

**FIRST RECORD OF NEW SPECIES *PHASCOLOSOMAAGASSIZII* (SIPUNCULA) AT SYRIAN COAST FROM THE EASTERN MEDITERRANEAN SEA****\*Izzat Arabiaa**

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Received 18<sup>th</sup> July 2024; Accepted 20<sup>th</sup> August 2024; Published online 30<sup>th</sup> September 2024**Abstract**

Specimens of the sipunculan worm *Phascolosomaagassizii* have been collected for the first time at Latakia coast- Syria in the eastern Mediterranean Sea. They were on soft bottoms between macroalgae beds (*Padinapavonica*) in the intertidal zone. We use morphological characteristics to identify the individuals.

**Keywords:** Sipuncula, Phascolosoma, *Phascolosomaagassizii*, Syrian coast, new species Mediterranean, Distribution.

**INTRODUCTION**

Phylum Sipuncula has included 6 families and 16 genera [1]. They are marine invertebrates animal. They have a tube-shaped body and a single opening ringed with tentacles [2, 3, and 4]. It has a body consisting of two sections: the first is a folded, retractable body and the second is a trunk [5, 6]. The genus *Phascolosoma* Leuckart, 1828, contains a large number of species most of which inhabit the warm shallow waters of the world's oceans [2, 3]. These worms inhabit the area under rocks where mud accumulates. They use the tentacles around their mouth to feed on debris and microorganisms [7, 8, 9, and 10]. Thirty-six species of sipuncula have been recorded in the Mediterranean Sea [11, 12]. The aim of this study is to record this new species for the Syrian coast.

**MATERIALS AND METHODS**

We collected samples from the intertidal zone of Ibn Hani site- Latakia- Syria- in March 2024. Specimens were separated from macroalgae and collected by hand. In the lab, the worms were fixed in 10% buffered formalin and preserved in 70% ethanol. To identify the species, we examined the papillae and hooks, under the microscope.

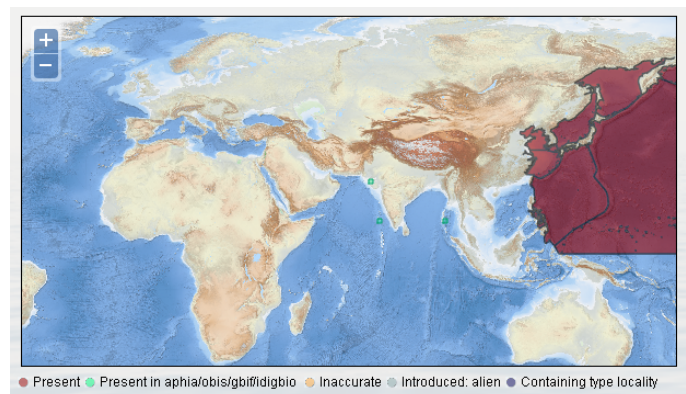
**RESULTS AND DISCUSSION**

Identification:

Domain Eukarya  
Kingdom Animalia  
Phylum Sipuncula  
Class Phascolosomatidae  
Order Phascolosomatida  
Family Phascolosomatidae  
Genus *Phascolosoma*  
Species *agassizii* Keferstein, 1866 [13]

Common Name: Peanut worm

**Morphological characteristics:** The length of this worm, when stretched out, is about 7 cm (Fig.2). It is cylindrical and has a tube shape. This species of Sipuncula has small, thread-like, unbranched tentacles (Fig.3) (at the anterior end of its body). Dark spots and transverse lines (Fig.4), with 15-22 rings of small hooks at its anterior end, mark the folded part of the body. Hooks without spines in their base; consist of one lobe. The trunk is pinkish-brown or light brown, with dark brown spots. The skin is rough due to conical papillae that increase in size at the posterior end of the trunk (Fig.5). According to the morphological observations of these specimens and previous researches [14, 15, 16] the species is identified as *Phascolosoma agassizii* (Keferstein, 1866). This species is distinguished from similar species by the presence of dark spots and transverse lines on its folded body. *Phascolosomaagassizii* is not a common species in the Mediterranean. *P. agassizii* reported for the first time in the northern Cyprus from the eastern Mediterranean [17]. The body length of our specimens are longer than those recorded from the other coasts of the eastern Mediterranean [17], but the same of the length of specimens of western Mediterranean [18, 19]. The small-sized individuals indicated to environmental conditions [17], but our specimens are not small like others in Cyprus. Geographical distribution (Fig.1): Kodiak Island, Alaska to Bahia de San Quintin (Baja California), Sea of Japan. It is also found in the Atlantic, Indian Oceans and Mediterranean Sea [3, 14].

**Fig. 1. Geographical distribution of *P. agassizii*****\*Corresponding Author: Izzat Arabiaa**

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Depth Range: intertidal zone

**Habitat:** In soft bottom under rock, between macroalgae beds.



Fig. 2. *P. agassizii agassizii*



Fig.3. *P. agassizii agassizii*  
anterior

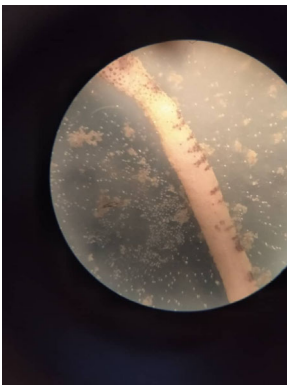


Fig. 4. *P. agassizii agassizii*;  
Dark spots and transverse lines



Fig. 5. *P. agassizii agassizii*;  
posterior end

## Conclusion

A new species is added to the marine Syrian fauna. It is *P. agassizii agassizii*. Syrian coast has suitable conditions for alien species.

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