

A new record of blue crab *Portunus segnis* (Forskål, 1775) from the Iraqi coast

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Abstract

This study lists the commercially important swimming crab, *Portunus segnis* (Forskål, 1775), on the basis of four specimens collected in March 2020 from two locations of the north west of the Persian-Arabian Gulf, Iraqi coast. External morphological characteristics and first male gonapod G1 were examined, and photographs and illustration of the species are provided. *Portunus segnis* is the first representative of the genus *Portunus* from the Iraqi coast.

Keywords: Commercially crab, Persian-Arabian Gulf, Morphological characteristics.

Introduction

In the Persian-Arabian Gulf, the genus *Portunus* Weber, 1795 is represented by ten species, namely: *Portunus (Achelous) granulatus* (H. Milne Edwards, 1834), *Portunus (Achelous) orbitosinus* Rathbun, 1911, *Portunus (Portunus) sanguinolentus* (Herbst, 1783), *Portunus (Portunus) segnis* (Forskål, 1775), *Portunus (Xiphonectes) arabicus* (Nobili, 1905), *Portunus (Xiphonectes) guinotae* Stephenson and Rees, 1961, *Portunus (Xiphonectes) hastatoides* Fabricius, 1798, *Portunus (Xiphonectes) longispinosus* (Dana, 1852), *Portunus (Xiphonectes) pulchricristatus* (Gordon, 1931) and *Portunus (Xiphonectes)*

tuberculosis (A. Milne-Edwards, 1861) (Naderloo, 2017).

Lai et al., 2010 revised the complex species *Portunus pelagicus* (Linnaeus, 1758) and distinguished four species namely: *P. pelagicus* (Linnaeus, 1758), *P. segnis* (Forskål, 1775), *P. reticulatus* (Herbst, 1799) and *P. armatus* (A. Milne-Edwards, 1861) based on morphological and molecular characters. *P. segnis* is widely distributed commercially crab in the Persian-Arabian Gulf.

In recent years, extensive taxonomic investigations on brachyura species have been conducted in the Persian-Arabian Gulf and along the Iraqi coast, including: (e.g. Naser et al.,

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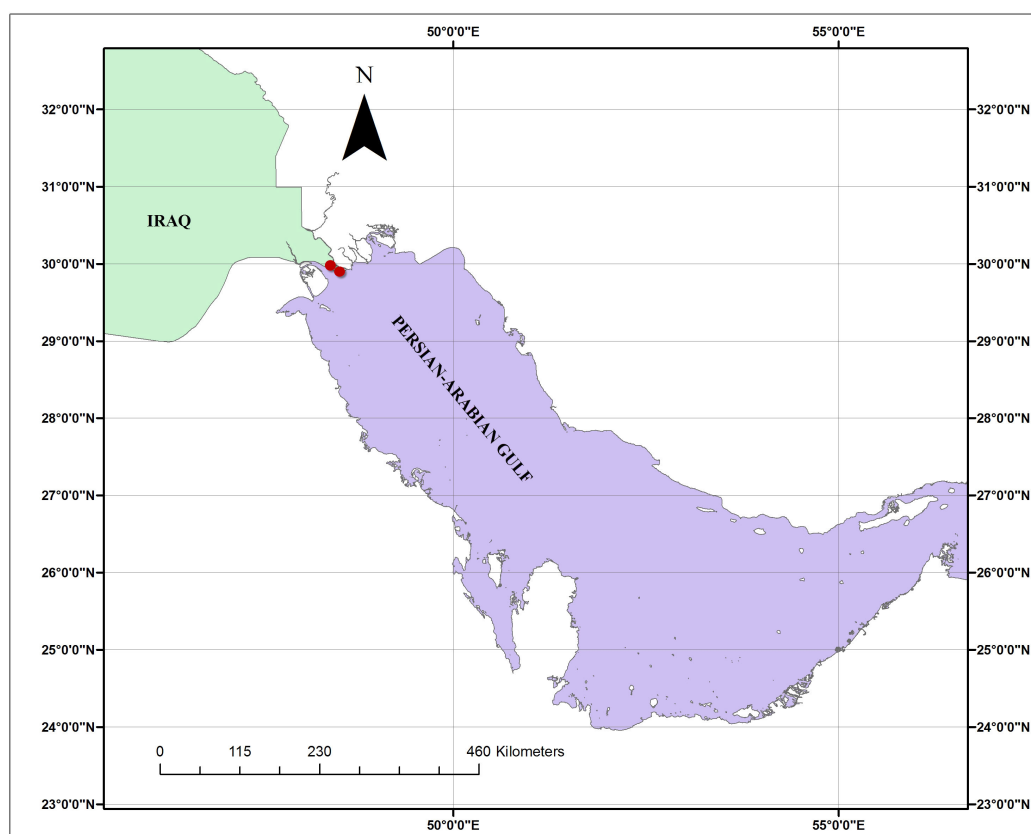


