

TABLE S2 | Genetic diversity in *Lutjanus guttatus* from five sampled locations. Size sample (n), number of alleles (N_A), number of effective alleles (N_{EA}), observed (H_O) and unbiased expected (H_E) heterozygosities, probabilities of Fisher exact test (P), and frequencies of null alleles (F_{NA}). Significant deviations from Hardy-Weinberg Equilibrium after Bonferroni adjustment ($P < 0.004$) are represented by a “*”. Frequencies of null alleles higher than 0.05 are in bold.

Locus		Locations				
		Mexico			Panama	
		La Paz	Colima	Oaxaca	Chiriqui	Port of Panama
Lgut16	n	30	48	47	30	29
	N_A	23	24	24	24	24
	N_{EA}	15.13	16.88	16.3	18.18	16.33
	H_O	0.933	0.938	0.851	0.967	1
	H_E	0.95	0.951	0.949	0.961	0.955
	P	0.9075	0.3857	0.2574	0.7196	0.7994
	F_{NA}	0	0	0.0439	0	0
Lgut18	n	29	48	49	29	28
	N_A	19	20	16	15	18
	N_{EA}	11.93	11.58	10.94	9.84	12.06
	H_O	0.966	0.833	0.735	0.862	0.857
	H_E	0.932	0.923	0.918	0.914	0.934
	P	0.812	0.003*	0.0287	0.8358	0.5013
	F_{NA}	0	0.0222	0.0919	0	0.0146
Lgut19	n	30	48	48	30	29
	N_A	27	31	30	21	24
	N_{EA}	17.48	20.57	20.66	15.93	16.99
	H_O	1	0.979	0.979	0.967	1
	H_E	0.959	0.961	0.962	0.953	0.958
	P	0.961	0.622	0.9177	0.8602	0.9481
	F_{NA}	0	0	0	0	0
Lgut21	n	29	47	48	30	29
	N_A	17	22	26	19	17
	N_{EA}	12.01	13.55	16.58	9.28	12.84
	H_O	0.793	0.787	0.688	0.8	0.897
	H_E	0.933	0.936	0.95	0.907	0.938
	P	0.098	0.0024*	0*	0.2602	0.1906
	F_{NA}	0.0553	0.0714	0.1322	0.0464	0.0116



TABLE S2 | (Continued)

Locus		Locations				
		Mexico			Panama	
		La Paz	Colima	Oaxaca	Chiriqui	Port of Panama
<i>Lgut26</i>	<i>n</i>	29	48	49	29	29
	N_A	23	24	25	25	21
	N_{EA}	15.57	17.19	18.83	18.09	14.38
	H_O	0.862	0.958	0.939	0.897	0.966
	H_E	0.952	0.952	0.957	0.961	0.947
	<i>P</i>	0.051	0.359	0.3151	0.1833	0.5381
	F_{NA}	0.0444	0	0.0107	0.012	0
<i>Lgut34</i>	<i>n</i>	30	48	48	30	28
	N_A	19	26	22	19	20
	N_{EA}	13.53	16.46	14.77	13.64	13.88
	H_O	0.833	0.958	0.833	0.9	0.857
	H_E	0.942	0.949	0.942	0.942	0.945
	<i>P</i>	0.2198	0.6433	0.2155	0.427	0.0997
	F_{NA}	0.0482	0	0.0572	0.0044	0.0281
<i>Lgut37</i>	<i>n</i>	30	48	49	30	29
	N_A	18	17	20	18	13
	N_{EA}	13.85	12.06	12.38	11.32	8.58
	H_O	0.567	0.708	0.735	0.7	0.759
	H_E	0.944	0.927	0.929	0.927	0.899
	<i>P</i>	0*	0.0004*	0.0124	0.0018*	0.0132
	F_{NA}	0.1883	0.1083	0.0948	0.112	0.0703
<i>Lgut38</i>	<i>n</i>	30	48	49	29	29
	N_A	24	26	27	20	26
	N_{EA}	18.75	18	18.19	12.65	16.99
	H_O	0.767	0.688	0.755	0.517	0.862
	H_E	0.963	0.954	0.955	0.937	0.958
	<i>P</i>	0*	0*	0*	0*	0.0209
	F_{NA}	0.096	0.1356	0.0964	0.2088	0.036
<i>Lgut39</i>	<i>n</i>	30	48	49	30	29
	N_A	15	16	16	16	14
	N_{EA}	11.25	10.84	11.92	11.04	9.84
	H_O	0.9	0.938	0.816	0.8	0.724
	H_E	0.927	0.917	0.926	0.925	0.914
	<i>P</i>	0.3046	0.2531	0.0381	0.1452	0.0173
	F_{NA}	0	0	0.0532	0.0476	0.1009



TABLE S2 | (Continued)

Locus		Locations				
		Mexico			Panama	
		La Paz	Colima	Oaxaca	Chiriqui	Port of Panama
Lgut43	<i>n</i>	30	47	48	28	27
	<i>N_A</i>	18	18	18	18	16
	<i>N_{EA}</i>	11.46	13.03	13.09	13.4	11.95
	<i>H_O</i>	0.933	0.745	0.854	0.714	0.889
	<i>H_E</i>	0.928	0.933	0.933	0.942	0.934
	<i>P</i>	0.4004	0*	0.0857	0.0016*	0.2872
	<i>F_{NA}</i>	0.008	0.0903	0.045	0.1097	0.0236
Lgut44	<i>n</i>	30	44	49	29	29
	<i>N_A</i>	25	22	27	20	22
	<i>N_{EA}</i>	16.82	14.24	13.3	14.75	15.72
	<i>H_O</i>	0.833	0.568	0.673	0.586	0.724
	<i>H_E</i>	0.956	0.94	0.934	0.949	0.953
	<i>P</i>	0.0641	0*	0*	0*	0.0013*
	<i>F_{NA}</i>	0.0467	0.19	0.1239	0.1832	0.1061
Lgut46	<i>n</i>	30	48	49	30	29
	<i>N_A</i>	13	17	16	13	18
	<i>N_{EA}</i>	7.79	9.54	8.86	7.86	10.13
	<i>H_O</i>	0.9	0.854	0.898	0.933	0.897
	<i>H_E</i>	0.886	0.905	0.896	0.888	0.917
	<i>P</i>	0.7686	0.3073	0.2328	0.9853	0.7495
	<i>F_{NA}</i>	0	0.0351	0.0005	0	0
Mean	<i>n</i>	29.75	47.5	48.5	29.5	28.67
	<i>N_A</i>	20.08	21.92	22.25	19	19.42
	<i>N_{EA}</i>	13.8	14.49	14.65	13	13.31
	<i>H_O</i>	0.857	0.83	0.813	0.804	0.869
	<i>H_E</i>	0.939	0.937	0.937	0.934	0.938



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Official Journal of the Sociedade Brasileira de Ictiologia

HOW TO CITE THIS ARTICLE

- Díaz-Viloria N, Max-Aguilar A, Rivera-Lucero MI, Espino-Barr E, Reguera-Rouzaud N, Casaucao-Aguilar A, Perez-Enriquez R. Genetic connectivity in the spotted rose snapper *Lutjanus guttatus* (Lutjaniformes: Lutjanidae) between Mexico and Panama throughout the Tropical Eastern Pacific. Neotrop Ichthyol. 2023; 21(2):e220113. <https://doi.org/10.1590/1982-0224-2022-0113>