



**Figure S2** Observed versus expected estimates of nucleotide heterozygosity ( $\Theta_w$ ) at 18 *D. pseudoobscura* marker loci based on a coalescent model of an exponentially growing population. Nucleotide heterozygosity estimates based on the number of segregating sites within five gene arrangements (AR, PP, CH, ST, and TL) as well as among all arrangements are shown in the individual panels. The observed (Obs) estimates of  $\Theta_w$  as well as the mean ( $P(0.500)$ ) and the 95% confidence interval ( $P(0.025)$  to  $P(0.975)$ ) derived from 1000 coalescent simulations using nested subsamples for an exponentially growing population with growth rate parameter  $\alpha=7$ . The genetic markers labeled in red on the x-axis are genes within the inverted region of the derived arrangement. The proximal region is to the left.