1. Density plots, dotplots, boxplots

Dataframe barley (package lattice)
- **yield**: yield in bushels per acre
- **variety**: 10 different varieties
- **year**: two years (1931, 1932)
- **site**: 6 different Minnesota sites

2. Models, residuals, variance, standard deviation

- $y_i$: observation of case $i$ on variable $y$
- $\bar{y}$: the mean of the observations
- $\hat{y}_i$: the model value for case $i$ on variable $y$ (for now $\hat{y}_i = \bar{y}$)
- $e_i$: the residual of case $i$

\[ y_i = \hat{y}_i + e_i \]