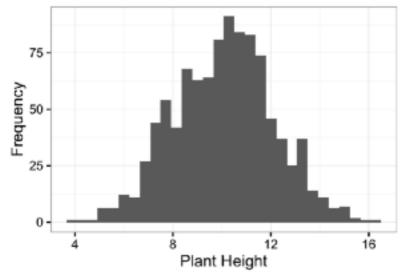
# Response to Selection

The predicted magnitude of change in a quantitative trait.



### Parental Average

### Population

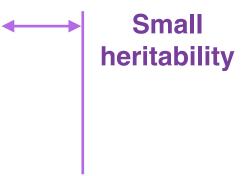
Average





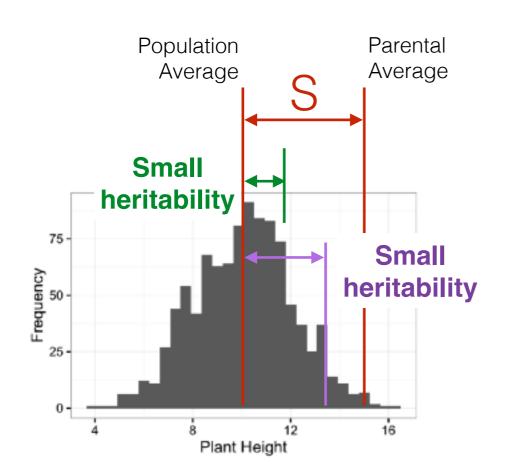






### Response to Selection

The predicted magnitude of change in a quantitative trait.



$$R = h^2 S$$

## Phenotypic Variance

 Can be partitioned into within and among components, creating an F<sub>ST</sub>-like parameter if we collect family-level data.

$$Q_{ST} = \frac{\sigma_{population}^2}{\sigma_{population}^2 + 8\sigma_{family}^2}$$