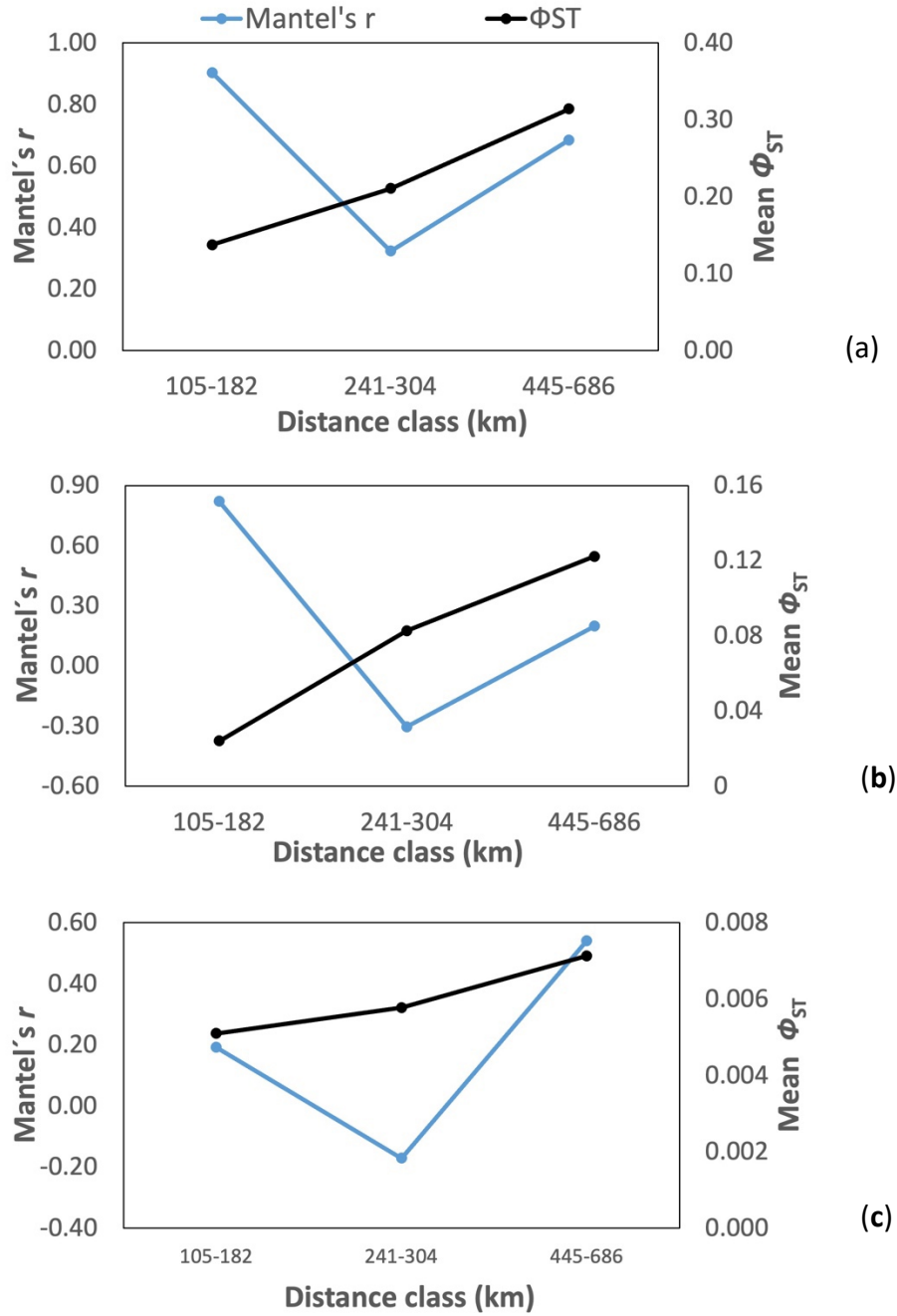
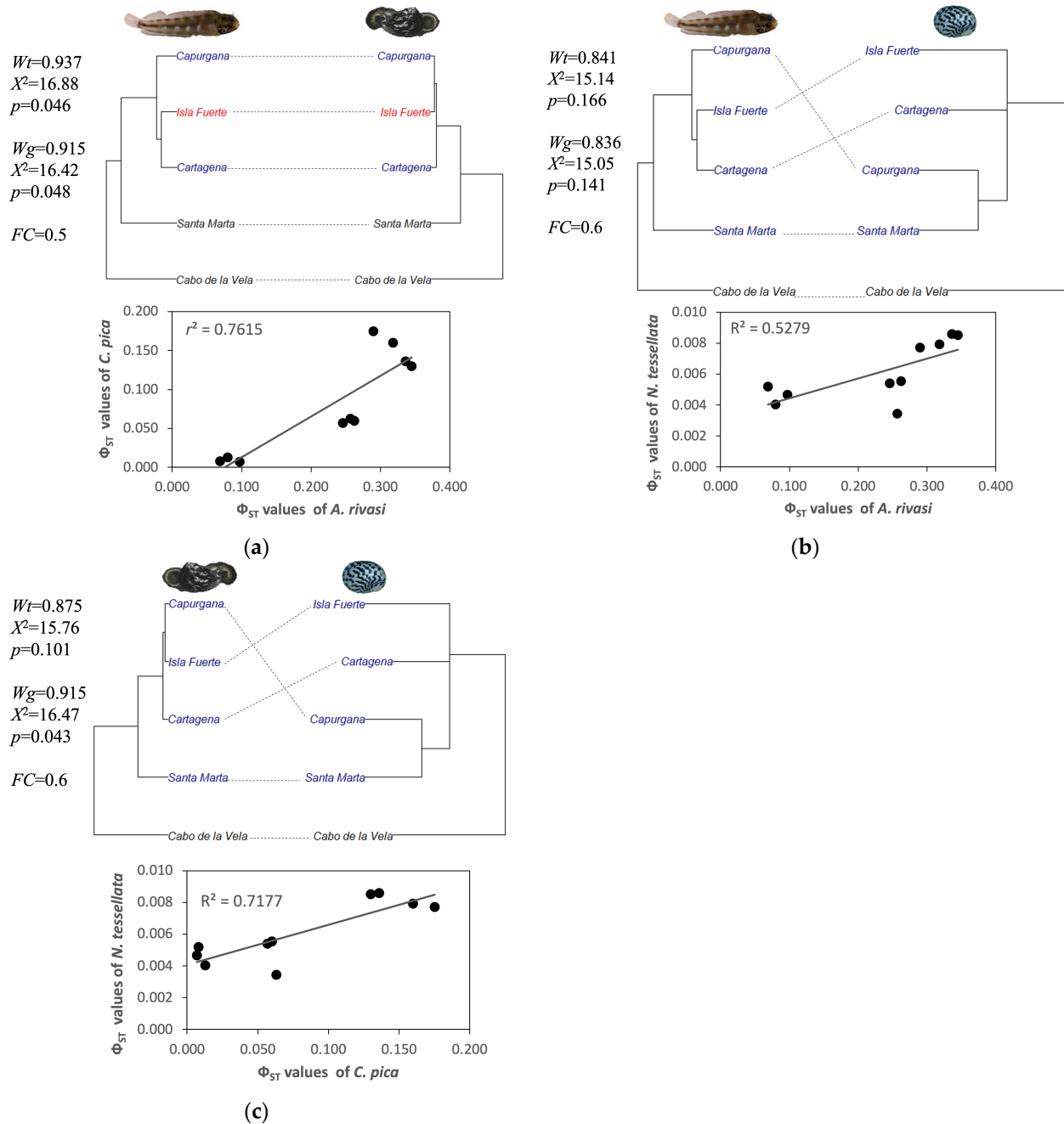


