

Making Your Garden Organic

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What is organic?

- n USDA says it's intended to promote and enhance biodiversity, biological cycles, and biological soil activity
- n Minimum use of external inputs
- n Not addressing "certified organic"
- n Fair disclosure: this is the only way we know to do it

Topics we will touch on



- n Caring for soil
- n Managing water
- n Choosing the right crops and varieties
- n Working with insects
- n And when you just can't help yourself . . .

Caring for soil

- n Start with a soil test
- n Auburn lets you specify "organic gardening" or "organic vegetable gardening" under "crops/plants"

Caring for soil

- n If you have gumbo . . .
- n We'll say a prayer for you
- n Consider raised bed and bring in topsoil
- n Compost!
- n Lots of organic material

Caring for soil

- n Here in central Alabama, how many months each year should soil lie fallow?
- n Keep something growing on it all year long
- n Why?
- n Avoid working in the garden when soil is wet
- n Avoid walking on soil
- n Keep tilling to a minimum



Managing water

- n Work to keep soil moisture level consistent
- n Too much water just as bad as too little
- n Water deeply and infrequently
- n Minimize erosion
- n Avoid overhead sprinkling, especially in late afternoon
- n Drip irrigation or soaker hose



Resistant varieties

- n Amanda's saga with squash
- n Avoid: Pepo (yellow squash, spaghetti squash, and zucchini)
- n Avoid: Maxima (buttercup squash)
- n Resistant: Moschata – Butternut
- n Still a work in progress!



Working with insects

- n What percentage of insect species are harmful to our gardens?
- n The overwhelming majority of insect species are either harmless or beneficial



Exclusion

- n Row cover



Good things bugs do

- n Pollination
- n Food for lizards, birds, toads, and frogs
- n Keep soil aerated and improve texture
- n Recycle nutrients



Attracting Pollinators

- n Butterflies and bees
- n Bee balm, sunflower, black eyed Susan, goldenrod, butterfly bush, purple coneflower, and butterfly weed

Attracting Predators and Parasitoids

- n These are the good guys:
 - n Lady beetles
 - n Braconid wasps
 - n Hover flies
 - n Lacewings
 - n Tachinid flies
 - n Soldier beetles
 - n Spined soldier bugs
 - n Ground beetles
 - n Robe beetles
 - n Tiger beetles
 - n Assassin bugs

Attracting Predators and Parasitoids

- n In general, you can't go wrong:
 - n Plant flowers that produce pollen and nectar
 - n Plant sheltering plantings (perennials)

Our aphid story

- n Green beans attacked by aphids
- n No action (other than cussing)
- n Next year – help arrives!

Our tomato hornworm story

- n Hate 'em
- n Companion planting – French marigolds and basil
- n And even . . .

Trap Cropping

- n Plant a crop known to attract the pest
- n Wait, then plant target crop
- n Kill the pests on the trap crop (insecticide, vacuum, or hand pick)

Our lesson about insect pests

- n Be patient
- n Scout regularly
- n Squish and stomp
- n Don't overreact
- n Help will (often) come
- n And help doesn't come, maybe try something else



When you just can't help yourself – organic pesticides

- n ANR-1428 is a great resource
- n Use pesticides as a last resort
- n Follow label directions!
- n Avoid contact with blooms
- n Apply in late evening – bees not foraging



Resources

- n ANR-0063 – Planting Guide for Home Gardening in Alabama
- n ANR-0638 – Backyard Composting
- n ANR-1045 – Garden Bugs
- n ANR-1425 – Buying Organic – What Does It Mean?
- n ANR-1428 – Insecticides for Organic Commercial & Backyard Vegetable Production
- n University of Georgia Extension, [Insect Identification Guide for Southern Landscapes](#)
- n Ellis, Barbara and Bradley, Fern Marshall, eds., [The Organic Gardener's Handbook of Natural Insect and Disease Control](#)