

**Table S2 Comparison between computer simulations and diffusion approximations (E[] in bold face) for different gene frequency and allelic diversity variables.**

<b><math>u = 0.00001</math></b>								
$Nm$	$A_S$	$E[A_S]$	$D_A$	$E[D_A]$	$A_{ST}$	$E[A_{ST}]$	$K_T$	$E[K_T]$
0	0.299	<b>0.301</b>	1.152	<b>1.146</b>	0.794	<b>0.792</b>	12.36	<b>68.198</b>
0.01	0.512	<b>0.547</b>	1.203	<b>1.174</b>	0.701	<b>0.682</b>	10.50	<b>37.366</b>
0.05	0.923	<b>1.059</b>	1.028	<b>0.969</b>	0.527	<b>0.478</b>	7.31	<b>16.269</b>
0.1	1.444	<b>1.277</b>	0.935	<b>0.749</b>	0.393	<b>0.370</b>	6.57	<b>11.208</b>
0.5	1.652	<b>1.483</b>	0.533	<b>0.385</b>	0.244	<b>0.206</b>	5.45	<b>6.223</b>
1	1.628	<b>1.574</b>	0.436	<b>0.330</b>	0.211	<b>0.173</b>	4.94	<b>5.515</b>
5	1.961	<b>1.909</b>	0.365	<b>0.280</b>	0.157	<b>0.128</b>	4.75	<b>4.928</b>
10	2.218	<b>2.080</b>	0.337	<b>0.269</b>	0.132	<b>0.115</b>	4.76	<b>4.853</b>
50	2.431	<b>2.464</b>	0.265	<b>0.248</b>	0.098	<b>0.092</b>	4.64	<b>4.792</b>
100	2.592	<b>2.598</b>	0.283	<b>0.236</b>	0.098	<b>0.083</b>	4.72	<b>4.785</b>
500	3.009	<b>2.782</b>	0.233	<b>0.180</b>	0.072	<b>0.061</b>	4.87	<b>4.779</b>
1000	3.110	<b>2.802</b>	0.217	<b>0.136</b>	0.065	<b>0.046</b>	4.91	<b>4.778</b>
<b><math>u = 0.0002</math></b>								
0	5.605	<b>4.887</b>	5.945	<b>4.382</b>	0.515	<b>0.473</b>	66.05	<b>112.854</b>
0.01	5.784	<b>5.058</b>	6.049	<b>4.435</b>	0.511	<b>0.467</b>	65.16	<b>110.190</b>
0.05	6.370	<b>5.782</b>	6.402	<b>4.683</b>	0.501	<b>0.448</b>	64.84	<b>101.763</b>
0.1	7.323	<b>6.552</b>	6.854	<b>4.872</b>	0.483	<b>0.427</b>	63.67	<b>94.500</b>
0.5	11.942	<b>10.520</b>	7.653	<b>5.352</b>	0.391	<b>0.337</b>	61.33	<b>74.240</b>
1	15.569	<b>13.205</b>	7.768	<b>5.389</b>	0.333	<b>0.290</b>	61.87	<b>68.030</b>
5	23.456	<b>20.803</b>	7.196	<b>5.249</b>	0.235	<b>0.202</b>	61.55	<b>61.392</b>
10	26.924	<b>24.416</b>	6.750	<b>5.222</b>	0.200	<b>0.176</b>	60.98	<b>60.419</b>
50	33.847	<b>32.129</b>	5.857	<b>4.880</b>	0.147	<b>0.132</b>	60.08	<b>59.614</b>
100	36.821	<b>34.941</b>	5.323	<b>4.777</b>	0.126	<b>0.120</b>	58.88	<b>59.511</b>
500	40.904	<b>38.592</b>	4.822	<b>3.610</b>	0.105	<b>0.086</b>	58.87	<b>59.429</b>
1000	43.009	<b>38.968</b>	4.649	<b>2.707</b>	0.098	<b>0.065</b>	59.92	<b>59.419</b>

The scenario considered refers to a subdivided population with  $n = 10$  subpopulations, each of size  $N = 1000$  individuals, mutation rate  $u$ , variable migration rate ( $m$ ), and no sampling (all subpopulation individuals are analysed). See main text for definitions.