

**Additional file 7. Evolutionary analysis of molecular adaptation of aquatic plants compared with non-aquatic plants.**

Unigene ID	Gene name	$\omega$ of aquatic plants	$\omega$ of non-aquatic plants	P value
TR6629_c1_g1_i1	<i>ABCB19</i>	0.036874	0.023494	0.028
TR10093_c0_g1_i2	<i>HEMB1</i>	0.059597	0.027808	0.039
TR60631_c0_g1_i1	<i>ABCB1</i>	0.076195	0.036114	5.24E-06
TR44321_c0_g1_i1	<i>RAD50</i>	0.132137	0.079645	0.028
CL3482Contig1	<i>CCR3</i>	0.06995	0.024871	0.027
TR21240_c1_g1_i2	<i>ATJ13</i>	0.157833	0.098019	0.033
CL680Contig1	<i>SPE2</i>	0.056426	0.023564	0.033
TR977_c2_g1_i1	<i>At4g23740</i>	0.121856	0.048377	0.026
TR15463_c0_g1_i1	<i>NAT2</i>	0.110638	0.044651	0.007
TR47905_c0_g1_i5	<i>STN8</i>	0.092683	0.038917	0.016
CL4684Contig1	<i>DXS</i>	0.05216	0.025734	0.007
TR25987_c0_g1_i2	<i>LNG2</i>	0.221001	0.13413	0.026
TR29764_c0_g1_i3	<i>At2g20050</i>	0.122199	0.053947	2.62E-05
TR52493_c0_g1_i2	<i>CAT2</i>	0.05629	0.028676	0.018
TR31717_c0_g1_i3	unknown	0.352998	0.072004	0.008
TR61766_c0_g1_i12	unknown	0.170641	0.080018	0.015
CL6880Contig1	unknown	0.161334	0.020046	0.015
TR49871_c1_g2_i2	unknown	0.082749	0.021676	0.035

Note: P value indicated the P value corrected by false discovery rate at 5%.  $\omega$  means nonsynonymous to synonymous substitution rates