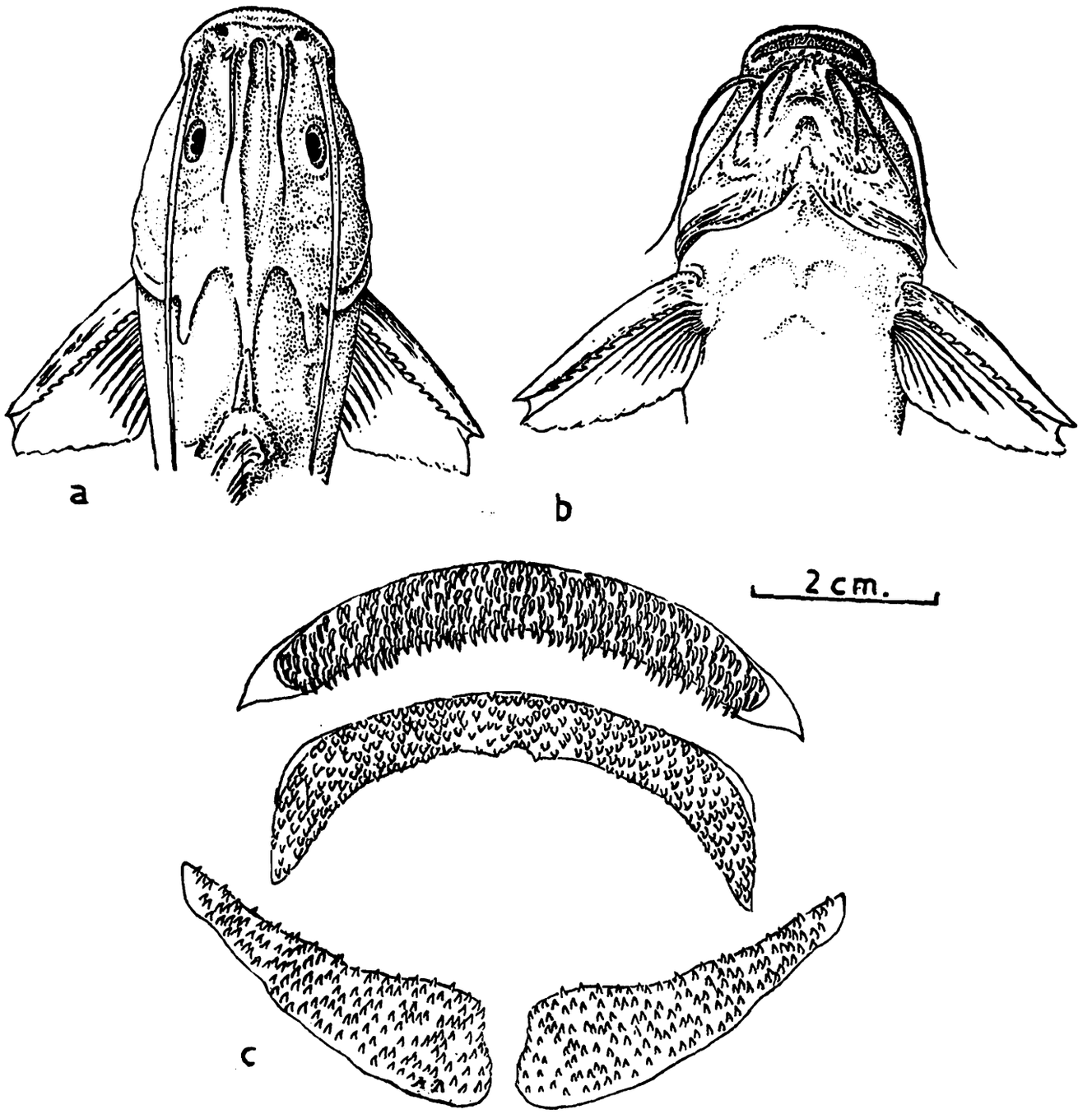

Fig. 2. (a) Dorsal view of head,
(b) Ventral view of head,
(c) Dentition.

