

## Variability on microevolutionary and macroevolutionary scales: a review on patterns of morphological variation in Cnidaria Medusozoa

### Organisms Diversity and Evolution

Amanda F. Cunha<sup>1</sup>, Maximiliano M. Maronna and Antonio C. Marques

<sup>1</sup>Corresponding author, Departamento de Zoologia, Instituto de Biociências, Universidade de São Paulo, São Paulo, Brazil. E-mail: amanfcunha@gmail.com

Online Resource 2. GenBank data (up to January 2013) for estimation of Hydrozoa cryptic diversity (Fig. 3). Names of species are in accordance with the original information provided for the sequences in GenBank, although we are aware that misidentifications may occur. When no geographical coordinate was provided with the species record, the coordinates were estimated based on the name of the sampling location, in order to calculate the geographical distance. Species were classified in accordance with their life cycle strategy (holoplanktonic/pleustonic or meroplanktonic/benthic) based on information from the literature.

COI Sequences (GenBank accession numbers)	Species	Number of Haplotypes	Number of geographical locations	Similarity (%)	Distance (Km)	Life Cycle
GQ119939, HM053518	<i>Abylopsis tetragona</i>	2	2	99.1	14115	Holoplanktonic
JQ716190-93, JQ716195-97	<i>Aequorea australis</i>	7	1	97.3	0	Meroplanktonic
JQ716175-77	<i>Aequorea conica</i>	3	1	98.8	0	Meroplanktonic
JQ716056, JQ716185, JQ716181-82, JQ716184	<i>Aequorea papillata</i>	5	1	99.0	0	Meroplanktonic
GQ119940-43, AY937363	<i>Agalma elegans</i>	5 <sup>a</sup>	2	98.0	1900	Holoplanktonic
GQ119944-45, GQ119947-48	<i>Agalma okeni</i>	4 <sup>a</sup>	1	99.1	637	Holoplanktonic
FJ602534-35, GQ120073	<i>Aglantha digitale</i>	3	3	95.5	3257	Holoplanktonic

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JQ716057, JQ716085	<i>Amphinema dinema</i>	2 <sup>a</sup>	1	99.8	0	Meroplanktonic
GQ119956, AY937364	<i>Athorybia rosacea</i>	2	1	99.3	1796	Holoplanktonic
GQ119959-60	<i>Bassia bassensis</i>	2	1	99.5	706	Holoplanktonic
JQ716117-19	<i>Blackfordia polytentaculata</i>	3 <sup>a</sup>	1	99.4	0	Meroplanktonic
JQ716112-13, JQ716115-16	<i>Blackfordia virginica</i>	4 <sup>a</sup>	1	99.4	0	Meroplanktonic
JX121578, GU812438	<i>Candelabrum cocksii</i>	2 <sup>b</sup>	1	100.0	0	Benthic
AY789898-99, AY789901, DQ068054-56	<i>Clytia gracilis</i>	6	4	82.4	5697	Meroplanktonic
AY789902, HM053515, HM053517	<i>Clytia hemisphaerica</i>	3	1	91.4	9391	Meroplanktonic
AY789894-95	<i>Clytia hummelincki</i>	2	2	99.4	8248	Meroplanktonic
JQ716206-09	<i>Clytia</i> sp. KC JRH-2012	4 <sup>b</sup>	1	100.0	0	Meroplanktonic
JQ716198-6205	<i>Clytia</i> sp. n. JRH-2012	7 <sup>b</sup>	1	99.0	0	Meroplanktonic
GQ120076-77	<i>Colobonema sericeum</i>	2	1	99.2	2038	Holoplanktonic
JQ716061-64	<i>Corymorpha verrucosa</i>	4 <sup>b</sup>	1	99.5	0	Meroplanktonic
GQ119967-70	<i>Diphyes bojani</i>	4	1	98.7	0	Holoplanktonic
GQ119971, GQ119973, AY937367	<i>Diphyes dispar</i>	3	2	99.1	3165	Holoplanktonic
JQ716152-55	<i>Eirene brevistylus</i>	4 <sup>b</sup>	1	99.2	0	Meroplanktonic
FJ418658, HM053525-27, JQ716138, JQ716140-42	<i>Eirene ceylonensis</i>	8 <sup>b</sup>	1	91.1	0	Meroplanktonic
JQ716148-51, FJ418659	<i>Eirene hexanemalis</i>	5 <sup>b</sup>	1	97.9	0	Meroplanktonic
JQ716128-29, JQ716131, FJ418660	<i>Eirene kambara</i>	4 <sup>b</sup>	1	99.2	0	Meroplanktonic
JQ716132, JQ716134, JQ716135-36, FJ418662	<i>Eirene menoni</i>	5 <sup>b</sup>	1	99.7	0	Meroplanktonic
FJ418656, JQ716144-46	<i>Eirene pyramidalis</i>	4 <sup>b</sup>	1	99.8	0	Meroplanktonic
GQ119977-80	<i>Eudoxoides mitra</i>	4	1	98.7	405	Holoplanktonic
GQ119981-83	<i>Eudoxoides spiralis</i>	3	1	99.3	962	Holoplanktonic

