

Table S1 The pairwise comparison of 34 populations from six Venezuelan States by cytb analysis; FST values below diagonal (p-values above) (Arlequin v3.1).

	pop 1	pop 2	pop 3	pop 4	pop 5	pop 6	pop 7	pop 8	pop 9	pop 10	pop 11	pop 12	pop 13	pop 14	pop 15	pop 16	pop 17	pop 18	pop 19	pop 20	pop 21	pop 22	pop 23	pop 24	pop 25	pop 26	pop 27	pop 28	pop 29	pop 30	pop 31	pop 32	pop 33	pop 34					
pop 1		0.0216	<b>0.0000</b>	0.7144	0.0002	<b>0.0000</b>	0.0005	0.2421	<b>0.0000</b>	<b>0.0000</b>	0.0002	0.0003	0.0703	0.0023	0.0005	0.0010	0.0023	<b>0.0000</b>	0.0100	<b>0.0001</b>	0.0005	0.0025	0.0005	0.0025	<b>0.0000</b>	<b>0.0000</b>	0.0055	0.0005	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>				
pop 2	0.1828		0.1428	0.1837	0.2587	0.0031	0.0840	0.9999	0.0006	0.0073	0.0321	0.0796	0.0002	0.1505	0.0828	0.0693	0.0756	0.0174	0.2950	0.0337	0.0398	0.1142	0.0741	0.0847	0.0441	0.0060	0.1540	0.0749	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>			
pop 3	0.4268	0.0470		0.0061	0.7674	<b>0.0000</b>	0.0688	0.2597	0.1846	0.0188	0.0113	0.2092	<b>0.0000</b>	0.5075	0.3551	0.1448	0.3451	0.0785	0.5184	0.3103	0.2686	0.2452	0.2046	0.3445	0.0971	0.0151	0.5708	0.3352	0.0506	0.3749	0.0526	0.0194	<b>0.0010</b>	<b>0.0001</b>	<b>0.0001</b>	<b>0.0001</b>	<b>0.0001</b>		
pop 4	-0.0343	0.0593	0.3020		0.0158	<b>0.0000</b>	0.0063	0.6830	<b>0.0000</b>	0.0003	0.0016	0.0061	0.0489	0.0176	0.0122	0.0077	0.0175	0.0008	0.0475	0.0019	0.0031	0.0176	0.0080	0.0165	0.0029	0.0029	0.0410	0.0060	0.0002	0.0018	0.0002	<b>0.0001</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>		
pop 5	0.3665	0.0130	-0.0238	0.2361		0.0352	0.1755	0.2205	0.0139	0.0311	0.1300	0.1828	<b>0.0000</b>	0.3314	0.1920	0.1954	0.3170	0.0477	0.5656	0.1739	0.1685	0.0880	0.2701	0.3111	0.0337	0.0313	0.3742	0.3136	0.0357	0.2833	0.0347	0.0085	0.0081	0.0002	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	
pop 6	0.6617	0.2766	0.0968	0.6025	0.1324		0.5542	0.0082	0.1831	<b>0.0000</b>	0.0601	<b>0.0000</b>	0.5509	0.0999	0.0013	0.0313	0.6640	0.0141	0.9999	0.4347	0.2502	0.0596	0.0984	0.6605	0.0362	<b>0.0000</b>	0.9999	0.5621	0.4805	0.4894	0.2222	<b>0.0001</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>		
pop 7	0.5813	0.2035	0.0522	0.4903	0.0820	-0.0046		0.0837	0.9999	0.0007	0.2201	0.9999	<b>0.0000</b>	0.9999	0.0477	0.0347	0.1827	0.0340	0.9999	0.4795	0.9999	0.1639	0.0867	0.1839	0.4709	<b>0.0000</b>	0.3833	0.2066	0.9999	0.5714	0.9999	<b>0.0010</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0003</b>	<b>0.0000</b>	<b>0.0000</b>		
