

Table S2. Number of Tags, OTUs under temperature stress.

Group ID	Total Tags	Taxon Tags	Singleton Tags	OTUs
Nt1	477427	465936	11491	12238
Ht1	515915	506380	9535	12008
Nt2	490000	477757	12243	12711
Ht2	575304	569430	5874	9199
Nt3	571861	568095	3766	6873
Ht3	572748	570347	2401	5296
Nt4	595409	591967	3442	5649
Ht4	602809	599818	2991	5209

Nt indicates that samples were taken from the normal temperature sea water. Ht indicates that samples were taken from the high temperature. Ht1, Ht2, Ht3 and Ht4 indicate that were taken from heated aquarium on different mouths (May, June, July and August).

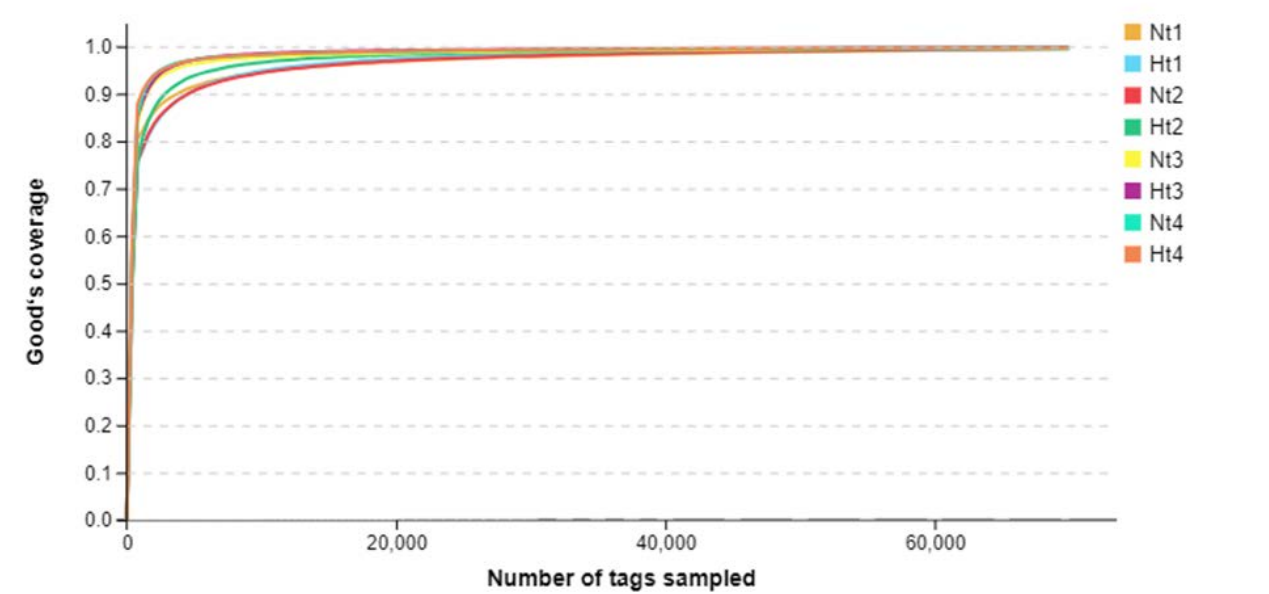


Figure S1. Rarefaction curve for Good's-coverage indices. The horizontal axis represents the number of tags sampled.

Supplementary Table S3. Number of alpha diversity indices of epibacterial communities of *A.vermiculophyllum*.

Group	Sobs	Shannon	Simpson	Chao1	Goods_coverage	Pielou
Nt1	2346.2	7.25511	0.9662	2393.88	0.99735	0.64993
Nt2	2375.4	8.02381	0.98524	2411.15	0.99766	0.71945
Nt3	1291.2	7.18793	0.9313	1318.07	0.99877	0.69593
Nt4	1069.8	6.90942	0.93364	1076.59	0.99955	0.69416
Ht1	2315.8	7.59126	0.96481	2357.57	0.99811	0.67989
Ht2	1741.6	8.18646	0.97768	1766.41	0.99865	0.77002
Ht3	985	7.16919	0.95807	997.699	0.99937	0.73927
Ht4	1016.2	7.19581	0.97531	1027.46	0.99945	0.7265

