

What is F_{ST} when:

1. Two populations are fixed for different alleles?
2. Two populations, A has $p=q$ in HWE and B has $r=s$ also in HWE.
3. Four populations, A, B, C fixed for one allele, population D fixed for different allele?

Misuse of F_{ST}

$$F_{ST} = \frac{\sum_{i=1}^{\ell} \sigma_{q_{S(i)}}^2}{\sum_{i=1}^{\ell} [q_{T(i)} (1 - q_{T(i)})]}$$
$$= 1 - \frac{y_{ST}}{y_T}$$

$$E[F_{ST}] = \frac{1}{4N_e m + 1}$$

