

Organic Gardening

Plano Community
Gardeners Share Their
Experience



Selecting a site

- Location, location, location
- North-South versus East-West orientation
- Minimum hours of sunlight
- Close to water source
- Good drainage



Building the bed

- Types of beds
 - In-ground
 - Raised
 - Cement blocks
 - Cedar or pine boards
 - Soil mounds
- Containers
 - Alternative, supplement



Building the beds

- Preferred width and length and depth
- Approximate yield
- Soil testing



Building the beds

- Design your plantings
 - How tall will the plant get?
 - How wide will the plant get?
 - Where is the sun coming from?
 - Tall to short plantings



Preparing the soil

- Goal: Feed the microbes
- A well-amended soil = microbial diversity
- Keep the soil covered with a mulch



Preparing the soil

- Types of amendments
 - Soil blend (native soil and compost)
 - Compost
 - Top dressing
 - Green sand
 - Dried leaves
 - Green grass clippings



Preparing the soil

- Optional amendments
 - Composted (mature) manure
 - Seed meals (alfalfa, soy, cottonseed)
 - Blood meal
 - Bone meal
 - Molasses



What to plant and when

○ Spring season

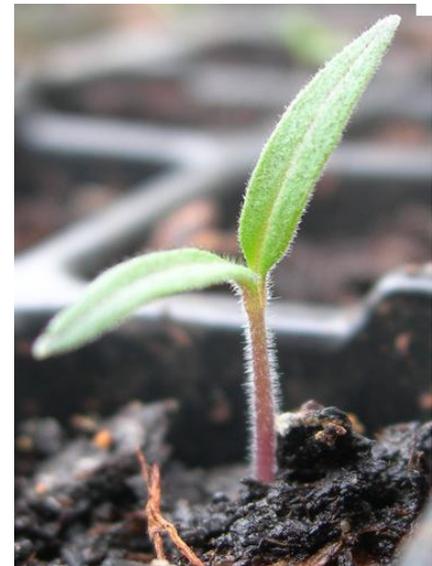
- Prepare the soil (November – February)
- Plant
 - Soil temperature reaches ___ ° (depends on crop)
 - After average last frost date (March 15)**
 - Cages and frost-proofing



What to plant and when

- **Spring season**

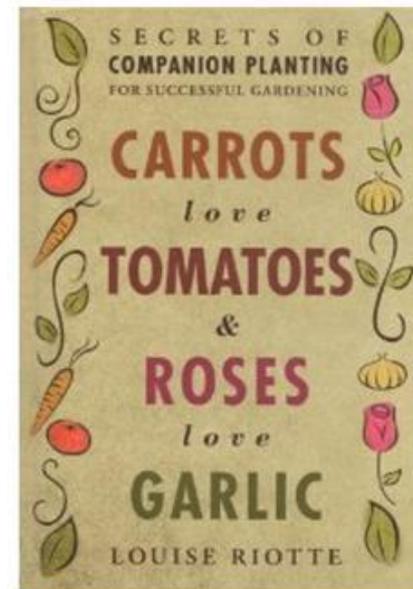
- Seeds or transplants
 - Select varieties appropriate to the area
 - Know your plants' needs
 - cool/hot
 - wet/dry, etc.



What to plant and when

- **Spring season**

- Companion planting
 - Which like to be together
 - Which don't like to be together
- Crop rotation
 - Know your families



What to plant and when

- **Spring season**

- February: Potatoes, onions, cabbages, peas
- March: Mustards, cabbages, beets, tomatoes, lettuces
- April: Eggplants, peppers, beans, squash, cantaloupe, cucumbers
- May: Sweet potatoes, okra
- June-July: water and harvest only



What to plant and when

- **Fall season**

- Amend the soil every time you take a crop out
- Plant
 - Some seeds need to be started indoors (cooler)
 - Calculate from average first frost (Nov 15) back to planting time
 - Find out the days to maturity
- Rotate your crops



What to plant and when

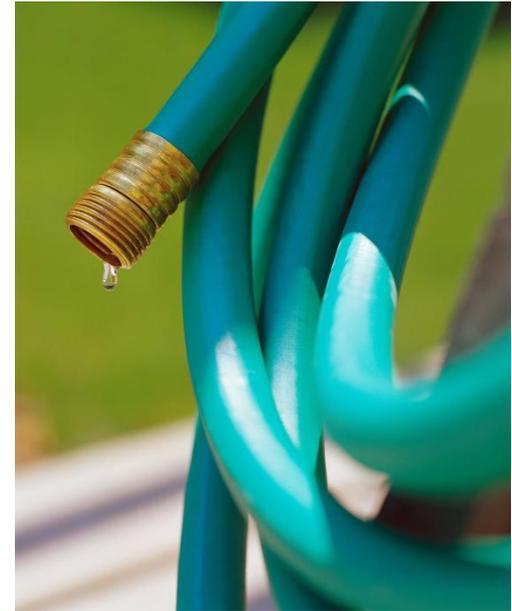
○ **Fall season**

- July: Peppers, tomatoes, eggplant, squash
- August: Cabbages, broccoli, lettuces, cucumbers
- September: Lettuces, spinach, mustards, greens, turnips, cabbages, bunching onions, carrots
- October: Beets, garlic, leeks, radishes
- November – December: improve the soil



