University of Kentucky
College of Agriculture, Food and Environment

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 _____

Lab Use Only:

County Use Only:

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County Code County Sample #

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 DEVLEOPMENT
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_____

Billing Code (Lab Use Only)

SECTION VI. PLANT DESCRIPTION

□ 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
- □ Other_____
  - 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.