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A new size record of Big eye ilisha, *Ilisha megaloptera* (Clupeiformes: Pristigasteridae) with a note on its sexual maturity from Hooghly Estuary, India

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Pristigasteridae family comprising of Genus *Ilisha* is reported to include 13 species of fish in inshore areas across Indo-Pacific region (Talwar and Jhingran, 1991; Mahmood *et al.*, 2012) with *Ilisha filigera* being the largest among all (Whitehead, 1985). All the species exhibit a circum-tropical distribution in estuaries and coastal waters, with eleven in tropical Asia, two in South America and one species in the tropical East Atlantic (Blaber *et al.*, 1998) (Fig. 1). Hooghly estuary is the distributary of Ganga-Bhagirathi river system forming the largest estuary of India (Pannikr, 1966). It is one of the most productive ecosystems and supports important commercial multi-species fisheries. This diverse ecosystem of the Hooghly estuary hosts 76% of the aquatic fauna out of the reported 1498 living organisms (Mitra, 2001). The Hooghly estuarine system is mesohaline in nature due to huge freshwater drainage from the tributaries. *Ilisha megaloptera* (Swainson, 1839), locally known as 'Dhela' in the lower zone of Hooghly estuary, contributes significantly (approximately 2 %) to the total fish landing spectrum. The species is lucrative and admired in the Hooghly estuarine system owing to its excellent taste and flavour.

The goal of the present paper is to update the new size record of *Ilisha megaloptera* (Big eye ilisha) along with a report on its maturity status from Hooghly estuary. A large size specimen of *I. megaloptera* was collected during seasonal catch monitoring sampling carried out in March 2020 from Frasergunj coast (21°34'47"N, 88°15'4"E) of West Bengal (Fig. 2) using a multimeshed drift gillnet (mesh: 60 cm) at a depth range of 45 m. The site Frasergunj is a tide dominant zone experiencing consecutive two high tides and two low tides in a single day creating an interesting mixture of fish fauna. The site is within close proximity of Bay of Bengal located nearly 10 Km away from the sea mouth. The collected fish specimen was stored in ice and carried to the laboratory in ice cover, photographed and identification was confirmed using several identifying keys (Rao, 1973; Talwar and Jhingran, 1991). The morphometric measurements of the sample was taken using a wooden scale to the nearest 0.1 cm and meristic counts were also noted. Furthermore, after recording the sex and maturity stages of the ova (Pillay, 1964) the ovaries were preserved in 4% formaldehyde solution for fecundity evaluation. Gonad was also weighed to the nearest 0.01 gm. The gravimetric method was employed to determine absolute fecundity (Murua *et al.*, 2003). Relative fecundity of the sample was obtained by dividing absolute fecundity to the weight of fish. For histological assessment, a middle portion of gonad was collected and preserved in Bouin's solution. Ethanol series of dehydration process was carried out followed by paraffin embedding. Tissue sectioning was done at 5 µM and stained with hematoxylin and eosin (H&E) to examine histological observation under a light microscope (Zeiss-Scope A1) (Van *et al.*, 2004).

The specimen of *I. megaloptera* collected from Frasergunj (Hooghly estuary) during high tide measured

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