



**Figure S15** Analysis of the allele count data from datasets 3 and 4. (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 3. (B) Boxplot representation of the posterior means of the selection coefficients  $\sigma_{ij}$  for positively selected loci in dataset 3. 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 “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 4. (D) Idem as (B) for dataset 4.