Selection response

☐ Assume : Selection on $\hat{u}_i$

☐ What is expected selection response per generation?

$$i = \frac{z}{p}$$

$P \rightarrow$ determines i

z {

$P \rightarrow$ determines i

$\hat{u}_i$

$\times 17 \rightarrow \hat{y} \downarrow \hat{u}$

$y_c \hat{u}_i$
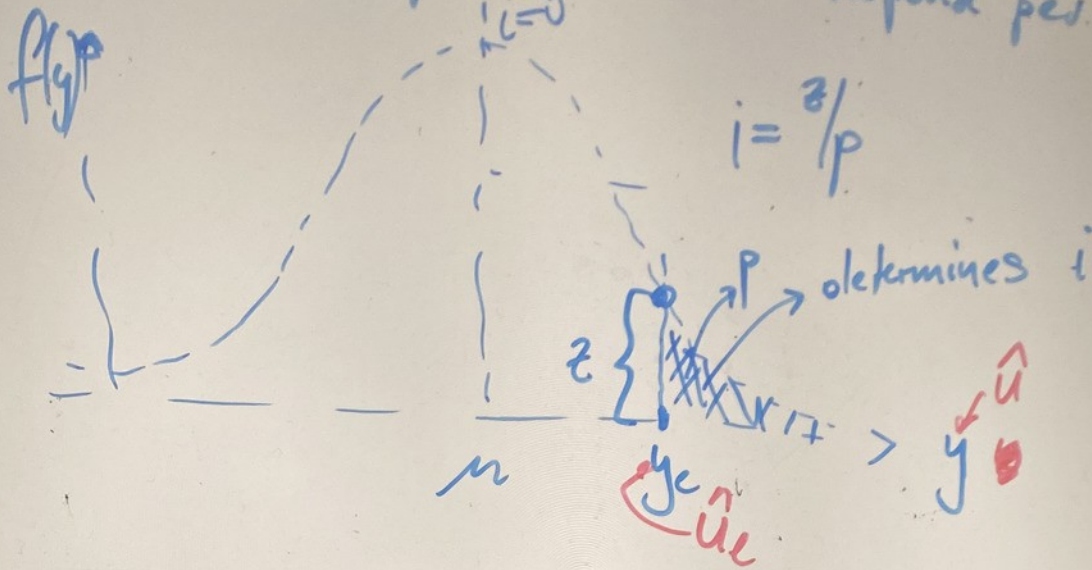
☐ $R = i \cdot r^2_{u,y} \cdot \sigma_y$

↓

R: Selection response

i : selection intensity

$r^2_{u,y}$: Reliability

σ_y : phenotypic standard deviation $= \sqrt{\text{var}(y)}$

☐ For Breeding programs : $\boxed{\dfrac{R}{L}}$ where L = Generation interval

→ selection response per year