



Received: 11-07-2024
Accepted: 21-08-2024

International Journal of Advanced Multidisciplinary Research and Studies

ISSN: 2583-049X

New record of a gastropod *Nassarius gayii* Kiener 1834 in the Northwest Arabian Gulf

¹ Tariq HY Al-Maliky, ² Zahraa K Shakir, ³ Intisar MA Jabbar, ⁴ Hanan AZ Salbok
^{1, 2, 3, 4} Department of Marine Biology, Center for Marine Sciences, University of Basrah, Iraq

DOI: <https://doi.org/10.62225/2583049X.2024.4.4.3191>

Corresponding Author: Tariq HY Al-Maliky

Abstract

New species have been recorded in the waters of the Iraqi coast overlooking the Arabian Gulf, and among these species is the species *Nassarius gayii* Kiener 1834

belonging to Nassariidae (Gastropoda, Neogastropoda). This is a result of climate change and the resulting biodiversity.

Keywords: Biodiversity, Iraqi Coast, Climate Change

Introduction

The Nassariidae species live in sandy or muddy sediments and are distributed from the intertidal zone to the subtidal zone, and even at depth. Taxonomic studies of the Nassariidae species have revealed many confusing names, synonyms, and misidentifications; for example, of 1323 proposed names for modern species, only 319 were considered correct by Cernohorsky (1984)^[3]. The western Indo-Pacific region has the highest biodiversity of the Nassariidae family, with the genus *Nassarius* containing 211 living species (Cernohorsky, 1984)^[3]. Seventy Nassariidae species have been recorded in Australia (Wilson, 1994)^[13] and 69 from Japan (Tsuchiya, 2000)^[11]. In 1990, 47 species were collected from Indonesia (Cole and Strack, 2000)^[8]. Martin (2008)^[9] reported 41 species from the coast of the Philippines, and 64 species were recorded from Vietnam by Helberg and Kilbourne (2003). In China, only 43 species have been recorded according to Chi (2004)^[12] and Zhang (2008a, b)^[14, 15].

Materials and Methods

Gastropod samples were collected by bottom trawling from the waters of the northwestern Arabian Gulf. After collection, they were stored in plastic bottles containing 75% ethyl alcohol. After arriving at the laboratory at the Marine Science Center - University of Basra, their lengths were measured using a scale and classified based on: Frassinetti, and Covacevich, (1995)^[5] and Gili, (2015)^[6].

Results

Phylum: Mollusca
Class: Gastropoda
Order: Neogastropoda
Family: Nassariidae

Nassarius gayii (Kiener 1834)

Fig 1: Photograph of the newly recorded specie: *Nassarius gayii* Kiener 1834, 13mm

Material examined: 5 specimens, length= 13mm, (MSC).

Description: this gastropod species is small, reaching a length of 13 mm (Fig. 1). It lives in marine waters at depths of up to 15 meters. Its colour varies from one region to another, depending on the environment in which it is found. The surface of its body has simple grooves. It is widespread in the waters of the Indian Ocean. The current study recorded its presence for the first time in Iraqi waters and the Arabian Gulf.

Discussion

The genus *Nassarius* Dumeril, 1806 is represented by many species in the waters of the Arabian Gulf, including *Nassarius albescens* (A. Adams, 1852), *Nassarius jactabundus* (Melvill, 1906), *Nassarius frederici* (Melvill & Standen, 1901), *Nassarius splendidulus* (Dunker, 1846), (Al-Khayat, 1997)^[1].

And a species was recorded for it in Iranian waters in the Gulf represented by the species *Nassarius tagiallii* (Moolenbeek, 2007), (Moolenbeek, 2007). While in Iraqi waters it was recorded for it species *Nassarius arcularius* (Linne, 1758), (Al-Naser *et al.* 2010), and the current study records for the first time the species *N. gayii* (Kiener 1834) in the waters of the Iraqi marine coast northwest of the Arabian Gulf.

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