

# **Research Methods in Horticulture**

## **Hort-401 3 (2-1)**



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# **Sampling and Data Collection**

- **Normally random samples are taken**
- **Remain unbiased while taking samples**
- **Representative samples are taken**
- **Type of samples depends upon the nature of experiment being conducted**

# **Improving vanadium stress tolerance of watermelon by grafting onto bottle gourd and pumpkin rootstock**

- **Plant growth, SPAD index and photosynthesis assimilation**
- **Root morphology and scanning electron microscopy (SEM) of root tips**
- **Ion analysis**
- **Hydrogen per oxide (  $H_2O_2$ ), malondialdehyde (MDA), superoxide dismutase (SOD), and catalase (CAT) measurement**
- **RNA extraction and gene expression analysis of chlorophyll biosynthesis, chlorophyll degradation, and antioxidant enzymes-related genes**

<https://link.springer.com/article/10.1007/s10725-018-0372-x>

**The End**