

**GAGATA PAKISTANICA, A NEW CATFISH FROM PAKISTAN (PISCES :  
SISORIDAE)**

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**Abstract:** Only one species, viz., *Gagata cenia* has so far been known from Pakistan. A second species *G. pakistanica* is being described as new to science. It can be easily distinguished from *G. cenia* by its longer maxillary barbels reaching to the base of pelvics, which are shorter in *G. cenia* and only reaching to the pectoral fins.

**Key words:** New catfish, Pakistan: *Gagata pakistanica*.

**INTRODUCTION**

**M**irza (1990) listed only one species of the genus *Gagata* (Family Sisoridae), i.e., *G. cenia* from Pakistan. The population of this genus from the river Indus downstream of Tarbela was found to be distinct from *Gagata cenia* (Hamilton) in several characters, especially the nasal and maxillary barbels. The nasal barbels in this new species extend upto the eye while the maxillary barbels almost reach to the base of the pelvic fins. In *G. cenia*, the nasal barbels are quite rudimentary while the maxillary barbels only reach to the base of pectoral fins. The two species are sympatric in the river Chenab near Qadirabad and might be found in the other rivers together, the specimens collected from Ghazi near Tarbela are of *G. pakistanica* only.

*Gagata pakistanica* new species

Fig. 1

DI/6; PI/8; Vi/6; Ai/12; C17.

*Holotype*

Total length = 7 cm, standard length = 5.6 cm. Collected by Dr. William George & Khalid Abu Bakar on 28-3-1997 from river Indus near Ghazi.

*Paratypes*

Total length = 6.4, 7, 6, 6.5, 6.6, 6.35 cm.

Standard length = 5, 5.2, 4.6, 5.2, 5.3, 5.07 cm.

Collected by Dr. William George and Khalid Abu Bakar on 28-3-1997 from the river Indus near Ghazj.

### *Description*

A rather small and slender species. Head compressed, its length 20—23.58% ( $M = 22.06$ , Holotype 23.2); breadth 15.09—19.23% ( $M = 16.95$ , Holotype 17.85) and height 16—19.23% ( $M = 17.36$ , Holotype 17.85) of standard length. Occipital process not reaching the basal bone of dorsal fin. The eyes present in the 1st half of the head. The eye diameter 4.46—6.73% ( $M = 5.57$ , Holotype 4.46) and the inter orbital distance 5.66—7.69% ( $M = 6.65$ , Holotype 7.14) of standard length.