Basic Maintenance

- Efficient watering
 - Provide what the plant **needs** (1" per week)
 - Deep, less-frequent watering
 - Water early to allow leaves to dry before nightfall



Basic Maintenance

- Efficient watering
 - Adjust based on weather and season
 - Hand watering or drip irrigation
 - Mulch to retain moisture
 - Compost is recommended



Integrated Pest Management

- Good sanitation
 - Select only healthy, well-adapted varieties
 - More resistant to disease and pests
 - Select plants bred for resistance
 - Remove diseased/spent plants immediately
- Prevention vs. remediation
 - Be observant
 - Be proactive



Integrated Pest Management

- Know the enemy
 - Learn to identify the bad bugs
 - Remove diseased plants immediately
 - Treat the specific problem
 - Determine the least-toxic options



Integrated Pest Management

- Encourage beneficial insects
 - Provide shelter, food, water
 - Know the adult, larvae forms



Integrated Pest Management

- Use physical barriers
 - Floating row covers
 - Collars (chopstick, nail, coffee can, etc.)
 - Fencing
 - Bird netting



Integrated Pest Management

- OMRI-approved products
 - Spinosad (fire ants)
 - Surround WP (cucumber beetles)
 - Actinovate (fungus, wilt, nematodes)
 - Bt: *Bacillus thuringiensis* (all caterpillars)
 - Neem oil (direct contact with pest)
 - Diatomaceous earth
 - Sluggo (slugs and snails)

Harvesting

- Know when they are ready
- Know what to eat
- Compost the rest
- Harvest promptly (daily)
- Enjoy the bounty!



Tips for Success

- Plan, plan, plan
- Plan AHEAD
- Start small
- Start easy
- Keep it simple



Tips for Success

- Use the right tools
- Regular maintenance
- Involve the family
- Be patient
- Keep good records



Resources

- Texas A&M's Home Vegetable Gardening Guide



Department of Entomology

Department of Horticultural Sciences

vegetable ipm

Integrated Pest Management for the Home Vegetable Garden



We're all proud of our vegetable gardens. Their abundance, diversity and beauty provide a rich harvest for us year after year.

But if we expect to continue enjoying and using our natural resources, we must be responsible for protecting them. This means it will be necessary for many of us to change conditioned attitudes about the way we manage insect pests, not only in our vegetable gardens, but in and around our homes as well.

This site is dedicated to Integrated Pest Management for the home vegetable garden. IPM uses four key strategies to control pest damage while fostering environmental awareness and stewardship.

- Plant genetic resistance to pests and disease;
- Biological control (the use of one organism to control another);
- Environmental and cultural (favorable for the plant, unfavorable for the pest);
- Chemical - the last resort.

Identify the problem in your garden by scanning images of pests or by finding the most common pest problems of common vegetable crops. Then search the control database to determine the current recommendations for cultural, biological, or chemical control of your pest.

INSECTS BY NAME

INSECTS BY PHOTO

VEGETABLES

CONTROLS

<http://vegetableipm.tamu.edu>

Vegetable Resources

Aggie Horticulture Network > Vegetable Resources > Guides

Guides

- [Texas Vegetable Growers Handbook](#)
- [Organic Vegetable Production Guide](#)
- [Guide to Marketing Organic Produce](#)
- [Composts in Vegetable & Fruit Production](#)
- [Vegetable Show Planning Guide](#)
- [The Crops of Texas](#)
- [Specialty Crops of Texas](#)
- [Crop Briefs](#)
- [Texas Home Vegetable Gardening Guide](#)
- [Vegetable Gardening in Containers](#)
- [Growing Herbs in Texas](#)
- [Building a Raised Bed Garden](#)
- [Producing, Preparing and Processing Vegetables for Health](#)
- [Costs of Foodborne Illness Outbreaks](#)

