Systematic revision of five aspidochirote holothurians species (Holothuroidea: Echinodermata) inhabiting the Posidonia oceanica meadow of the Sidi-Fredj peninsula (Algeria)

Karim Mezali
Institute of Marine Science and Littoral Management, P.O. Box 54, Sidi-Fredj, 42321 Tipasa, Algeria

In this study, we tried to overview the systematics of five Mediterranean aspidochirote holothurian species. Following a morphological, endoskeletal, and anatomical study, and using the most recent systematic works, we could identify two species groups: 1) Holothuria (Holothuria) tubulosa Gmelin, H. (H.) stellati Delle Chieje, and H. (Lessonothuria) polii Delle Chieje were characterised by very diversified spicules in form and in size. 2) H. (Panningothuria) forskali Delle Chieje and H. (Platyperona) sanctori Delle Chieje differ from members of the first group by the extreme reduction of their spicules in number and in size. H. (H.) tubulosa and H. (H.) stellati are often confused because of the similarity of their external morphology. However, H. (H.) stellati differs from H. (H.) tubulosa, from the endoskeleton point of view, by its large thick sticks that present side ramifications of complex forms. H. (Platyperona) sanctori is recognised morphologically by the white spots located on its dorsal face, while H. (Panningothuria) forskali presents two morphological types: one being soft and brown and the other black.