pop 8	0.0854	-0.0630	0.0959	-0.0312	0.0414	0.4704	0.3333		0.0024	0.0037	0.0265	0.0874	0.0112	0.1019	0.1000	0.0865	0.0936	0.0157	0.2275	0.0304	0.0350	0.1019	0.0864	0.0928	0.0431	<b>0.0000</b>	0.2319	0.0921	0.0061	0.0453	0.0045	0.0033	0.0012	0.0011	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	
pop 9	0.7012	0.3171	0.1212	0.6551	0.1596	0.0666	0.0000	0.5383		<b>0.0000</b>	0.0039	0.9999	<b>0.0000</b>	0.9999	0.0003	0.0018	0.0445	<b>0.0000</b>	0.9999	0.0773	0.2725	0.0318	0.0101	0.0470	0.0142	<b>0.0000</b>	0.1696	0.0496	0.9999	0.2026	0.9999	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>		
pop 10	0.6219	0.2518	0.1210	0.5506	0.1406	0.5297	0.6276	0.4126	0.7537		<b>0.0000</b>	0.0007	<b>0.0000</b>	0.0043	<b>0.0000</b>	<b>0.0001</b>	0.0008	<b>0.0000</b>	0.0061	<b>0.0000</b>	0.0003	0.0002	<b>0.0000</b>	0.0005	<b>0.0001</b>	<b>0.0000</b>	0.0024	<b>0.0001</b>	<b>0.0000</b>	0.0004	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>		
pop 11	0.5848	0.2102	0.0626	0.4961	0.0909	0.0976	0.0574	0.3389	0.1927	0.4351		<b>0.0000</b>	0.4440	0.1962	0.1347	0.9035	0.1756	0.6798	0.3901	0.5859	0.9999	0.8172	0.9028	0.0669	<b>0.0000</b>	<b>0.0000</b>	0.7108	0.2861	0.0104	0.1240	0.0073	0.0005	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	
pop 12	0.5813	0.2035	0.0522	0.4903	0.0820	-0.0046	0.0000	0.3333	0.0000	0.6276	0.0574		0.0002	0.9999	0.0516	0.0335	0.1793	0.0363	0.9999	0.4823	0.9999	0.1508	0.0855	0.1857	0.4782	<b>0.0001</b>	0.3718	0.2101	0.9999	0.5841	0.9999	0.0013	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0001</b>	<b>0.0001</b>		
pop 13	0.1971	0.5511	0.7536	0.3349	0.7053	0.9958	1.0000	0.5556	1.0000	0.9900	0.9798	1.0000		<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	
pop 14	0.5497	0.1711	0.0251	0.4437	0.0541	-0.0339	0.0000	0.2746	0.0000	0.5922	0.0163	0.0000	1.0000		0.4075	0.0886	0.9999	0.1013	0.9999	0.5077	0.9999	0.4652	0.2133	0.9999	0.4850	<b>0.0001</b>	0.4608	0.4805	0.9999	0.9999	0.9999	0.0058	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	
pop 15	0.4815	0.1053	-0.0034	0.3648	0.0137	0.1289	0.0671	0.1770	0.1999	0.2165	0.0129	0.0671	0.8846	0.0269		0.6174	0.4948	0.2358	0.4151	0.0440	0.0524	0.4669	0.6475	0.5048	0.0244	<b>0.0000</b>	0.4224	0.3415	0.0010	0.5445	0.0005	0.0050	<b>0.0001</b>	<b>0.0001</b>	<b>0.0001</b>	<b>0.0001</b>	<b>0.0001</b>	<b>0.0001</b>	
pop 16	0.5565	0.1826	0.0458	0.4569	0.0729	0.2457	0.3187	0.2931	0.5330	0.5444	0.0760	0.3187	0.9872	0.2566	-0.0183		0.2913	0.9999	0.2192	0.3200	0.0265	0.0604	0.6930	0.2934	0.0147	<b>0.0001</b>	0.5730	0.6140	0.0038	0.0705	0.0023	0.3441	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>		
