University of Kentucky College of Agriculture, Food and Environment

Soilless Media Test

Greenhouse and Container Nursery Production

SECTION I. Date received by county		ab Use Only:
Address		county Use Only:
CityStateZip		
Telephone Number		
Owner's Sample Identification		County Code County Sample #
<u>SECTION II.</u> CROP Mark (x) One	SECTION III. TYPE OF GROWING	G Billing Code (Lab Use Only)
Bedding Plants / Transplants	Mark (x) where appropriate	SECTION VI. PLANT_DESCRIPTION
□ Vegetables		□ Normal growth
	Custom Mix	□ Stunted arowth
	Pine bark% Peat %	Weak or damaged roots
Vegetables	Vermiculite%	□ Yellowing of lower leaves
	Perlite%	□ Yellowing of new leaves
Lettuce	Expanded shade%	□ Scorched leaf margins
□ Tomato	Hardwood bark%	
Other vegetables	Other%	
Flowers	SECTION IV. STAGE OF PLANT	SECTION VII. FERTILIZER & LIME APPLIED
Chrysanthemums	Mark (x) One	Mark (x) where appropriate
Herbaceous perennials	□ Pre-plant	Liquid application (injector)
□ Annuals	Seedling or freshly planted	□ Constant
□ Foliage plants	weeks after transplanting	□ Other:
Poinsettias	months after transplanting	Analysis:
Other	Other, specify	
Woody Landscape Plants		Brand:
	CONTAINER OR RAISED BED	Analysis:
	Mark (x) One	Rate:
	Plug tray; count per tray	Other commercial fertilizer
Evergreen trees	□ Cell pack; count per flat	□ Other
	inch container	Kind: Analysis:
	□ Above-ground container nursery	Rate:
	gallon container	□ Other Kind:
	Pot-in-Pot production gallon container	Analysis: Rate:
Evergreen shrubs	□ Raised bench	Liming material used
	Width (inches)	 Dolomitic limestone
Ground covers	Depth (inches) Length (feet)	Agricultural limestone Other:
	Other, specify	rale.

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.