

**Supplementary material to the publication: Pigment and fatty acid heterogeneity in the sea slug *Elysia crispata* is not shaped by habitat depth.**Xochitl G. Vital<sup>1,2</sup>, Felisa Rey<sup>3,4\*</sup>, Paulo Cartaxana<sup>5</sup>, Sónia Cruz<sup>5</sup>, M. Rosário Domingues<sup>3,4</sup>, Ricardo Calado<sup>5</sup> and Nuno Simões<sup>2,6,7\*</sup>**Table S1.** Algae consumed by *Elysia crispata* and its presence in the study area, according to literature. Presence of algae in collecting site of this study (Sistema Arrecifal Veracruzano) according to Galicia-García et al. [73].

| Algae                          | Origin of slugs<br>(collected or cultured)    | Assessment                                  | References                         | Present in collecting site<br>(Verde reef)    |
|--------------------------------|---|---|------------------------------------|---|
| <i>Acetabularia crenulata</i>  | col. Florida                                  | DNA   | [6]                                | YES   |
| <i>Acicularia schenckii</i>    | col. Florida                                  | DNA   | [6]                                | YES   |
| <i>Batophora oerstedii</i>     | col. Florida                                  | observations                                | [14]                               | NO  |
| <i>Batophora</i> sp.           | not mentioned                                 | observations                                | [6 <sup>a</sup> ,15 <sup>b</sup> ] | NO  |
| <i>Bryopsidella</i> sp.        | col. Florida                                  | DNA   | [68] in [12]                       | NO  |
| <i>Bryopsis pennata</i>        | col. Florida, Virgin Islands, Panama          | DNA   | [12,68,74]                         | YES <sup>c</sup>                              |
| <i>Bryopsis pennatula</i>      | col. Florida                                  | DNA   | [68]                               | NO  |
| <i>Bryopsis plumosa</i>        | col. Florida; cultured                        | observations;<br>microscopy and<br>DNA      | [14,15,74,75]                      | YES <sup>c</sup>                              |
| <i>Bryopsis</i> spp.           | col. Florida, Curacao, Virgin Islands, Panama | DNA;<br>observations                        | [6,12,40,68]                       | Only the species mentioned above <sup>c</sup> |
| <i>Caulerpa ambigua</i>        | col. Panama                                   | DNA   | [12]                               | NO  |
| <i>Caulerpa racemosa</i>       | col. Florida & Jamaica                        | observations                                | [76]                               | YES   |
| <i>Caulerpa sertularioides</i> | col. Florida & Jamaica                        | pigment<br>analysis (HPLC);<br>observations | [54,76,77]                         | YES   |
| <i>Caulerpa</i> spp.           | col. Florida                                  | DNA;<br>observations                        | [6 <sup>a</sup> ,14 <sup>d</sup> ] | YES, additionally <i>C. cupressoides</i>      |
| <i>Caulerpa verticillata</i>   | col. Florida & Jamaica                        | observations                                | [1,14,15,76,78]                    | NO  |