pop 17	0.5534	0.1754	0.0298	0.4504	0.0589	-0.0197	0.0295	0.2829	0.1888	0.5149	-0.0631	0.0295	0.9924	-0.0182	-0.0107	0.0382		0.3709	0.9999	0.8229	0.7058	0.4894	0.9999	0.9999	0.3234	<b>0.0001</b>	0.9999	0.7892	0.0650	0.7753	0.0559	0.0246	<b>0.0001</b>	<b>0.0002</b>	<b>0.0001</b>	<b>0.0002</b>	<b>0.0001</b>	<b>0.0002</b>	
pop 18	0.6031	0.2256	0.0750	0.5228	0.1046	0.1659	0.2007	0.3715	0.3590	0.4948	0.0534	0.2007	0.9810	0.1568	0.0147	-0.0879	0.0091		0.2987	0.1566	0.0410	0.1394	0.6371	0.3600	0.0143	<b>0.0000</b>	0.5331	0.4630	<b>0.0001</b>	0.1467	<b>0.0000</b>	0.1312	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	
pop 19	0.5226	0.1374	-0.0061	0.4026	0.0210	-0.0706	0.0000	0.2208	0.0000	0.5619	-0.0280	0.0000	1.0000	0.0000	-0.0165	0.1995	-0.0687	0.1138		0.7769	0.9999	0.4727	0.4136	0.9999	0.6774	<b>0.0001</b>	0.9999	0.5046	0.9999	0.9999	0.9999	0.9999	0.0417	0.0032	0.0022	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	
pop 20	0.5908	0.2122	0.0585	0.5045	0.0892	-0.0186	0.0410	0.3496	0.1689	0.5252	0.0408	0.0410	0.9911	0.0012	0.0494	0.0599	-0.0567	0.0413	-0.0426		0.3590	0.1324	0.3995	0.8199	0.1247	<b>0.0000</b>	0.9999	0.9999	0.9999	0.1141	0.3382	0.1025	0.0106	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>
pop 21	0.5878	0.2097	0.0571	0.4998	0.0669	0.0251	-0.0092	0.3447	0.0991	0.5848	-0.0055	-0.0092	0.9967	-0.0462	0.0539	0.2549	-0.0574	0.1661	-0.0891	0.0404		0.4288	0.3155	0.6948	0.1452	<b>0.0000</b>	0.6007	0.1830	0.3378	0.5522	0.3117	0.0006	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	
pop 22	0.5435	0.1688	0.0310	0.4355	0.0572	0.2118	0.1759	0.2655	0.4013	0.5085	-0.0947	0.1759	0.9895	0.1111	-0.0179	0.1634	-0.0355	0.1042	0.0492	0.1116	0.0284		0.5939	0.4984	0.1029	<b>0.0000</b>	0.3314	0.0854	0.0515	0.4398	0.0476	0.0017	0.0026	0.0003	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	
pop 23	0.5574	0.1824	0.0408	0.4573	0.0687	0.1060	0.1155	0.2920	0.2993	0.4698	-0.0485	0.1155	0.9837	0.0632	-0.0265	-0.0286	-0.0838	-0.0294	0.0110	0.0063	0.0419	-0.0320		0.9999	0.0431	<b>0.0000</b>	0.7756	0.7891	0.0209	0.0844	0.0148	0.0246	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	
pop 24	0.5534	0.1754	0.0298	0.4504	0.0589	-0.0197	0.0295	0.2829	0.1888	0.5149	-0.0631	0.0295	0.9924	-0.0182	-0.0107	0.0382	-0.1429	0.0091	-0.0567	-0.0574	-0.0355	-0.0838		0.9999	0.0431	<b>0.0000</b>	0.7756	0.7891	0.0209	0.0844	0.0148	0.0246	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	
pop 25	0.5777	0.2038	0.0572	0.4850	0.0																																		

Table S1 The standard deviation of P values (Arlequin v3.1).