Commercial Crop Guides

- [Asparagus](#) [Bean: Green/Snap](#) [Bean: Pinto](#) [Beet: Table](#) [Broccoli](#) [Cabbage](#)
[Cantaloupe/Muskmelon](#) [Carrot](#) [Cauliflower](#) [Celery](#) [Chinese Cabbage](#) [Cilantro](#)
[Collards/Kale](#) [Cucumber: Pickling](#) [Cucumber: Slicers](#) [Eggplant](#) [Garlic](#)
[Honeydew Melon](#) [Kohlrabi](#) [Leeks](#) [Lettuce](#) [Mustard Greens](#) [Okra](#) [Onion](#)
[Parsley](#) [Pepper: Bell](#) [Pepper: Jalapeno](#) [Potato](#) [Pumpkin](#) [Radish](#)
[Southern Pea \(Cowpea\)](#) [Spinach](#) [Squash](#) [Sweet Corn](#) [Sweetpotato](#)
[Swiss Chard](#) [Tomato](#) [Turnip](#) [Watermelon](#) [Watermelon: Seedless](#)
[Recommended Varieties for Texas](#) [Water Requirements](#)

Vegetable Home

Easy Gardening Series

Guides

- [Texas Vegetable Growers Handbook](#)
- [Organic Vegetable Production Guide](#)
- [Guide to Marketing Organic Produce](#)
- [Composts in Vegetable & Fruit Production](#)
- [Vegetable Show Planning Guide](#)
- [The Crops of Texas](#)
- [Specialty Crops of Texas](#)
- [Crop Briefs](#)

Problem Solvers

Horticultural Crop Variety Trials

Watermelons

International Spinach Conference

Additional Resources

<http://aggie-horticulture.tamu.edu/vegetable/guides/>

Vegetable Resources

[Aggie Horticulture Network](#) > [Vegetable Resources](#) > [Problem Solvers](#) > [Cucurbit Problem Solver](#)

Cucurbit Problem Solver

A Guide to the Identification of Common Problems

Cucurbit Disorders

- [Leaf](#)
- [Fruit](#)
- [Root, Stem and Seedling](#)
- [Insects](#)

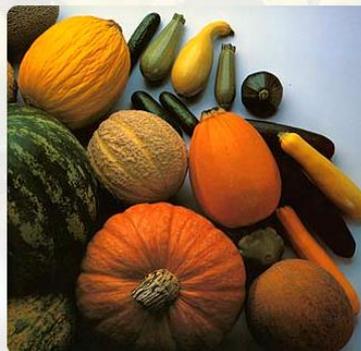
This online problem solver was created with funds provided by the Integrated Pest Management program of the Texas AgriLife Extension Service.

We recognize that the first step in environmentally-responsible pest management is the correct identification of the problem.

Project Collaborators:

- Dan Lineberger and Frank Dainello (retired), Horticulture
- John Jackman (deceased), Entomology
- Marvin Miller, Plant Pathology

We gratefully acknowledge the cooperation of Allen Stevens, Elizabeth Bernhardt, Jeff Dodson, and Jon Watterson, Seminis Vegetable Seeds, Inc. for allowing the reproduction of the images in the publication "Cucurbit Diseases-A Practical Guide for Seedsmen, Growers & Agricultural Advisors." Images noted as such are property of Seminis, Inc.



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Cucurbit Problem Solver

[Cucurbit Fruit Disorders](#)

[Cucurbit Leaf Disorders](#)

[Cucurbit Insects](#)

[Cucurbit Root, Stem and Seedling Disorders](#)

[Tomato Problem Solver](#)

[Horticultural Crop Variety Trials](#)

[Watermelons](#)

[International Spinach Conference](#)

[Additional Resources](#)

<http://aggie-horticulture.tamu.edu/publications/cucurbitproblemsolver/>

Vegetable Resources

Aggie Horticulture Network > Vegetable Resources > Problem Solvers > Tomato Problem Solver

Tomato Problem Solver

A Guide to the Identification of Common Problems

Tomato Disorders

- [Green Fruit](#)
- [Ripe Fruit](#)
- [Insect Pests](#)
- [Leaf](#)
- [Stem](#)
- [Root](#)



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Images of the fruit, leaf, stem and root sections are property of Seminis, Inc.

Images in the insect section were provided courtesy of [AVRDC - The World Vegetable Center](#).

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[Tomato Problem Solver](#)

[Common Insect Pests of Tomatoes](#)

[Disorders of Green Tomato Fruits](#)

[Disorders of Ripe Tomato Fruits](#)

[Disorders of Tomato Leaves](#)

[Disorders of Tomato Roots](#)

[Disorders of Tomato Stems](#)

[Horticultural Crop Variety Trials](#)

[Watermelons](#)

[International Spinach Conference](#)

[Additional Resources](#)

<http://aggie-horticulture.tamu.edu/publications/tomatoproblemsolver/>

Resources

- Collin County Master Gardeners
 - <http://ccmgatx.org>
- Books at Plano Library
- Internet
- Texas A&M's AgriLife
- Reputable nurseries
- Consider classes

