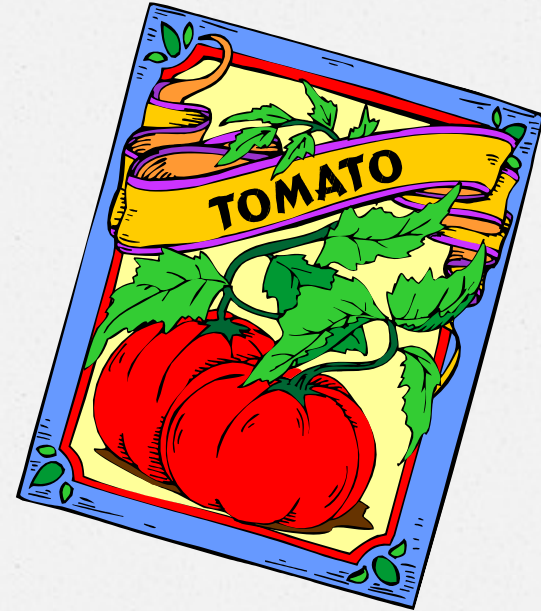




UNIVERSITY OF GEORGIA
EXTENSION



Presents...

TOTALLY TOMATOES

University of Georgia

- o An Equal Opportunity, Affirmative Action, Veteran, Disability Institution
- o If you are an individual with a disability who may require assistance or accommodation in order to participate in or receive the benefit of a service, program, or activity of UGA, or if you desire more information, please contact us.

Our Fave Veg...

- o *...or is it a fruit?*
- o Scientists say...
- o Cooks say...



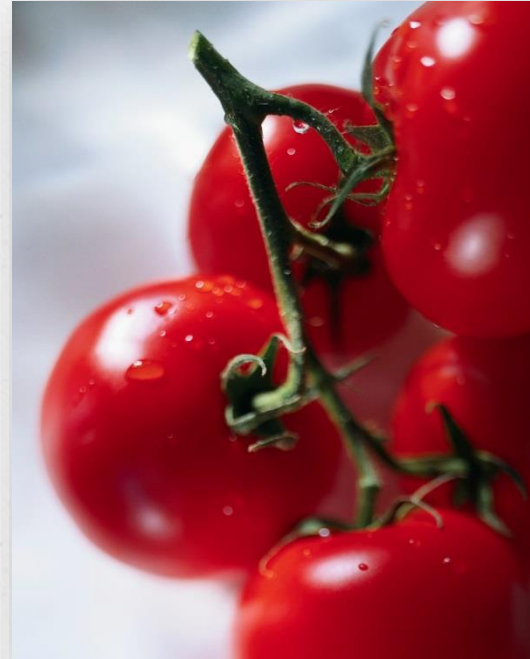
Tomatoes Today



- o Most popular 'vegetable' in US
- o Contain lycopene, one of most powerful natural antioxidants
- o Tomato plants are **vines**, typically growing **six feet or more** above the ground if supported, although...
- o ...erect **bush** varieties are generally **three feet tall or shorter**

So, How Can I Grow the BEST Tomatoes?

- o Be realistic
- o Educate Yourself
- o Set appropriate goals
- o Take good notes



What You Can Control...

- o Preparation
- o Location
- o Selection
- o Planting
- o Care
- o Actions...and Reactions



...And What You Cannot Control



- o Weather
- o Mother Nature is ALWAYS the Boss
 - o *“Do the best you can...and enjoy the run.”*

The Grand Plan

- o You wouldn't go on a trip without a map (or GPS)
- o Before you head to the garden center, consider your objectives:
 - o *"I want to eat my first BLT by July 4th!"*
 - ✓ Slicing or sandwich type
 - ✓ Matures in 75 days from transplant
 - o *"I don't want to repeat last year's disaster, when all my tomatoes had ugly black spots on the end!"*
 - ✓ Research blossom end rot
 - ✓ Keep good notes



Preparing a Place

- o Location, Location, Location
- o *What Does Your Soil Test Say?*
- o It All Started Last Year...



Location, Location, Location

o Key ingredient to success: The Sun

- o 6-10 hours; 8 is optimum
- o Consistent, if not constant
- o Monitor the amount of sunlight
- o Select varieties based on YOUR location



o Where's the Water?

- o Tomatoes are thirsty plants
 - o *One inch a week*
- o Tomatoes need consistent moisture
- o Use drip irrigation or soaker hose in morning

Don't Guess – Soil Test

- o Soil Test Kits with bags and all the information about collecting soil samples and submitting

\$10.00 fee will be charged for samples.



