



Figure S19 Analysis of the allele count data from a simulation of 50,000 neutral markers. The simulation was performed according to an island model with $n_d = 50$ “uncolored” demes, each made of $N = 250$ diploid individuals (500 genes). Samples were collected in six demes (50 individuals per deme). The migration rate was chosen to achieve the expected value of $F_{ST} = 0.15$, using equation 6 in Rousset (1996). The realized value was $F_{ST} = 0.153$ (multilocus estimate). (A) Boxplot representation of the posterior means of the parameters κ_{ij} (that indicate which allele is selected for) for the 50,000 neutral markers in “uncolored” demes (1–6). (B) Boxplot representation of the posterior means of the selection coefficients σ_{ij} for the 50,000 neutral markers (unconditional on κ_{ij}). The horizontal dotted line indicates the prior mean $\sigma_{ij} = 1$