Adaptation & Quantitative Traits

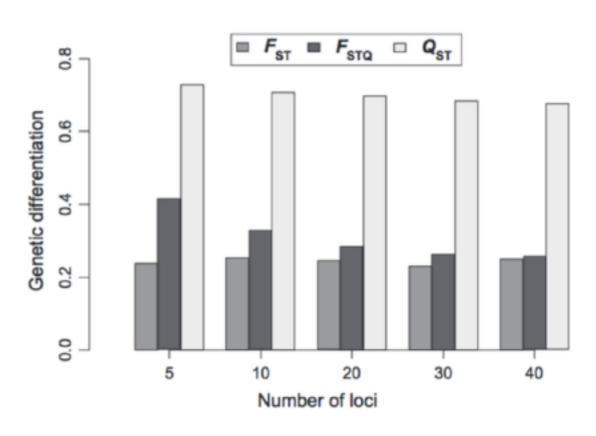
Most traits appearing to influence fitness in natural populations are quantitative.

The ability to evolve over time is determined by the presence of "large effect" genes as well as the cumulation of interactions among genes of "small" effect.

Epistasis

Selection often works to optimizes epistatic interactions among loci by changing covariance in allele frequencies among populations.

 "Adaptive" loci are not even expected to look different than neutral loci!



LeCorre & Kremer (2012) Mol. Ecol. 21: 1548-1566.