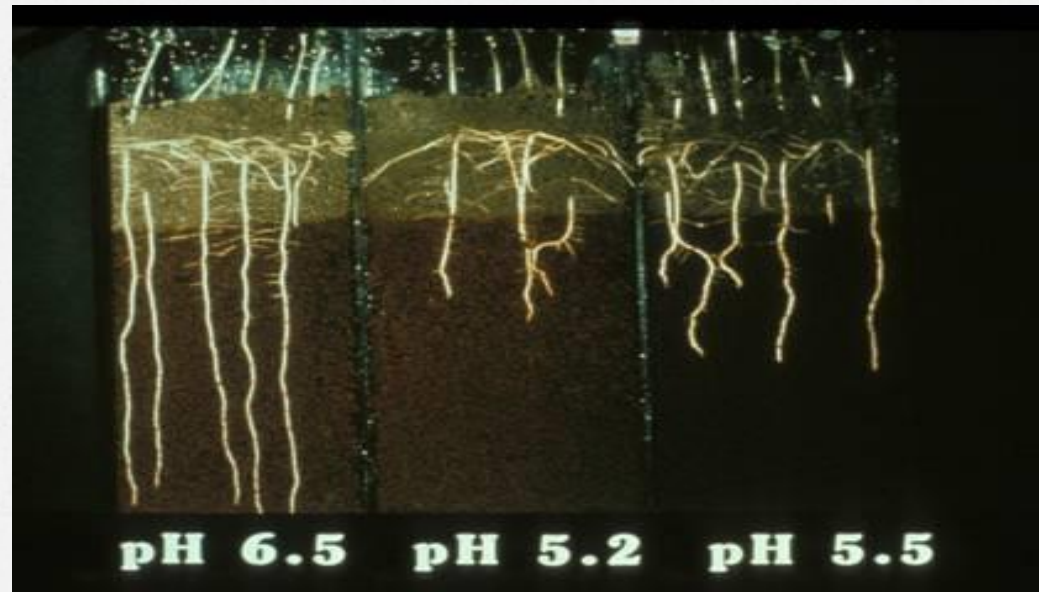
Soil Testing – for pH level

Soil test gives recommendations on how to amend your soil, based on what you plan to grow:

- for **ideal pH**: for tomatoes, best range is 6.0 – 6.8
- measures fertility, and makes recommendations for which nutrients you need to supplement

Correct soil pH according to soil test recommendations

***Strong healthy roots =
Strong healthy plants!***



Soil Testing – for nutrient levels

Soil test gives recommendations on how to amend your soil, based on what you plan to grow:

- for ideal pH: for tomatoes, best range is 6.0 – 6.8
- measures **fertility**, and makes recommendations for which nutrients you need to supplement

Do I Have to Soil Test?

- o Recommended every 2-3 years
- o If no soil test done, apply a balanced fertilizer (10-10-10) per label instructions
 - o Incorporate into top 6-9" of soil
 - o Best if done 3-4 weeks prior to planting
- o Note: if you are growing in containers exclusively
 - o Use quality potting medium
- o Can add a “starter solution” at planting
- o Fertilize again...
 - o At flower bloom
 - o Golf ball-size fruit
 - o 4-6 weeks later



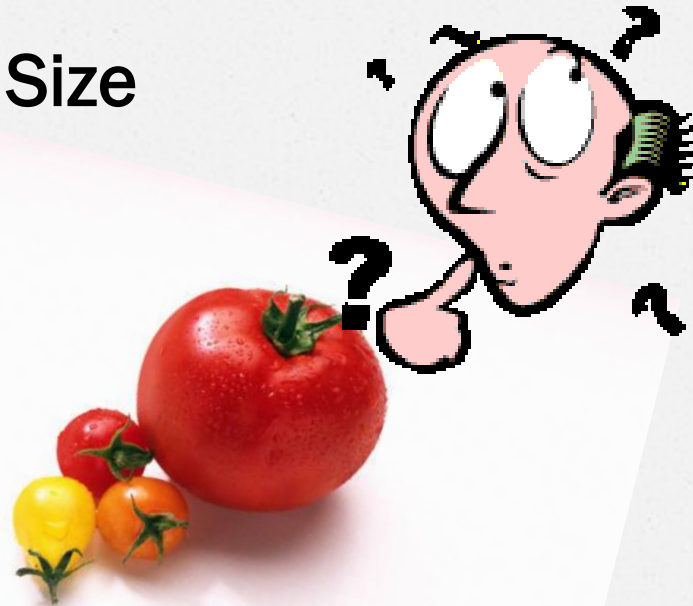
It All Started Last Year...

