

# Holy Cross College (Autonomous)

Nagercoil-629004

Affiliated to Manonmaniam Sundaranar University, Tirunelveli Nationally Accredited with A+ Grade (CGPA 3.35) by NAAC IV Cycle An ISO 9001:2015 Certified Institution SSR 2019-2020 to 2023-2024

3.3.1 Institution has created an ecosystem for innovations, Indian Knowledge System (IKS), including awareness about IPR, establishment of IPR cell, Incubation Centre and other initiatives for the creation of transfer of knowledge/technology and the outcomes of the same are evident





S.No.	Specimen	Authors	BIN Number	Date	Barcode
1.	Name Panulirus	Tyni Joice Raj,	BOLD:		•
	polyphagus	T.G., Shyla	AAX2557	03/03/2021	269
		Suganthi, A.,			
		and Teeni Janet Raj, T.G.			538
2.	Panulirus	Tyni Joice Raj,	BOLD:		•
	versicolor	T.G., Shyla	AAD3352	03/03/2021	269
		Suganthi, A.,			
		and Teeni Janet Raj, T.G.		C	538
3.	Oziotelphusa	Teeni Janet	QU3	0	•
	bouvieri	Raj, T.G.,	BOLD:	05/07/2021	269
		Shyla	ACB4571		
		Suganthi, A. and Tyni Joice	December 1	V 1	538
		Raj, T.G.		5.6	
4.	Oziotelphusa	Teeni Janet	Process ID:		
	parakkai	Raj, T.G., Shyla	SDP678 <mark>00</mark> 8-21	03/07/2021	200
	1	Suganthi, A.		7 (III)	400
	p-	and Tyni Joice			600
	18	Raj, T.G.			
5.	Pseudosesar	Teeni Janet	Process ID:	1987	•
	ma kadiapattina	Raj, T.G., Shyla	SDP678005-21	24/03/2021	200
	- каанаранна - т	Suganthi, A.			-
	\	and Tyni Joice	UCE ET	SPES	400
		Raj, T.G.	MA	AIS	
		1.C.		The state of the s	600
		100	RCOI	L	



### Article-43

Eco. Env. & Cons. 27 (October Suppl. Issue) : 2021; pp. (\$303-\$307) Copyright® EM International ISSN 0971–765X

# A new species of freshwater crab of the Genus Oziotelphusa Muller, 1887 from Tamil Nadu, India (Brachyura: Gecarcinucidae)

Teeni Janet Raj T.G.<sup>1</sup>, Shyla Suganthi A.<sup>2\*</sup>, Tyni Joice Raj T.G.<sup>1</sup>, Anilkumar G.<sup>4</sup> and Neil Cumberlidge<sup>3</sup>

<sup>1</sup>Research Scholar, Department of Zoology, Holy Cross College (Autonomous), affiliated to Manonmaniam Sundaranar University, Tirunelveli, Tamil Nadu, India

\*Department of Zoology, Holy Cross College (Autonomous), Tamil Nadu, India, Nagercoil 629 004.

3 School of Biosciences, Vellore Institute of Technology (VIT), Vellore, Tamil Nadu, India

<sup>4</sup>Department of Biology, Northern Michigan University, Marquette, MI 49855, USA

(Received 8 December, 2020; accepted 18 February, 2021)

#### ABSTRACT

A new species of freshwater crab of the genus Oziotelphusa Muller, 1887, is described from a lake in Tamil Nadu, southern India. Oziotelphusa parakkai sp. is recognized as a new species based on a unique combination of characters of the abdomen, carapace, chelipeds, and first gonopods.

Key words: Oziotelphusa, Gecarcinucidae, Brachyura, Crustaceans, Paratelphusa, Taxonomy.

#### Introduction

Until recently little attention had been paid to the freshwater crabs of India (Potamidae and Gecarcinucidae), there has been an upsurge of interest in this group and a number of workers are now active in this field with the result that the number of species is increasing rapidly (Raghavan et al., 2015; Kumar et al., 2017; Pati et al., 2017; Smrithy Raj et al., 2017). Despite this increased effort, there is still a lot of species awaiting discovery.

