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Invertebrate Conservation & Information Network of South Asia (ICINSA)

Newsletter of the
Invertebrate Conservation & Information Network of South Asia (ICINSA)

Record of Giant Freshwater Prawn *Macrobrachium rosenbergii* (De Man, 1879) in Krishna River, southern India



Adult giant freshwater prawn *M. rosenbergii* collected from the Krishna River at Nagarale village.

Macrobrachium rosenbergii is commonly known as Giant River prawn or giant freshwater prawn, it is nocturnal, bottom dwelling and sluggish in nature and highly territorial. *Macrobrachium rosenbergii* is distributed in Bangladesh, Brunei Darussalam, Cambodia, China, India, Indonesia, Malaysia, Myanmar, Pakistan, Philippines, Singapore, Sri Lanka and Thailand (New 2002). This species is widely cultured both within its natural range and far beyond. Throughout its

range it is extensively fished for, as well as being the main focus for freshwater shrimp aquaculture. Commercial development of prawn farming has now become widespread, especially in South-Asian countries. *M. rosenbergii*, is a commercially important species in India due to its fast growth rate, large size and good demand with premium price. The species lives in large rivers and stream with a connection to the sea. The maximum recorded size for females and males are 29

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cm and 33 cm respectively. The spawning season of *M. rosenbergii* varies in different regions in its distributional range in the Indo West Pacific region. In temperate regions, the breeding season coincides with the summer; while in tropical regions it is generally restricted to the onset of the rainy season (Valenti 1984) successful mating occurs between soft shelled females and hard shelled males. Gravid females migrate downstream into estuaries, where the eggs hatch as free swimming larvae. The larvae pass through 11 zoeal stages before reaching the post larval stage (Karmakar 2002). Although commercially fished for throughout its range it is not thought to represent a threat to the global population. In view of its large natural range and the absence of any known major threats the species is considered as of Least Concern in IUCN Red List (De Grave et al. 2013).



Adult giant freshwater prawn *M. rosenbergii* collected from the Krishna River at Mhaisal site.

Study area begins from Karad (17.286501 N and 74.181427 E) to Mhaisal (16.8155019 N and 74.6496991 E) state border of Maharashtra approximately 105 Km distance. We have collected different body sized freshwater prawn *M. rosenbergii* in the Krishna River during monsoon and

post monsoon season in the specific sites where deep muddy region is present. Collection was made by using cast and drag nets with the help of local fisherman. Collected specimen was immediately photographed using digital SLR camera (Canon EOS-1100D) at the site, then fixed in 4%



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formalin solution. The specimens were brought to the laboratory and identified with the help of standard keys mentioned in the taxonomic catalogue and manual (New 2002). Adult giant freshwater prawn *M. rosenbergii* collected from Takari (17.1309366 N and 74.3616738 E), Nagarale (17.097651 N and 74.4496237 E) and Mhaisal sites of the Krishna River. Collected specimens lengths were 19 to 31 cm. This is the first report on record of freshwater prawn *M. rosenbergii* in the Krishna River, Sangli district, Western Maharashtra. These specimens may come from the aquaculture ponds accidentally through the streams and lakes present either side of the Krishna River along with rain water during monsoon. Detailed study is necessary to know the species density, diversity, reproductive pattern and ways of introduction in the Krishna River system of Western Maharashtra.

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Suresh M. Kumbar¹, Gautam R. Kulkarni² & Jyoti A. Kumbar³

¹⁻³ Department of Zoology, Arts, Commerce and Science College, Palus, Dist. Sangli, Maharashtra 416310, India. Email: ¹ smkumbar@rediffmail.com (corresponding author), ² gautam.kulkarni04@gmail.com, ³ jyotikumbar@gmail.com

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