## Re-reporting of *Pinctada* sp. (bivalve species, family: Pteriidae) in Gulf of Mannar, Northern Province, Sri Lanka

V. Pahalawaththaarachchi, C.B. Medagedara\*, K.R. Dalpathadu, C. Karunarathne, M.S.M. Fahim, W. Bandara and P. Chathuranga

National Aquatic Resources Research and Development Agency (NARA), Crow Island, Colombo 15, Sri Lanka

The Gulf of Mannar in the Northern Sri Lanka is well known for pearl oysters. The pearl industry in Sri Lanka had played a significant role since the colonial period as a main source of foreign income. Rediscovery of the pearl oyster beds may provide additional source of income for the coastal communities in the area. Therefore, the objective of this study was to rediscover the possible pearl oyster beds in Gulf of Mannar, to obtain Pinctada sp. bivalves and spats for artificial culture. Literature survey and interviews with fishermen, divers and villagers in the Mannar area were used to extract information on possible oyster beds. Based on the information gathered, an underwater survey with line intersect transect method was conducted during March 2019, at Silawathura (Point 01 - E 79' 46.1330, N 08'41.0423) and (Point 02 - E 79' 44.1432, N 08'45.3556) Northern Province in Sri Lanka. Sampling sites were located 13 km away from the mainland in 10 m to 12 m deep water. The length of a transect was 30 m and 1 m<sup>2</sup> quadrates were used for the survey. Total number of 12 and 10 transects were used in point 1 and 2 respectively. A quadrate was placed every 3 m distance along the transect. Specimen were identified up to the genus level based on shell characteristics. Morphometric measurements were taken using a manual caliper (precision of 0.1 mm) so that compromised Shell Height (SH), Shell Width (SW), Shell Thickness (ST) and weight (g) were measured of 120 specimens from each site. The density was recorded as 20 individuals per m<sup>2</sup> (Indi.m<sup>-2</sup>) in point 01 and 5 Indi.m<sup>-2</sup> in point 02. Morphometric parameters recorded as SH, SW, ST and weight were 46.97±4.30 mm, 37.55±4.30 mm, 16.15±2.00 mm and 14.62±3.28 g in point 01 and 48.75±2.38 mm, 39±3.22 mm, 19.05±1.46 mm and 18.30±3.51 g. Conservation guidelines are required to secure their small population and its natural habitat in the Gulf of Mannar.

Keywords: bivalve, Pinctada sp., Gulf of Mannar, rediscovered

<sup>\*</sup>Corresponding author - email: chathuramedagedara@yahoo.com