

□ Important for selection process:

Observed or measured traits (phenotypes) are not passed from parents to offspring!

But based on genetics:

Parents pass a random sample of their alleles to their offspring

⇒ Therefore parents must be selected based on the value of the sample of alleles

Unknown \Rightarrow estimate
 \Rightarrow estimated breeding value

- Observed or measured characteristics (traits) are called **phenotypes (P)**

According to our genetic model that we use, phenotypes can be decomposed into a genetic part (G) and into an environmental part (E).

$P = G + E \rightarrow$ can be partly observed