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The ecological requirements and habitat dispersion of *Ompak pabda* Ham. in India

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Abstract
Ompak pabda Ham. is an important species distributed in Indian rivers, reservoirs and ponds. Ecological requirement and dispersion of the species in some selected reservoir is communicated here. The study area is found this species is predominant for years. Suitable ecological requirements database for this species is mentioned for extending *Ompack pabda* fisheries in inland waters.

Keywords: Ecological requirement, Habitat dispersion, Water quality Database, *Ompak pabda* Ham.

1. Introduction
Ompak pabda is a demanding species in inland fisheries since the species has wide habitat zones like rivers, reservoir and ponds. Among the rivers Ganges and river Gomoti have been reported. Reservoirs in Madhya Pradesh, Uttar Pradesh, Chhattisgarh are more common. The species can be reared in large pond in West Bengal conditions. *Ompak pabda* Ham is being a popular catfish fish whose breeding knows how is being known to institute of culture fisheries, However, in CIFRI for the interests of capture fisheries, we are able to determine statistical species dispersion or ranges of suitable water quality parameters required for growth, development and spawning of the species. In this article an informatics on *Ompak pabda* specially on their water quality requirements are communicated.

Fig 1: *Ompak pabda* Ham.

This butter-catfish *Ompak pabda* is one of the important catfishes available in India. Its ecological habitat zones are mainly rivers, reservoir and ponds as well. The species have got a great economic importance among fish lovers, fishermen and fish consumers.

2. Materials and Method
Field visits are made in the district of Jhansi, Uttar Pradesh, and on every occasion the species are found in the reservoir. Water samples are collected and analyzed, Species dispersion and water quality parameters were judged since its pre dominant existence of the species at Barwar reservoir, Jhansi (UP) for consecutive three years on ecological requirements for survivability of Ompack *pabda*. The study says that *Pabda* can be survived, reared and breed under natural water bodies having following water qualities Table-1 for capture fisheries development. The species needs to be conserved for maintaining fisheries biodiversity. Applying recent data-mining techniques in fishery its associated species can also be identified.

Table 1: Water qualities for growth and spawning of *Ompak pabda* Ham.

Water quality parameter	Minimum	Maximum
Depth (cm)	300	1000
Water temperature ºC	8	30
Transparency (cm)	60	120
DO (ppm)	5.8	7.2
pH	7.8	8.5
Conductivity (ms)	96	172
TDS (g/l)	62	105
Alkalinity (ppm)	74	104
Free CO_2	0	7
Chlorinity (ppt)	0.0066	0.0096
Salinity (ppt)	0.041	0.047
NO_3 (ppm)	0.057	0.176
Total N (ppm)	0.344	0.0.91
PO4 (ppm)	0.022	0.17
Sulphate (ppm)	0.66	1.3
Silicate (ppm)	3	7.2
Hardness (ppm)	54	80
Calcium (ppm)	17.6	24
Mg (ppm)	.45	7.3
GPP (mg/m^3)	104	229.2
NPP (mg/m^3)	58.33	125

Its occurrence is observed in Indian reservoir of Barwar in Uttar Pradesh where the study is being made for three consecutive years of water sampling. Beside its existence in Indian river basin. It is also reported that the species can survive in a pond ecological condition beside its importance in capture fisheries. There are four species of *Pabda* (Hamilton, 1822) namely: *Pabda. calicrous*, *P. ompok*, *P. silurus P wallago*.. Species name are mentioned here after necessary correction over Hamilton, 1822.

3. Results and Discussion

The catfish *Ompak pabda* is fed on small fishes, mollusck, insects, microbes along with the planktons including phyto plankton and zoo plankton. Once these fish feeds are available species may exist in such kind of inland fresh water conditions in India. Natural breeding is performed in the reservoir and rivers. In culture fisheries interests, breeding of *Ompack* is made possible in Tripura. This research communication is just an awareness among the fish lovers to popularize *Ompak pabda*. Water quality (Table 1) mentioned may be suitable for species growth and natural breeding.

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5. References

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