

**RETUSA CANALICULATA (SAY, 1822) AS A SEDIMENTARY ENVIRONMENTAL INDEX FOR SAND DEPOSITS IN THE IRAQI COAST**

**Bushra Majeed ISSA<sup>1</sup>**

University of Basrah, Iraq

**Abstract**

The aim of the research is to determine the sedimentary environment and estimate the geological period of the rocky islands (solidified sand deposits) and shoals in the Iraqi coast, by studying a type of gastropod class known to be present in the region, which is *Retusa canaliculata* (Say, 1822). Only eight sand sediment samples were used for this purpose. The particle size distribution showed that sediment was formed of Clayey sand, Silty sand, sand and Muddy sand. By checking the species *Retusa canaliculata* (Say, 1822) in the sandy samples, it was observed that the percentage of species individuals increased with the rise in the percentage of sand in the samples. From the shells nature of the individuals of this species, their age is probable to date back to the late Holocene period (less than 4,000 years ago). Which means that the solid sandy sediments were within the aforementioned period, where the estuarine environment was, which represents the ideal environment for the species *Retusa canaliculata* (Say, 1822).

**Keywords:** *Retusa canaliculata* (Say, 1822), Iraqi coast, Rocky islands, Late Holocene, Southern Basrah, Estuarine environment.