Mirabilis longiflora

Sweet Four O’clock

Tyler Warren
Taxonomy

- Nyctaginaceae Family
- Perennial Dicot
- Sweet Four O’clock
Background

- Mexico and the Southwest United States
- Dry, desert-like environments
Taxonomic Description

- Sprawling, bush-like habit (3’ x 3’)
- Full sun
- Drought and heat resistant
- Well-drained, light soil
Taxonomic Description

- Flowers
  - ½” to 1 ½” wide
  - White with a purple fused center
  - Elongated purple stamen and anthers
Taxonomic Description

- Flowers
  - Scented
  - Nocturnal – Hawkmoth pollination
  - Late summer
- Roots
  - Tuberous
- Leaves
  - Heart Shaped
Propagation

- Seed
  - Thompson & Morgan, etc
- Stratification suggested
  - One week
- Once sown:
  - A) Mist house
  - B) Polythene bag for one week
Experiment

- Stratification vs. Non Stratification
- 30 seeds divided into two groups with 15 in each
Experiment

Group 1
- Stratification
- Seeds chilled at 40° for one week
- Covered with vermiculite

Group 2
- Non-Stratification
- Directly sown
- Covered with vermiculite
Experiment

Group 1 (Stratified)
- Germination Results
- Week 10: 20%
- Week 11: 93% total

Group 2 (Non-Stratified)
- Germination Results
- Week 10: 0%
- Week 11: 60% total
Production

- Nine to eleven week production schedule
- Week 9 - Sown
- Week 10 & 11 - Germination
- Week 12 - Capillary Mats
- Week 13 - Transplanted