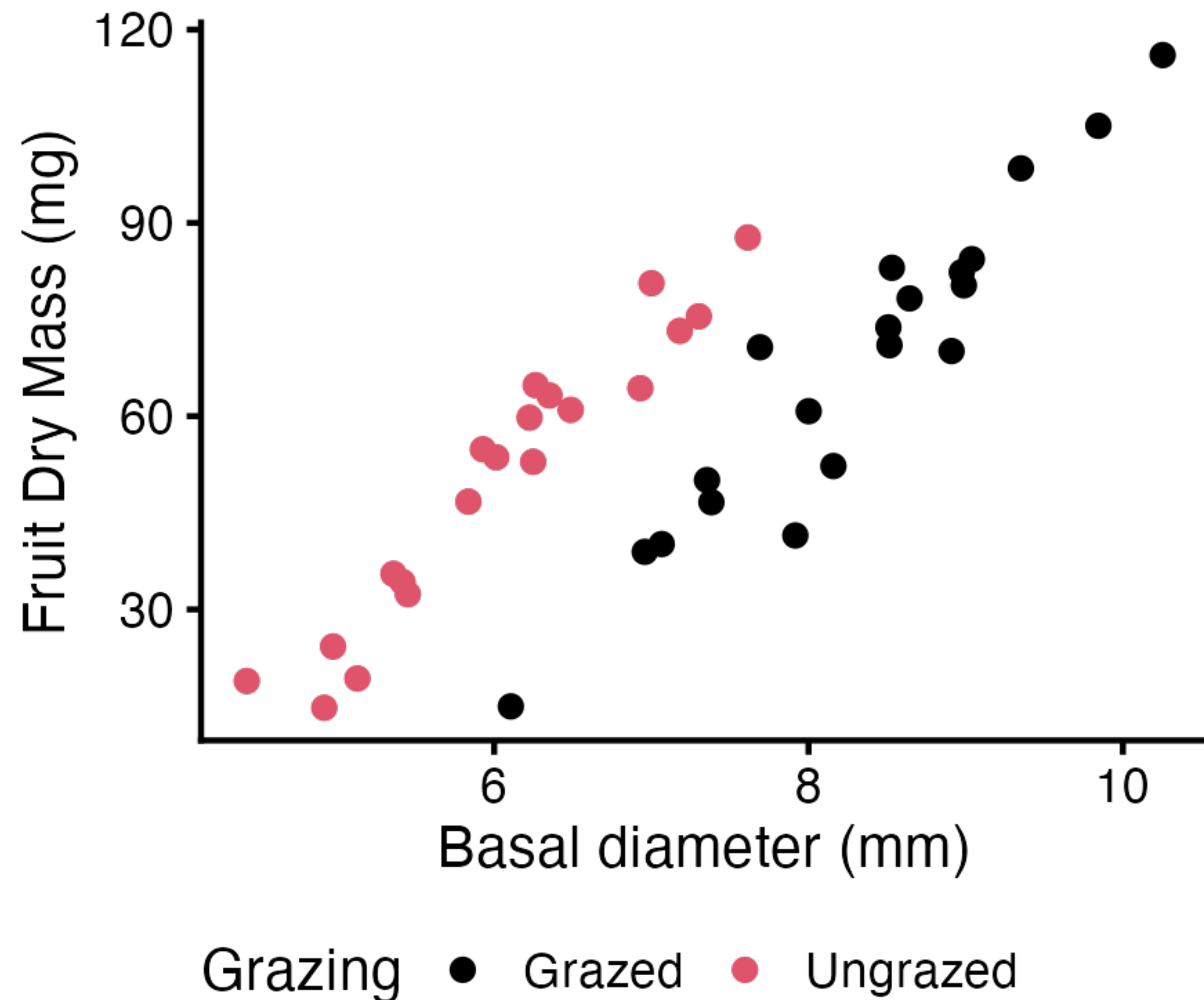


# Scale variables



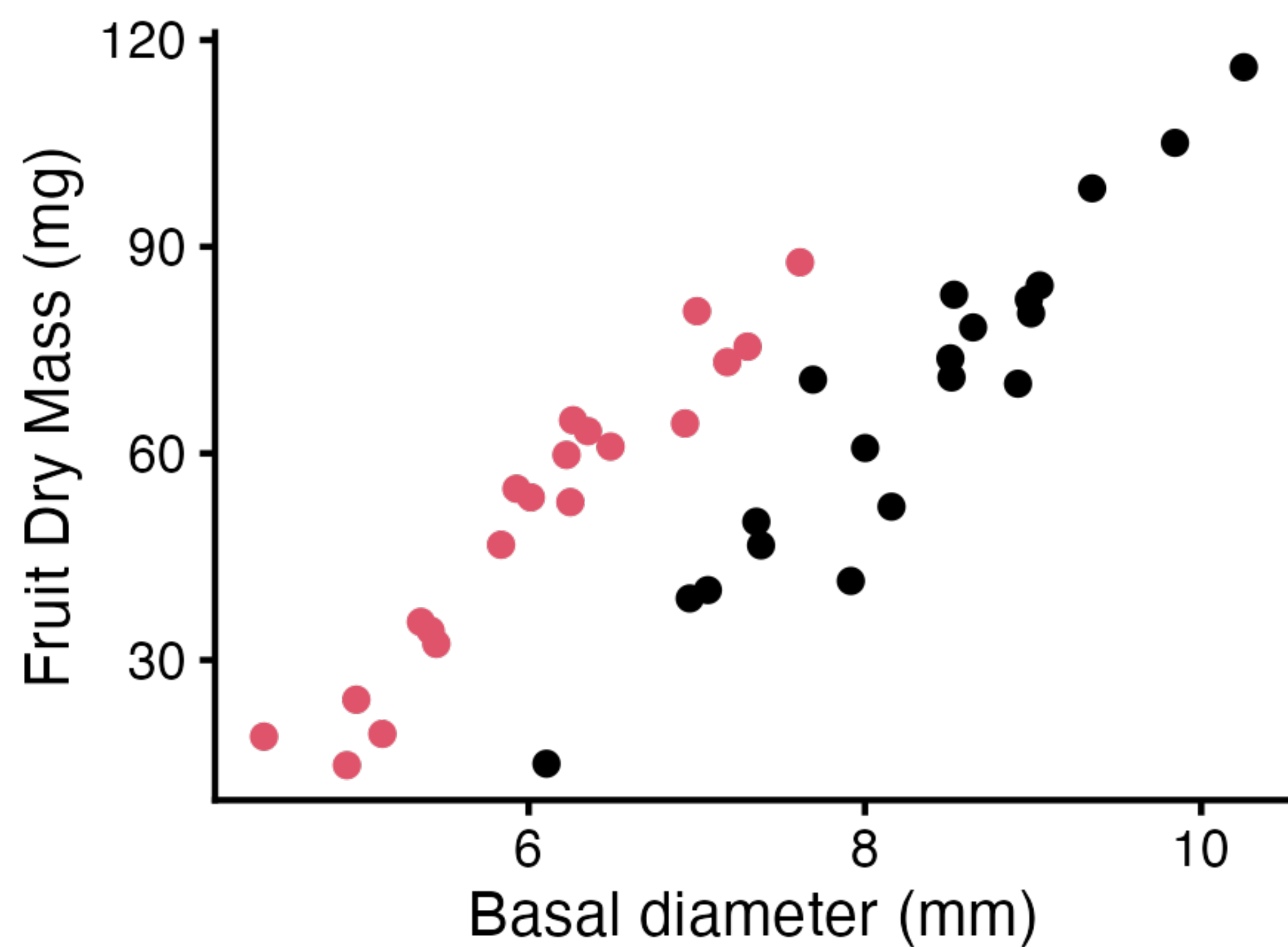
- It's good practice to scale variables by their standard deviation and subtract the mean:

$$\tilde{y}_i = \frac{y_i - \bar{y}}{sd(y)}$$

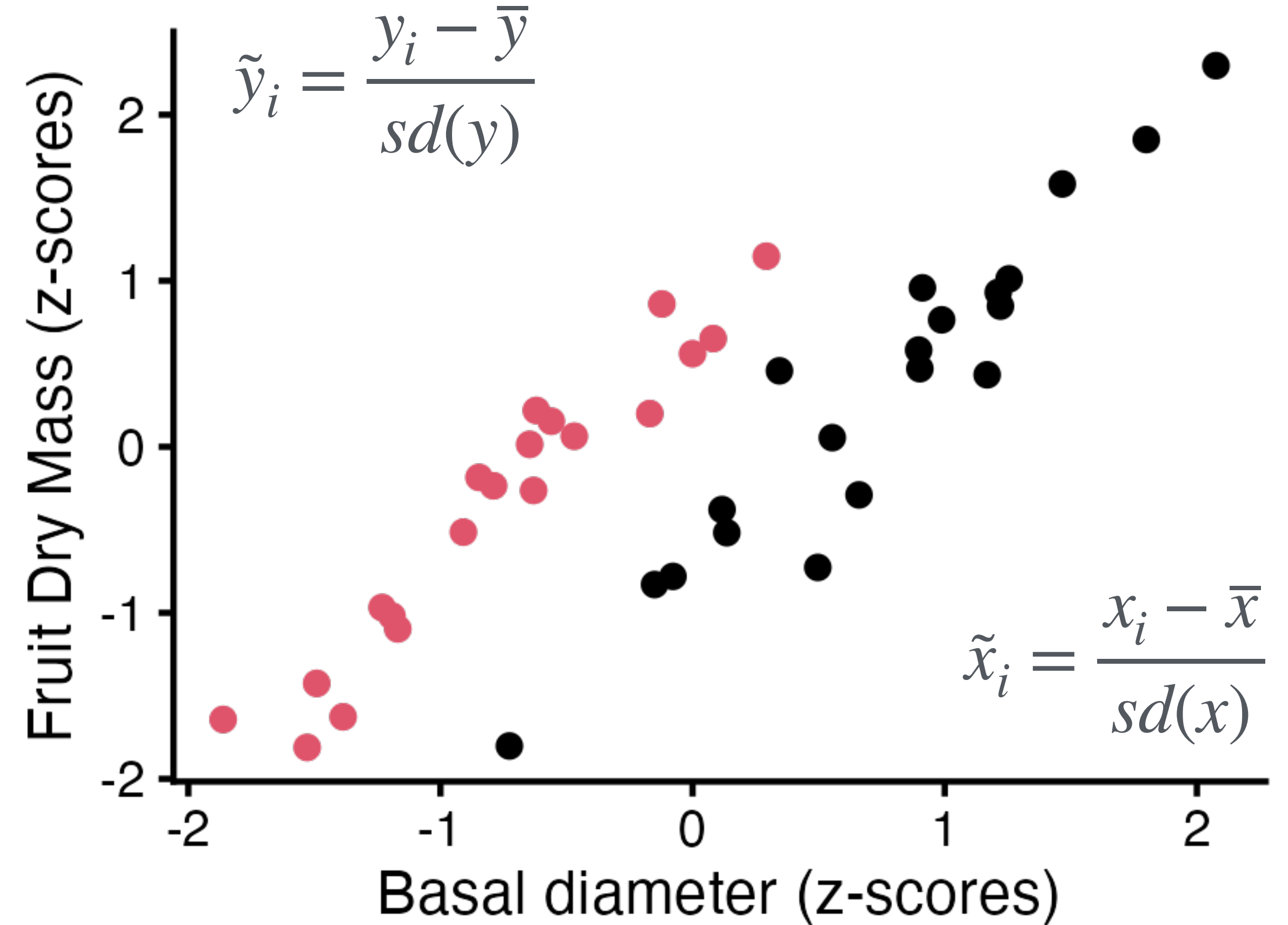
- The **z-score** of a continuous variable is a measure of how many standard deviations a data point is from the mean of the dataset
- Using z-scores makes coefficients easier to interpret and comparable across variables with different scales
- The transformation is linear, and we can always recover parameter values on their original scale by multiplying by the standard deviation

# Scale variables

Using standard deviation units makes everything simpler



Grazing ● Grazed ● Ungrazed ●



Grazing ● Grazed ● Ungrazed ●