- o Fall Clean-Up Essential
- o Soil Test
- o Amendments and Worms Have Time to Work
 - o Lime (if needed)
 - o Compost (for micro-nutrients)
- o Crop Rotation
 - o Not where the Nightshades* were...
 - o *Nightshade Family includes tomatoes, peppers, potatoes, and eggplants



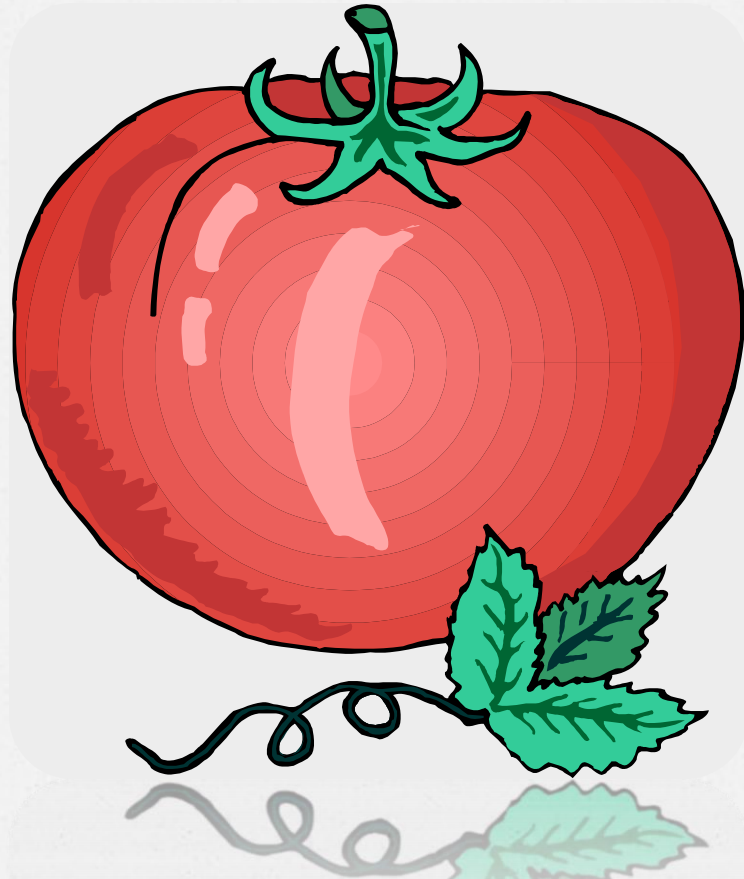
Choices, Choices, Choices

- o Selecting a Type and a Size
- o Old or New
- o Color and Acidity
- o Early-, Mid-, or Late-Season



Types of Tomatoes: Growth Habits

- o Indeterminate
- o Determinate



Indeterminate Variety

- o Bear crop until killing frost
- o Vines that never top off
- o Must be staked or caged
- o Good for...
 - o *Home gardens*
 - o *Farmers' Markets*
- o Brandywine, Better Boy, Lemon Boy,
- o SuperSweet 100



Determinate Variety

- o “Bush” varieties
- o Bear full crop all at once
- o Top off at a specific height, usually 4-5 feet
- o Good for...
 - o *Containers*
 - o *Canning, paste, sauces uses*
 - o *Commercial growers*
- o **Celebrity*, Better Bush, Roma, etc.**



Shape and Size Considerations

- o Slicing or globe (Sandwich, serving)
- o Beefsteak (Sandwich)
- o Plum, pear, or paste (Sauce or canning)
- o Cherry or grape (Salad)



Old or New?

o Heirloom

- o Open pollinated (OP)
- o True to type from own seed
- o Cultivated for at least 3 generations
 - o Usually means Pre-WWII

o Hybrid

- o Cross between two different tomato varieties
- o Get the best of both parents
- o Predictable



Heirloom (OP)

- o Taste
- o Individuality
 - o Unique shapes and colors
- o Productivity
 - o Can take longer to mature
 - o Can produce fewer fruit
- o Notables include:
 - o Brandywine, Mortgage Lifter, German Johnson



Hybrid



- o Productivity
- o Disease-resistance
- o Strength
- o Consistency
- o Longevity
- o Notables include:
 - o Celebrity, Better Boy, SuperSweet100, SunGold, Early Girl,



