



Pôster – Outra área temática

Recognizing the diversity of jellyfishes (Medusozoa, Rhopaliophora)

Morandini, André C. (1, 2); Cavalcante, Arthur S. (1); Gamero-Mora, Edgar (1); Jordano, Mayara A. (1); Klovra, Anabelle (1); Lawley, Jonathan W. (3); Maronna, Maximiliano M. (1); Molinari, Clarissa G. (1); Tiseo, Gisele R. (1); Schiariti, Agustin (4); Stampar, Sergio N. (5)

(1) Departamento de Zoologia, Instituto de Biocências da Universidade de São Paulo (IB/USP), São Paulo, SP, Brasil (2) Centro de Biologia Marinha da Universidade de São Paulo (CEBIMar/USP), São Sebastião, SP, Brasil (3) Sea Jellies Research Laboratory, School of Environment and Sciences, Griffith University, Gold Coast, QLD, Australia (4) Instituto Nacional de Investigación y Desarrollo Pesquero, Mar del Plata, Argentina (5) Departamento de Ciências Biológicas, Faculdade de Ciências e Letras, Universidade Estadual de São Paulo (UNESP), Assis, SP, Brasil

The main objective of the project is to generate knowledge about the systematics of jellyfish, focusing on morphological aspects and using molecular tools. The differential of the project lay in using an integrative approach [life cycle, biology, detailed morphology, molecular data] to diagnose and define species. It is composed of several smaller projects including different students and collaborators. Concerning the systematics part: a book with all species of scyphozoans and cubozoans of the world was finished containing descriptions of 271 valid species; we advanced in resolving the identification of species of the genera *Aurelia* (6 redescribed, 4 resurrected, 17 new species being 2 from the Brazilian coast), *Cassiopea* (at least 12 redescribed, and 1 new species), *Linuche* (4 redescribed) and *Nausithoe* (22 redescribed, 1 new species for Brazil) using both morphology and molecular data; the species *Lychnorhiza lucerna* has little genetic variability (COI, ITS) throughout its distributional range (0.7% between Argentina and N Brazil); data from the ultrastructure of the sperm of jellyfishes cannot be used for separating species, but can help in distinguishing the classes Scyphozoa and Cubozoa. Concerning the biology of species: the investment in gonad formation corresponds to 20-30% of total wet weight of medusa of *L. lucerna* and *Chrysaora lactea*; the species *Catostylus tagi* from the Portuguese coast has a metagenetic life cycle (polyp obtained from *in vitro* fertilization); in the species studied (*N. aurea*, *C. plocamia*, *L. lucerna*) the cnidae types do not vary throughout the life cycle, only size; higher temperatures (+ 5°C) under laboratory conditions affect the development and swimming abilities of *L. lucerna* and *C. andromeda*. The genome size of 29 species of Scyphozoa and Cubozoa were generated and data showed that species with reduced or abbreviated metagenesis have larger genomes.

Apoio: Fundação de Amparo à Pesquisa do Estado de São Paulo (FAPESP) 2015/21007-9; Conselho Nacional de Desenvolvimento Científico e Tecnológico (CNPq 304961/2016-7); Núcleo de Pesquisa em Biodiversidade Marinha da Universidade de São Paulo (NPBioMar/USP)