Uttar Pradesh J. Zool. 30(2) : 213-219, 2010 ISSN 0256-971X

FRESHWATER ICHTHYOFAUNA OF KAN AND BURAI RIVERS OF SAKRI TAHSIL (DISTRICT- DHULE) OF MAHARASHTRA

S.S. PATOLE
V.V.M's. S.G.PATIL ARTS, SCIENCE AND COMMERCE COLLEGE,
SAKRI-424 304, INDIA.
(e-mail : vidyavikas2006@rediffmail.com)

The freshwater Ichthyofauna of Kan and Burai rivers Sakri tahsil (District-Dhule) was surveyed by making five collection stations spread over the entire tahsil and all main places were visited. Sixty five specimens were examined comprising of 21 species (17 generas) of fishes of five orders. Order Cypriniformes reports maximum number *i.e.* 14; it is followed by Perciformes (4). Whereas Siluriformes, Osteoglossiformes and Synbranchiformes contribute only single species. In present investigation out of total reported species, nine species of the fishes are reporting first time from this region.

Key words : Ichthyofauna, Cypriniformes, Perciformes, Siluriformes species, Osteoglossiformes. Synbranchiformes.

INTRODUCTION

Ichthyofauna of Maharashtra has been subject of only a few studies. Some earlier as well as recent workers *viz.* Annandale (1919) studied the fish fauna of Satara and Poona district. Frazer (1942), Tonapi & Mulherkar (1963), Tilak & Tiwari (1976) of Poona district. Singh & Kamble (1987) surveyed Jalgaon district. Singh (1990) reported Dhule district. Yadav (2004 & 2006) recorded fish fauna of Pench National Park, Nagpur and Tadoba National Park, Chandrpur, respectively while Jadhav & Yadav (2007) surveyed Ratnagiri district. The previous work of Singh (1990) the ichthyofauna of Dhule district reported 25 fish species. The present ichthyofaunal account adding nine new species actually have been colleted and updated from the literature. However, very scanty information (except, Singh, 1990) is available on fish fauna of this region especially Kan and Burai rivers of Sakri tahsil. Hence attempt has been made here to present piscine inventory from these two rivers. Both rivers harbour a rich fish fauna (Singh, 1990).

Dhule district, formerly known as West Khandesh, lies between 20^0 38' and 22^0 3' North latitude and 73^0 47' and 75^0 11' East of longitude. Sakri is one of the major tahsil of this district. It lies between 20^0 59' 25'' N latitude and 74^0 19' E longitudes. Kan and Burai, both rivers are flowing through tahsil and become tributaries of western flowing Tapi river. The present work of fresh water fishes comprising 21 species of 17 genera, in 7 subfamilies of 10 families under 5 orders has been prepared.

