

SUPPLEMENTARY MATERIAL

Table S1. Collection dates and localities for *Elysia* sister species and outgroup

Authors' sample codes, collection information, and NCBI accession numbers for specimens used in genetic analyses.

Note that two alleles were sampled from some specimens at the histone 3 (H3) locus; in such cases, accession numbers are separated by a comma

Species	Sample ID	Collection site	Collector (date)	COI	16S	H3
<i>E. abei</i>	Eabei_08Jap01	Misaki Marine Biological	Y.M. Hirano &	JN819114	JN819137	JN819171
	Eabei_08Jap02	Station, Japan	Y.J. Hirano (8/2008)	JN819115	–	–
<i>E. australis</i>	Eaus_07Aus03	Coulom, Australia	P. Krug (4/2007)	JN819109	JN819142	JN819176
<i>E. chlorotica</i>	Echl_06Mas01	Martha's Vineyard, MA, USA	S. Pierce (11/2006)	GU191073	JN819148	JN819183
<i>E. crispata</i>	Ecri_06FL01	Summerland Key, FL, USA	Á. Valdés (7/2006)	JN819090	JN819139	–
	Ecri_04Swe02	Sweetings Cay, Bahamas	P. Krug (6/2004)	JN819091	–	JN819174
	Ecri_06Jam03	Discovery Bay, Jamaica	P. Krug (3/2006)	JN819092	JN819140	JN819173
<i>E. hamatani</i>	Eham_02Jap01	Misaki Marine Biological Station, Japan	C. Trowbridge (6/2002)	JN819110	JN819143	JN819177
<i>E. marginata</i>	Emarg_09Gua01	Pago Bay, Guam	P. Krug (8/2009)	JN819099	JN819128	JN819156
	Emarg_09Gua10	"	" R Ellingson	JN819100	JN819129	JN819156
	Emarg_08Mor01	Moorea, French Polynesia	(5/2008)	JN819098	JN819130	JN819156
	E_aff_marg_09Gua01	Piti Bay, Guam	P. Krug (8/2009)	JN819098	JN819131	–
<i>E. ornata</i>	Eorn_06Jam01	Discovery Bay, Jamaica	P. Krug (3/2006)	JN819093	JN819132	JN819157
	Eorn_06Jam02	"		JN819094	–	–
	Eorn_09Cur01	Playa Kanoa, Curaçao	P. Krug (1/2009)	JN819096	–	JN819158
	Eorn_09Cur02	"		JN819097	–	JN819157
	Eorn_09Cur03	Spanish Waters, Curaçao	P. Krug (1/2009)	JN819095	–	JN819159
<i>E. papillosa</i>	Epap_04Swe03	Sweetings Cay, Bahamas	P. Krug (6/2004)	JN819107	JN819144	–
	Epap_04Swe04	"		JN819108	JN819145	JN819180, JN819181
<i>E. pratensis</i>	Epra_07Pla04	Plana Cays, Bahamas	P. Krug (7/2007)	JN819112	JN819136	JN819169, JN819170
<i>E. pusilla</i>	Epus_04Jap01	Sobe, Japan	C. Trowbridge	JN819101	–	
	Epus_04Jap02	"	(7/2004)	JN819102	JN819152	
	Epus_07Aus01	Coulom, Australia	P. Krug (4/2007)	JN819103	JN819151	
	Epus_09Gua01	Pago Bay, Guam	P. Krug (8/2009)	–	JN819149	
	Epus_09Gua22	"	"	–	JN819150	
<i>E. serca</i>	Eser_06Lee03	Lee Stocking Island, Bahamas	A. DuPont (2003)	JN819104	JN819147	JN819182

<i>E. stylifera</i>	Esty_07Aus01	Coulom, Australia	P. Krug (4/2007)	GU191057	GU191046	
<i>E. subornata</i>	Esub_06Jam01	Discovery Bay, Jamaica	P. Krug (3/2006)	JN819111	JN819135	JN819166, JN819168
	Esub_07Swe02	Sweetings Cay, Bahamas	P. Krug (7/2007)	–	–	JN819166, JN819167
<i>E. thompsoni</i>	Ethom_10Jap01	Chinen, Japan	C. Trowbridge (4/2010)	JN819088	–	
<i>E. tuca</i>	Etuc_04Pan01	Bocas del Toro, Panama	P. Krug (12/2004)	–	JN819133	JN819165
<i>E. zuleicae</i>	Ezul_07Swe01	Sweetings Cay, Bahamas	P. Krug (7/2007)	JN819105	JN819146	JN819178
	Ezul_04SSal02	San Salvador, Bahamas	P. Krug (6/2004)	JN819106	GU191047	JN819179
<i>Elysia</i> sp. 5	E_sp5_03Maui02	Maui, Hawaii	C. Pittman (6/2003)	JN819113	JN819138	JN819172 JN819162
	E_sp6_08Mex02	"	(8/2008)	–	–	JN819161, JN819160
	E_sp6_08Mex03	"		–	–	JN819161, JN819163
	E_sp6_08Mex04	"		–	–	JN819162, JN819164
<i>Elysia</i> sp. 19	E_sp19_10NPr01	New Providence, Bahamas	P. Krug (7/2010)	JN819089	JN819141	JN819175