	pop 1	pop 2	pop 3	pop 4	pop 5	pop 6	pop 7	pop 8	pop 9	pop 10	pop 11	pop 12	pop 13	pop 14	pop 15	pop 16	pop 17	pop 18	pop 19	pop 20	pop 21	pop 22	pop 23	pop 24	pop 25	pop 26	pop 27	pop 28	pop 29	pop 30	pop 31	pop 32	pop 33	pop 34		
pop 1		±0.0014	±0.0000	±0.0047	±0.0001	±0.0000	±0.0002	±0.0040	±0.0000	±0.0000	±0.0001	±0.0002	±0.0025	±0.0005	±0.0003	±0.0005	±0.0000	±0.0010	±0.0001	±0.0002	±0.0005	±0.0003	±0.0005	±0.0000	±0.0000	±0.0008	±0.0002	±0.0000	±0.0000	±0.0000	±0.0000	±0.0000	±0.0000	±0.0000	±0.0000	
pop 2			±0.0035	±0.0036	±0.0049	±0.0005	±0.0025	±0.0000	±0.0002	±0.0009	±0.0017	±0.0032	±0.0001	±0.0036	±0.0025	±0.0028	±0.0025	±0.0014	±0.0043	±0.0020	±0.0018	±0.0029	±0.0025	±0.0028	±0.0018	±0.0007	±0.0034	±0.0025	±0.0004	±0.0019	±0.0004	±0.0007	±0.0001	±0.0007	±0.0005	
pop 3				±0.0008	±0.0040	±0.0024	±0.0041	±0.0037	±0.0013	±0.0010	±0.0044	±0.0043	±0.0000	±0.0053	±0.0049	±0.0035	±0.0057	±0.0024	±0.0052	±0.0046	±0.0043	±0.0044	±0.0038	±0.0044	±0.0027	±0.0011	±0.0050	±0.0047	±0.0021	±0.0049	±0.0025	±0.0014	±0.0004	±0.0001	±0.0001	
pop 4					±0.0012	±0.0000	±0.0008	±0.0047	±0.0000	±0.0002	±0.0004	±0.0008	±0.0018	±0.0012	±0.0011	±0.0008	±0.0013	±0.0003	±0.0019	±0.0004	±0.0006	±0.0015	±0.0010	±0.0013	±0.0006	±0.0006	±0.0020	±0.0007	±0.0001	±0.0004	±0.0001	±0.0001	±0.0001	±0.0001	±0.0001	
pop 5						±0.0012	±0.0000	±0.0008	±0.0047	±0.0000	±0.0002	±0.0004	±0.0008	±0.0018	±0.0012	±0.0011	±0.0008	±0.0013	±0.0003	±0.0019	±0.0004	±0.0006	±0.0015	±0.0010	±0.0013	±0.0006	±0.0006	±0.0020	±0.0007	±0.0001	±0.0004	±0.0001	±0.0001	±0.0001	±0.0001	
pop 6							±0.0018	±0.0039	±0.0039	±0.0012	±0.0016	±0.0031	±0.0039	±0.0000	±0.0048	±0.0036	±0.0040	±0.0046	±0.0022	±0.0048	±0.0037	±0.0036	±0.0023	±0.0045	±0.0047	±0.0020	±0.0019	±0.0041	±0.0042	±0.0019	±0.0043	±0.0017	±0.0010	±0.0009	±0.0001	
pop 7								±0.0056	±0.0009	±0.0037	±0.0000	±0.0023	±0.0052	±0.0000	±0.0000	±0.0003	±0.0019	±0.0045	±0.0013	±0.0000	±0.0049	±0.0046	±0.0025	±0.0031	±0.0046	±0.0019	±0.0000	±0.0049	±0.0054	±0.0051	±0.0043	±0.0001	±0.0001	±0.0001	±0.0001	
pop 8									±0.0024	±0.0000	±0.0003	±0.0041	±0.0000	±0.0000	±0.0002	±0.0021	±0.0019	±0.0038	±0.0019	±0.0000	±0.0049	±0.0000	±0.0032	±0.0028	±0.0035	±0.0048	±0.0000	±0.0053	±0.0043	±0.0000	±0.0051	±0.0000	±0.0003	±0.0000	±0.0002	
pop 9										±0.0004	±0.0006	±0.0017	±0.0026	±0.0011	±0.0031	±0.0029	±0.0030	±0.0029	±0.0011	±0.0041	±0.0017	±0.0018	±0.0026	±0.0029	±0.0029	±0.0020	±0.0000	±0.0049	±0.0030	±0.0008	±0.0020	±0.0007	±0.0006	±0.0004	±0.0004	
pop 10											±0.0000	±0.0006	±0.0000	±0.0000	±0.0000	±0.0002	±0.0004	±0.0020	±0.0000	±0.0027	±0.0045	±0.0018	±0.0011	±0.0021	±0.0012	±0.0000	±0.0040	±0.0020	±0.0000	±0.0036	±0.0000	±0.0000	±0.0000	±0.0000		
pop 11												±0.0000	±0.0003	±0.0000	±0.0000	±0.0000	±0.0000	±0.0000	±0.0000	±0.0000	±0.0002	±0.0001	±0.0000	±0.0002	±0.0001	±0.0000	±0.0005	±0.0001	±0.0000	±0.0002	±0.0000	±0.0000	±0.0000	±0.0000		
