

## Technical Note on Fisheries of *Babylonia spirata* (Linnaeus, 1758) (Babyloniidae) in Pakistan

Asadullah Ali Muhammad<sup>1\*</sup>, Wajid Ali<sup>2</sup>, Sumera Farooq<sup>3</sup>

<sup>1</sup>Fisheries and Coastal Development Department, Government of Baluchistan

<sup>2</sup>College of Marine Life Sciences Ocean University of China Qingdao

<sup>3</sup>Marine Science Division, Department of Zoology, University of Karachi

\*(E-mail: : asadcemb@gmail.com)

This is the first study on the fisheries of *Babylonia spirata* (Linnaeus, 1758) (Babyloniidae) in Pakistan. *Babylonia spirata* (Linnaeus, 1758) and *Babylonia zeylanica* (Bruguere, 1789) have been fished and exported to Southeast Asian countries and some parts of USA. The fishery of *B. spirata* in Pakistan was started in 2001 and from then the number of fishing vessels targeting this resource increased over the years. Stainless steel Crab Pot was used to capture *Babylonia spirata* in Pakistani waters and dried sardine fish is used as a bait for this fishery. Fishing seasons are in between September and February. %.

**(Keywords:** *Babylonia Spirata*, Fisheries, Pakistan)

### INTRODUCTION

Mollusc is one of the oldest group of living creatures. It has been shown without a shadow of a doubt that they have been on earth meanwhile the Paleozoic period 540 million years ago. Molluscs represent a diverse group of organisms inhabiting this beach, characterized by their ability to bury themselves and their typically slippery and substantial shells. They constitute the second largest phylum following Arthropods (insects), with an estimated identification of 80,000 to 100,000 species (Strong et al., 2008; Rehman et al., 2021). These creatures possess soft-bodied characteristics, which are protected by a singular, calcareous shell that exhibits a range of sizes, shapes, and colors. Molluscs play significant roles within coastal ecosystem food webs, functioning as algae feeders, detritivores, and deposit feeders (Smith 2013; Rehman et al., 2021). Molluscs are an essential part of tropical marine ecosystems due to their abundance, size, variety, and ability to serve as both predators and prey. In tropical Indo-Pacific coastal environments, molluscs are only surpassed by polychaetes and crustaceans in terms of percentage of benthic macroinvertebrates (15 – 40%) (Longhurst and Pauly, 1987). Members of class Gastropoda have been harvested for their meat and shell in prehistoric times (Hill et al., 2015). The whelks, abalones, turbo snails and conchs are the most economically important gastropods. Six species of whelk *Babylonia* *Babylonia areolata*, *B. japonica*,

*B. formosae formosae*, *B. formosae habei*, *B. spirata* and *B. zeylanica* are reported from the World and have commercial significance particularly in Southeast Asian nations.

Due to their high economic worth and widespread overfishing, numerous marine gastropods have displayed severe overexploitation issues in various regions of the globe (Tegner, 1989; Castilla, 1996; Ponce-Diaz et al., 1998; Hobday et al., 2001). This has often resulted in downfall, long-term closure of the gastropod fisheries such as Californian abalone fisheries and Chilean muricid fishery (Castilla, 1996; Karpov et al., 2000; DiNardo et al., 2021). The social and economic ramifications of these disasters have encouraged the development of new management strategies that emphasize both biological and financial sustainability (Castilla, 2000; DiNardo et al., 2021).

The gastropod resources especially Whelks are now become the economically important group in terms of fisheries perspective. Two species of whelks *Babylonia zeylanica* (Bruguere, 1789) and *Babylonia spirata* (Linnaeus, 1758) have been reported from Pakistan. The fisheries of *B. spirata* was started in 2001 in Pakistan. The whelks are fished and exported to Southeast Asian countries and USA in huge amount. The demand and rising industry of whelks in Pakistan resulted in the increase of fishing efforts over the time. Mollusc is one of the oldest group of living creatures. It has been shown without a shadow of a doubt that they have been on earth meanwhile the