Valenciennes was named *Silurus pelusius*. Since Solander's name and work has precedence over that of Valenciennes (1839), *Silurus pelusius*=*Mystus pelusius* becomes the type species of the genus *Mystus*.

Solander's description of *Mystus pelusius* in Russell's work (1756) is very brief. Günther (1864) described a specimen from Russell's collection present in the British Museum (Natural History) London. This

description is also poor in details and is only of a preserved, bleached 6" long specimen.

It is seen that *Mystus pelusius* which happens to be the type species of the genus *Mystus* and which appears to be common in its range of distribution (Syria, Iraq) is not very well known in literature, nor many examples have been recorded. On the other hand the genus is wide spread in India and adjacent countries and as many as 42 species are known from its entire range.

Through the kind courtsey of Dr. Munir K. Bunni, Director, Baghdad Natural History Research Centre, Baghdad, one of us (K. C. J) was able to obtain as exchange, three specimens of *Mystus pelusius* ranging from 142.8 mm to 171.2 mm in S. L. This material has been placed at our disposal as already mentioned. Since this species has not been described well, a full redescription with illustrations is presented in this paper.

DESCRIPTION

Specimens studied : Three examples from Baghdad Natural History Research centre :

One example 142.8 mm. SL, Euphrates-Faluga ; 16.4.1973.

One example 171.2 mm SL, (lean specimen), Euphrates-Faluga ; 16.4.1973.

One example 164.3 mm SL, (Albino) Tigris-Baghdad ; 6.11.1965.

Description : Body depth 19.26 (17.93-20.68) ; head length 21.46 (21.38-21.50) ; head width 16.16 (15.76-16.49) ; head depth 15.13 (14.64-15.48) ; predorsal length 35.16 (33.40-36.34) ; post dorsal length 69.93 (68.84-71.44); all as percentage of standard length. Eye 20.61 (18.85-21.81) ; interorbital space width 29.08 (28.14-29.64) ; snout length 44.18 (42.67-45.33) ; dorsal spine 90.54 (82.04-97.78) ; pectoral spine 86.82 (79.80-94.33) all as percentage of head length. Adipose dorsal fin base 34.31 (31.77-38.01) in anal fin base. Least depth of caudal peduncle 32.32 (29.46-34.0) in its length. Dorsal fin 1.7 : pectoral fin I, 8 ; pelvic fin i, 5 ; anal fin ii, 8-9 ; Caudal fin 7+8=15.

Dorsal profile gently rising to the base of rayed dorsal fin. Snout obtusely rounded. Lips thin ; lower lip studded with 4-6 sensory pores on either side of lower jaw. Mouth subterminal, gape of mouth not extending to orbit. Upper jaw slightly longer, jaws and palate with villiform teeth. Teeth on palate in a semilunar uninterrupted band. Teeth on lower jaw in a moderately curved or angular band, mesially interrupted ; band on upper jaw in a slightly curved continuous band ; teeth uniformly villiform. Barbels four pairs ; maxillary barbells reaching not beyond the pelvic fin ; nasal pair slightly beyond posterior margin of eye ; mandibular pair inserted almost at the same level ; outer mandibular barbels extending upto half of pectoral fin, inner mandibular barbels extending to opercle. In some specimens the origin and extension of the mandibular barbels are visible beneath the skin on the ventral surface. Eyes of moderate size situated at the centre of the head with a free orbital margin, not visible from below. Median longitudinal groove on head as a long single fontannel nearly reaching the base of the supraoccipital process. Occipital process reaching basal bone of dorsal fin and 4.5 times as long as broad. Cleithral process exposed and rugose, half as long as pectoral spine.

