

Phenotype Screening

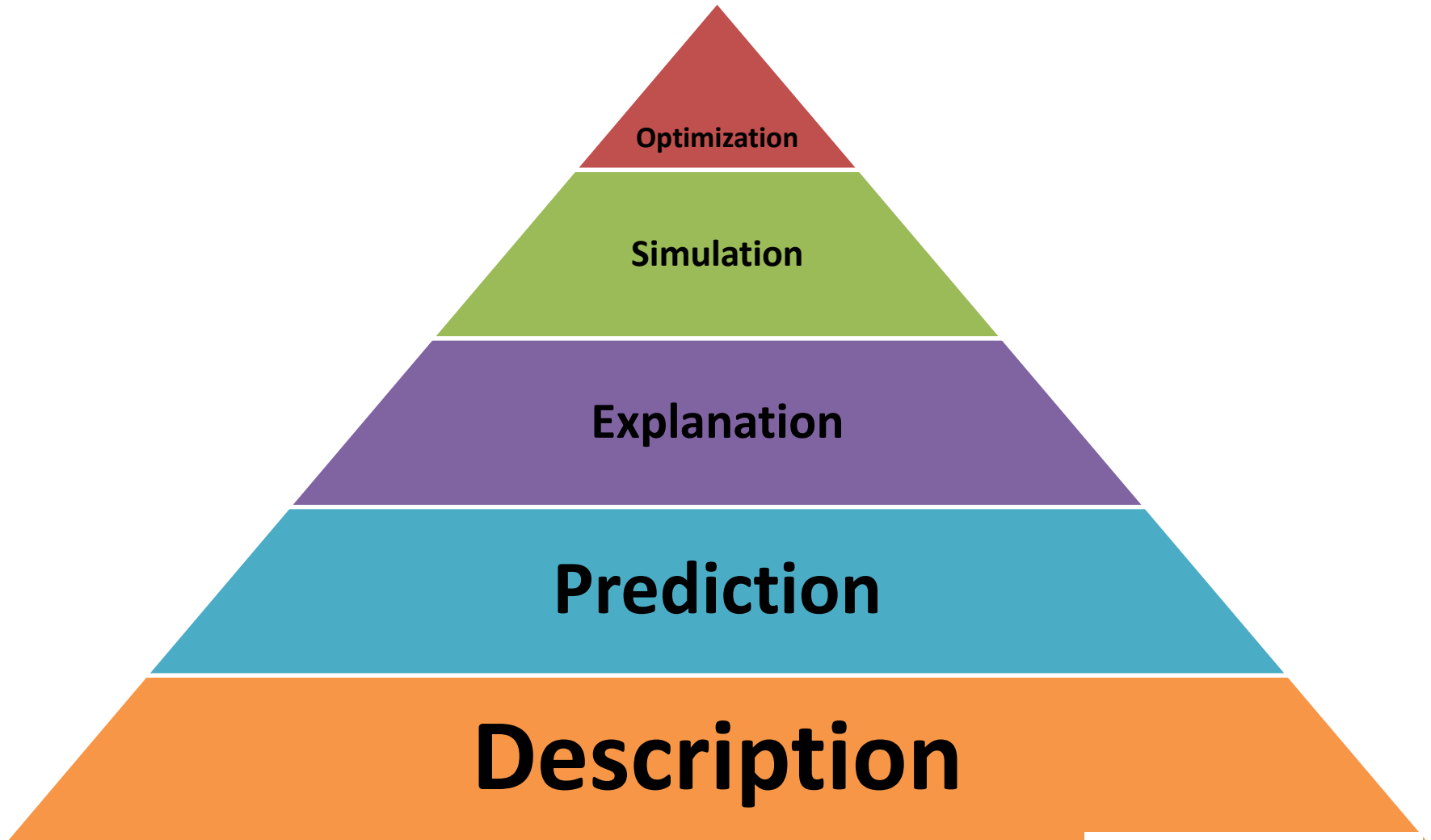
C O R P O R A T I O N

*enabling discovery*

# Small-Sample-Size Statistics In Agriculture, How to maximize Business Value

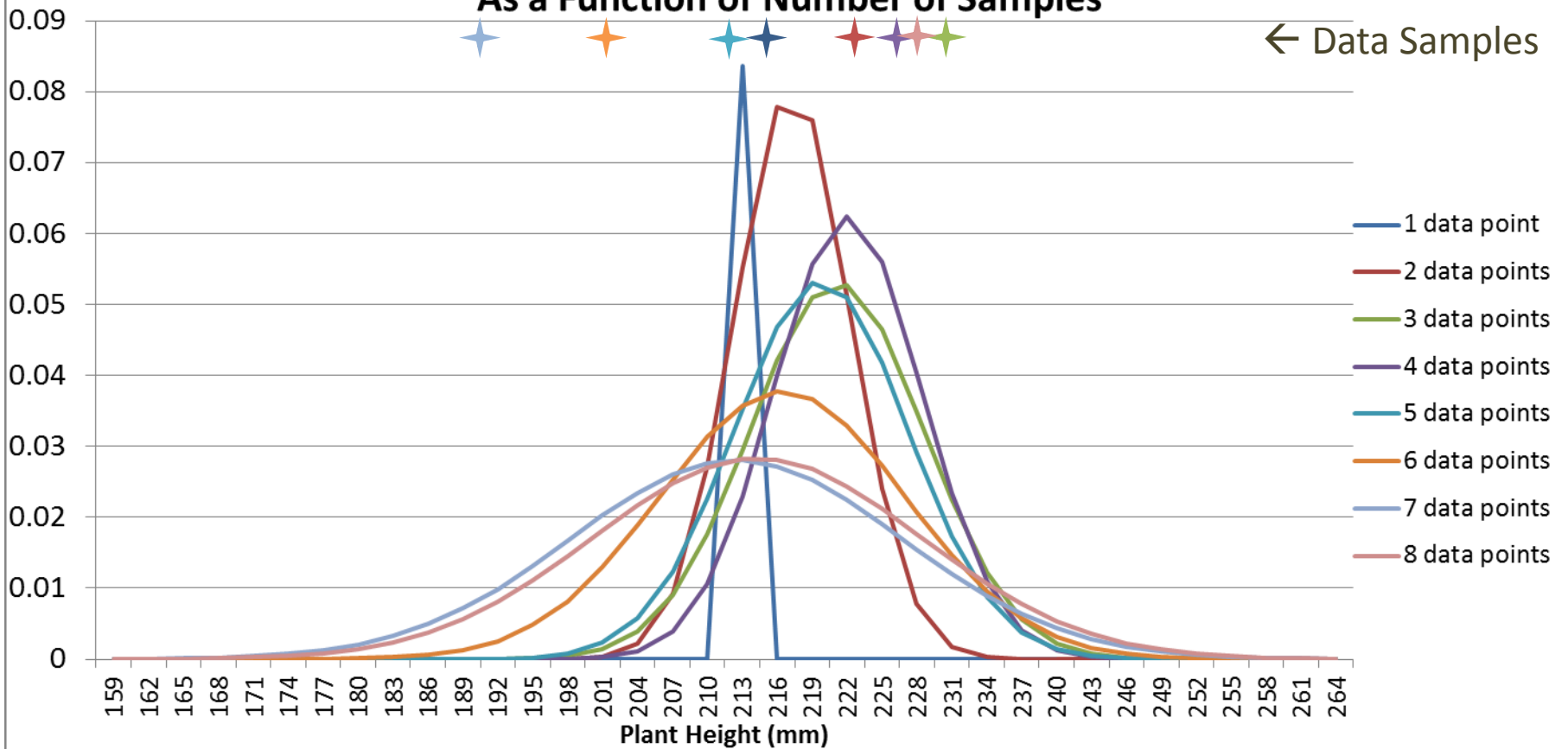
November 3, 2016

# What is the Objective of an Conducting Any Experiment?

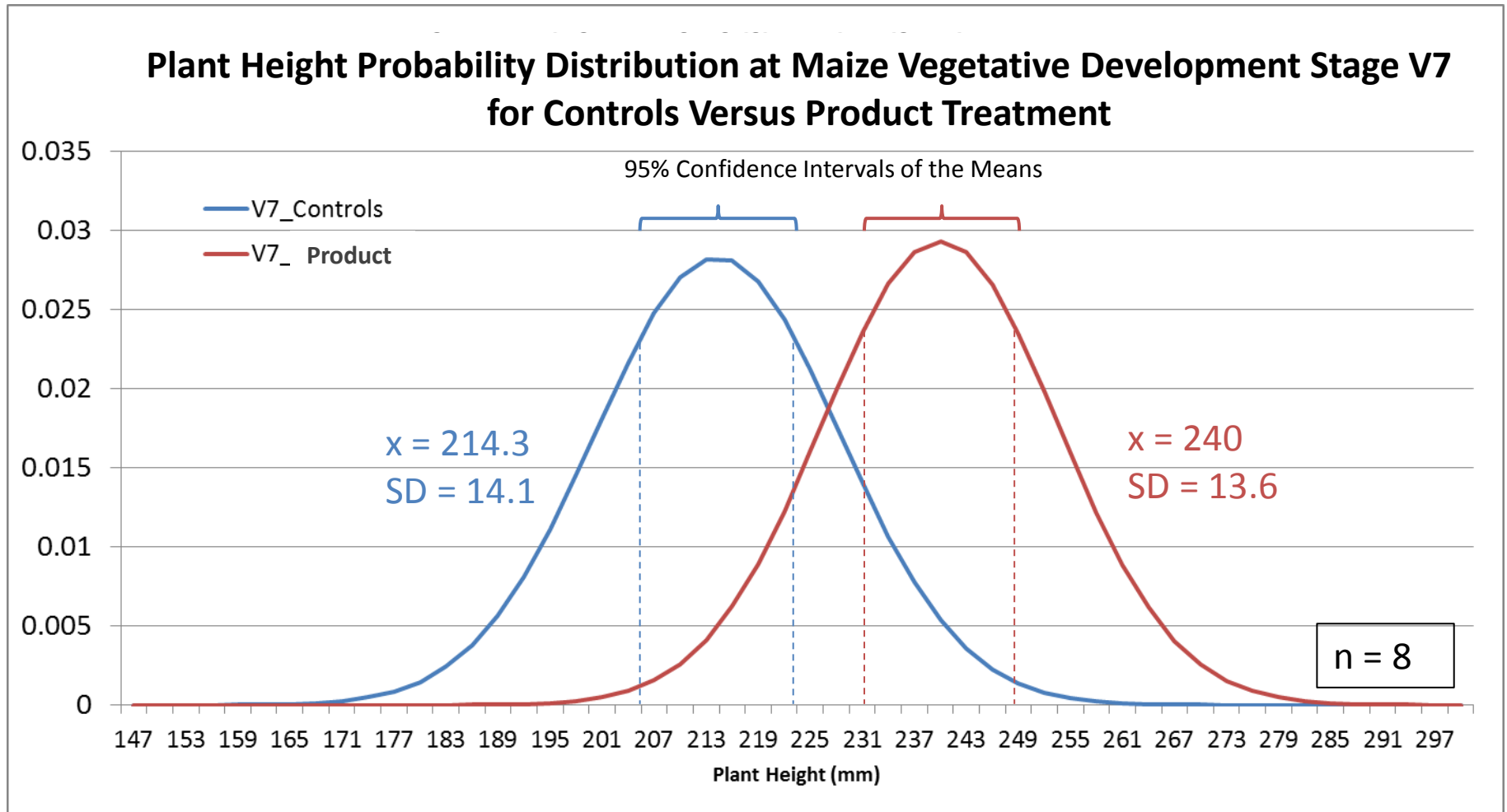