What Do Those Initials Mean?

o Seed packets and transplant labels have the initials like V, F, N, or T after their variety name...

o Indicates disease resistance to:

- A = alternaria stem canker
- BC = bacterial canker
- BSK = bacterial speck
- BST = bacterial spot
- BW = bacterial wilt
- C1, C2, etc. = leaf mold
- EB = early blight 
- F1, F2, etc. = fusarium wilt races
- FCRR = fusarium crown and root rot
- LB = late blight 
- N = root-knot nematode
- • PM = powdery mildew
- PVY = potato virus Y
- Si = silvering
- St = gray leaf spot
- • T = tobacco mosaic virus
- ToMoV = tobacco mottle virus
- TW, TSWV = spotted wilt virus
- • TYLC = tomato yellow leaf curl
- V = verticillium wilt

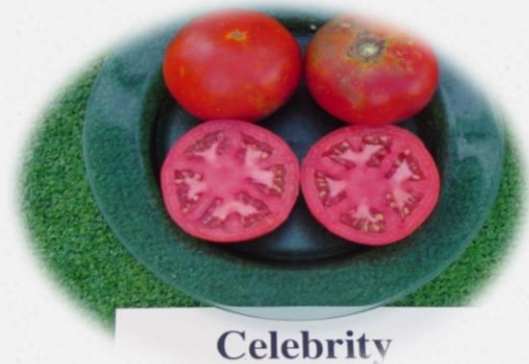
Early Season Varieties

- o First producers (70 or fewer days)
- o More compact plant growth than the main-season varieties
- o Sunburning of fruit problem in hot weather
- o Small to medium-sized fruit
- o Usually not suitable for pruning
- o Examples include:
 - o Early Girl (54 days; 5 ounces; earliest full size; indeterminate; resistant to V)
 - o Quick Pick (60 days; 4 ounces; round, smooth, heavy yield; indeterminate; resistant to VFNTA)
 - o Juliet (60 days: 1 ounce; 1999 AAS Winner; elongated, grape-like fruits in clusters of sweet-flavored fruits; cling to the vine longer than any other cherry tomato; indeterminate)



Main Season Varieties

- o Most bear medium sized to large fruit
- o Have adequate foliage cover
- o Have high yield
- o Have high productivity, long periods
- o Examples include:
 - o Celebrity (70 days to harvest; 10 ounces; large, productive; *semi-determinate; resistant to VFFNTA)
 - o Better Boy (72 days; 12 ounces; easy-to-find plants; indeterminate; resistant to VFN)
 - o Super Sweet 100 Hybrid (65 days; Huge clusters of ½ in very sweet fruit with high Vitamin C content)



Late Season Varieties

- Fruits may be extremely large
- Can be misshapen, with rough scar tissue ("cat-facing") on the end
- Large size more often about novelty
- Examples include:
 - Delicious (OP) [77 days to harvest; over 1 lb.; world record (7 lb. 12 oz) with this variety; indeterminate]
 - Supersteak (80 days; 1 to 2 lb.; extra meaty; indeterminate; resistant to VFN)
 - Beefmaster (81 days; 1 to 2 lb.; large Beefsteak type; indeterminate; resistant to VFN)
 - Jubilee, and most OPs like Brandywine and Cherokee purple



So, What Do I Plant in GA?

Some examples include...

- o Better Boy →
- o Celebrity
- o Early Girl
- o Juliet



What's Next?



- o You have made your plan
- o You are informed and eager
- o Let's go to the Garden Center...or Farmers Market...or Master Gardeners Plant Sale! (Shameless self-promotion)

Stop!



- o *What is today's date?*
- o **Count backward from last average frost date to start your seed**
- o **Resist the urge to transplant before all danger of frost has past**
 - o **Better still...wait until the night time temps are consistently 55 degrees and above.**

Planting Options

- o Growing your own from seed
- o Planting transplants
 - o Plan on 2 plants per tomato-eating person...unless you plan to make sauce, catsup, salsa...or can/freeze
 - o Plus a variety of cherry tomatoes

Should I Start Seeds...or Buy Transplants?

o Seeds:

- o More Varieties
- o Less expensive*

o Transplants:

- o Tried-and-true varieties
- o Easier to jump right in and plant

Choosing Tomato Transplants

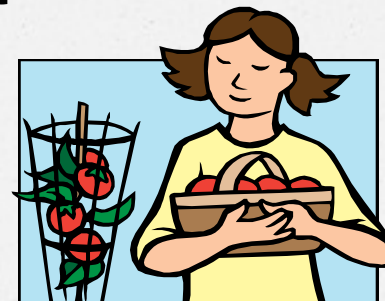
- o Go for the Green
 - o Leaves and stems consistently-colored
- o Bigger isn't always better
 - o 4-8" ...go shorter than taller
- o Check the soil
 - o Avoid dry or root-bound

Time to Transplant!