Rayed dorsal fin inserted in anterior half of head, above tip of pectoral spine. Dorsal spine smooth on the outer edge and rough

TABLE 1

	Body porportions					
	As percentage			As ratio		
	Range	Mean	n	Range	Mean	n
TL/Body depth	15.60-16.75	16.18	2	5.97-6.41	6.19	2
TL/Head length	17.32-17.48	17.4	2	5.72-5.77	5.75	2
SL/LH	21.38-21.50	21.46	3	4.65-4.68	4.66	3
SL/Body depth	17.93-20.68	19.26	3	4.84-5.57	5.21	3
SL/Width of head	15.76-16.49	16.16	3	6.06-6.35	6.19	3
SL/Head depth	14.64-15.48	15.13	3	6.46-6.83	6.61	3
SL/Predorsal length	33.40-36.34	35.16	3	2.75-3.0	2.35	3
SL/Post dorsal length	68.84-71.44	69.93	3	1.40-1.45	1.43	3
SL/Length of dorsal spine	17.65-21.97	19.75	3	4.55-5.67	5.11	3
SL/Length of Anal fin base	12.36-14.22	13.24	3	7.03-8.09	7.58	3
Snout/IOW	63.19-69.47	65.89	3	1.44-1.58	1.52	3
Adipose fin base/Anal fin base	31.77-38.01	34.31	3	2.63-3.15	2.93	3
LCPD/HCPD	29.46-34.0	32.32	3	2.94-3.39	3.11	3
LH/Eye	18.85-21.81	20.61	3	4.58-5.30	4.87	3
LH/IOW	28.14-29.64	29.08	3	3.37-3.55	3.44	3
LH/Dorsal spine	82.04-97.78	90.54	3	0.98-1.22	1.10	3
LH/Pectoral spine	79.80 94.33	86.82	3	1.06-1.25	1.16	3
LH/Length of snout	42.67-45.33	44.18	3	2.21-2.34	2.27	3
LH/Width of gape of mouth	50.81-55.74	53.84	3	1.79-1.97	1.86	3
LH/Length of max. barbel	40,34-48.93	44.96	3	0.40-0.49	0.45	3
LH/Length of nasal barbel	53.09-65.03	57.50	3	1.54-1.88	1.75	3
LH/Length of inn. mand. barbel	66.12-70.25	68.59	3	1.42-1.51	1.46	3
LH/Length of out. mand. barbel	72.62-96.88	85.50	3	0.73-1.15	0.97	3
LH/Length of dorsal fin base	56.94-68.73	62.66	3	1.45-1.76	1.61	3
LH/Length of anal fin	57.51-66.12	61.70	3	1.51-1.74	1.63	3
LH/Length of caudal peduncle	78.71-87.71	84.24	3	0.79-0.88	0.84	3
LH/Least depth of caudal peduncle	37.43-38.81	38.33	3	2.58-2.67	2.61	3

TABLE 2 Meristic counts of fin rays

	D			P			V			A			C		
SL	142.8	164.3	171.2	142.8	164.3	171.2	142.8	164.3	171.2	142.8	164.3	171.2	142.8	164.3	171.2
	I,7	I,7	I,7	I,8	I,8	I,8	i,5	i,5	i,5	ii,8	ii,8	ii,9	7	7	7
													8	8	8

on the inner edge. Adipose dorsal fin commencing immediately after rayed dorsal fin with a short interspace, smooth, high in posterior part, ending much above anal fin but not reaching caudal fin. Pectoral spine stronger than dorsal spine and serrated along inner margin with 14-18 antrose teeth. Pectoral fin not reaching pelvic fin and pelvic fin not reaching anal fin. Anal fin short, not reaching caudal fin. Caudal fin deeply forked with equal lobes. Lateral line reaching base of caudal fin.

Colour : Pale brown over body, fins and ventral surface lighter in colour. Occipital crest, head shield and cleithral process slightly rugose. 1 ex., 164.3 mm SL from Baghdad Museum is pale white with the head slightly brownish in colour. A black spot at the base of the dorsal spine is also seen in this specimen. In all the three specimens, a dark shoulder spot is visible. Other body proportions and meristic counts are presented in Tables-I & II.

Distribution : Rivers Euphrates, Tigris in Syria Iran and Iraq.

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*Not seen in original