

TOMATOES - ISSUES

Information taken from the Texas A&M AgriLife Extension

No matter if your tomato growing skills are novice or advanced, or if you pronounce it tomato or tomahto, there are not many ways to get around different types of diseases, fungi, and even insect attacking your plants. Luckily, the tomato community has put extensive effort into providing information for current and future tomato growers. The most common problems with tomatoes make themselves known by showing signs of stress, discoloration, chew marks, and also rotted stems and leaves. Take action today by diagnosing your tomato problem using the Tomato Pest Chart.

Leaf Issues

One of the most common places that you will notice tomato issues is on their leaves. You may observe discolored leaves, defoliated plants, and also black spots which provides the indication that you might have a fungus or insect attacking your plant. A few of the main insects that will go after your tomatoes include aphids, armyworms, cutworms, leaf miners, and fruit worms. The leaf miner will tunnel itself through leaf tissue which leads to stunted growth. The remaining insects will consume the tomato leaves, leaving nothing but the stems. When you are faced with discolored leaves, consider the following causes: Bacterial Canker, Bacterial Spot, Septoria Leaf Spot, Powdery Mildew, and Fusarium Wilt. Symptoms of these diseases and fungal issues show themselves in the way of discolored leaves, malformed new growth, and yellow spotting. Depending on your situation, these issues can be cured using an organic insecticide and fungicide. Make sure to view the chart below to gain a better understand of your tomato issues.

Stem Concerns

Many of the problems with leaves also show up on the stems of your tomato plants. Most of these issues will go unnoticed due to the stems not being the first thing noticed on your tomato. Diseases caused from fungi, such as phytophthora root rot, are found on the stem and do not appear to damage the plant immediately. If left unchecked, this disease will rip through your plants leaving wilted, and even discolored leaves. At the same time, you will notice a fuzzy growth on your stems. In addition to the phytophthora root rot, other cankers such as Alternaria and Bacterial Canker will also attack your tomato plants. This will show up as black, brown, and grey lesions on your stem and in some cases, you will also notice that the stem is very slimy. Pests that attack stems often go unnoticed and unchecked due to their hidden nature. Make sure you periodically check for any malformed growth to ensure you treat your plant as early as you can. Red Barn recommends using either the Revitalize Biofungicide or Copper Fungicide by Bonide to help with these issues.

Fruit Problems

One frustrating part of gardening, that many of us experience, is nurturing your plant to the point of it flowering and fruiting only to have the end result be inedible fruit that are better for the birds than for you and your family. There are quite a few problems that arise when your plant is putting off fruit. The most common being black mold, cloudy spot, spotted wilt, blossom end rot, radial racking, and tomato mosaic. While some of these are caused from fungi buildup and contact with wet soil, others stem from low nitrogen and potassium in the soil along with rapid water uptake. In the first case, we at Red Barn recommend you use the Revitalize Bio fungicide by Bonide which will help eliminate threats from disease. In the second case, we recommend using a slow-release organic fertilizer such as worm castings or Espoma's Tomato-Tone. We also encourage all gardeners to complete a soil test to figure out which nutrients they are lacking. Make sure to check out the Tomato Pest Chart for a more detailed look at common tomato issues.



