

Supplemental Table S1. Theoretical maximum and minimum values for allelic diversity and variance.

Each data set (i.e. pair of populations) has the following properties: ten samples per population; no allelic overlap between each of the two populations, equal AMD (Δ) and equal variance within each population, and with 50% of the total (Δ_T) residing in each population.

Minimum
one allele for entire data set (1 marker)
two diploid pops, each with 10 samples

AMDA						AMOVA					
Source of Information	Degrees of Freedom	Diversity Estimate exp(sH)	[0,1] Scaled Diversity D'	Δ	Ω	Source	df	SS	MS	Est. Var.	%
AP	1	1.00	0.00	0.0	0.00	AP	1	0.00	0.00	0.00	0%
AI	18	1.00	0.00	0.0	0.00	AI	18	0.00	0.00	0.00	0%
WI	20	1.00	0.00	1.0	1.00	WI	20	0.00	0.00	0.00	0%
Total	39	1.00	0.00	1.0	1.00	Total	39	0.00		0.00	0%
						Stat	Value				
one allele for entire data set (10 markers)				Ω_{ST}	0.00	F_{ST}	#N/A				
two diploid pops, each with 10 samples				Ω_{IS}	0.00	F_{IS}	#N/A				
				Ω_{IT}	0.00	F_{IT}	#N/A				