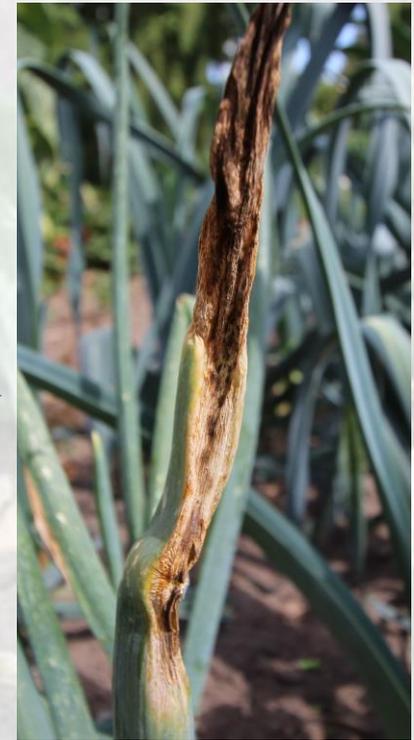


My ONION has a LEAF DISEASE!

What could it be?

In short, it's a fungus living in the soil on decaying plant matter.

Disease	Symptoms	Environmental conditions
Stemphylium leaf blight	Elongated brown-black spots, tips die back	Warm and wet
Purple blotch	Lesions that have concentric rings with a purplish centre	Warm and wet
Botrytis leaf blight	Grey-white oval lesions, turning yellow, tips die back	Warm and wet. See a trend?
Downey mildew	Purple-grey velvety growth, turning yellow with age, leaf dieback	Cool and wet



Are my onions going to be alright?

Yes. They won't win any prizes for the biggest, roundest onions and they might not keep as long if the neck is spongy, but you'll still be eating onions. If your onions got the disease early in the season, they might get a bacterial rot, but you'll be able to tell because your onions will be much softer and oozier than normal.

How do I control these vicious diseases?

It depends on the weather, but there are things you can do to tip the odds in favour of the onion:

- Plant non-host plants in the same soil for three years. Avoid all other Alliums (leeks, garlic, shallots and friends). If you are lucky enough to have Stemphylium, you'll also need to avoid sunflowers, radishes, tomatoes and asparagus.
- Remove those sick plants and bury them deep in the ground (the molten core will kill those spores!). The fungus is lurking on the dead onion leaves, just waiting for a new plant to invade next year.
- Give your plants space so they can dry out quickly. These fungi love humidity.
- Perennial alliums (Egyptian onions, Welsh onions, etc) host the fungus year round. To give those summer onions a chance, keep them well away from the perennial fungus fest!

My SQUASH/ZUCCHINI/MELON/CUCUMBER has a LEAF DISEASE!

Disease	Symptom	Control
Powdery mildew (PM)	Dense white powdery growth on upper leaf surface, starts on lower leaves. Most common on pumpkins and squash.	<ul style="list-style-type: none"> ○ Encourage air circulation: prune dense leaf canopies, give each plant space to grow, grow in leaner (lower nitrogen) soil ○ Plant mildew resistant varieties ○ Plant in a sunny spot ○ Water at the base of the plant and water during drought
Downey mildew (DM)	Angular yellow spots turning tan brown on leaf top. Grey-purple fuzz on leaf underside. Most common on cantaloupe and cucumbers.	
Bacterial wilt spread by striped cucumber beetles (BW)	Dull green leaves that wilt, one-by-one during the day. Plant soon collapses.	



PM



DM



BW

Will I have a cucumber salad with a side of squash soup this summer?

Maybe. The mildews result in smaller fruit if the plant dies prematurely. When wilt strikes early in the season, the plant can die before fruit is formed.

I follow all the control measures, but I get mildew every year! Why does squash hate me?

Welcomed summer rainstorms also rain down mildew spores on your plants. Those spores have traveled from their overwintering grounds further south. Your best protection is good cultural control measures!

My TOMATO has a LEAF DISEASE!

But I don't eat tomato leaves. Why should I care?

Your tomato plant uses its leaves to make fruit. Diseased leaves mean fewer or no tomatoes for you.

Disease	Symptoms	Control
Early Blight (EB)	Dark lesions with concentric rings; leaves die. Small tomatoes	<ul style="list-style-type: none">○ Crop rotation: plant tomatoes in the same soil once every 3 years.○ Bury infected plants, don't compost!○ Water at the base of plants, not overhead.○ Use seed that is disease free. If you're not sure, you can sterilize them with hot water or bleach.
Septoria Leaf Spot (SLS)	Grey circular spots with dark brown halo first appear on lower leaves; leaves die. Small tomatoes	
Bacterial Spot and Speck (BS&S)	Small circular lesions with yellow halo; leaves die. Fruit has spots on it.	
Late Blight (LB)	Brown lesions with pale green halo and white velvety growth on the leaf underside. Plants die. Rapid spread. Fruit rots.	<ul style="list-style-type: none">○ Disease resistant varieties

How did I get this disease?

Some diseases over-winter on last year's dead plants and on seed from diseased plants (EB, SLS, BS&S), while others travel to your garden on weather systems from the south (LB). Once late blight arrives, there is nothing you can do except watch the carnage.

Tell me more about resistant varieties!

Once your neighbours tomatoes are dead from blight, you can set up a stand and sell them your crop! Many newer varieties are resistant to EB and LB:

Beefsteak: Defiant, Mountain Merit

Roma: Plum Regal

Campari or saladette: Mountain Magic



Tomato with EB in the garden of A.T.