



Table X. Matrix of pairwise Fst statistics for 9 populations of *Palythoa tuberculosa* based on 26,111 SNPs are on the bottom of the matrix and the p-values are values on the top. Bolded numbers indicate significance after controlling for **false discovery rates** at a = 0.05 (as per Narum, 2006). The corrected a = XXX. (NWHI, Northwestern Hawaiian Islands; MHI, Main Hawaiian Islands)

		NWHI				MHI						
		Kure	Pearl & Hermes	Maro Reef	French Frigate Shoals	Kauai	Oahu	Molokai	Maui	Big Island		
	Киге		0.136	0.098	0.002	0.001	0.004	0.001	0.001	0.001		
NWHI	Pearl & Hermes	0.005		0.291	0.365	0.015	0.565	0.01	0.245	0.004		
	Maro Reef	0.006	0.001		0.359	0.013	0.249	0.044	0.308	0.027		
	French Frigate Shoals	0.01	0.003	0		0.001	0.085	0.046	0.048	0.003		
	Kauai	0.025	0.02	0.013	0.019		0.001	0.004	0.001	0.023		
МНІ	Oahu	0.005	-0.002	0.002	0.007	0.025		0.001	0.008	0.001		
	Molokai	0.036	0.023	0.012	0.011	0.011	0.023		0.112	0.054		
	Maui	0.024	0.004	0.002	0.011	0.012	0.011	0.005		0.002		
	Big Island	0.031	0.025	0.011	0.015	0.004	0.028	0.005	0.012			

Table X. Analysis of molecular variance (AMOVA) based on 26,111 SNPs for *Palythoa tuberculosa*. Bolded values denote significance at P < 0.05. (NWHI, Northwestern Hawaiian Islands; MHI, Main Hawaiian Islands; OA, Oʻahu).

Regions	Among groups			Among Populations (within groups)			
	F_ct	P-value	% variation	F_sc	P-value	% variation	
Breaks <sup>a</sup>	0.017	< 0.001	0.02%	-0.002	0.026	0.00%	
NWHI vs. MHI	0.008	< 0.001	0.01%	0.011	< 0.001	0.01%	
OA vs NWHI vs MHI	0.013	< 0.001	1%	0.006	< 0.001	1%	

<sup>&</sup>lt;sup>a</sup>Breaks combine populations Kure and Pearl & Hermes, Maro Reef and French Frigate Shoals, and the Main Hawaiian Islands as individual populations



## Molecular diversity indices table

Sample location	n	Eff. Num	Но	Hs	Gis
Northwestern Hawaiian Islands					
Kure	10	1.188	0.148	0.13	-0.143
Pearl & Hermes	4	1.181	0.137	0.13	-0.052
Maro Reef	5	1.192	0.156	0.135	-0.156
French Frigate Shoals	9	1.184	0.135	0.13	-0.032
Main Hawaiian Islands					
Kauaʻi	15	1.187	0.142	0.131	-0.081
Oʻahu	10	1.187	0.135	0.132	-0.018
Moloka'i	10	1.188	0.14	0.134	-0.04
Maui	10	1.177	0.112	0.129	0.132
Hawaiʻi Island	17	1.191	0.15	0.134	-0.115