# Soilless Media Test
## Greenhouse and Container Nursery Production

### SECTION I
- Date received by county: _______________________
- Name: ______________________________________
- Address: _____________________________________
- City: __________________________ State______ Zip________
- Telephone Number: _____________________________
- Owner’s Sample Identification: ______________________

### SECTION II
#### CROP
- Mark (x) One
- **Bedding Plants / Transplants**
  - Vegetables
  - Flowers
- **Vegetables**
  - Cucumbers
  - Lettuce
  - Tomato
  - Other vegetables________
- **Flowers**
  - Chrysanthemums
  - Herbaceous perennials____
  - Annuals________________
  - Foliage plants________
  - Poinsettias________
  - Other__________________
- **Woody Landscape Plants**
  - Deciduous trees________
  - Evergreen trees________
  - Flowering trees________
  - Deciduous shrubs________
  - Evergreen shrubs________
  - Ground covers________

### SECTION III
#### TYPE OF GROWING MEDIUM
- Mark (x) where appropriate
  - Commercial Mix _____________
  - Custom Mix _____________
    - Pine bark ____%
    - Peat ____%
    - Vermiculite ____%
    - Perlite ____%
    - Coarse sand ____%
    - Expanded shade ____%
    - Hardwood bark ____%
    - Compost______%
    - Other______%

### SECTION IV
#### STAGE OF PLANT DEVELOPMENT
- Mark (x) One
  - Pre-plant
  - Seedling or freshly planted
  - ____ weeks after transplanting
  - ____ months after transplanting
  - Other, specify_____________

### SECTION V
#### SIZE OF CONTAINER OR RAISED BED
- Mark (x) One
  - Plug tray; ____ count per tray
  - Cell pack; ____ count per flat
  - ____ inch container
  - Above-ground container nursery production ____ gallon container
  - Pot-in-Pot production ____ gallon container
  - Raised bench
    - ____Width (inches)
    - ____Depth (inches)
    - ____Length (feet)
  - Other, specify_____________

### SECTION VI
#### PLANT DESCRIPTION
- Mark (x) where appropriate
  - Normal growth
  - Stunted growth
  - Weak or damaged roots
  - Yellowing of lower leaves
  - Yellowing of new leaves
  - Scorched leaf margins
  - Other, describe__________________

### SECTION VII
#### FERTILIZER & LIME APPLIED
- Mark (x) where appropriate
  - Liquid application (injector)
    - Constant
    - Weekly
    - Other:
      - Analysis: __________________
      - Rate: _____________________
  - Slow-release application
    - Brand: _______________________
    - Analysis: _____________________
    - Rate: ________________________
  - Other commercial fertilizer
    - Superphosphate
      - Kind: _____________________
      - Analysis: __________________
      - Rate: _____________________
  - Other________________________
    - Kind: _____________________
    - Analysis: __________________
    - Rate: _____________________

### Liming material used
- Dolomitic limestone
- Agricultural limestone
- Other: _______________________
  - Rate: _____________________
Soilless Media Test
OVERVIEW and INSTRUCTIONS

Overview
The soilless media test is intended for use with growth media appropriate for greenhouse or nursery crop production in containers or raised benches with limited volume. This test is not appropriate for field soil. Field soil is typically not included in growth media for these systems, nor is it recommended. If you wish to test field soil, with or without organic amendments, request a routine soil test at your County Extension Office.

Parameters measured in the soilless media test include pH, soluble salts (electrical conductivity), water-soluble nitrate-N, phosphorus, potassium, calcium, magnesium, sodium, boron, iron, manganese, copper, and zinc using a saturated media extract procedure. Samples may be taken from a current crop or from bulk media before use.

Samples must be submitted through your County Extension Office in bags/boxes provided by Cooperative Extension. Please provide complete information on the attached form. The more information that is provided, the more detailed the response can be.

Completing the Form
Section I. County Extension Office will record the date received.
Print name, address and telephone number.
For the Owner’s Sample Identification – enter any combination of numbers and letters that will identify the sample, such as MUMS, CUC1, CUC2, etc.

Section II. Mark (x) the box for the crop for which a recommendation is desired. If “other”, please write in the name of the crop.

Section III. Mark (x) the box or boxes that best describe your plant growth medium and add more detail as available.

Section IV Mark (x) the box describing the stage of crop production.

Section V. Mark (x) the box for the size of container or bed.

Section VI. Mark (x) the box that best describes the crop plant at the time of media sampling.

Section VII. Mark (x) the appropriate box that best describes your fertilizer program and lime application. Provide as much specific information as possible about the kind of fertilizer and the rate.

Taking a Sample
Growth media samples should be representative of the bed or bench of a given crop. A sampling strategy should consider crop species, planting time, container size and environmental parameters such as shading, location in a greenhouse or nursery bed, etc. Ideally, a sample should be taken from plants representing each of the possible variations in these factors. However, circumstances may not allow crop management to differ with each of these variations. Therefore, it is best to select several subsamples from plants that will be managed as a block and submit a composite sample. Samples may be taken from bulk media before the crop is planted to determine beginning status.

Collect 6 to 8 subsamples from several locations in beds or from 6 to 8 representative containers in a block. Each of these subsamples should include the growth medium from the whole root zone from the surface to the bottom of the raised bed or container. This is necessary because the soluble salts and other parameters can differ with depth in a container or bed. Thoroughly mix the subsamples together to create a pooled sample and take two pints of the mixture as your sample. Two pints will fill two sample bags obtained from your County Extension Office. Mark the sample with an owner ID.

Sampling time should also be considered relative to recent management activities or environmental events such as rainfall. If a crop is receiving routine liquid fertilization, it is generally accepted to wait four to six hours after the application before sampling.