

# Common Vegetable Problems

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A lot of problems can happen in the garden that can confuse the average gardener. From germination, wilting, light conditions, diseases, watering, pest and much more! Below is an explanation for some of the most common problems that gardeners and farmers face when planting vegetable seeds.

## Identifying and Treating Diseases



### Seeds Do Not Germinate

This is a tricky one. Most of the time it will be an environmental condition and not the seeds. Most professional seed companies will not send seed that has been professionally tested at 85% germination. If it is just one seed variety then it may be the seed but if you have trouble with more than one it is most likely an environmental control.

Causes	Fixes
Not given enough time	Wait longer
Soil too cold	Allow soil to warm up
Soil too dry	Water the soil
Soil too wet	Replant and make sure soil drains well
Insects ate the seed	Replant and protect seed. Relocate
Seed too old	Use fresh seed



### Seedling Wilt and Die

Seedlings can be very fragile. Keeping healthy growing conditions can be a challenge for people who work, have children or just don't have time.

Causes	Fixes
Dry soil	Keep soil moist but not dry or damp
Wet soil	Usually causes root rot and plant dies where stem meets the soil
Too much fertilizer	Seedlings don't need fertilizer the first month of growth. Use a soilless mixture to start seeds
Pests	Treat with organic insecticide



### **Spindly and Reaching Plants**

This is one of the most common occurrences for beginning gardeners. Tomatoes, peppers, and other vegetable stems will get long and skinny as though they are reaching for more light.

<b>Causes</b>	<b>Fixes</b>
Not enough light	Use grow lights or sunny location. Do not burn plants.
Wet soil	Slow watering. Improve drainage.
Crowded plants	Thin plants out. Increase spacing.
Too much nitrogen	Do not fertilize seedlings.



### Slow Growth

Slow growth of vegetables plants can be a number of factors. Sometimes it can just be the nature of the plant to grow slow, other times it may be transplant shock.

<b>Causes</b>	<b>Fixes</b>
Not enough light	Most vegetables need full light. Move to new location.
Temperature	Use row covers or cloths to protect from cold.
Nutrients	Test soil, fix as needed.
Insects	Identify insect doing damage and remove pest.
Disease	Identify disease and fix: <b>Disease Control and Identification</b>



### **Yellow Leaves**

Yellow leaves is a common problem on tomatoes for gardeners. It will affect other vegetables and usually means the same thing.

<b>Causes</b>	<b>Fixes</b>
Nutrient Deficiency	Test soil, fix as needed.
Not enough light	Most vegetables need full light. Move to new location.



### Poor Yields

Poor yields can be attributed to several things that go wrong in the garden.

Causes	Fixes
Weather	Temperature too hot or cold. Grow varieties that are right for your climate.
Fertilizer	Test soil, fix as needed. Too much nitrogen
No pollination	Attract bees and butterflies with flowers.
Not mature	Give the plants more time to mature.
Soil moisture	Use mulch, keep soil moisture even.

# Disease Control for Plants

Pests and diseases can wreak havoc on home gardens and farms. Watching your plants carefully for the first signs of pest or disease damage can give you the upper hand for controlling the spread. Preventative and early detection are the best methods for controlling spread.

It is often hard to prevent every pest and disease from being introduced to your crops. Once there is an introduction it is best to identify the cause and find a quick solution to stop the spread. We encourage every gardener and farmer to try every organic and natural means possible before resorting to harsh chemicals that are bad on plants and the environment. Below you will find a comprehensive list of pest and diseases and best methods to remove them from your crops.

## Identifying and Treating Diseases



**Blight Disease** (a.k.a. Phytophthora Blight, Crown Rot, Fruit Rot)

**Symptoms:** Attacks and leaves brown spots on roots, stems, leaves and fruit. Wilting and death occur right when reaching the fruiting stage. Fruit rotting.

