

SEED PROPAGATION

Objectives:

- A. To collect and properly prepare seed from trees and shrubs for sowing
- B. To investigate seed viability by using seed germination test.
- C. To investigate planting depths of seeds
- D. To observe the effects of broadcasting seeds versus sowing seeds in rows.

Procedures:

Preparation of Woody Plant Seed for Sowing

- A. 1. Collect at least 50 seeds from each of the following:

<i>Cornus florida</i>	Flowering Dogwood
<i>Magnolia grandiflora</i>	Southern Magnolia
<i>Acer spp.</i>	Maple
<i>Cercis canadensis</i>	Eastern Redbud
<i>Hibiscus spp.</i>	Hibiscus
<i>Ulmus spp.</i>	Elm
- 2. Properly prepare these seeds for sowing
 - a. Remove pulp by soaking in 1 qt. of water plus 1 tsp. Baking soda
 - b. Thrash seeds for pod
- 3. Sow seeds as researched

Germination Test (Rag Test)

- B. 1. Count 100 seeds from each category.
- 2. Place each group in a moistened paper towel and enclose in a plastic bag.
- 3. Record data in table.

Planting Depth

- C. 1. In your assigned row, plant radish seed at 4 difference depths (top of ground; proper planting depth; 2 x than proper planting depth; 3 x than proper planting depth). Label accordingly.
- 2. Record data over the next 2 weeks.

Planting Method

- D. 1. Mark off 2 areas of your row. Label accordingly.
- 2. Broadcast seeds in one flat.
- 3. Sow seeds in rows in the other.
- 4. Observe over the next 2 weeks.

1. Method for preparing dry seed -
2. Method for preparing fleshy seed or seed with pulp -
3. Scarification -
4. Stratification -
5. Seed Viability -
6. Percent Germination -
7. Rag test for germination -
8. General Rule for planting depth of seeds -
9. Seed or seedling diseases -
10. Environmental conditions needed for seed germination -

PERCENT GERMINATION

PLANT:

	Day 1	Day 3	Day 6	Day 9	Day 12	Day 15			

DEPTH OF PLANTING

	Depth	Week 1	Week 2	Week 3	Week 4
1					
2					
3					
4					

BROADCAST VS. ROWS OBSERVATIONS

PLANT:	BROADCAST	ROWS
WEEK 1		
WEEK 2		
WEEK 3		
WEEK 4		