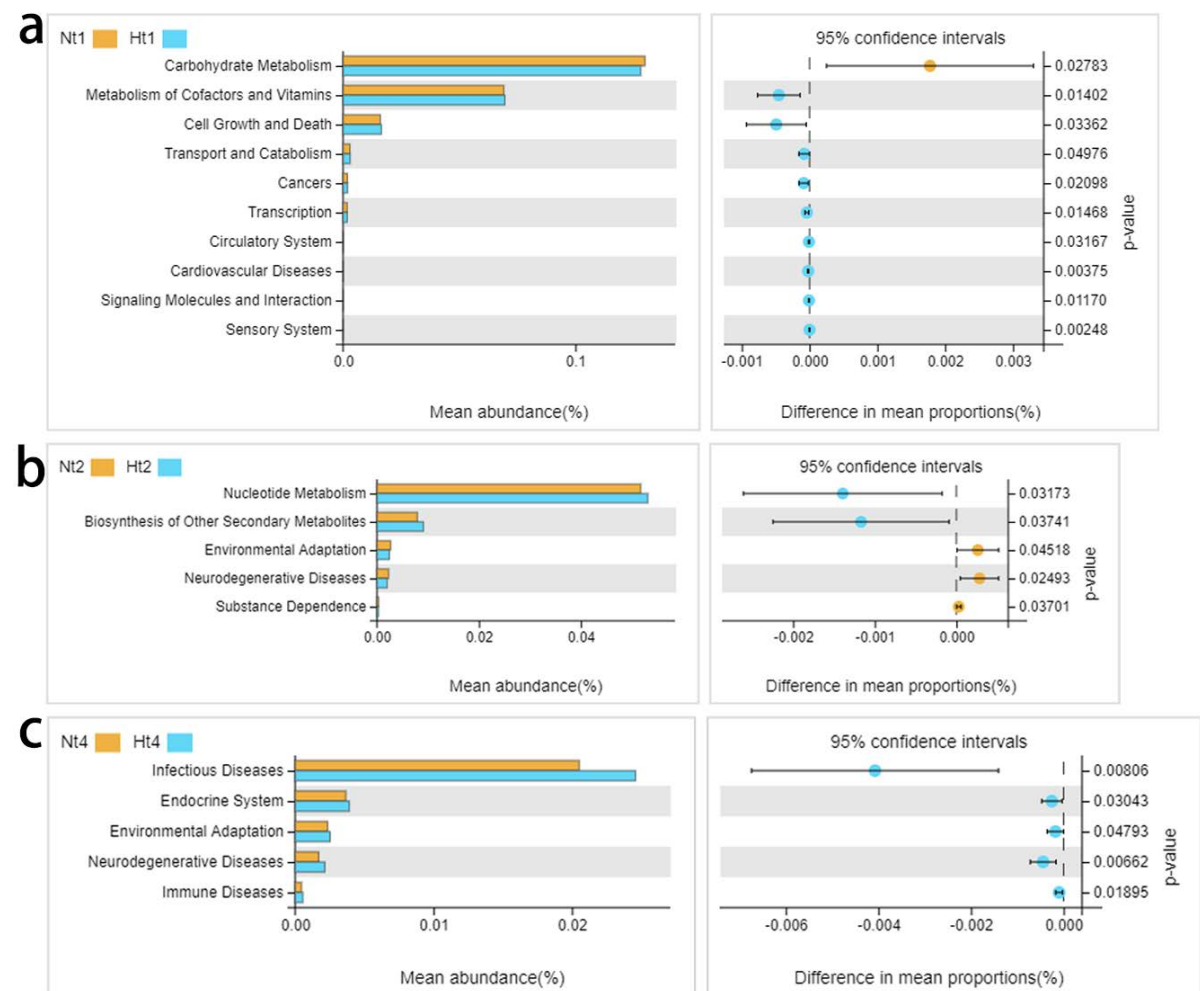


Figure S2. Welch's t test of the mean for functional abundance.