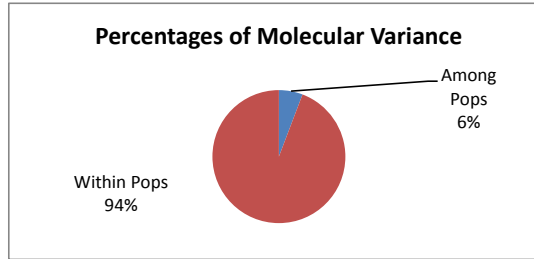


Results of Analysis of Molecular Variance

Data Sheet File S1
Data Title Geo separation

No. Samples 2026
No. Pops 13
No. Permutation: 999
NO 115.699
SSTOT 7892.766



Pop	Australia	Belgium	China	Cuba	France	Germany	India	Italy	Netherland	Norway	Spain	Switzerland	USA
n	7	108	8	10	66	85	94	7	1081	203	186	70	101
SSWP	20.000	397.843	21.625	34.600	248.515	313.235	222.117	20.286	4188.110	708.246	705.323	269.671	379.564

Summary AMOVA Table

Source	df	SS	MS	Est. Var.	%
Among Pops	12	363.630	30.303	0.230	6%
Within Pops	2013	7529.136	3.740	3.740	94%
Total	2025	7892.766		3.970	100%

Stat Value P(rand >= data) Probability, P(rand >= data), for PhiPT is based on standard permutation across the full data set.

PhiPT 0.058 0.001 $\text{PhiPT} = \text{AP} / (\text{WP} + \text{AP}) = \text{AP} / \text{TOT}$
 PhiPT max 0.178
 Phi'PT 0.325
 Nm (Haploid) 8.146 $\text{Nm (Haploid)} = [(1 / \text{PhiPT}) - 1] / 2$

Key: AP = Est. Var. Among Pops, WP = Est. Var. Within Pops

Pairwise Population PhiPT Values

	Australia	Belgium	China	Cuba	France	Germany	India	Italy	Netherland	Norway	Spain	Switzerland	USA	
		0.038	0.001	0.032	0.008	0.015	0.001	0.050	0.005	0.001	0.025	0.010	0.011	Australia
	0.051		0.001	0.007	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	Belgium
	0.185	0.152		0.001	0.001	0.001	0.001	0.002	0.001	0.001	0.001	0.001	0.001	China
	0.068	0.049	0.163		0.030	0.021	0.001	0.113	0.027	0.001	0.019	0.024	0.014	Cuba
	0.075	0.035	0.115	0.035		0.001	0.001	0.009	0.001	0.001	0.001	0.003	0.001	France
	0.061	0.058	0.137	0.034	0.049		0.001	0.028	0.001	0.001	0.001	0.001	0.001	Germany
	0.357	0.225	0.375	0.297	0.183	0.273		0.001	0.001	0.001	0.001	0.001	0.001	India
	0.113	0.103	0.208	0.048	0.088	0.044	0.373		0.001	0.001	0.004	0.001	0.003	Italy
	0.050	0.021	0.115	0.028	0.015	0.034	0.180	0.068		0.001	0.001	0.017	0.001	Netherland
	0.095	0.051	0.162	0.082	0.063	0.083	0.230	0.138	0.032		0.001	0.001	0.001	Norway
	0.051	0.034	0.110	0.038	0.031	0.041	0.208	0.103	0.023	0.050		0.002	0.001	Spain
	0.046	0.021	0.107	0.029	0.017	0.036	0.218	0.081	0.005	0.033	0.012		0.001	Switzerland
	0.068	0.060	0.120	0.044	0.053	0.054	0.257	0.105	0.044	0.074	0.037	0.035		USA

PhiPT Values below diagonal. Probability, P(rand >= data) based on 999 permutations is shown above diagonal.