MATERIALS AND METHODS

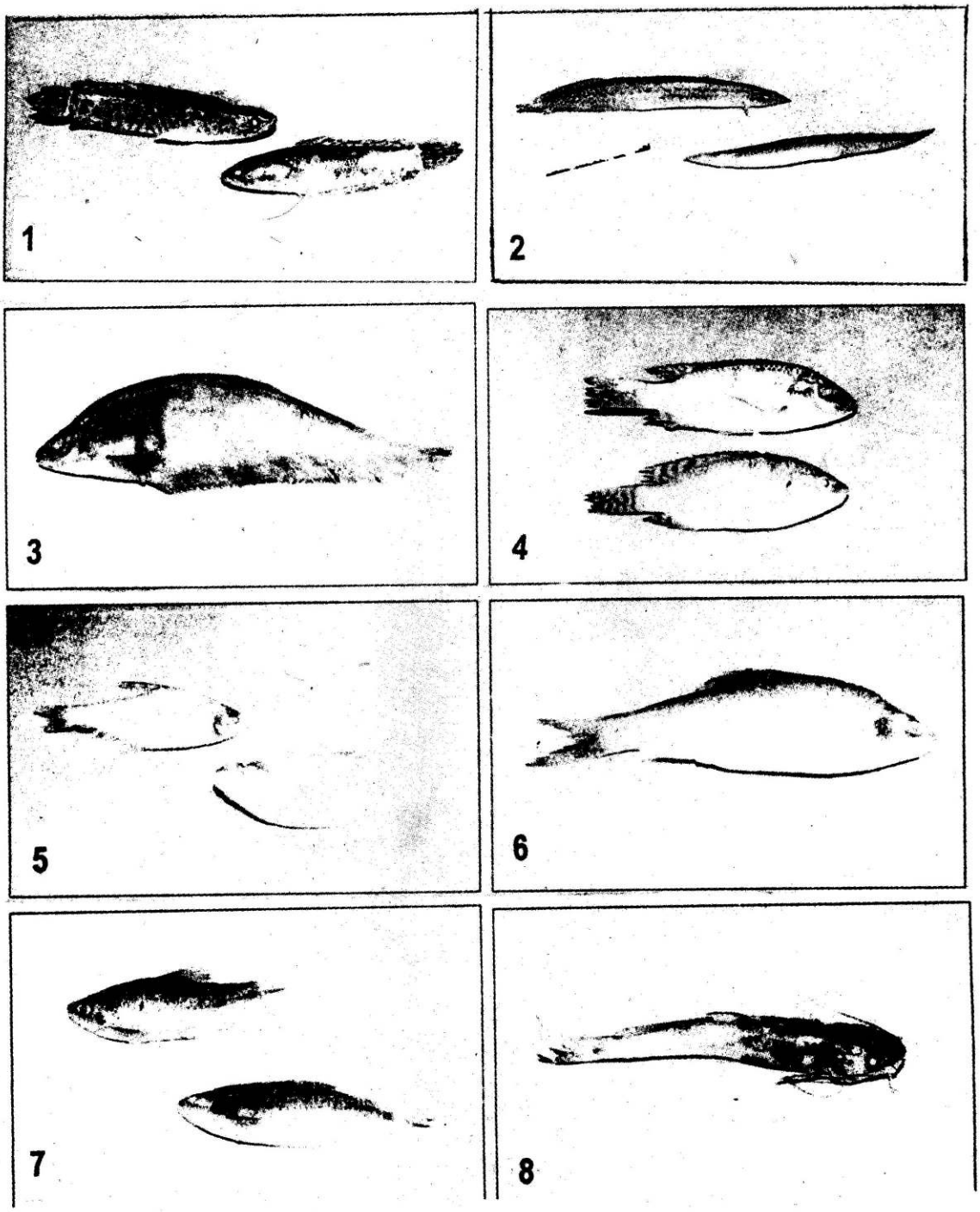
The fish material was collected from Kan and Burai rivers of Sakri tahsil having five stations namely, Dahiwel, Dusane, Sakri, Nijampur and Vardhane. Fishes were colleted during September 2008 to March 2009 by applying different methods by using cast net having 6 meter diameter as well as with aid of smaller net or bag net in shallow water. The fish specimen collected were instantly fixed in 4% formaldehyde solution and subsequently after 4-6 hour's fixation and washing with tap water, transferred to 70 % ethanol. The large sized specimen was given incision on its belly. While identify in the

Table 1: Ichthyofauna of Kan and Burai Rivers (Tahsil-Sakri).

