

ORGANIC DISEASE CONTROLS

FUNGICIDES-prevent, suppress and control various fungal diseases. Here is a list of fungicides I have used.

GREENCURE-(Potassium Bicarbonate)-**Use for powdery mildew**, blackspot, downy mildew, blights, molds and other plant diseases. Spray foliage at the first sign of disease or use as a preventative before infection. Potassium bicarbonate-based fungicide has been proven to cure and prevent powdery mildew. Baking soda (sodium bicarbonate) is often recommended for similar fungus problems, however research has shown potassium bicarbonate works better and is safer on plants.

COPPER FUNGICIDE-Liquid Copper Fungicide is organic and controls a large variety of fungal diseases, including peach leaf curl, powdery mildew, black spot, rust, anthracnose, fire blight and bacterial leaf spot and some blights. Will not burn plants. Can be used up to the day of harvest.

SULFUR-Sulfur Plant Fungicide is a finely ground wettable powder containing 90% elemental sulfur. Controls diseases on fruits, vegetables and flowers. Effective against powdery mildew, rust, scab, brown rot, rose black spot and many more. Will not burn plants.

NEEM- A broad spectrum insecticide, miticide and fungicide, 70% Neem Oil controls numerous diseases as well as insects and mites. Controls insects including whitefly, aphid leafhopper and scale. Controls fungal diseases including black spot, rust, powdery mildew and scab.

BIOLOGICAL FUNGICIDES- There are now safe, 100 percent natural biological fungicides that both prevent and control a broad spectrum of root, soil borne and foliar diseases.

A. COMPANION-A Break-Through Biological Fungicide used for broad spectrum disease prevention, control and suppression. Companion contains the naturally occurring beneficial bacterium known as *Bacillus subtilis* GB03. The GB03 combats disease by colonizing a plant's root hairs, crowding out disease producing microbes in the soil. It produces natural antibiotics that disrupt the cell wall formation of pathogens, causing the pathogens to die. Helps plants' natural immune system to better resist diseases. Prevents and controls a broad spectrum of root and foliar diseases such as root rot, wilt, bottom- and stem-rot, and bacterial leaf spot, early blight and late blight. Must order online.

B. SERENADE-Provides protection against a broad spectrum of the most common fungal and bacterial garden diseases. It is non-toxic to bees and beneficial insects. Use as a foliar spray on tomatoes, cucumbers, squash and all vegetables as needed. Spray at first sign of disease. I use this in conjunction with Companion or Actinovate. Buy at Agua Fria Nursery.

C. ACTINOVATE- Actinovate microbe grows on the plant's roots and leaves, living off the plant's by-products while at the same time attacking harmful disease causing pathogens. This natural product suppresses & controls a wide range of foliar and root diseases. Use as a foliar spray as a preventative or at first sign of infection. Buy at Paynes Nursery.

VIRUSES-Most viruses are transmitted through insects or are soilborne and are not usually curable. Pull plant and destroy.

BEET CURLEY TOP VIRUS-caused by beet leafhopper. Plant dies quickly. Wilts and does not recover when watered.

TOMATO SPOTTED WILT VIRUS-Caused by Thrips who transmit the virus from sick plants to healthy plants.

BACTERIAL WILT-SOILBORNE DISEASE-Soil borne and waterborne pathogens that causes leaves to wilt in day only to recover at night and then complete sudden wilting of plant. **TEST:** Cut a four inch long section from low down on the stem and suspend this cutting in a jar of water. If a cloudy, milky ooze comes out, this is an indication of bacterial wilt. Dried leaves may remain green. Do not plant in same spot for three years.

For more vegetable gardening information, go to my blog at:
<http://giantveggiegardener.com>