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First record of *Dosinia prostrata* (Linnaeus, 1758) (Bivalvia: Veneridae) from the Iraqi coast

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Abstract

The objective of this study is to collect novel data on the distribution of bivalves along the Iraqi coastline. Between 2020 and 2021, a new record of the bivalve *Dosinia prostrata* (Linnaeus, 1758) was discovered along the Iraqi coast in the northwestern Persian-Arabian Gulf.

Key words: Bivalve distribution, Iraqi coast, Persian-Arabian Gulf

1. Introduction

Molluscs are a highly significant category of invertebrates, characterized by their extensive species diversity, biomass, and abundance. They inhabit nearly all types of habitats, except for aerial environments (Kabir et al., 2014). While significant research has been conducted on molluscs throughout the marine coast of Iraq, with notable studies by Ahmed (1975), Al-Hassan and Al-Hasani (1985), Yasser and Naser (2021), Yasser et al. (2022a), Yasser et al. (2022b), Yasser et al. (2023) and Yasser and Naser, 2023, fresh findings continue to be documented periodically. The genus *Dosinia* comprises a significant number of species, and these exhibit substantial variations in both exterior and internal characteristics.

This paper represents the initial documentation of D. *prostrata* on the Iraqi coast northwest of the Persian-Arabian Gulf.

2. Materials and methods

A survey was conducted from 2020 to 2021 to collect specimens of D. *prostrata* from the Iraqi coast located to the northwest of the Persian-Arabian Gulf. The samples were collected from two locations (Fig. 1, 2), situated in the northwestern region of the Persian-Arabian Gulf. Molluscs were obtained by either dredging or manually collecting them from muddy flats. The specimens were preserved in a solution of 70% ethanol and sent to the Marine Science Centre (MSC) at the University of Basrah, together with collection voucher number (512). The naming and classification approach was employed by Bosch et al. (1995) and Oliver et al. (2023) for first identifications.

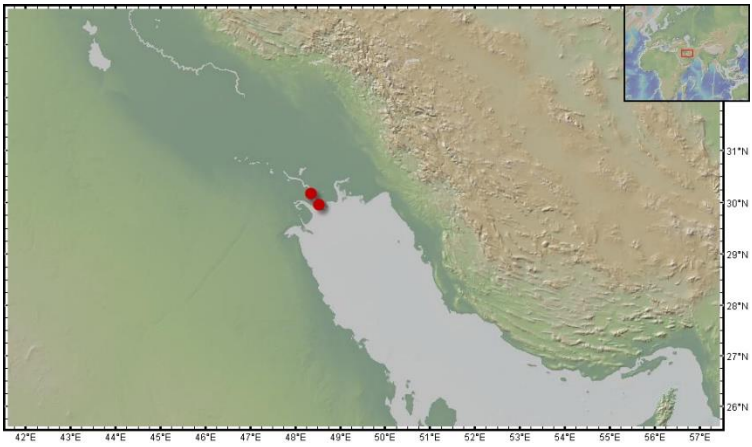

Figure 1. Sampling sites (red dots) of the bivalves from North West of the Persian-Arabian Gulf, Iraq.

Figure 2. Habitat of the bivalve *Dosinia prostrata* (Linnaeus, 1758) from the Iraqi coast

3. Results and Remarks

Class Bivalvia Linnaeus, 1758

Subclass Autobranchia Grobben, 1894

Order Venerida Gray, 1854

Family Veneridae Rafinesque, 1815

Genus *Dosinia* Scopoli, 1777

Dosinia prostrata (Linnaeus, 1758)
(Fig. 3)
Type locality: Indian Ocean.

Figure 3. *Dosinia prostrata* (Linnaeus, 1758)

Shell orbicular transversely striated, with scabro-membranous lips. It dwells as a burrower within the muddy sands along the coast of Iraq. It is already recorded from the strandline of the south coast of Boubyan, Kuwait.

