Common Tomato Pests & Problems

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General Pest Control Practices

- Sanitation
- Appropriate Plant Spacings
- Crop Rotation/Cover Crops

General Pest Control Practices

- Mulching & Watering Practices
- Minimize Plant Stress
- Regular Scouting!

What About Companion Planting?

- Not research-based
- Too many variables to account for
- Encourage plant diversity, including habitat for beneficial insects

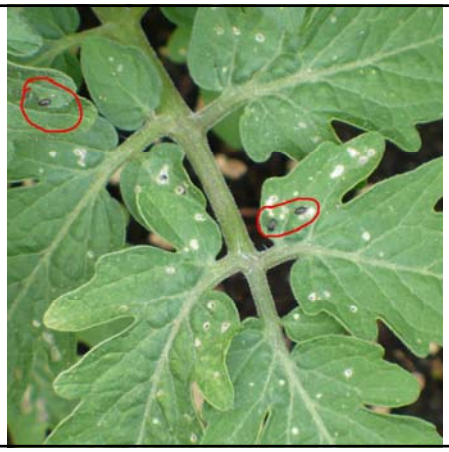
Insects

Spider Mites

- Suck the juices out of plant leaves
- Stippled appearance
- Horticultural oils and insecticidal soaps
- Hard stream of water

Aphids

- More common in the early summer
- Damage plants by sucking juices
- Most common garden insecticides will kill aphids



Flea Beetles

- Tiny black beetles
- Very small holes in the leaves in the early spring
- Tomatoes usually outgrow damage
- Controlled with neem oil or permethrin.

Grasshoppers

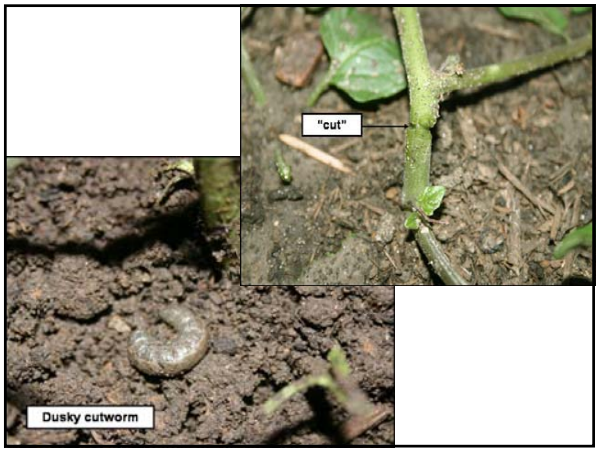
- Can be very destructive
  - Often worst during droughts
- Best to control when immature
  - Wingless stages
- Permethrin, Cyfluthrin, Sevin
  - Retreatment is necessary often
  - Contact is necessary to kill
  - Apply before sunrise for best results

Blister Beetles

- Very destructive
- Chewing insects
- Adult stage is damag
- Eat grasshopper eggs!
- Permethrin, cyfluthrin, Lambda-cyhalothrin, carbaryl

Tomato Hornworm

- Green caterpillar with characteristic “horn”
- One caterpillar can be very damaging
- Find it and squash it!



Cutworms

- Early season cutworms often chew a plant off at the soil level.
- Later season cutworms can eat leaves.
- If the plant is totally cut off, replanting is necessary.

Stinkbugs

Diseases

Septoria Leaf Spot

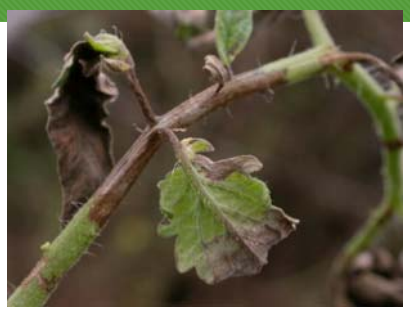
- Tiny black spots on lower leaves
- Leaves yellow and die from the bottom up
- Favored by warm, wet weather
- Caging or staking, mulching, and rotation will help prevent the disease.
- Preventative fungicides:
  - Chlorothalonil or fixed coppers.

Early Blight

- ½" circular lesions on lower leaves
- Leaves yellow and die from the bottom upward
- Favored by wet, warm weather
- Caging or staking, mulching, and rotation will help prevent the disease.
- Preventative fungicides:
  - Chlorothalonil or fixed coppers.

Root Knot Nematodes

Late Blight



Viruses

- Distorted leaves
- Mottled leaves
- Distorted or discolored fruit
- Stunting or strange growth

- REMOVE infected plants

- PREVENTION is the cure

Soil-Borne Wilt Diseases

- Fusarium or Verticillium
- Fungal diseases
- Live for years in the soil

- Population increases when susceptible varieties are planted.

- ROTATE!
- Choose resistant varieties
- Cover crops?

Environmental & Physiological

Wind Hail
Heat Watering

Blossom End Rot

- Brown-black, leathery spots on fruit bottom.
- Prevent by proper watering practices
- Some varieties are very susceptible

Physiological Leaf Curl

- Leaves curl when the weather changes from cool and moist to hot and dry
- The plants will be fine in a few days.

Cracking

- Tomatoes in Kansas crack due to weather
- Harvest tomatoes as soon as they start to color, then ripen indoors
- Some varieties are more crack resistant

2,4-D Herbicide Injury

- Leaves are cupped, thickened or leathery, and develop an uncharacteristic fan shape.
- Plants will overcome moderate damage.
- Poor production is likely
- 2,4-D can spread on the wind for a few miles

Over-watering

Hot Weather

- Daytime temperatures are above 85-90 degrees
- Overnight temperatures above 75 degrees
- Prevents good pollination
- Gap in fruit production

Questions?