

NEW REPORT OF THE SPECIES, *Horabagrus brachysoma* IN  
UTTARA KANNADA DISTRICT OF KARNATAKA

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**ABSTRACT**

*Horabagrus brachysoma* Jayaram, a rare catfish belonging to the family Bagridae has so far been reported in the backwater areas of Kerala. This paper extends the geographical range of this species farther north of Kerala upto the northern parts of Karnataka. The study was conducted in four river ecosystems of the Uttara Kannada District of Karnataka. Specimens of this species of catfish were found in downstream as well as midstream reaches of the two rivers Kali and Aghanashini.

**Introduction**

The catfish species, belonging to the family Bagridae, *Horabagrus brachysoma* Jayaram, has so far been reported in the Kerala region of the Western Ghats. It was first described as *Pseudobagrus brachysoma* by Gunther in 1864 and separately by Day in 1865 (Proc. zool. Soc. Lond. p. 290; Malabar, ii, p.185, pl. xiii fig. 2) as a specimen from Cochin with the name *Pseudobagrus chryseus*. There seems to have been a controversy about the exact taxonomic position of this species since, in later publications, Day (1877) refers to it as *Macrones chryseus*. The species belonging to the genus *Macrones* are identical to the Indian species of *Mystus*. They are characterised by the following features - the presence of 15 or less number of anal fin rays, the eyes are placed much above the angle of the mouth (thus being invisible from the ventral surface), the barbels are longer than the head, the pelvic fin is far apart from the anal fin and there is a moderately long adipose fin. On the other hand, *M. chryseus* is characterized by the presence of the anal fin with 26-28 rays, the eyes being placed in line with the angle of the mouth such that it

is visible from the ventral surface, the barbels not extending beyond the head and the pelvic fin reaching the anal fin.

Because of these anomalies, *M. chryseus* had to be placed in a separate position from the species belonging to the *Mystus* group and for some time, was placed in the genus *Pseudobagrus* as *P. brachysoma* (Jayaram, 1952). *P. brachysoma* is the only species of the genus belonging to the Indian subcontinent while the other species of the genus are Chinese. A comparison of specimens of *P. brachysoma* with the other specimens of *Pseudobagrus* show that they are not congenetics and subsequently, the former was given a new generic rank and named as *Horabagrus* (Jayaram, 1955).

The species *Horabagrus brachysoma* has a moderately elongated, compressed body with a large head and a wide subterminal mouth. The eyes are large, inferior and visible from the ventral portion of the individual. The dorsal fin, consisting of the rayed fin with 5-7 rays, possesses a hard spine and is separated from the softer smaller adipose dorsal fin. It also has four pairs of barbels: one nasal, two mandibular and one maxillary.

This species has, till date, been reported with Neyyatinkara (near Trivandrum) - a backwater of Kerala - forming the southernmost limit and regions near the Karnataka border forming the northernmost limit.

### **Materials and Method**

Field surveys are being conducted in the river systems of the district of Uttara Kannada, located in the northern part of Karnataka. Uttara Kannada, situated at 13° 52' to 15° 30' N and 74° 5' E, forms part of the northern extent of the Western Ghats. This region has a number of both perennial and temporary streams and rivers. I have been studying the fish diversity of four main west flowing rivers- Sharavati, Aghanashini, Bedti and Kali. Fish collections have been made using methods that employ gill nets, cast nets and drag nets. Samples have been collected from 6 sites in each of these four rivers during the period of January 1997 to January 1999.

### **Results**

During recent surveys, fresh samples of *Horabagrus brachysoma* have been collected at the rivers Kali and Aghanashini near the downstream reaches of these river systems. We first recorded the presence of the species in the river Kali at Kadra (74° 20' E, 14° 53' N, altitude of approx. 100m. above M.S.L.). The habitat at this site consists of