S. No.	Scientific and (common) name of the fish species	Locality within Panzara region and (status)	Distribution in India	Diagnostic features and Remark
I. A i 1	Order - Cypriniformes Family- Cyprinidae Sub-family- Danioninae *Barlius bendelisis* (Ham-Buch) (Zora)	Dahiwel, Sakri. (Common)	Throughout India except Kerala	Body elongated, Head sharply pointed. Barbles 4, short. Caudal fin forked. Body covered with clusters of bands. It attains 6 inches in length.
2.	*Danio aequipinnatus* (Mc Cle.) (Ger)	Sakri (Common)	Throughout India	Body elongate, compressed. Head moderate, blunt. Lateral bands extending from eyes to caudal base. Fins yellowish. Dorsal and anal fins with broad, bluish bands. It attains 6 inches in length.
3.	*Rasbora daniconius* (H & B) (Kanthya)	Sakri (Common)	Throughout India	Head and snout slightly pointed. Mouth large. No barbles. Dorsal fin without spines. Caudal fin forked. Color- Greenish yellow above, silvery at sides. It grows 8 inches.
Ii 4.	Sub-family- Cyprininae Tribe- Systomini Sub-tribe- Osteobramae *Osteobrama cotio cotio* (H & M) (Ger)	Sakri (Common)	Throughout india except Malabar and South of the Kistna.	Body short, compressed. Head short, snout bluntly rounded. Eyes large. No barbles. Caudal fin forked. Color- silvery darkest superiorly, often with silvery lateral line. Length 6 inches.
5.	Sub-tribe- Systomi *Puntius conchonius* (H & M) (Chhoti-Dhebaree)	Dahiwel, Dusane (Common)	Bramhaputra, Ganga, Mahanadi and Cauvery river system.	Body short, Without barbles. Color- Greenish. A large rounded black, lateral spot on tail. Fins orange, Heightinches.
6.	*Puntius sarana sarana* (H & M) (Kunder)	Sakri (Common)	Throughout North of Krishna river system	Moderate body, short head. Barbles absent. Color- Dark gray above, silver below with horizontal bands. It attains a foot in length.
7.	*Puntius sophore* (Ham-Buch) (Lal -Dhebaree)	Vardhane, Sakri, Dusane.	Throughout India below 2000 ft.	Head short, No barbles. Silvery often with scarlet (reddish) lateral band. A rounded black blotch at the

		(Common)	altitude.	root of caudal. Height attains 5 inches.
8.	*Puntius ticto* (Ham-Buch) (Chhoti-Dhebaree)	Dusane (Common)	Throughout India	Body moderately short. Barbles absent, Dorsal fin short but larger than anal fin. Caudal fin forked. Small scales. It attains 4 inches in length.
iii 9.	Sub-family- Garrinae *Garra mullya* (Sykes) (Mhya masa)	Sakri, Dahiwel. (Common)	Throughout India, except Assam and the Himalaya	Body short. Mouth blunt, eyes small. 2 Barbles. Scales moderate, caudal fin slightly emarginate. Dark black to olive color dorsally. Length 5 inches.
b iv 10.	Family- Balitoridae Sub-family- Nemachelinae *Acanthocobitis botia* (H & B) (Mooree)	Sakri, Dahiwel. (Common)	Ganga and Bramhaputra river system. Deccan, Poona	Body with irregular black blotches, caudal fin barred. 6 barbles. It attains 3 inches in length.
11.	*Nemacheilus evezardi* (Day) (Mooree)	Sakri (Common)	Throughout India	Broad head, 8 barbles. Dorsal fin large, caudal fin rounded. Scales- very minute. Color- reddish brown with dark blotches, a dark spot at base of caudal fin. Length attains 3-4 inches.
12.	*Oreonectus evezardi* (Day) (Mooree)	Sakri, Nijampur. (Common)	India- Western Ghats, Godavari & Krishna basins, Satpura range.	Body elongate. Head depressed. Dorsal fin inserted nearer to base of rounded caudal fin. 6 barbles. It attains 3-4 inches in length.
c v 13.	Family- Cobitidae Sub-family- Cobitinae *Lepidocephalus guntea* (H & B) (Mooree)	Sakri (Common)	Northern India, Ganga and Bramhaputra river system	Body elongated. Laterally compressed. Barbles 6. Dorsal fin origin variable. Anal fin short, caudal fin slightly forked, scale small. It attains 3 inches.
14.	*Lepidocephalus thermalis* (Valencinnes) (Mooree)	Sakri. (Common)	South of Krishna river system, Kerala and Karnataka	Body elongated. Barbles 8. Caudal fin forked. Color- sandy with irregular blotches on lateral line and black. 4 bands on caudal fin. Height 2-3 inches.
II d 15.	Order- Perciformes Family- Chandidae *Chanda nama* (Ham-Buch) (Kach-masa)	Vardhane (Uncommon)	Ganga, Krishna, Mahanadi basin	Body short, compressed. Mouth wide & protractile. Two dorsal fins, continuous. Caudal fin forked. Scale small, cycloid. Color- yellowish olive, covered with minute black dots, fins orange. It attains 3 inches in

