

Tomato Pest Identification



Indicates very common pests



Photo by Jude Boucher, UConn

Tomato Pests



Early Blight: dark leaf spots with rings; yellow tissue around spots; vine lesions brown with light centers; defoliates plants from bottom up

Tomato Pests



Photo by Rob Wick, UMass



Photo by Joan Allen, UConn



Photo by Jude Boucher, UConn



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Late Blight: large dark areas on leaves, stems, and fruit; can be white flour-like growth on underside of leaf lesion, or on vine or fruit lesion

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★ **Septoria leaf spot:** small, dark spots with ash-grey centers; defoliates plants from bottom up

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★ **Anthrachnose ripe rot:** sunken, water-soaked fruit lesions; sometimes on stem end; salmon-colored spores

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Photo by Jude Boucher, UConn



Photo by J. Boucher, UConn

Leaf mold: light spots on top, dark-purple fuzz underneath

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Photo by Jude Boucher, UConn

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Powdery mildew: white, fuzzy leaf spots; kills leaves

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Photo by Meg McGrath, Cornell University



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Ghost spots

Grey Mold: large, grey, fuzzy area on stem or fruit;
Ghost Spot: white rings on fruit

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Fusarium crown rot: stem girdled near soil line; brown discoloration in stem and roots; bottom leaves yellow and wilt; plant death

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Verticillium wilt: internal stem discolored brown near soil line; leaves and plants wilt and die

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Phytophthora/Buck-eye rot: girdled stem; plant death; hard, brown spot or white spores on fruit

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Photo by Rob Wick, UMass

Pythium: girdled stem on seedlings; brown soft fruit rot; white fuzzy growth

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Southern blight: white growth on stem or brown resting spores; lower leaves wilt and die; plant death

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Photo by Joan Allen, UConn



Photo by Rob Wick, UMass

Sclerotinia Blight/White Mold: white-cottony fungal growth, with black resting spores; soft watery fruit rot with large black spores

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★ **Bacterial canker:** yellow and brown leaf margins;
fruit spots white, sometimes with dark centers

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Bacterial spec: tiny dark specs on leaves or fruit

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★ **Bacterial spot:** dark spots on fruit or leaves

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Photos by Meg McGrath, Cornell University

Pith Necrosis: brown stem and fruit spots; brown, hollow stems; adventitious roots grow on stems

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Tomato or Tobacco mosaic virus: stunted, mottled and distorted leaves; fruit with internal or external browning

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Tomato spotted wilt virus: mottled or streaked leaves turn brown and droop; plants stunted; fruit with yellow or multicolor spots or rings

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Blossom end rot: collapse of the tissue at the blossom end of the fruit; followed by soft rot or dark fungal growth invading damaged tissue

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Phosphorus deficiency: purple leaves

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Photo by Rob Durgy, CAES



Rain check: numerous tiny cracks in the tomato fruit surface, can join to form larger cracks

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Growth cracks: can be around the fruit or down the sides of the fruit

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Catfacing: misshaped fruit on blossom end, with scars and holes

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Photo by John Howell, UMass

Greywall or blotchy ripening: yellow or white on surface and inner flesh

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Gold fleck: scattered gold flecks on surface

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Photo by John Howell, UMass

Zipper: brown scar down side of fruit, sometimes with shallow hole midway

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Paraquat injury: dark-brown vines; white along leaf veins; usually worse in mid-canopy

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Flea beetles: small dark beetles; pit leaves

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Photo by Jude Boucher, UConn

★ **Aphids:** tiny, green, pear-shaped with “tail pipes”; white cast skins; sticky “honeydew” excretion

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Tomato/tobacco hornworm: large, green caterpillar with white lines or V's on side and "horn" on back. May be covered with white pupae of parasitic wasp. Defoliates plants, scars fruit or produces large holes

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Photo by Tom Kuhar, Virginia Tech



Photo by Jude Boucher, UConn



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Tomato fruitworm = corn earworm: green, red or yellow caterpillar with stripes; 1/4 -inch hole in fruit

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Photo by Jude Boucher, UConn



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Cabbage looper: Adult moth grey or brown with silver markings on wings; green caterpillar with white stripes, makes large holes in fruit

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Cutworms (spotted, yellow-striped or variegated): large grey or brown caterpillars with stripes or black or yellow spots; large holes in fruit

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European corn borer: cream-colored caterpillar with dark brown head; makes small holes in fruit, usually near stem end

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Two-spotted spider mites: tiny with two dark spots; with webbing; stippled or speckled leaves

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Photo by Joan Allen, UConn



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Broad mite and damage: microscopic, translucent mites (right); misshape leaves, “russet” surface of fruit and vines;

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Colorado potato beetle: Adult yellow and black stripes; larva pink with black spots, slug-like; chew holes in leaves; defoliate plants and scar fruit