**Figure S1.** Bar graphs of the population ancestry coefficient from the STRUCTURE program indicating the probable number of populations ( $K = 2-6$ ) for each species: (a) *Acanthemblemaria rivasi*, (b) *Cittarium pica*, and (c) *Nerita tessellata*.



**Figure S2.** Correlogram plots of correlation coefficients and averages of estimated  $\Phi_{ST}$  at each linear geographic distance class mark (right) for (a) *Acanthemblemaria rivasi*, (b) *Cittarium pica*, and (c) *Nerita tessellata*.



**Figure S3.** Dendrograms of  $\Phi_{ST}$  values constructed with the UPGMA method for *A. rivasi*, *C. pica* and *N. tessellata*, and spatial autocorrelation analysis between the  $\Phi_{ST}$  matrices relating the localities across the southern Caribbean, Colombia sector. **(a)** Analysis between *A. rivasi* and *C. pica*; **(b)** *A. rivasi* and *N. tessellata*; **(c)** *C. pica* and *N. tessellata*. FC = topological concordance factor; W = Kendall's statistic for topological ( $W_t$ ) and genetic ( $W_g$ ) congruence;  $rm$  = Mantel correlation coefficient;  $p$  = significance level. The black, blue, and red colors of the site names indicate high, medium, and low concordance among their locations in the dendrograms.

**Table S1.** The genetic diversity indices calculated for *Acanthemblemaria rivasi*, *Cittarium pica*, and *Nerita tessellata* in five localities distributed across the southern Caribbean Sea, Colombia sector. Num: number of alleles, Eff\_num: effective number of alleles, Ho: observed heterozygosity, Hs: heterozygosity within populations, and Gis: inbreeding coefficient. SD: standard deviation.

<i>Acanthemblemaria rivasi</i>						
Localities	Number of samples	Num	Eff_num	Ho	Hs	Gis
Cabo de la Vela	19	1,222	1,097	0.063	0.062	-0.009
Santa Marta	21	1,404	1,206	0.121	0.129	0.069
Cartagena	14	1,537	1,211	0.132	0.141	0.066
Isla Fuerte	15	1,521	1,225	0.145	0.147	0.017
Capurganá	16	1,449	1,169	0.106	0.113	0.061
	Global value	2,000	1,243	0.163	0.181	0.045
	SD	0	0.001	0.001	0.001	0.001
<i>Cittarium pica</i>						
Localities	Number of samples	Num	Eff_num	Ho	Hs	Gis
Cabo de la Vela	12	1,437	1,220	0.131	0.141	0.073
Santa Marta	15	1,629	1,282	0.165	0.182	0.097
Cartagena	8	1,632	1,283	0.170	0.193	0.120
Isla Fuerte	15	1,766	1,293	0.173	0.195	0.117
Capurganá	15	1,764	1,293	0.177	0.195	0.095
	Global value	2,000	1,243	0.163	0.181	0.102
	SD	0	0.001	0.001	0.001	0.001
<i>Nerita tessellata</i>						
Localities	Number of samples	Num	Eff_num	Ho	Hs	Gis
Punta Gallinas	9	1,603	1,225	0.138	0.159	0.134
Santa Marta	12	1,702	1,232	0.141	0.162	0.130
Cartagena	12	1,666	1,226	0.139	0.159	0.127
Isla Fuerte	10	1,644	1,230	0.140	0.162	0.140
Capurganá	8	1,541	1,219	0.136	0.156	0.127
	Global value	2,000	1,213	0.139	0.16	0.131
	SD	0	0.002	0.001	0.001	0.002