



Range extension of *Pethia nigripinna* (Cyprinidae) to Karnataka, India

The black-finned barb, *Puntius nigripinnis* Knight *et al.*, 2012 currently designated to the genus *Pethia* Pethiyagoda *et al.*, 2012 is a little known barb described from the east flowing Cauvery River basin (Knight *et al.*, 2012). The present knowledge on the range of *Pethia nigripinna* (Knight *et al.*, 2012) is based only from its original description, as there have been no subsequent records of this species from the Western Ghats. Until now, *P. nigripinna* is known to occur only in Kalindhi stream, Kabini River in Wayanad, Kerala and Kakkan halla, Moyar River, Tamil Nadu.

During a recent survey of Southern Karnataka, specimens of *Pethia nigripinna* were collected from three additional localities. Two of present collection localities fall within the same east flowing Cauvery River basin, while the other locality falls on the west flowing Barapole River, which flows thorough Valapattinam, Kerala and eventually drains into the Arabian Sea. The two new locations of *P. nigripinna* in the Cauvery River basin are streams in Kalur (12°28'17"N, 75°44'25"E) and Hattihole (12°29'11"N, 75°47'47"E), Madhikeri, Kodagu district, Karnataka. Specimens of *P. nigripinna* were also collected from the Barapole River (12°01'50"N, 75° 55'42"E), Coorg, Karnataka, thus extending the range of *P. nigripinna* from the east flowing Cauvery River basin to the west flowing Barapole River (Fig. 1). A total of 4 specimens of *P. nigripinna* were collected from these three locations. The specimens were identified as *P. nigripinna* based on the absence of barbels and having the last unbranched dorsal ray serrated (see Knight *et al.*, 2012). The specimens had an incomplete lateral line with 20–21 scales in lateral series. The dorsal, anal, pelvic and pectoral fins were black in adult males and the dorsal and anal fins were pale red

in females. The body pattern consisted of a black humeral spot on the 3rd or 4th lateral-line scale and a second larger spot on the 18th and 19th scale, which formed a ring around the caudal peduncle having only two scales between the second spot and the hypural notch (Fig. 2). The specimens of *P. nigripinna* were collected from fast flowing streams as well as riffles with overhanging terrestrial vegetation which provide shady retreats for the species. *Pethia nigripinna* were found moving in small shoals of 2 to 3 individuals and were quick to hide when disturbed. In the Cauvery River headwaters, *P. nigripinna* was found to co-exist with loaches (*Schistura* sp. and *Mesonemacheilus* sp.), Baril (*Barilius gatensis*), Wayanad mahseer (*Neolissochilus wynaadensis*) and a few stone suckers (*Garra* sp.).

Wherever collected, *P. nigripinna* was not abundant. Only a few individual were seen and a fewer were collected. Currently the status of the species and the possible threats are unknown. It is possible that habitat destruction as well as pollution caused by the discharge of domestic sewage and other chemical pollutants like pesticides and fertilizers carried by surface water runoffs could impact the species. It is true that the present knowledge on the diversity of freshwater fishes of Western Ghats is far from complete (Ali *et al.*, 2013a) and Wallacean shortfall, which concerns the deficiency of knowledge of species distribution at different geographical scales is to be blamed for many premature claims of local extinction of fish species (Knight, 2010). In recent times, large fish species are getting the required attention when it comes to bridging the knowledge gap on species distribution (Ali *et al.*, 2013a, b; Knight *et al.*, 2013a,b,c). However, it is the population and distribution of diminutive species such as *P. nigripinna* that need to be monitored before habitat destruction and other anthropogenic factors drive them to the brink of extinction (Knight 2014).

Comparative materials: *Pethia nigripinna*: ZSI/SRC F. 6628, 1 ex. (Holotype) 45.0mm SL, Kalindhi stream of river Kabini, Wyanad, Kerala; Paratypes: ZSI/SRC F. 6629, 3 exs., 33.0–38.0 mm SL, Kalindhi stream of river Kabini, Wyanad, Kerala; ZSI/SRC F. 6578, 2 exs., 34.0–39.0 mm SL, Kakkan halla, Moyar River, Tamil Nadu.

