

Table S6. Tests for signatures of introgression among *Ectocarpus* species, related to figure 5.

Patterson's D-statistic (ABBA-BABA tests) was calculated for concatenated alignments of 261 ortholog genes and significance was detected using a block-jackknifing approach with a block size of 5 Kbp. *Ectocarpus fasciculatus* was used as the outgroup taxon for all ABBA-BABA tests (noted as O in the four-taxon fixed phylogeny scheme: (((P1,P2)P3)O)). All values are significant.

P1_P2_P3	GROUP	ABBA	BABA	D
SP7_SP5_SP6	clade_2	24069.63	24141.19	-0.26
SP7_SP6_SP9	clade_2	24648.30	24646.74	0.01
SP5_SP6_SP9	clade_2	24641.30	24657.63	-0.09
SP6_SP7_SP9	clade_2	24646.74	24648.30	-0.01
SP7_SP5_SP9	clade_2	24572.33	24554.44	0.13
SP5_SP9_ESIL	clade_2	24774.81	24746.81	0.07
SP7_SP9_ESIL	clade_2	24755.11	24717.00	0.10
SP6_SP9_ESIL	clade_2	24866.07	24821.74	0.11
SP7_SP5_ESIL	clade_2	25032.00	25021.89	0.07
SP6_SP5_ESIL	clade_2	25121.44	25105.11	0.09
SP6_SP7_ESIL	clade_2	25113.15	25106.93	0.04
SP9_ESIL_SP3	clade_2	24675.00	24760.56	-0.18
SP5_ESIL_SP3	clade_2	24795.30	24868.41	-0.14
SP7_ESIL_SP3	clade_2	24780.26	24840.15	-0.12
SP6_ESIL_SP3	clade_2	24882.93	24948.26	-0.12
SP5_SP9_SP3	clade_2	24773.78	24761.33	0.04
SP7_SP9_SP3	clade_2	24756.15	24730.48	0.08
SP6_SP9_SP3	clade_2	24860.89	24840.67	0.06
SP7_SP5_SP3	clade_2	25039.78	25026.56	0.12
SP6_SP5_SP3	clade_2	25119.37	25111.59	0.05
SP6_SP7_SP3	clade_2	25114.70	25120.15	-0.04
SUB_ECRO_SP2	clade_1	26007.07	26066.96	-0.09
SUB_ECRO_SP1	clade_1	25804.85	25873.30	-0.12
SP2_SP1_ECRO	clade_1	26033.78	26033.00	0.00
SP1_SP2_SUB	clade_1	26213.44	26222.78	-0.04
SP2_SP1_SP3	clade_1_2	25976.48	25962.48	0.06
SUB_ECRO_SP3	clade_1_2	25749.37	25785.15	-0.08
SP2_SP1_ESIL	clade_1_2	26139.81	26123.48	0.07
SUB_ECRO_ESIL	clade_1_2	25954.70	25913.48	0.09
SP2_SP1_SP9	clade_1_2	26016.15	25995.93	0.10
SUB_ECRO_SP9	clade_1_2	25807.96	25814.19	-0.01
SP2_SP1_SP5	clade_1_2	26142.41	26103.52	0.16
SUB_ECRO_SP5	clade_1_2	25912.44	25936.56	-0.05
SP2_SP1_SP7	clade_1_2	26115.44	26091.33	0.11
SUB_ECRO_SP7	clade_1_2	25898.70	25910.37	-0.03
SP2_SP1_SP6	clade_1_2	26214.48	26196.59	0.08
SUB_ECRO_SP6	clade_1_2	25995.93	26019.26	-0.05