# More Samples Give Better Approximation of Population

Plant Height Probability Distribution at V7 For Controls  
As a Function of Number of Samples



# Null Hypothesis Disproved ( $\alpha = 0.05$ )

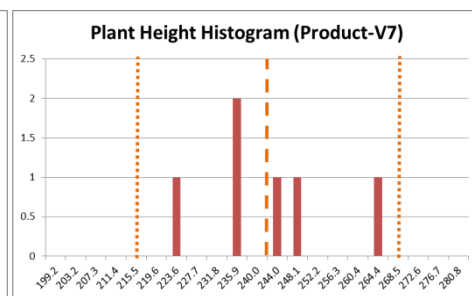
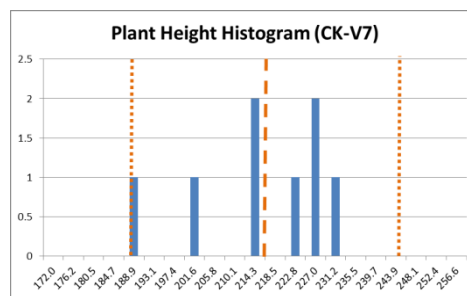


# Preceding Assumed Data From a Normal Distribution

- Various Approaches to Checking for Normality

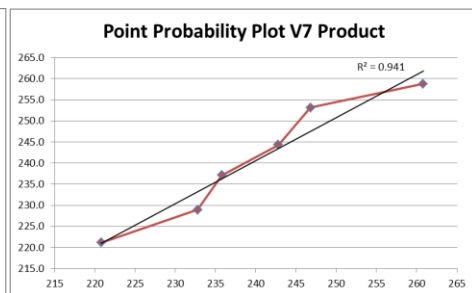
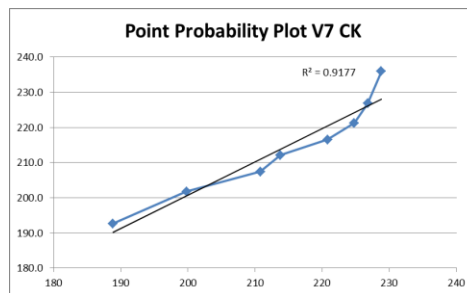
- Graphical (Histogram)

- Rank order data
- Generate a histogram



- Graphical (Point Probability Chart)

- Plot above data against ideal normal distribution data



# Confidence Level Does Not Decrease Monotonically with Number of Plants

