

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

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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 Chiaje, and *H. (Lessonothuria) polii* Delle Chiaje were characterised by very diversified spicules in form and in size. 2) *H. (Panningothuria) forskali* Delle Chiaje and *H. (Platyperona) sanctori* Delle Chiaje 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.