

# **STARTING PLANTS IN A GREENHOUSE**

## **(Field Exercise)**

- I. Making the soil mix
  - A. Ingredients
    1. For air porosity, drainage, and texture: sand, perlite, pumice, vermiculite, etc.
    2. For fiber, body, organic matter, water holding capacity: peat moss, coconut fiber
    3. For introduction of soil micro-organisms; biological aspects of soil: compost or soil
    4. For nutrition: addition of NPK and trace minerals
  - B. Method
    1. Mix ingredients starting with the driest (perlite, etc) and ending with the wettest (compost/soil).
      - a. Mix with shovel in contained area
      - b. Mix with cement mixer
    2. Add water and continue mixing. Add until water can be squeezed from the soil by hand.
- II. Making soil blocks
  - A. Advantages
    1. More soil for root development
    2. Roots do not circle
    3. Easy to transplant
    4. Saves space in greenhouse
  - B. Make flat of 1" soil blocks with floor blocker – for most seeds
  - C. Make flat of 2" soil blocks with hand blocker – for large seed

\*Size of block also depends on type of plant and length of time in the greenhouse
- III. Seeding
  - A. Seeding method in soil block - seed three different size seeds into soil blocks. Try different methods of dropping seed – by hand, with moist toothpick, with folded seed packet.
  - B. Covering seed for darkness – cover with porous medium that will not crust – sand or vermiculite is best. Also provides a base of support for seedling.
- IV. Supplemental care
  - A. Watering method – water immediately after covering seed. Must be kept moist for seed to germinate, and obviously for continued growth. Discuss subsequent irrigation options.
  - B. Nutrition – best provided with foliar spray of compost tea. Aids in rapid plant growth, disease prevention. Adds live component through compost. Make compost tea: 4 cup compost, 1 cup liquid fish and kelp, 1 tbsp molasses, two gallons water. Mix well and aerate for 24 hours. Apply with backpack sprayer.