**Cause:** Occurs naturally in soil with high moisture, poorly drained soils.

**Control:** Once spotted remove all plants from soil and burn. Practice crop rotation. Avoid poorly drained soils. Fungicides can be used as a prevention.

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### **Downey Mildew Disease**

**Symptoms:** Blush tinge on upper part of leaves, maturing to small yellow spots on upper side with white fluffy growth underneath.

**Cause:** Occurs in cool temperatures and high humidity.

**Control:** Plant debris should be removed and burned. Space plants for good air circulation. Fast draining soil. Fungicides should be used under wet conditions for prevention.



### **Leaf Spot Disease**

**Symptoms:** Attacks leaves of plants. Black tar looking ripples in the middle of brown spots on leaves. A fungus disease.

**Cause:** Most damages occurs in spring. Wet weather invites fungus spores to reproduce.

**Control:** Does not harm actual tree. Remove infected leaves. Keep foliage dry if possible. Use organic copper fungicide if needed.



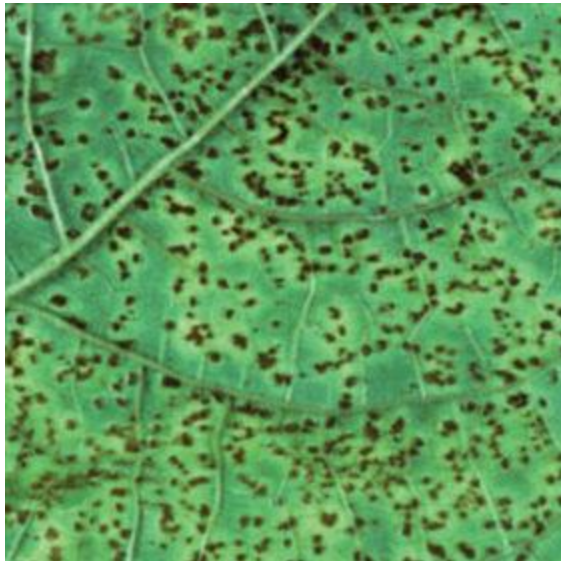


### **Root Rot Disease**

**Symptoms:** Attacks plant roots. Plants will be stunted and stop growing. Foliage will be dull. Sometimes leaves turn yellow and wilt. Plant may have to be lifted from ground to discover root rot.

**Causes:** Damp or dry soil can cause this. Certain fungi will cause as well.

**Control:** Increase soil drainage. Avoid dense, clay soil. Fungicides have been shown to help but increase soil drainage is best option.



### **Rust Disease**

**Symptoms:** Pustules on leaves occasionally on the other aerial parts. Pustules may be orange, yellow, brown, black or white.

**Causes:** Caused by fungus disease.

**Control:** Pick off infected plant parts and burn. Use organic copper based fungicides.



### **Verticillium Wilt Disease**

**Symptoms:** Leaves turn yellow and dry up. Starts from bottom and moves up.

**Causes:** Caused by soil borne fungus and can affect several different vegetables. Fungus can persist for years. Affects uptake of water and nutrients eventually killing the plant.

**Control:** Crop rotation and resistant varieties is important. Remove affected plants and burn.

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### **Blossom End Rot**

**Symptoms:** This is a very common occurrence on tomatoes and peppers. Fruits start to rot from bottom up. Looks like a brown, ripply skin.

**Causes:** A couple things cause this. Dry weather following wet spell. Insufficient calcium in soil.

**Control:** Mulch around tomatoes to even moisture. Add lime to the soil.

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### **Powdery Mildew Disease**

**Symptoms:** Starts off with small white powdery looking dots on leaves and will continually worsen as time goes on. Will attack beans, beets, carrots, cucumbers, eggplant, lettuce, peas, peppers, pumpkins, tomatoes and more.

**Cause:** Damp, hot weather can cause powdery mildew but is not dependent on these factors.

**Control:** Planting varieties that are better resistant to powdery mildew is important when growing in areas that have had it in the past. Plant in full sun. May require fungicide treatment.

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