- o Think DEEP, HIGH, and WIDE!
 - o Plant deep*
 - o Cover top of peat pot with at least 2" soil
 - o Stake, cage, or tie to trellis when planting
 - o Plant 18"-to-30" apart, in rows 4-6' apart, depending on cultivar
 - o Provide good air circulation

Staking and Caging

- Provides support for vines and fruit
- Lessens disease and pest opportunities
- Indeterminate varieties require staking, usually 6' in height
- Determinate varieties can benefit from being caged



Protect those Transplants

- o Early pest protection
 - o Collar the cutworm
- o Fertilize at time of planting
 - o Starter solution directions (1 cup per plant)
OR
 - o Slow-release, balanced (10-10-10) or weak fish emulsion
 - o CAUTION: Too much nitrogen means beautiful, green plants...little fruit
- o Water well at planting



Care

- o Water consistently
 - o 2x/week for first 2 weeks
 - o 1"/week thereafter
 - o Drip or soaker hose
- o Fertilize by side dressing with 2-3 T (10-10-10) per plant:
 - o *Started to set fruit and*
 - o *4 to 6 weeks thereafter throughout the growing season.*
 - o *Keep the side dressing material 4 to 6 inches from the plant's stem.*
- o Remove suckers on Indeterminate varieties
- o As plant matures, remove lower 6-8" of growth
- o Mulch to retain moisture



Tips for the Tops in Tomatoes

- o No tomato crop is ever perfect
- o Weather happens
- o Many problems with tomatoes can be prevented or corrected
- o Management by walking around (IPM)
 - o Visit your tomatoes early and often

Integrated Pest Management

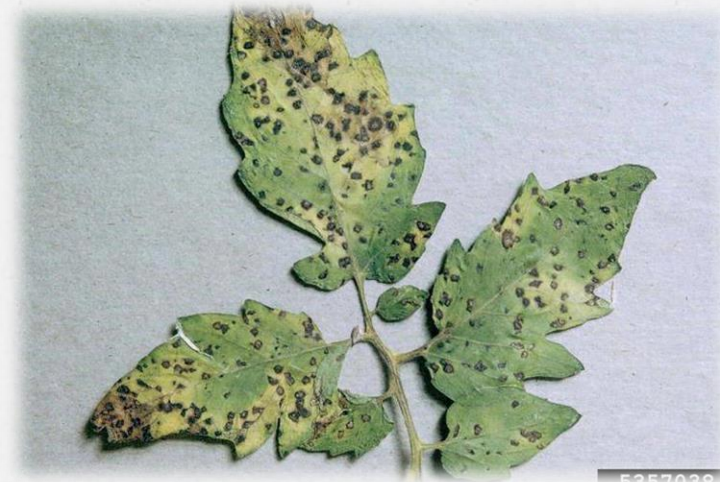
- o Preventing pest problems:
 - (“an ounce of prevention...)
requires regular monitoring of plants, pests, natural enemies
- o Identifying insects:
 - o *Is it really a problem?* Most garden insects are beneficial or harmless
- o Use of action thresholds
 - o Decide how many pests you are able to tolerate
 - o Recognize that any intervention will also have an effect on the balance between pests and beneficials

Problems

- o Prevention (*Actions*)
 - o Three best things you can do:
 - o Choose disease-resistant varieties (V, F, T, N)
 - o Proper spacing (18-36" plant x 36-48" row)
 - o Practice crop rotation (3-5 years)
 - o Nightshade Family: tomatoes, potatoes, peppers, & eggplants

Common Diseases

- o Verticillium (V) and Fusarium (F) wilts
- o Early blight
- o Blossom-end rot
- o Septoria leafspot →
- o Spotted Wilt Virus
- o Late blight



Common Pests

- o Cutworm
- o Stink bug
- o Tomato fruitworm →
- o Aphids
- o Colorado potato beetle
- o Flea beetles
- o Hornworms



Common Problems

- o Lots of leaves...no fruit?
- o Blossoms fall off before fruit sets?
- o Fruit puckered or malformed?
- o Fruit cracked?
- o There's a rotten spot on the bottom! →
- o Leaves wilting or turning yellow?