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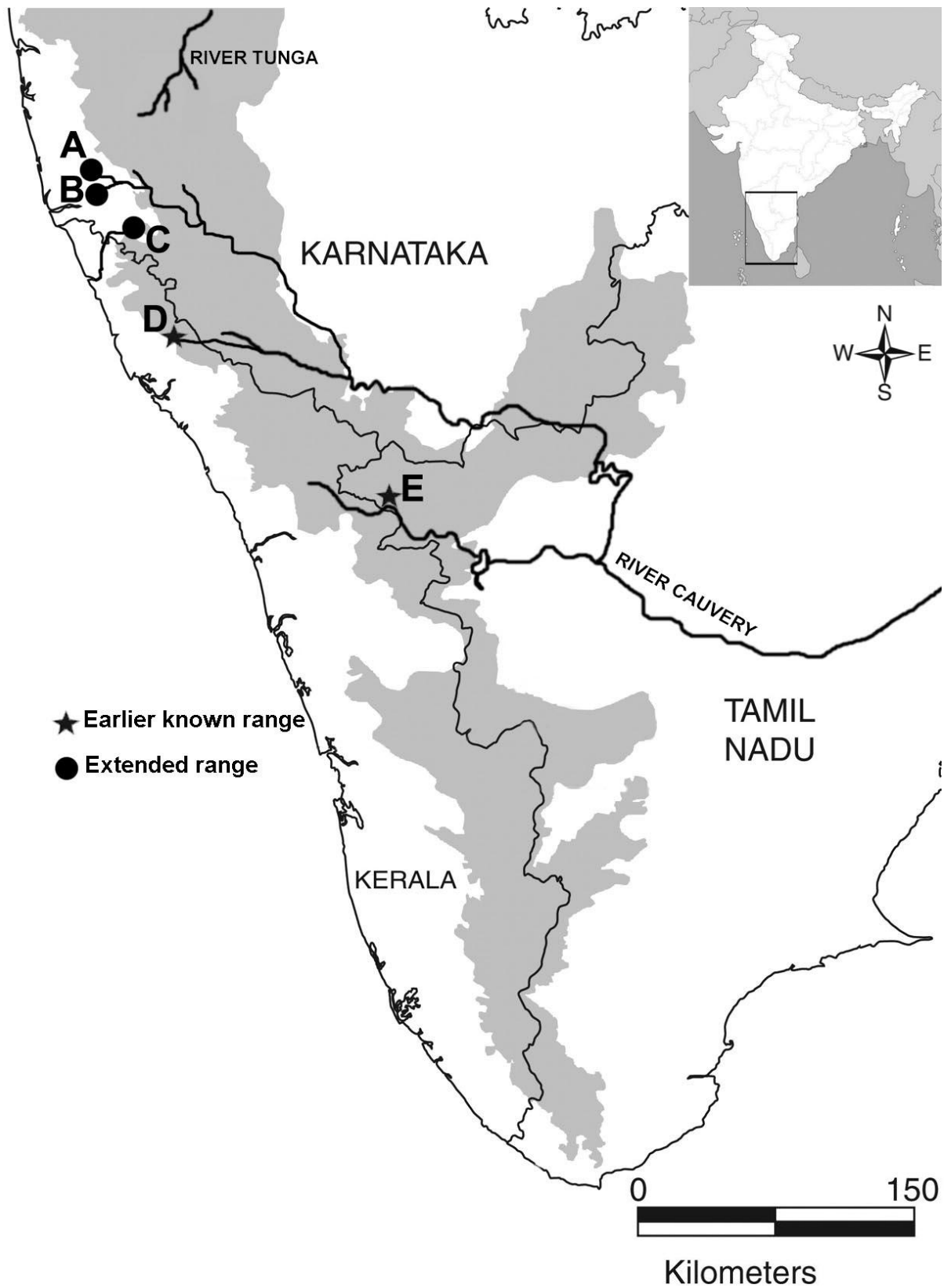


Figure 1: Map showing collection localities of *Pethia nigripinna* from the Western Ghats: A, Kalur, Karnataka; B, Hattihole, Karnataka; C, Barapole, Karnataka; D, Kalindhi stream, Kabini, Kerala; E, Kakkan halla, Moyar, Tamil Nadu.

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Figure 2: *Pethia nigripinna* A, Male from Kalindhi stream, Kabini River, Wayanad, Kerala; B, Female from Barapole River, Coorg, Karnataka.