NEW LOCALITY-RECORD OF DISTRIBUTION OF

HORADANDIA ATUKORALI DERANIYAGALA

(PISCES : CYPRINIDAE : RASBORINAE)

ALONG THE WEST COAST IN KERALA, INDIA

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INTRODUCTION

Pethiyagoda (1991) speculated on the possibility of certain cyprinid fishes, believed to be endemic to Sri Lanka, also occurring in India. Proving this notion true, Horadandia atukorali Deraniyagala, 1943, described from the freshwater ponds in the coastal plains of Sri Lanka and earlier thought to be endemic to it, was later recorded from India by Rema Devi and Menon (1992). Based on the specimens obtained from a freshwater pond in the coastal plains of west coast (collection locality: Pathiramanal Island in the ‘Vembanad’ Lake of Alappuzha District, Kerala), they initially described them as a new subspecies Horadandia atukorali brittani Rema Devi and Menon. However, Menon (1999) considered it to be a synonym of H. atukorali.

Rema Devi (1996), later, reported its extended range of distribution to the eastern coastal plains of India, recording the species from the weed infested freshwater bodies at Kalpakkam, Tamil Nadu, and Villianur, Pondicherry, and as well updated the information about the distributional occurrence of the species along the west coastal plains in ponds, ditches and in ‘Vembanad’ Lake of Kottayam and Alappuzha Districts in southern Kerala (Rema Devi, et al, 1996). There has been no record of H. atukorali from the allied habitat environs in the coastal plains of northern Kerala, and further beyond along the west coastal plains of India.

A good number of very small cyprinid fish specimens (12–21 mm long) were collected by us from a freshwater pond—locally known as ‘Mananchira’—in the coastal plains of Kozhikode District in northern Kerala. The fish specimens on detailed study could be identified as H. atukorali.

Horadandia atukorali Deraniyagala

(Fig. 1)

1943. Horadandia atukorali Deraniyagala, J. Royal Asiat. Soc., Vol. xxxv, 96 : 158, 159, fig. 1 (Type locality: Attidiya, Colombo, etc., Ceylon (i.e., Sri Lanka); Munro, 1955, Marine and Freshwater fishes of Ceylon : 41, pl. 7, fig. 107.

**Diagnosis**: The species is characterized by the small body size (hardly 3 cm in total length), with absence of barbels and lateral line, dorsal fin with 3 simple and 7 branched rays, anal fin with 3 simple and 5 branched rays, scale counts: along longitudinal series 19–22, along transverse series 6.5–7, circumpeduncular 8, predorsal 10–12, etc. The features tally with the illustration of species characteristics given by Rema Devi and Menon (*op. cit.*). The fish in life is pale yellowish green in colour, with belly and eyes silvery, and fins hyaline.

Certain salient attributes of biology of the species, according to Brittan (1961), are that this very small carplet is habituated to spawn freely among weeds, and the extremely tiny eggs are found attached to the clumps of weed in water. Eggs hatch in 36–48 hours. The adult ones exhibit no parental care of hatchlings or fry. By the time the fish becomes a little more than a year old, its reproductive life is completed.

The occurrence of this fish species in a pond in the coastal plains of a northern district of Kerala, as presently reported, indicates its extension of range of distribution to northward of Kerala along the west coast of India. There is all the possibility that the species is likely to occur in other freshwater bodies such as ponds, tanks and beels in the coastal plains of the Kozhikode and the other north-bound districts of Kerala, and also further beyond, along the coast.

The pond having an approximate area of 100 sq. m. is an important supply source of drinking water to the city dwellers. It is, therefore, well protected all-around by strong walls, which prevents any kind of seasonal run offs, inflow or outflow, of rainwater. The optimal storage of the pond is attained only through direct precipitation during monsoon period as well as by underground recharges through natural subterranean springs.

The pond, even under protected conditions, has become, over the years, veritably a functional ecological system of a pond habitat. Its lentic waters harbour considerable accumulation of hydrilla weed and also profuse growth of grassy weed in the shallow margin waters. The sample specimens of fish were collected, using a plankton-net, from the grassy weed growth in the shallow waters of the pond in the margins. The apparent ease availability of the fish specimens (a few sweeps of the plankton-net through the shallow, margin waters resulted in the collection of 12 specimens of 9–21 mm TL) during the collection indicates that a good population of *H. atukorali* thrives in the pond habitat. This carplet must have had the opportunity to proliferate in the congenial habitat conditions of the pond system, which remains both isolated and protected in nature.

The sample collection from the pond also included, besides *H. atukorali*, the other common fish species such as *Puntius vittatus* Day, *Pseudosphromenus cupanus* (Valenciennes) and *Aplocheilus blocki* (Arnold). The piscivorous birds such as Little Cormorant (*Phalacrocorax niger*), Little Grebe (*Podiceps ruficollis*), Little Egret (*Egretta garzetta*), Median Egret (*Egretta intermedia*) and the Pond Heron (*Ardeola grayii*), are frequent visitors to this pond system, quite often using the pond environs for foraging.
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