

**Figure S10:** Pairwise comparisons between the correlation coefficients of selection with  $F_{ST}$ ,  $D_{XY}$  and  $\Delta \pi$  across four sampling points for  $\mu = 4.89e^{-7}$  simulations. Each data point represents a unique demographic treatment with points coloured according to DP population size and shaped according to migration level. Correlation 1 refers to the first measure listed in the comparison and Correlation 2 to the second. The y=x line is plotted within each facet to illustrate biases towards one measure. Points below the line are biased towards Correlation 1, whilst points above the line are biased towards Correlation 2. Each point represents correlation coefficients calculated across all genes within individual treatments groups and averaged over 20 iterations.