

How to prevent diseases in tomato crop

As for all crops, good disease management principles should be used for tomato diseases. These practices include field rotation with non-related crops, site selection, and the use of organic amendments such as cover crops to improve soil quality. Extensive research shows that a hairy vetch cover crop will help suppress disease development on tomato. Use raised beds and use trickle irrigation if possible to avoid excessive leaf wetness. Staking plants also aids in air movement around plants. Select cultivars with tolerance or resistance to disease when possible, and heat treat seed to manage bacterial diseases.

A good fungicide program should begin when plants are 6 inches tall, with protectant products. An early season conventional program for disease protection includes products such as mancozeb + copper applied twice and then alternated with mancozeb + a strobilurin product (Cabrio, Quadris or Priaxor). If bacterial spot or speck have been problems in the past, Actigard can be added at a low rate (0.33 oz/A) on alternate weeks for better control.

Once harvest is close, be especially careful of products that have a long PHI (pre-harvest interval). During harvest products such as Endura + chlorothalonil could be rotated with Quadris Top. Recent tomato trials from around our region have shown that several new products have good efficacy on tomato diseases and can be incorporated into programs. Priaxor looked good on Septoria, Fontelis and Quadris Top looked good on early blight.

Be sure to scout for specific diseases such as timber rot. If this disease is a recurring problem in your fields, make sure to keep Endura in your program. It is a good material for early blight and also has efficacy on timber rot. You also should consider use of Contans to drive down the inoculum in your field (though it is most effective when applied 3 – 4 months in advance of disease).

The disease late blight has also been a problem in Delaware and Maryland in recent years. You can anticipate its occurrence by monitoring the USABlight website (<http://www.usablight.org/>) throughout the growing season. There are many good fungicides for managing late blight (see the Mid-Atlantic Commercial Vegetable Production Recommendations). Revus Top and Tanos have efficacy on both late blight and early blight.

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