

**Figure S18** Analysis of the allele count data from datasets 10 and 11. (A) Boxplot representation of the posterior means of the parameters  $\kappa_{ij}$  (that indicate which allele is selected for) for the 1,000 positively selected loci in "blue" demes (1–2), "red" demes (3–4) and "uncolored" demes (5–6) in dataset 10. (B) Boxplot representation of the posterior means of the selection coefficients  $\sigma_{ij}$  for positively selected loci in dataset 10. For "blue" demes, the posterior means of the selection coefficients  $\sigma_{ij}$  are conditional upon the "blue" allele being selected for ( $\kappa_{ij} = 0$ ). For "red" demes, the posterior means of the selection coefficients  $\sigma_{ij}$  are conditional upon the selection coefficients  $\sigma_{ij}$  are conditional upon the "red" allele being selected for ( $\kappa_{ij} = 1$ ). The horizontal dotted lines indicate the true value of  $\sigma_{ij} \equiv 2Ns_{ij}$  (top) and the prior mean  $\sigma_{ij} = 1$  (bottom). For "uncolored" demes, the posterior means of the selection coefficients  $\sigma_{ij}$  are unconditional. (C) Idem as (A) for dataset 11. (D) Idem as (B) for dataset 11.