TOMATO PEST CHART

	Location			Cause	Symptom	Treatment
	Leaf	Stem	Fruit			
Alternaria Canker				Wounded plants easily infected	Brown/Black lesions, sunken gray lesions on unripe and ripe fruit	Revitalize Biofungicide, Copper Fungicide
Bacterial Canker				Seed or soil borne bacteria	Wilted leaves, discolored and sunken tissue, slimy stems, on unripe fruit	Revitalize Biofungicide, Copper Fungicide, Plant Doctor
Bacterial Speck				Overly saturated soils	Small, black patches of necrotic tissue w/ yellow rings, on unripe fruit	Revitalize Biofungicide, Copper Fungicide
Broomrape				Parasitic flowering plant that uses the tomato plant as a host to grow	Plant with yellow/white stringy stems, wrapping up tomato plant	
Bacterial Spot				Bacteria build up in moist areas	Radial Cracking on unripe fruit	Revitalize Biofungicide, Copper Fungicide
Early Blight				Damp rain causes infection as temps increase	Sunken, leathery lesions near stem scar, on ripe fruit	Revitalize Biofungicide, Copper Fungicide
Late Blight				Cool weather fungus build up	Water soaked lesions, greasy/papery appearance on ripe fruit	Revitalize Biofungicide, Copper Fungicide
Southern Bacterial Wilt				Soil or insect borne bacteria, unsanitized soil	Rapid wilting of lower leaves and whole plant, gray slime from cut stems	Plant Doctor
Damping Off				Term for typical disease conditions	Infection and death of seedlings, water soaked lesions on stem, wilted plant	
Phytophthora Root Rot				Soil borne fungal disease caused by Phytophthora pathogen	Appears asymptomatic at first until rapid decline, wilted plant	Excellent drainage is imperative, Plant Doctor
Corky Rot				Soil borne fungal disease caused by Pyrenochaeta pathogen	Infected plants gradually die back, roots have irregular, black, cracked lesions	Plant Doctor
Southern Blight				Soil borne fungus affecting roots & internal structures	Water soaked leaves and lesions, wilted plant and brown fruit, white mold on soil/stem	Revitalize Biofungicide
Gray Spot/Leaf				Fungi build up from excess moisture	Brown specks on leaf underside, necrotic tissue with holes, yellow halo	Revitalize Biofungicide, Copper Fungicide
Leaf Mold				Fungi build up in soil	Light green patches on older leaves, mold growth on leaf underside	Revitalize Biofungicide, Copper Fungicide
Powdery Mildew				Fungus by poor air circulation, high humidity, insufficient light	Yellow spotted appearance, white/gray powder on leaves	Revitalize Biofungicide, Copper Fungicide
Septoria Leaf Spot				Fungus by persistent humidity	Circular, water soaked lesions, eventually gray spots	Revitalize Biofungicide, Copper Fungicide
Verticillium Wilt				Soil borne fungus affecting roots & internal structures	Wilted leaf margins, yellow/brown in color, discoloration in stem, stunted growth	Revitalize Biofungicide
Fusarium Wilt				Soil borne fungal disease	Rapid wilting, vine decline, yellow/brown stem tissue, damping off of seedlings	Revitalize Biofungicide
Fusarium Crown Rot				Seed borne, or infection in wounds, diseases develops in cool, wet soils	Stunted, yellow plants, brown plant and roots, dark lesions near stem line	Revitalize Biofungicide
Timber Rot				Unsterilized soil	Wilted plant and loss of vigor, moldy white lesions on stem	Plant Doctor
Anthraxnose				Fungi build up	Dark, water soaked lesions, on ripe fruit	Revitalize Biofungicide, Copper Fungicide
Black Mold				Fungi build up/Wet soil contact	Lesions, or sunken holes, on ripe fruit	Revitalize Biofungicide
Sour Rot				Fungi build up	Water soaked lesions, white growth in cracks, on ripe fruit	Revitalize Biofungicide, Plant Doctor
Cloudy Spot				Fungi build up/Wet soil contact	Watery, soft tissue, on ripe fruit	Revitalize Biofungicide
Spotted Wilt				Viral spread by onion thrips	Malformed/Stunted fruit, raised ring spots, on unripe and ripe fruit	Plant Doctor, Captain Jack's Dead bug, Monterey Insect Spray, Spinosad Soap
Blossom End Rot				Nutrient imbalance, water stress	Black/Brown fruit, hard and shriveled, on unripe and ripe fruit	b
Buckeye Rot				Wet soil contact	Rotten, circular lesions, leathery surfaces, on unripe and ripe fruit	Copper Fungicide, Plant Doctor
Radial Cracking				Low nitrogen/potassium, long sun exposure, rapid water uptake	Corky cracks from stem scar to blossom end, on unripe and ripe fruit	Increase watering, apply mulch to retain moisture
Sun Scald				Severe sun exposure, mold infection in wounded tissue	Leathery, dried out white patches, on unripe and ripe fruit	Plant Doctor
Tomato Mosaic				Infection by viral transmission	Green/yellow/brown patches, stunted growth, on unripe fruit	All Season's Horticultural Oil
Beer Armyworm (I)				Bug infection	Green larvae eat leaves/Defoliate plants	Captain Jack's Deadbug, Monterey Insect Spray, Spinosad Soap
Cutworm (I)				Springtime bug infection on young transplants	Defoliated plants	Captain Jack's Deadbug, Monterey Insect Spray, Spinosad Soap
Leaf Miner (I)				Bug infection	Tunnels in leaf tissue, stunted growth	Captain Jack's Deadbug, Monterey Insect Spray, Spinosad Soap
Pinworm Damage (I)				Bug infection	Blackened cavities, excrement in fruit tunnel, on unripe fruit	Captain Jack's Deadbug, Monterey Insect Spray, Spinosad Soap
Tomato Fruit worm (I)				Bug infection	Defoliated plants, tunnels in fruit, on unripe and ripe fruit	Captain Jack's Deadbug, Monterey Insect Spray, Spinosad Soap
Root Knot Nematodes (I)				Microscopic worms in soil, feeding on plant roots	Sluggish plants, appear discolored, roots are knotted and swollen with growths	Remove plant and till soil each season to lessen infestation