



## Integrative taxonomy of *Ophiothrix* (Echinodermata: Ophiuroidea) [↗](#)

PLOS One

Renata Alitto<sup>1</sup>, Michela Borges<sup>1</sup>, Letícia Dias de Oliveira<sup>1</sup>, Helena Serrano<sup>1</sup>

<sup>1</sup>Universidade Estadual de Campinas

[dx.doi.org/10.17504/protocols.io.t2meqc6](https://doi.org/10.17504/protocols.io.t2meqc6)

**Renata Alitto**

### ABSTRACT

In this protocol, we highlight that molecular data did not have preference over morphological features.

### EXTERNAL LINK

<https://doi.org/10.1371/journal.pone.0210331>

### THIS PROTOCOL ACCOMPANIES THE FOLLOWING PUBLICATION

Alitto RAdS, Amaral ACZ, Oliveira LDd, Serrano H, Seger KR, Guilherme PDB, Domenico MD, Christensen AB, Lourenço LB, Tavares M, Borges M (2019) Atlantic West *Ophiothrix* spp. in the scope of integrative taxonomy: Confirming the existence of *Ophiothrix trinidadensis* Tommasi, 1970. PLoS ONE 14(1): e0210331. doi: [10.1371/journal.pone.0210331](https://doi.org/10.1371/journal.pone.0210331)

### PROTOCOL STATUS

**Working**

#### Character sets

- 1 Species boundaries among populations of *Ophiothrix* were evaluated using four independent character sets in order to test: i) external morphology, ii) arm microstructures morphology, iii) morphometry, and iv) molecular data (16S and COI fragments).

#### Congruence framework

- 2 The CS were classified according to the congruence framework of Padial et al. (2010), when there was concordance of, at least, three data sets analyzed.



This is an open access protocol distributed under the terms of the [Creative Commons Attribution License](https://creativecommons.org/licenses/by/4.0/), which permits unrestricted use, distribution, and reproduction in any medium, provided the original author and source are credited