Figure 1. Sampling site (red dot).

2010; Naser, 2011; Naser et al., 2012; Naser et al., 2013; Naser, 2018; Naser, 2019; Yasser & Naser, 2019, Yasser & Naser, 2019b, Yasser et al., 2021). The purpose of this paper is to add another species from the Iraqi coast to the Iraqi brachyuran list.

Materials and Methods

On March 20, 2020, the first author collected four specimens of commercially important

swimming crab, *Portunus segnis* (Forskål, 1775) from two sites at the northwestern Persian-Arabian Gulf, Iraqi shore (Fig. 1). The specimens were conserved in 95% ethanol and deposited in the Marine Science Centre (MSC), University of Basrah, Iraq, with collection voucher number (91). The species classification system was taken from (Lai et al., 2010; Naderloo, 2017). The species' measurements were obtained with an electronic calliper and are reported to the nearest millimeter.

Results and Remarks

The specimens were identified based on the key provided by Lai et al., 2010, and *P. segnis* can be recognised by median teeth frontal teeth

minute, inconspicuous, almost obsolete.

Systematics

Order Decapoda

Family Portunidae Rafinesque, 1815 (Swimming Crabs)

Genus *Portunus* Weber, 1795

Portunus segnis (Forskål, 1775) (Figs. 2,3 and 4)

Examined material –Iraq, Fao region (see Fig. 1) , coll. M.D. Naser, 2 male, 60.9x 140.3; 48.44 x 124.0 mm, 1 female, 47.3 x 123.5 (MSC 91).

The carapace width is 2.07–2.6 times greater than the length (Fig. 2A). The median frontal teeth are minute or obsolete, and are not frequently noticeable, looking confluent or with a wide gap between the lateral median teeth (Fig 3B). The carapace regions are poorly defined when compared to adult male *P. pelagicus*, and branchial regions are not as inflated as they are when compared to adult male *P. pelagicus* (Fig 3A). The sixth male abdominal somite is shorter and less tapered than the fifth (Fig. 2B).

Chelipeds are thin and elongated, with the merus length of mature males reaching a maximum of 4.5 times the width of the cheliped; most individuals have shorter, stouter chelipeds than *P. pelagicus*, and the front margin of the merus of the cheliped is usually covered with four spines (Fig. 3C). Ambulatory legs are elongated and slender, and the merus of the 4th pereopod is 3.3–4.4 (median 3.6) times longer than it is wide. Base of G1 with a small basal protrusion (Fig. 4).

Conclusion

The current research is part of an ongoing investigation in Iraq looking at the diversity of brachyuran crabs. In the Persian-Arabian Gulf, the blue swimmer crab *Portunus segnis* (Forskål, 1775) is widely dispersed species. However, it is new record for the Iraqi coast.

Acknowledgments

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Conflicts of Interest

The authors declare that there is no conflicts of interest.

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Figure 2. A, Male dorsal view and B, Abdominal somites of *Portunus segnis* (60.9x 140.3 mm) (MSC 91).