Tomato Problem Solver

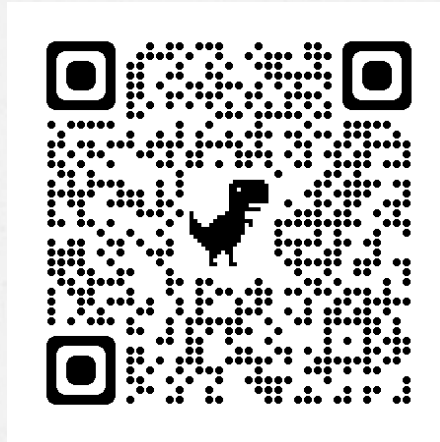
- o Check out research-based sites to help:
- o Visual-based,
from Texas A&M →



<https://aggie-horticulture.tamu.edu/vegetable/problem-solvers/tomato-problem-solver/>

Would You Like a Copy of the PDF?

o The QR code will take you there.



[https://www.waltonmastergardeners.com/
ppt-pdfs](https://www.waltonmastergardeners.com/ppt-pdfs)

Questions?

Contact us at
waltonmg@uga.edu
770-267-1324



Walton County Extension
1258 Criswell Rd SE
Monroe, GA 30655
M-F – 8 AM to Noon/1PM to
5 PM

Help Desk Hours – Tuesday
1 to 4 PM

Visit our booth at the
Farmers' Market for help
with gardening questions.

Don't forget to fill out the evaluation and let us
know what classes you would like to see next year!



Walton County Master Gardeners invite you to
Free Spring 2024 Garden Talks

Mondays 2:00–3:00 p.m.
O’Kelly Memorial Library
363 Conyers Road, Loganville GA

**Feb 26: Growing Inside the Box—
Raised Bed Basics**

Mar 4: Managing Plant Disease

Mar 11: Spring/Summer Veggies

Mar 18: Totally Tomatoes

**Mar 25: Plant Choice Matters—
Gardening with Native
Plants**



Scan the code
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Walton County Master Gardeners invite you to
Free Spring 2024 Garden Talks

Tuesdays 4:00–5:00 p.m.

**W.H. Stanton Memorial Library
407 W. Hightower Trail, Social Circle GA**

**Feb 27: Growing Inside the Box—
Raised Bed Basics**

Mar 5: Managing Plant Disease

Mar 12: Spring/Summer Veggies

Mar 19: Totally Tomatoes

**Mar 26: Plant Choice Matters—
Gardening with Native
Plants**



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Walton County Master Gardeners invite you to
Free Spring 2024 Garden Talks

Wednesdays 2:00–3:00 p.m.

UGA Extension Office

1258 Criswell Rd SE, Monroe GA

**Feb 28: Growing Inside the Box—
Raised Bed Basics**

Mar 6: Managing Plant Disease

Mar 13: Spring/Summer Veggies

Mar 20: Totally Tomatoes

**Mar 27: Plant Choice Matters—
Gardening with Native
Plants**



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Support WC Master Gardeners Soil3 Fundraiser

Get \$30 off on ALL 3 Big Yellow
Bags now thru Feb 29
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Receive an extra \$5
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WaltonMG2024



[Read our blog on Soil3](#)





Master Gardener
Fundraiser

Plant Sale

Walton County
Extension Campus
1258 Criswell Road
Monroe, GA
April 20, 10-2



UNIVERSITY OF GEORGIA
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Master Gardener Program



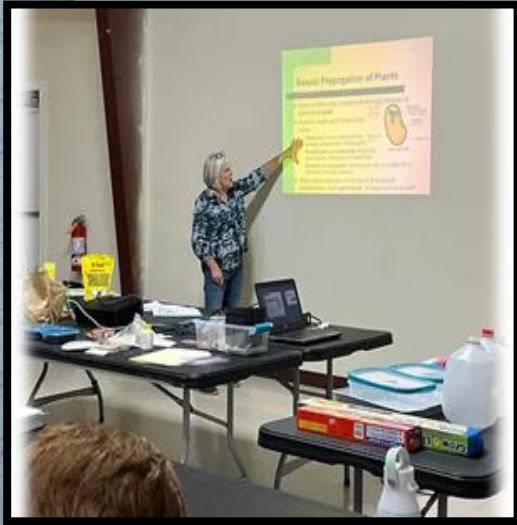
Rain or Shine



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Saturdays at the at
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April – September**



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