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JQ716171-72, JQ716174, FJ418666	<i>Eugymnanthea japonica</i>	4 <sup>b</sup>	1	99.5	0	Meroplanktonic
FJ602537-39	<i>Euphysa flammea</i>	3	1	99.0	1011	Holoplanktonic
AB458447-61, AB458463-68, AB458470, AB458473-92, AB458494- 8502	<i>Eutima japonica</i>	49	1	96.9	0	Meroplanktonic
JQ716158-60, FJ418664	<i>Eutima krampi</i>	4 <sup>b</sup>	1	99.0	0	Meroplanktonic
FJ418663, JQ716156-57	<i>Eutima levuka</i>	3 <sup>b</sup>	1	99.4	0	Meroplanktonic
GQ119990, GQ119992, GQ120047	<i>Halistemma amphytroidis</i>	3 <sup>a</sup>	1	99.7	2649	Holoplanktonic
JQ716163-65, FJ418667	<i>Helgicirrha brevistyla</i>	4 <sup>b</sup>	1	99.0	0	Meroplanktonic
JQ716161-62, FJ418665	<i>Helgicirrha malayensis</i>	3 <sup>b</sup>	1	99.5	0	Meroplanktonic
GQ119993-98, HM053521	<i>Hippopodius hippopus</i>	7	2	93.3	6405	Holoplanktonic
JQ716120-21	<i>Laodicea undulata</i>	2 <sup>b</sup>	1	99.4	0	Meroplanktonic
AY789910-12	<i>Laomedea flexuosa</i>	3	1	98.3	1545	Benthic
GQ120001, GQ120066	<i>Lensia campanella</i>	2	1	97.1	0	Holoplanktonic
GQ120004-07	<i>Lensia fowleri</i>	4	1	99.3	52	Holoplanktonic
GQ120016-17	<i>Lilyopsis rosea</i>	2	1	99.8	0	Holoplanktonic
JQ716065, JQ716067	<i>Liriope tetraphylla</i>	2 <sup>b</sup>	1	100.0	0	Holoplanktonic
JQ716109-11	<i>Malagazzia carolinae</i>	3 <sup>b</sup>	1	99.7	0	Meroplanktonic
AY937373, GQ120022, JQ716068-71	<i>Nanomia bijuga</i>	6	3	83.1	9431	Holoplanktonic
AY789904-05	<i>Obelia bidentata</i>	2	1	87.5	6691	Meroplanktonic
AY789906-09	<i>Obelia longissima</i>	4	3	99.3	12325	Meroplanktonic
AY789884-87	<i>Orthopyxis integra</i>	4	2	88.3	11000	Meroplanktonic
FJ602531-33	<i>Paragotoea bathybia</i>	3	1	99.7	0	Holoplanktonic
GQ120032-33, AY937374	<i>Physalia physalis</i>	3	1	99.0	1795	Pleustonic
JQ716077-81	<i>Proboscoidactyla ornata</i>	5 <sup>b</sup>	1	99.4	0	Meroplanktonic
FJ602540-41	<i>Rathkea octopunctata</i>	2	1	100.0	0	Meroplanktonic

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GQ120038-40	<i>Rhizophysa eysenhardti</i>	3	1	99.4	1675	Holoplanktonic
AY937377, GQ120041	<i>Rhizophysa filiformis</i>	2	2	92.7	1875	Holoplanktonic
GQ120043-45	<i>Rosacea</i> sp. 1 BO-2009	3	1	92.5	1804	Holoplanktonic
HQ603190-97	<i>Stylaster californicus</i>	8	1	99.1	0	Benthic
HQ718594, HQ718600, JQ716090-6108	<i>Sugiura chengshanense</i>	21 <sup>b</sup>	2	99.0	0	Meroplanktonic
GQ120048-50, AY937378	<i>Sulculeolaria quadrivalvis</i>	4	1	98.6	2169	Holoplanktonic
JQ716123-27	<i>Tiaricodon coeruleus</i>	5 <sup>b</sup>	1	99.0	0	Meroplanktonic
JQ716166-70	<i>Tima formosa</i>	5 <sup>b</sup>	1	99.0	0	Meroplanktonic
JQ716082-83	<i>Turritopsis nutricula</i>	3 <sup>b</sup>	1	99.7	0	Meroplanktonic
HM053528-31, HM053543	<i>Varitentacula yantaiensis</i>	5 <sup>b</sup>	1	99.8	0	Holoplanktonic

<sup>a</sup> At least one haplotype without specific location.

<sup>b</sup> Haplotypes were assumed to belong to the same location, based on geographical information provided with the metadata for the sequences (“lat\_lon”).