

## OCCURRENCE OF THE SALP *PEGEA CONFOEDERATA* (THALIACEA: SALPIDAE) IN PAKISTANI WATERS

Shahnawaz Gul<sup>1</sup> and Shahnaz Jahangir<sup>2\*</sup>

<sup>1</sup>Jamia Millia Government Degree College, Malir, Karachi, Pakistan

<sup>2</sup>Centre of Excellence in Marine Biology, University of Karachi, Karachi-75270, Pakistan

\*Correspondence. Email: [shahnazrashid22@yahoo.com](mailto:shahnazrashid22@yahoo.com)

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### ABSTRACT

This study records the salp, *Pegea confoederata* from the coast of Pakistan possibly for the first time. All specimens were aggregate zooids collected this winter in January 2018 from Sandspit, Karachi, Pakistan.

**Key words:** Tunicata, Salpidae, *Pegea confoederata*, Karachi

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Salps are pelagic tunicates, the filter feeding macrozooplanktons with complex life cycle that alternates between asexually reproducing oozoids (solitary) and sexually reproducing blastozoid generations.

During a field visit to Sandspit, Karachi on 20 January 2018, the winter season, two stranded chains of the tunicate, later identified as *Pegea confoederata* Forskål (1775) were observed on the upper shore and photographed. The specimens were collected and preserved in 5% formaldehyde. They were young zooids, identified following van Soest (1974) and Madin and Harbison (1978) and deposited in the Museum of Department of Zoology, Jamia Millia Government Degree College, Malir, Karachi.

### Systematics

Phylum Chordata Bateson, 1885  
Subphylum Tunicata Lamarck, 1816  
Class Thaliacea Nielsen, 1995  
Order Salpida Uljanin, 1884  
Family Salpidae Lahille, 1888  
Subfamily Salpinae Lahille, 1888  
Genus *Pegea* Savigny, 1816  
*Pegea confoederata* (Forskål (1775)  
(Fig. 1)

### Material examined

14 (young) aggregate zooids in two chains, 20-22 mm long, Sandspit, 20 January 2018, MDZ JMGDC TU 6).

### Remarks

In aggregate forms of *Pegea* species, *Pegea confoederata* can be distinguished by having both muscle-band pairs fused in the mid, posterior terminal region very thick, extended around nucleus and no posterior projections. Posterior projections are characteristic only to *P. bicaudata*.

In our specimens, however the first pair of muscle-bands are strongly fused whereas, second seems only touching. van Soest (1975: 193-94) observed this morphological difference in specimens of temperate waters and concluded that, this is latitudinal variation due to variation in number of muscle fibres.

Current state of knowledge about the taxonomic diversity of salps from Pakistani waters is not clear. Sewell (1953) in the John Murray Expedition (1933-34) reported *Pegea confoederata* from Northern part of Arabian Sea, off the coast of Pakistan. The species occurs in the Pacific, Atlantic and Indian Oceans, Mediterranean, Red Sea and Arabian Sea (Kannathasan *et al.*, 2014; Kim *et al.*, 2017).

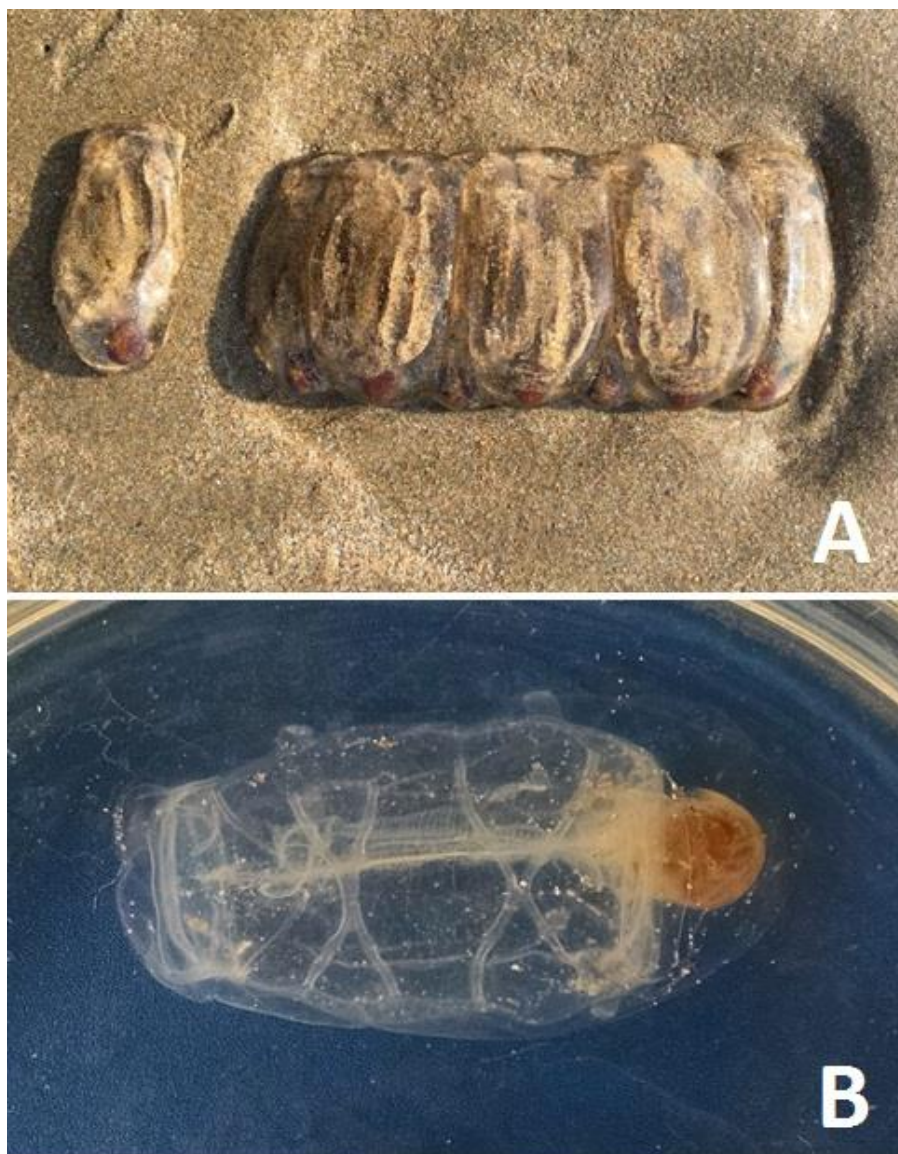


Fig. 1. *Pegea confoederata* Forskål (1775) from the coast of Pakistan. A) specimens (aggregate zooids) at Sandspit; B) one specimen in close up.

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