The latest investigation on the marine mollusca of Iraq consists of a comprehensive inventory of marine bivalves (Yasser et al., 2022b; Yasser et al., 2023, and Yasser & Naser, 2023), documenting a total of 42 species. Nevertheless, by documenting the currently recorded species found along the Iraqi coast, the total number of reported species increases to 43.

In the Persian-Arabian Gulf, there are 6 species of the genus *Dosinia* are listed from the Gulf namely: *Dosinia labiosa* Römer, 1862 (type locality: Australia), *Dosinia erythraea* Römer (type locality: Red Sea), 1860, *Dosinia alta* (Dunker, 1849) (type locality: Red Sea), *Dosinia contracta* (Philippi, 1844) (type locality: Red Sea), *Dosinia* sp. (type locality: Persian-Arabian Gulf), and the present species *Dosinia prostrata* (Linnaeus, 1758) (type locality: Indian Ocean) (Oliver et al., 2023).

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Conflict of interests

The authors declare that they have no competing interests.

References

Ahmed, M. M. (1975). Systematic study on Mollusca from Persian Gulf and Shatt Al-Arab. Center for Gulf Studies, Basrah University, Iraq, 1–75.

Al-Hassan, L. A. J., & Al-Hasani, Z. I. (1985). New records of marine Mollusca from Khor Abdullah, Iraq. The Nautilus, 99 (1), 20–21.

Bosch, D. T., Dance, S. P., Moolenbeek, R. G. &, Oliver, P. G. (1995). Seashells of eastern Arabia. Motivate publishing, Dubai, UAE, 1–296.

Kabir, M., Abolfathi, M., Hajimoradloo, A., Zahedi, S., Kathiresan, K., & Goli, S. (2014). Effect of mangroves on distribution, diversity and abundance of molluscs in mangrove ecosystem: a review. Aquaculture, Aquarium, Conservation & Legislation, 7(4), 286-300.

Oliver, P. G., Al-Kandari, M., Behbehani, M., & Dekker, H. (2023). An illustrated checklist of the intertidal Bivalvia of the state of Kuwait. Journal of Conchology, 44(6), 483-527. https://doi.org/10.61733/jconch44601

Yasser, A., & Naser, M. (2021). *Pupa affinis* (A. Adams, 1855) (Gastropoda: Acteonidae) a newly recorded species from Iraq, with an updated checklist of the marine gastropods from the Iraqi coast. Journal of Animal Diversity, 3 (2), 76–80.

Yasser, A. G., Naser, M. D., & Abdul-sahib, I. M. (2022a). Some New Records of Marine Gastropod from the Iraqi Coast. Zoodiversity, 56(4). https://doi.org/10.15407/zoo2022.04.285

Yasser, A. G., Naser, M. D., Oliver, P. G., Darweesh, H., & Al-Khafaji, K. (2022b). Additional records of marine bivalves from Iraq, with a provisional checklist for the marine bivalves of Iraq. Ecologica Montenegrina, 53, 25–34. https://dx.doi.org/10.37828/em.2022.53.3

Yasser, A. G., Naser, M. D., Abdul-sahib, I. M., & Abdullah, D. S. (2023). New records of bivalves from the Iraqi coast. Ecologica Montenegrina, 62, 50-54.

Naser, M. D., & Yasser, A. G. (2023). First record of *Glycymeris taylori* Angas, 1879 and two additional records of *Azumapecten ruschenbergerii* Tryon, 1869 and *Lutraria australis* Deshayes, 1855 from the north west of the Persian-Arabian Gulf. Acta Biologica Sibirica, 9, 521-527.

Yasser, A. G., Naser, M. D., Abdul-sahib, I. M., Son, M. O., & Oliver, P. G. (2023). First record of the invasive non-native Asian date mussel *Arcuatula senhousia* (Benson 1842)(Mollusca: Bivalvia: Mytilidae) from Shatt Al-Basrah Canal, Basrah, Iraq. BioInvasions Records, 12(1), 265-271.