



## Pôster – Evolução e biogeografia

### Identification of colonial species of coronatae scyphozoans (Cnidaria: Scyphozoa: Coronatae): the genus *Linuche* Eschscholtz, 1829

Klovra, Anabelle (1); Morandini, André C. (1, 2)

(1) Instituto de Biociências 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.

The order Coronatae is considered the basal group of the class Scyphozoa. The members of this order have at the polyp stage a peridermal tube that totally surrounds the soft parts, distinguishing them from other Scyphozoa. The characters used for species differentiation consists in external measurements and observations of structures inside the peridermal tube. As far as coloniality is concerned, there are 4 species recorded with this habitus: *Nausithoe punctata*; *Nausithoe racemosa*; *Linuche unguiculata*; and *Stephanoscyphistoma allmani*. The aim of this project was to verify if there were differences in the colonial polypoid stages from different regions identified as 'Linuche unguiculata'. For the observations and comparisons, two types of colonies were used: *in vivo* (cultures) and preserved (SEM) animals from Atlantic and Pacific Oceans. The following characters from the colonies were observed: type of ramification, tube diameter, number of external rings, and presence/absence and patterns of their internal cusps. Regarding the external features, no differences were found between the number of rings among the specimens analysed, and the diameters of the tubes for all the colonies were similar and isodiametric. We recognized 3 shapes for the colonies: stolonal, cauliflower, and verticil type. For internal features, we noticed 3 patterns of cusps: absent; cup-shaped cusps with regular projections at the margin (serrated); and cup-shaped cusps with irregular projections at the margin and surface. Regarding the medusoid stage, all of the colonies produced medusae that had a large number of symbionts (zooxanthellae), 4 pairs of gonads, 8 rhopalia, 16 marginal lobes, 1 shallow coronal groove, and developing subumbrellar sacs. From the data obtained, it can be concluded that the species present in the Caribbean region (Cuba) and in the Brazilian coast comprise a single taxonomic entity, which should be named *Linuche unguiculata*. Regarding the samples from the Pacific Ocean, we concluded that there are at least 3 different species: the first, with a colony structure very similar to the Atlantic Ocean (stolonal), classified in the genus *Linuche*. We were unable to differentiate between the two *Linuche* species described in the Pacific, as live material would be necessary for analysis of the ephyrae and adult medusae. For now, we choose to name this species as *Linuche* sp. The second species was *Nausithoe racemosa*, which has a characteristic colonial structure (cauliflower shaped) and absence of internal cusps. Finally, the third recognized species was *Stephanoscyphistoma allmani*, which has a different colonial growth (verticil type). However, we can not associate this species with any known jellyfish as we did not obtained living material for further comparative studies.

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