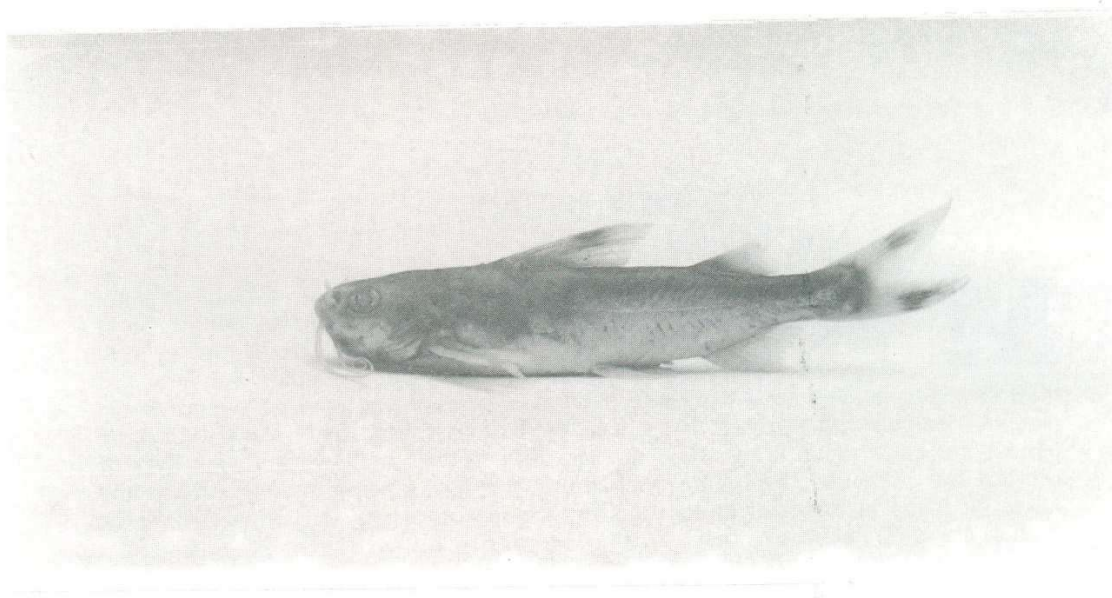


Fig. 1: *Gagata pakistanica*

The body smart, its breadth 10.71—17.30% ( $M = 13.09$ , Holotype 10.71) and height of the body 17.75—21.73 ( $M = 19.51$ , Holotype 17.85%) of standard length. The predorsal length 30.76—33.53% ( $M = 32.43$ , Holotype 32.14); the prepectoral length 17.75—28% ( $M = 22.49$ , Holotype 25); the prepelvic length 44—51.78% ( $M = 48.15$ , Holotype 51.78) and the preanal length 64—73.91% ( $M = 69.21$ , Holotype 73.21) of standard length.

The length of dorsal fin base 10.37—16.07% ( $M = 13.19$ , Holotype 16.07); the length of prectoral fin base 6—7.14% ( $M = 6.24$ , Holotype 7.14); the length of pelvic fin base 3.77—5.76% ( $M = 4.74$ , Holotype 5.35); the length of anal fin base



13.04—17.30% (M = 14.57, Holotype 14.28) and the length of caudal fin base 7.69—12.5% (M = 9.57, Holotype 12.5) of standard length.

Dorsal fin length 25.96—30.43% (M = 27.97, Holotype 28.57); the pectoral fin length 26—32.69% (M = 27.48, Holotype 26.78); the pelvic fin length 16.98—19.23% (M = 17.78, Holotype 17.85); the anal fin length 13.20—21.15% (M = 17.55, Holotype 17.85); the adipose dorsal length 12.5—19.23% (M = 15.97, Holotype 17.85) and the caudal fin length 22.64—32.69% (M = 27.44, Holotype 30.35); the length of caudal peduncle 5.76—13.20% (M = 9.70, Holotype 10.71), the least height of caudal peduncle 5.66—10.86% (M = 7.98, Holotype 7.14); the distance between the adipose and dorsal fin 18.86—23.91% (M = 20.63, Holotype 19.64) of standard length. The dorsal spine smooth and the pectoral spine with 7 serrations.

The length of maxillary barbels 41.42—49.05% (M = 44.68, Holotype 42.55); the length of outer mandibular 11.32—17.85% (M = 13.99, Holotype 17.85%); the length of inner mandibular 9.43—14.28% (M = 11.11, Holotype 14.28) and the length of nasal barbels 3.94—7.14% (M = 5.40, Holotype 7.14) of standard length.

The caudal fin is forked. The upper lobe is slightly longer than the lower lobe.

#### *Colour*

In 70% ethanol the body colour of the specimens is dirty white with copper coloured vertical bands. First band is situated toward the posterior end of the head, 2nd at the origin of the dorsal fin, 3rd behind the dorsal fin, 4th at the origin of the adipose dorsal and 5th at the caudal peduncle. There are colour bands on the dorsal fin.

A black verticle stripe at the base of the caudal fin. Anterior end of the adipose dorsal is black. The colour of the skin is black between the nostrils and between the orbits.

No. of specimens: 7

Longest specimen: 7 cm

#### *Locality*

Ghazi (river Indus).

#### *Distribution*

Pakistan.

#### *Remarks*

Specimens from Ghazi show the following differences from *Gagata cenia*:



*Gagata pakistanica*

- 1) Maxillary barbels attaining length of 41.42—49.05% (M=44.68) of standard length.
- 2) Nasal barbels attaining length of 3.94—7.14% (M=5.40) of standard length.
- 3) Maxillary barbel reaching the base of the pelvic fins.

*Gagata cenia*

- 1) Maxillary barbels attaining length of 16.27—22.22% (M=19.46) of standard length.
- 2) Nasal barbels attaining length of 1.13—2.43% (M=2.09) of standard length.
- 3) Maxillary barbel not reaching the base of the pelvic fins.

Roberts and Ferraris (1998) reviewed the genera *Gagata*. In more of the species described by them the maxillary barbels reach the pelvic fins.

## REFERENCES

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