pop 12													±0.0036	±0.0000	±0.0048	±0.0043	±0.0032	±0.0029	±0.0037	±0.0048	±0.0050	±0.0046	±0.0000	±0.0036	±0.0029	±0.0022	±0.0000	±0.0044	±0.0044	±0.0010	±0.0033	±0.0009	±0.0002	±0.0000	±0.0001	
pop 13														±0.0001	±0.0000	±0.0022	±0.0020	±0.0038	±0.0021	±0.0000	±0.0049	±0.0000	±0.0031	±0.0024	±0.0041	±0.0054	±0.0001	±0.0044	±0.0036	±0.0000	±0.0050	±0.0000	±0.0004	±0.0000		
pop 14															±0.0000	±0.0000	±0.0000	±0.0000	±0.0003	±0.0000	±0.0000	±0.0000	±0.0000	±0.0000	±0.0000	±0.0000	±0.0001	±0.0000	±0.0000	±0.0000	±0.0000	±0.0000	±0.0000	±0.0000		
pop 15																±0.0050	±0.0026	±0.0000	±0.0029	±0.0000	±0.0047	±0.0000	±0.0052	±0.0039	±0.0000	±0.0046	±0.0001	±0.0051	±0.0057	±0.0000	±0.0000	±0.0000	±0.0008	±0.0000		
pop 16																	±0.0050	±0.0044	±0.0046	±0.0022	±0.0023	±0.0048	±0.0049	±0.0049	±0.0016	±0.0000	±0.0045	±0.0049	±0.0003	±0.0052	±0.0002	±0.0007	±0.0001	±0.0001		
pop 17																		±0.0048	±0.0046	±0.0051	±0.0017	±0.0025	±0.0041	±0.0043	±0.0012	±0.0001	±0.0047	±0.0045	±0.0006	±0.0025	±0.0005	±0.0042	±0.0000	±0.0000		
pop 18																			±0.0044	±0.0000	±0.0046	±0.0051	±0.0000	±0.0000	±0.0045	±0.0001	±0.0000	±0.0036	±0.0025	±0.0040	±0.0024	±0.0015	±0.0001	±0.0001		
pop 19																				±0.0042	±0.0035	±0.0018	±0.0035	±0.0053	±0.0047	±0.0011	±0.0000	±0.0051	±0.0051	±0.0001	±0.0037	±0.0000	±0.0033	±0.0000		
pop 20																					±0.0041	±0.0000	±0.0055	±0.0045	±0.0000	±0.0044	±0.0001	±0.0000	±0.0043	±0.0000	±0.0000	±0.0000	±0.0019	±0.0005		
pop 21																						±0.0045	±0.0034	±0.0052	±0.0042	±0.0031	±0.0000	±0.0000	±0.0000	±0.0033	±0.0047	±0.0030	±0.0010	±0.0000		
pop 22																							±0.0044	±0.0055	±0.0041	±0.0038	±0.0000	±0.0046	±0.0038	±0.0047	±0.0046	±0.0039	±0.0002	±0.0000		
pop 23																								±0.0044	±0.0044	±0.0047	±0.0032	±0.0000	±0.0048	±0.0028	±0.0023	±0.0046	±0.0021	±0.0004	±0.0005	
pop 24																									±0.0000	±0.0021	±0.0000	±0.0036	±0.0037	±0.0015	±0.0028	±0.0012	±0.0014	±0.0000	±0.0001	
pop 25																										±0.0052	±0.0000	±0.0000	±0.0038	±0.0025	±0.0041	±0.0022	±0.0015	±0.0001	±0.0002	
pop 26																											±0.0003	±0.0047	±0.0039	±0.0015	±0.0029	±0.0014	±0.0002	±0.0000	±0.0002	
pop 27																												±0.0000	±0.0000	±0.0000	±0.0013	±0.0000	±0.0000	±0.0000	±0.0001	
pop 28																												±0.0000	±0.0040	±0.0000	±0.0042	±0.0027	±0.0003	±0.0004	±0.0001	
pop 29																												±0.0027	±0.0041	±0.0024	±0.0031	±0.0000	±0.0000	±0.0001	±0.0001	
pop 30																													±0.0052	±0.0000	±0.0000	±0.0000	±0.0000	±0.0000	±0.0000	
pop 31																														±0.0044	±0.0000	±0.0000	±0.0000	±0.0000	±0.0000	
pop 32																															±0.0000	±0.0000	±0.0000	±0.0000	±0.0000	
pop 33																																±0.0000	±0.0000	±0.0000	±0.0000	
pop 34																																	±0.0000	±0.0000	±0.0000	±0.0000