

# Vegetable Gardening Preparation

Amanda Borden

## What We'll Be Covering

- Soil
- Water
- Other preparation
- Seed selection
- Disease prevention
- Attracting beneficials

Text of slides is available online

## Soil

- Garden hygiene – clear out dead plants, debris, etc.

## Soil Testing

- Taking a Sample (supplies needed, sampling methods)
- Soil Sample Information Form – list crop you're growing (can say "organic vegetable gardening")

## Using the Soil Test Report

- Shows results for crops you listed
- Soil type, soil pH, nutrient rating, recommendations for lime and fertilizer application

## Amending Your Soil

- If gumbo, consider raised bed and purchased topsoil
- Correcting pH
- Sweet spot: 6.2 to 6.8
- If too acid – apply lime
- Use the ACES online calculator – go to [www.aces.edu](http://www.aces.edu) and search for "lime calculator"

## Amending Your Soil

- If too alkaline – apply sulfur (ferrous sulfate or aluminum sulfate)

## Fertilizer

- Recommendations will be in pounds/acre/season of N-P-K
- Comments section will adapt to the garden setting and smaller area
- Fertilizer calculators online – one for conventional and one for organic
- All synthetic and many organic will list the % of N-P-K (for example 27-3-4)

## Advantages of Compost and Organic Fertilizer

- Designed not to burn your plants
- Supplies nutrients in a form plants can use more readily
- Organic fertilizers tend to be slow-release; avoids problem of foliage at the expense of fruit

## Manure

- Great source of nutrients and organic matter
- Proviso re N to P ratio (1:1 vs 5:1)
- Check periodically with soil test
- Fresh manure (except maybe rabbit) will burn plants
- So compost before adding
- If you need it now, consider manure-based fertilizer

## Next Year: Cover Crops!

- Avoid the problem of excessive P
- Plant legume (fixes N) before target crop
- Other cover crops focus on biomass (organic matter)
- Summer: Sunn hemp to add N for fall planting
- Fall: crimson clover or winter pea
- Terminate cover crops 2-3 weeks before planting

## Water Supply

- Now is great time to install drip irrigation
- If already installed, check lines
- Direct seeding requires consistent soil moisture levels

## Other Preparation

- Weeding
- Severe? Solarize
- Have mulch on hand for timely application after planting
- Plan crop rotation – ANR-1254 lists 11 families
- Diseases/pests that persist in soil
- Nutrient depletion
- Work from a planting diagram

## Seed Selection

- Bulk seed & envelopes in stores
- Mail order catalogs
- Choose varieties suited to this area (ANR-0063)
- Plant according to recommended schedule (Alabama Vegetable Garden Planting Chart)

## During February

- Plant onion, cabbage, cauliflower, and Irish potatoes
- Direct seed spring peas, beets, mustard, radishes, turnips
- Late February: spinach and Swiss chard
- Start seed indoors

## Seed Starting

- Works for tomatoes, peppers, eggplant, basil and other herbs, marigolds
- You'll need:
  - Seeds
  - Sterile growing medium
  - Cell packs
  - Seedling tray and cover
  - Heat mat
  - Grow light
  - Labels

## Buy Transplants

- Buy from reputable garden supplier or nursery
- Master Gardener plant sales
- Auburn PLANET student group

## Disease Prevention

- Mulch to conserve moisture
- Also prevents splashing, which can spread disease
- Follow recommendations for plant spacing
  - Enough space for optimum air flow
  - Close enough to make good use of soil

## Attracting Pollinators

- Butterflies and bees
- Bee balm
- Sunflower
- Black eyed Susan
- Also goldenrod, butterfly bush, purple coneflower, and butterfly weed

## Attracting Predators and Parasitoids

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

## Attracting Predators and Parasitoids

- Plant flowers that produce pollen and nectar
- Plant sheltering plantings (perennials)

## Resources

- These slides: [www.camga.net](http://www.camga.net)
- ANR-0006-A: Home Soil Testing: Taking a Sample
- ANR-0006-B: Home Soil Testing: Using the Soil Test Report
- ANR-0047: Alabama Gardener's Calendar
- ANR-0063: Planting Guide for Home Gardening in Alabama
- ANR-0479: The Alabama Vegetable Gardener
- ANR-1254: Crop Rotation: An Essential Part of Planning a Home Garden
- Chaplin, *The Southern Gardener's Book of Lists: The Best Plants for All Your Needs, Wants, and Whims*
- Ellis & Bradley, Eds., *The Organic Gardener's Handbook of Natural Insect and Disease Control: A Complete Problem-Solving Guide to Keeping Your Garden and Yard Healthy without Chemicals*