				length.
e 16.	Family- Channidae *Channa marulius* (Ham-Buch) (Dok- masa)	Sakri (Common)	Throughout India	Body elongated. Dorsal and anal fins long. A large black ocellus at upper part of caudal. Caudal fin rounded. It attains maximum 4 feet.
f 17.	Family- Gobiidae *Glossogobius giuris* (H & B) (Khavale-masa)	Dusane, Vardhane (Common)	Throughout India	Body elongated, head pointed, snout rounded. Two dorsal fins. Scale cycloid. Caudal fin rounded. Color- olive to dusky green above lighter below. It grows up to a foot in length.
g 18.	Family- Cichlidae *Oreochrombis mossabmica* (P) (Shilpi)	Vardhane, Nijampur (Common)	Throughout India	Body elongated, abdomen rounded. Head compressed. Dorsal fin with 15-16 spines, anal fin with 3 spines. Caudal fin rounded. Length 6-8 inches.
III h vi 19.	Order- Synbranchiformes Sub-order- Mastacembeloidei Family- Mastacembelidae Sub-family- Mastacembelinae *Mastacembelus pancalus* (H-B) (Vam-masa)	Sakri (Common)	Throughout India	Body eel shaped. Snout long, pointed. Dorsal fin with 32-40 detached, depressible spines. Caudal fin rounded. Color- Greenish olive above, yellowish below. 7 inches in length.
IV i 20.	Order- Osteoglossiformes Family- Notopteridae *Notopterus notopterus* (Pallas) (Patoda)	Sakri (Uncommon)	Most of river basins.	Body moderately large. Anal and caudal united. Pelvic fins rudimentary, caudal fin small. Fine grayish spot all over body. Eyes golden. 2 feet in length.
V j vii 21.	Order- Siluriformes Family- Bagridae Sub-family- Ritinae *Rita pavimentata* (Val.) (Sisava)	Dahiwel (Uncommon)	Krishna and Godavari river system.	Body short, compressed. 6 barbles. Dorsal fin large with 6-7 rays and a spine. Anal fin short with 8-13 rays. Caudal fin forked. Color- greenish gray above. It attains 4 feet in length.



Figs. 1-8. Photo-plate of some newly reported fish species. **1.** *Channa marulius;* **2.** *Mastacembelus pancalus;* **3.** *Notopterus notopterus;* **4.** *Oreochromis mossambica;* **5.** *Osteobrama cotio cotio;* **6.** *Punctius sarana sarana;* **7.** *Punctius sophore;* **8.** *Rita pavimentatus.*

fish specimens, stress was mainly given on stable characters, both meristic and morphometric. The shape and total length of the body, head and snout; presence and or absence of barbles, their numbers and length; dorsal, anal and caudal fins and scales etc. the fishes were studied, identified and their valid scientific names have incorporated in the present paper.

For identification of fishes Day's Volume-I (1978); Talwar & Jhingran (1991) and latest books of Jayaram (2002) and Misra (2003), and published occasional papers of Yadav (2003, 2006 and 2008) were refereed.