Species of the gecarcinucid Oziotelphusa Müller, (1887) are generally found in rice fields, river embankments and streams in the low lying areas of Sri Lanka and southern India (Bahir and Yeo, 2005; Pati & Sharma, 2012). Oziotelphusa is found in both Sri Lanka (O. hippocastanum, O. ceylonensis, O. minneriyansis, O. stricta) and southern India (O. aurantia, O. bouvieri) (Ng and Tay, 2001). The present

study describes a new species of this genus (O. parakkai sp. nov.) from Parakkai, Kanyakumari, Tamil Nadu. India.

## Materials and Methods

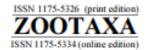
Freshwater crabs (Oziotelphusa parakkai sp. nov.) were collected by hand at night from the channel near Lake Parakkai, Nagercoil, Kanyakumari District, Tamil Nadu, in southern India. This species hides in its burrow during day time. Live crabs were photographed and others were preserved in 70% ethanol and were either dissected or used for morphometric and molecular analyses. Specimens were deposited in Zoological Survey of India, Chennai, Tamil Nadu. The terminology and measurements for the morphological study followed Cumberlidge (1999), Ng (1998), Ng and Tay (2001) and Bahir and Yeo (2007). Carapace Width (CW) and Carapace

Corresponding author's email: shylasuganthi@holycrossngl.edu.in





# Article



https://doi.org/10.11646/zootaxa.4363.2.3 http://zoobank.org/urn:lsid:zoobank.org:pub:F7DEEA81-E29E-433A-B234-4C8A64402EF3

A new species of freshwater crab of the genus *Oziotelphusa* Müller, 1887 (Crustacea: Decapoda: Brachyura: Gecarcinucidae) from Tamil Nadu, southern India

SMRITHY RAJ<sup>1</sup>, APPUKUTTANNAIR BIJU KUMAR<sup>1</sup> & PETER K. L. NG<sup>2,3</sup>

<sup>1</sup>Department of Aquatic Biology & Fisheries, University of Kerala, Kariavattom, Thiruvananthapuram-695581, Kerala, India <sup>2</sup>Lee Kong Chian Natural History Museum, Faculty of Science, National University of Singapore 2 Conservatory Drive, Singapore 117377 (Republic of Singapore)

<sup>3</sup>Corresponding author. E-mail: peterng@nus.edu.sg

#### Abstract

A new species of gecarcinucid freshwater crab of the genus Oziotelphusa Müller, 1887, is described from stationary or slow-flowing bodies of water in Keeriparai near Nagercoil, in the state of Tamil Nadu in southern India. Oziotelphusa ravi, new species, is distinguished from its congeners by several distinct characters: the median tooth of the posterior margin of epistome forms a distinct bilobed tip in frontal view, the male pleonal somite 6 is narrowly trapezoidal and slightly wider than long with the lateral margins concave, the terminal segment of the male first gonopod is distinctly bent laterally (along the longitudinal axis) at an angle of about 45°, and the proximal part of the outer margin of the subterminal segment of the male first gonopod has a prominent deep concavity.

Key words: Taxonomy, new freshwater crab, Nagercoil, Tamil Nadu, rice fields

#### Introduction

Freshwater crabs (Potamidae and Gecarcinucidae) are among the more poorly studied groups of animals because of their secretive habits. Although many new studies have been published and numerous new taxa described in recent years, the number of undiscovered new species is still high due to the paucity of surveys carried out on freshwater crabs in the many habitats in India (Bahir & Yeo 2007; Raghavan et al. 2015; Kumar et al. 2017; Pati et al. 2017).

Gecarcinucid species of Oziotelphusa Müller, 1887, are generally rice field crabs and are widely distributed along the low lying areas of Sri Lanka and India (Bahir & Yeo 2005; Pati & Sharma 2012). Seven species of Oziotelphusa are known thus far from India (Pati et al. 2012). The present paper deals with a new species of Oziotelphusa recently collected from Nagercoil, Tamil Nadu state, southern India.

## Material and methods

Methods of measurement and anatomical terminology follow Ng (1998), Ng & Tay (2001) and Davie et al. (2015). The size of the specimens (in millimetres) refers to carapace width and length, respectively. The specimens are deposited in Western Ghats Regional Centre, Zoological Survey of India (ZSI), Calicut, Kerala; museum collections of the Department of Aquatic Biology and Fisheries, University of Kerala (DABFUK), India; and the Zoological Reference Collection (ZRC) of the Lee Kong Chian Natural History Museum, National University of Singapore. The abbreviations G1 and G2 are used for the male first and second gonopods, respectively.