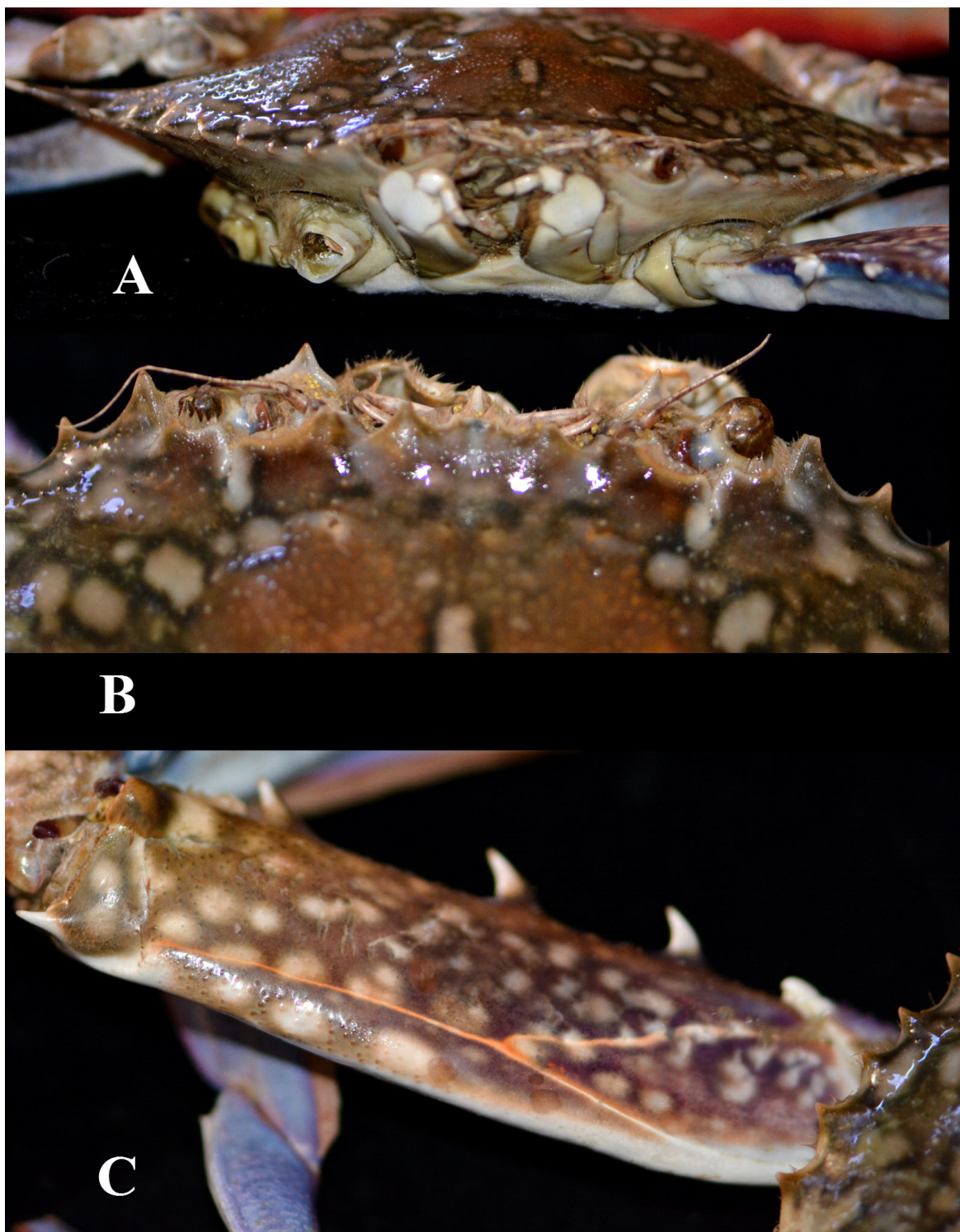


Figure 3.A, Frontal view showing branchial swelling, B, Frontal margin and C, merus of right cheliped of *Portunus segnis* (60.9x 140.3 mm) (MSC 91).