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Three-lined potato beetle: Adult yellow with 3 black stripes, red head, thorax and underside; larva brown or orange with black head and feces on back, slug-like; chew holes in leaves, defoliate plants; more common on tomatillo and husk tomatoes than tomato and potato

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(Green) stink bug: hard-bodied, shield-shaped;
yellow spots on mature fruit

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Photo by Alan Eaton, UNH



Photo by Mary Concklin, UConn

Brown marmorated stink bug: white stripes on antennae; suck plant juices from vines and fruit, “bruise” fruit and produce sunken spots

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Tarnished plant bug: adult; nymph; fruit damage

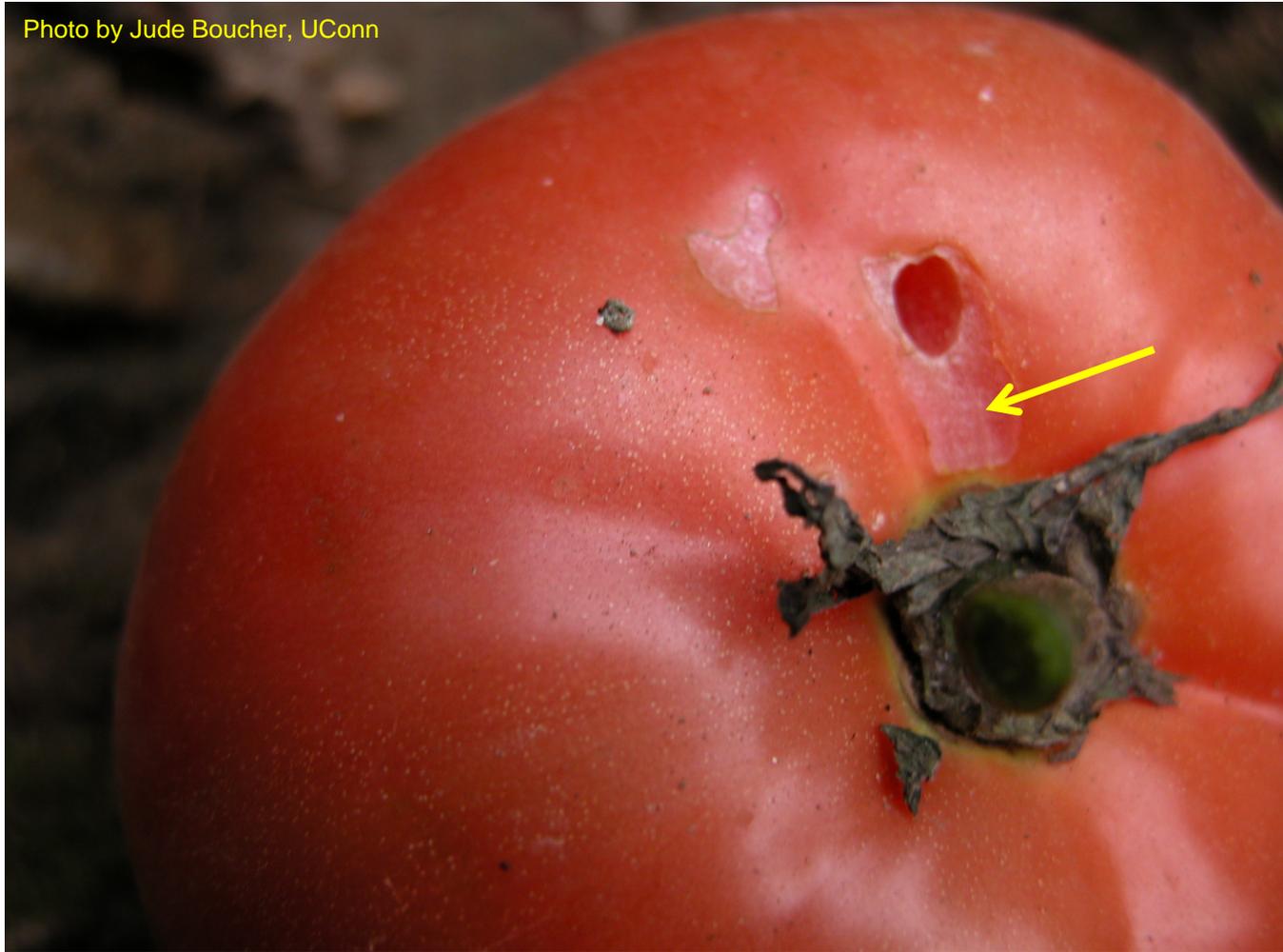
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Tortoise beetle: adult; larva with waste on back; chews small holes in leaves

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Photo by Jude Boucher, UConn



Slug feeding: hole surrounded by surface feeding