smooth flowing runs and the riparian vegetation here is mostly composed of long stands of Bamboo and species of *Terminalia*. The collections were made using gill nets and cast nets. The site at Kadra is very close to the Kaiga Dam Project and forms part of the reservoir. As a result, the water here is regulated. Interviews with local villagers revealed that the species is found in this region, but is rarer than other members belonging to the family Bagridae. The first collections were made in March 1998. Later, in April 1998, we tried to get more specimens from the region and collected one more specimen of the species from the downstream reaches of the river Aghanashini at Hulidevarakodlu (74° 40'E, 14° 24' N, altitude of approx. 500m. above M.S.L.). The River Aghanashini is subjected to much less human disturbance than the river Kali. The study area near Hulidevarakodlu is pristine, with thick evergreen forests consisting of species of *Terminalia*, *Eugenia hyneana*, *Callophyllum* spp., *Mangifera indica*, *Pongamia*, etc forming the riparian vegetation.

Two more specimens have been collected this year (in Jan.1999): one at the same site on the river Kali (at Kadra) and one at Kirtigadde (74° 36.5'E, 14° 26' N, altitude of approx. 500 m above M.S.L.) 1 Km. downstream of Hulidevarakodlu. Some of the morphometric details of the specimens are given in the table (Tab.1) below.

### **Discussion**

The species *Horabagrus*, listed as endangered, has been collected only in the Kerala region. This report on the presence of *Horabagrus brachysoma* in Uttara Kannada is important since it extends the presently known geographical range of the species from Kerala to regions much further northwards along the Western Ghats. Though it has not yet been reported from the southern districts of Karnataka, our findings suggest the possible occurrence of the species all along the hill streams of the Western Ghats.

### **References**

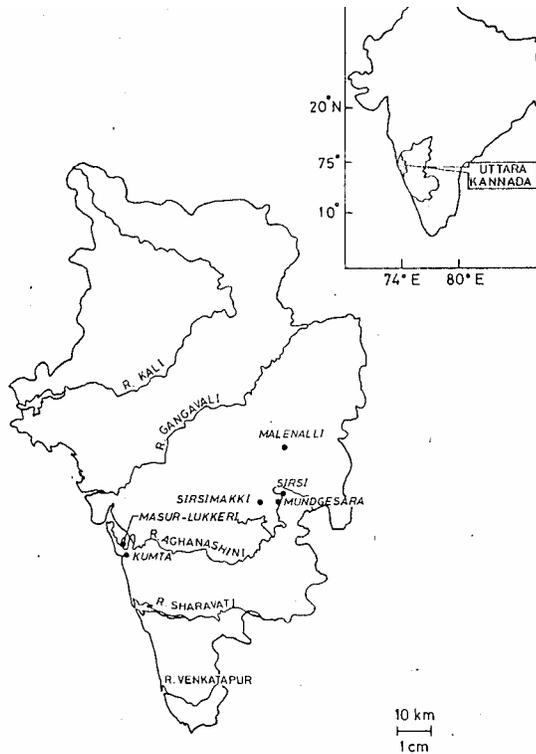
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**Fig. 1. Map of the study area , Uttara Kannada District, Karnataka**

**Morphometric details of the specimens (in centimeters)**

Parameter measured	Specimen from Kadra	Specimen from Hulidevra-kodlu	Specimen from Kadra
Total length	14.4	19.9	21.2
Standard length	11.8	16.2	17.4
Head length	3.2	4.2	4.8
Body depth	3.1	4.5	5.2
Length of snout	1.2	1.9	2.1
Eye diameter	0.65	0.9	1.0
Interorbital distance	1.8	2.6	3.
Length of barbel- nasal barbel	1.6	2.1	2.3
maxillary barbel	2.1	2.8	2.4
outer mandibular barbel	2.2	2.5	2.6
inner mandibular barbel	1.2	1.7	1.8
Predorsal distance	4.2	6.4	6.5
Postdorsal distance	7.8	9.5	11.2
Distance from pectoral fin base to pelvic fin base	3.9	4.2	4.5
Distance from pelvic fin base to anal fin base	1.0	1.4	1.4
Length of caudal peduncle	1.6	2.3	2.2
Height of caudal peduncle	1.3	1.9	2.0
Height of dorsal fin	1.8	3.6	3.7
Length of pectoral fin	2.5	3.1	3.6
Length of pelvic fin	1.5	2.1	2.2
Length of anal fin	2.8	4.1	4.6