RESULTS AND DISCUSSION

A data presented in Table I shows Scientific and common name, locality within river areas and status of fish, distribution in India and diagnostic features with remarks etc. The present account reports an inventory of piscine wealth of 21 species of 17 genera under 5 orders. They include most of food fishes and few are game as well as larvivorous fishes. Among the orders, Cypriniformes form maximum number (66.7%) of the local ichthyofauna followed by Perciformes contribute (19%) and remaining orders e.g. Osteoglossiformes, Siluriformes and Synbranchiformes contribute 4.8 % each. The present study also indicates, 17 fish species are common while 4 are uncommon in occurrence. This categorization is made on the basis of abundance, extent of occurrence and literature (Yadav, 2008). In present work, I am first time reporting 9 new species (Photo-plates) as in comparison, the work of Singh (1990).

The ichthyofauna of both Kan and Burai rivers are so rich; it can be protected by avoiding human interference and intensive exploitation like mass killing or capturing, besides water pollution, short term flowing and irrigation activities. The dumping of agriculture waste as well as sewage discharges responsible for loss of natural habitat of fish should be legally banned.

ACKNOWLEDGMENTS

I am grateful to the Dr. Anil Mahabal (Scientist E; office-in-charge), Dr. S. G. Patil (Scientist-C), Dr. B. E. Yadav (Sr. Zool. Assitt.) and Mr. S.S. Jadhav (Jr. Zool. Asstt) Zoological Survey of India, Western Regional Station, Poona for providing facilities and valuable guidance for identification of fishes. Sincere thanks to our Principal, for providing laboratory facilities and survey parties for collecting valuable fish specimens under this project.

REFERENCES

ANNANDALE, N. 1919. The fauna of certain small streams in the Bombay Presidency. V. Notes on freshwater fish mostly from the Satara and Poona districts. *Rec. Indian Mus.* **16** : 134-137.

Day, F. Vol. I. 1978. *The fishes of India; being a natural history of the fishes known to inhabit the seas and fresh waters of India, Burma and Ceylon.* Today and Tomorrow's Book Agency, New Delhi

FRAZER, A.G.L. 1942. Fishes of Poona, part I. *J. Bombay Nat. Hist. Soc.* **43**(1) : 79-91.

JADHAV, S.S. & YADAV, B.E. 2007. Enhancing Pisciculture in Northern part of Western Ghats. *Bionotes.* **9**(4) : 114-115.

JAYARAM, K.C. 2002. *The fresh water fishes of the Indian Region.* Narendra Publishing House, Delhi- 110 006.

MISRA, K.S. 2003. *An Aid to the identification of the common commercial fishes of India and Pakistan.* Narendra Publishing House, Delhi- 110 006.

SINGH, D.F. & KAMBLE, R.H. 1987. A note on the Ichthyofauna of Jalgaon district of Maharashtra. *Bull Zool. Sur. India.* **8(1-3)** : 291-93.

SINGH, D.F. 1990. Ichthyofauna of Maharashtra- Dhulia district. *Rec. Zool. Surv. India,* **86**(1) : 83-91.

TILAK, R. & TIWARI, D.N. 1976. On the fish fauna of Poona district (Maharashtra). *Newsl. Zool. Surv. Ind.* **2**(5) : 193-199.

TONAPI, G.T. & MULHERKAR, L. 1963. Notes on the freshwater fauna of Poona, Part I. Fishes. *Proc. Ind. Acad. Sci. Sec. B.* **48**(4) : 187-197.

YADAV, B.E. 2003. Ichthyofauna of Northern part of Western Ghats. *Rec. Zool., Surv. India. Occ. Paper.* **215** : 1-40.

YADAV, B.E. 2004. Pisces. *Fauna of Pench National Park,* Zoological Survey of India Western Regional Station, Poona. *Conservation area series.* **20** : 129-139.

YADAV, B.E. 2006. Pisces. *Fauna of Tadoba Andheri Tigar Reserve.* Zoological Survey of India Western Regional Station, Poona. *Conservation area series* **25** : 137-160.

YADAV, B.E. 2008. Freshwater fishes. *Fauna of Goa, State,* fauna series. **16** : *Zool. Surv. India,* 243-272.