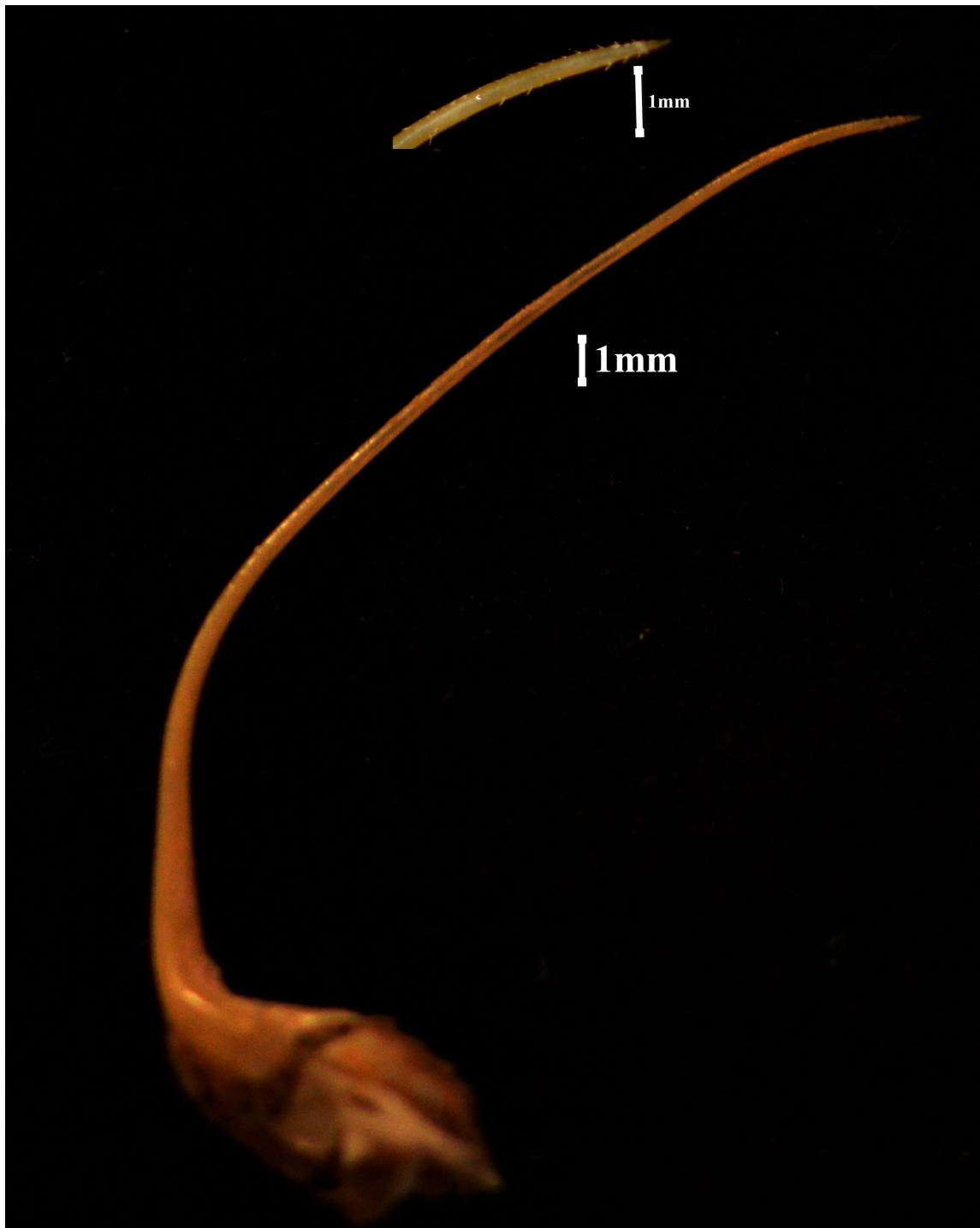


Figure 4. G1 and distal part of G1 structures of *Portunus segnis* (60.9x 140.3 mm) (MSC 91).