



“What’s wrong with my vegetable plant?”

A guide to many vegetable garden plant disorders

Colorado State University Extension

Plants succumb to many different problems while we grow them in our gardens. They may get problems that have a biotic (living) origin, such as a virus, bacterial infection, fungal infection etc. However, it’s equally common that the problem is abiotic (non-living) in origin, these can include fertilization issues, moisture issues, environment (heat, cold etc.), complications with the soil etc.


This guide is designed to help walk you through where you’re seeing your problem and figuring out what might be causing the issue. Once you know the issue you can click through to one of our videos on the topic and find out more, including what you can do to resolve the issue whether it be this year or next. Happy sleuthing!

We have divided this guide into plant families, a plant family is a group of plant with similar growth habits and characteristics. Most members of the family are susceptible to similar growing issues. As you determine what family your plant is you can then ask where you’re seeing symptoms. This guide has divided symptoms into four main categories: stems, fruit/flower, leaves, and roots.

This guide goes over the most common plant families found in the vegetable garden. There are many more, if you have questions, you can reference our Colorado Vegetable guide: <https://growgive.extension.colostate.edu/colorado-vegetable-guide/>. This will provide more information on certain plant topics and specific plant varieties. Please also reach out to your local county extension office.

Scroll down to see photos and descriptions of many of the most prevalent diseases and disorders of vegetables in Colorado home gardens.

Allium Crops: onion, garlic, leeks

Stem /plant	
<p>Nutrient deficiency – Small stems, poor growth For more information: https://youtu.be/Yr0jnPpyYOg</p>	<p>No Image</p>
Leaf	
<p>Fusarium basal rot - Infection can occur at any stage of development. Leaves may yellow and die back, from the tip downwards. Discoloration and rot can develop at the root margin, roots may disappear. Bulb may appear brown and watery.</p>	 <p>Howard F. Schwartz, Colorado State University, Bugwood.org</p>

Iris Yellow Spot - Yellow- or straw-colored elongated lesions on leaves and scapes. May eventually cause early lodging during seed production.

For more information:
<https://youtu.be/FgtzRUjamI>



Thad Gourd, Colorado State University Extension

Botrytis – White sunken oval spots on leaves, may have a light green halo or appear water-soaked. Leaf tips die back. Bulbs will be reduced in size.

For more information:
<https://youtu.be/l-hWtlcXZBY>



53

Howard F. Schwartz, Colorado State University,
Bugwood.org

Aster Yellows - Onion leaves may be twisted, more numerous and dwarfed. Flower may be dwarfed and distorted.



Whitney Cranshaw, Colorado State University, Bugwood.org



Lindsey du Toit, Washington State University, Bugwood.org

Downy mildew - Symptoms first appear on older leaves as variable pale patches. Bulbs become soft, shriveled and watery.



Both images: Howard F. Schwartz, Colorado State University, Bugwood.org

Purple Blotch -Typically begins on older leaves as small, sunken, water-soaked lesions. As disease progresses, they enlarge and become purple. Younger leaves become more susceptible as the bulb matures.



53

Howard F. Schwartz, Colorado State University,
Bugwood.org

Smut - Dark colored thickened spots develop in the first leaf to emerge. Similar spots develop in new leaves. Affected leaves become twisted, swollen or bent.



53

Howard F. Schwartz, Colorado State University,
Bugwood.org

Bulb

Fusarium - Infection can occur at any stage of development. Leaves may yellow and die back, from the tip downwards.

Discoloration and rot can develop at the root margin, roots may disappear. Bulb may appear brown and watery.

For more information:

<https://youtu.be/1vaabBob39g>



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Howard F. Schwartz, Colorado State University,
Bugwood.org

Botrytis - White sunken oval spots on leaves, may have a light green halo or appear water-soaked. Leaf tips die back. Bulbs will be reduced in size.

For more information:

<https://youtu.be/l-hWtlcXZBY>



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Botrytis continued



Both images: Howard F. Schwartz, Colorado State University, Bugwood.org

Water issue – Irregular water can cause bulbs to grow or split abnormally. Should not impact edibility, may make flavors more intense. For more information: <https://youtu.be/73GbhNFbaAo> and <https://youtu.be/b8PK3oBNbSc>



Cassey Anderson Colorado State University Extension

Roots

Pink root – Roots on onion become light pink progressing to red and finally dying. Plants become stunted, but rarely result in plant death.



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