

So far: Genetics

Given Model :  $P = G + E$

Aim: Predictions about  $G$  based  $P$  and  $E$

From statistics point of view:

$\left\{ \begin{array}{l} G : \text{unknown} \\ P, E(\text{parts of } E) : \text{known and available as observations} \\ \text{Farm, Season} \\ \text{Age, } \dots \end{array} \right.$

Model  $P = G + E$

Problem of estimating unknown parameter  $G$  based on  $P$  and  $E$

- BLUP : Best Linear Unbiased Prediction
- Bayesian methods