|                               |  |   |                          |                                    |
|-------------------------------|--|---|--------------------------|------------------------------------|
| <i>Chaetomorpha</i> sp.       | col. Florida & Jamaica                     | observations                                      | [76]                     | YES, only <i>C. nodosa</i>         |
| <i>Chlorodesmis</i> sp.       | col. Curacao, Florida                      | DNA   | [6 <sup>a</sup> ,12]     | NO                                 |
| <i>Codium</i> sp.             | not mentioned                              | not mentioned                                     | [79 <sup>e</sup> ]       | YES, only <i>C. taylorii</i>       |
| <i>Cymopolia</i> sp.          | not mentioned                              | not mentioned                                     | [40 <sup>f</sup> ]       | YES                                |
| <i>Derbesia</i> sp.           | col. Florida, Panama                       | DNA   | [12,68,74]               | NO                                 |
| <i>Derbesia tenuissima</i>    | cultured                                   | electronic<br>microscopy and<br>observations      | [74]                     | NO                                 |
| <i>Halimeda discoidea</i>     | col. Florida & Jamaica                     | observations                                      | [76]                     | YES                                |
| <i>Halimeda incrassata</i>    | col. Florida & Virgin<br>Islands           | DNA and<br>microscopy                             | [6,12,13,68,75]          | NO                                 |
| <i>Halimeda monile</i>        | col. Florida                               | DNA   | [6,13,68]                | NO                                 |
| <i>Halimeda opuntia</i>       | col. Virgin Islands                        | DNA   | [75]                     | YES                                |
| <i>Halimeda simulans</i>      | col. Panama                                | DNA   | [12]                     | NO                                 |
| <i>Halimeda tuna</i>          | col. Florida                               | DNA   | [12]                     | YES                                |
| <i>Halimeda</i> spp.          | col. Florida, Panama                       | observations;<br>DNA                              | [6,12,14,15,68]          | YES, additionally <i>H. scabra</i> |
| <i>Parvocaulis exiguus</i>    | col. Curacao, Panama                       | DNA   | [12]                     | NO                                 |
| <i>Penicillus capitatus</i>   | cultured; col. Florida &<br>Virgin Islands | electronic<br>microscopy;<br>DNA;<br>observations | [6,13,16,68,74,75]       | NO                                 |
| <i>Penicillus dumetosus</i>   | not mentioned                              | DNA   | [6 <sup>a</sup> ]        | NO                                 |
| <i>Penicillus lamourouxii</i> | col. Florida                               | DNA   | [6 <sup>a</sup> ,13, 68] | NO                                 |
| <i>Penicillus pyriformus</i>  | col. Florida                               | DNA   | [68]                     | NO                                 |
| <i>Penicillus</i> sp.         | col. Florida                               | DNA;<br>observations                              | [6 <sup>a</sup> ,14,15]  | NO                                 |
| <i>Polyphysa peniculus</i>    | col. Florida                               | DNA   | [12 <sup>g</sup> ]       | NO                                 |
| <i>Pseudochlorodesmis</i> sp. | col. Florida                               | DNA   | [6 <sup>a</sup> , 68]    | NO                                 |
| <i>Pseudocodiaceae</i> sp.    | col. Florida                               | DNA   | [6]                      | NO                                 |

|                                     |   |               |                    |   |
|-------------------------------------|---|---------------|--------------------|---|
| <b>Rhipiliaceae sp. 1</b>           | col. Florida  | DNA           | [6]                | NO  |
| <b><i>Rhipocephalus phoenix</i></b> | col. Florida  | observations  | [14 <sup>d</sup> ] | YES   |
| <b><i>Siphonogramen</i> spp.</b>    | col. Curacao, Virgin Islands, Florida, Panama           | DNA           | [12]               | NO  |
| <b>Udoteaceae</b>                   | col. Virgin Islands, Curacao & Florida, Panama; Florida | DNA           | [12,74,75]         | YES, only <i>R. phoenix</i>   |
| <b>Ulvophyceae sp. 1</b>            | col. Florida  | DNA           | [6]                | YES, <i>Ulva compressa</i> , <i>U. flexuosa</i> , <i>U. intestinalis</i> , <i>U. lactuca</i> , <i>U. paradoxa</i> |
| <b><i>Vaucheria litorea</i></b>     | not mentioned   | not mentioned | [80 <sup>h</sup> ] | NO  |

<sup>a</sup>Included in the list provided by its Supp. Data 2 [6].

<sup>b</sup>Reference [15] compiled information from literature up until that year; however, included her personal observations.

<sup>c</sup>According to [81], *Bryopsis pennata* is the only valid species in the Atlantic coast of Mexico.

<sup>d</sup>Authors mention that results regarding the feeding of this species of algae were inconclusive.

<sup>e</sup>This publication does not provide detailed information, only states "Certain marine slugs such as *Tridachia crispata* and *Elysia viridis* feed on siphonaceous seaweeds such as *Codium*".

<sup>f</sup>Could not be tracked in the publications cited by those authors and [78]; thus, authors probably observed slugs feeding on this algae.

<sup>g</sup>Reference [12] cites this species from reference [68], but we were not able to find *Polyphysa peniculus* in the original reference.

<sup>h</sup>This publication does not provide detailed information, only states "*Vaucheria litorea*, an alga eaten by *E. chlorotica* and, according to our feeding experiments, by juveniles of *E. crispata*".