



Plant Hardiness Zones Update

You may have seen the news that the USDA has updated its [Plant Hardiness Zone Map](#). Zones are assigned based on the average lowest temperature an area experienced from 1991-2020. These maps act as a reference for perennial plant hardiness or winter survival.

The change for our region, and much of the US, was an increase of a half zone over the 2012 released map, essentially confirming what

many have believed that our winter temperatures are moderating. Washington County is now either 7a or 7b meaning a lowest average winter temperature of either 0-5°F, or 5-10°F.

Keep in mind that localized microclimate conditions will come into play. Temperature differences based on topography, heat island effect of cities, etc. will still persist. But in theory, we may now have success with perennials that were formerly considered risky in terms of winter survival. Of course, being based on an average measurement, we could exceed those minimum temperatures since no bet is ever a sure thing. Click on the map or the [link for an interactive hardiness zone map](#).



December 12th is Poinsettia Day

The Latin name for poinsettias is *Euphorbia pulcherrima* which means "most beautiful Euphorbia". The common name for poinsettia is after Dr. Joel Robert Poinsett, an amateur botanist and the first American ambassador to Mexico. He became fascinated with the plant and sent poinsettias home to Greenville, South Carolina from southern Mexico in the 1820's. Poinsett went on to become war secretary under President Martin Van Buren. Today, however, he is best known for the plant named after him.

Care and Handling Tips

Poinsettias can remain beautiful far beyond the holiday season if the plant is cared for carefully.

- Purchase poinsettias as the last stop of the trip rather than leaving them in a car where temperature can drop quickly.
- Choose a plant with small, tightly clustered yellow buds in the center. Look for crisp, bright, undamaged foliage.
- Water the plant, but only when soil feels dry to the touch; discard excess water in the saucer. If a decorative plastic sleeve is on the plant do NOT allow the plant to sit in excess water. Either remove the plant from the sleeve for watering, or be certain to empty the sleeve soon after watering.
- Place in a room with bright, natural light. Ideally, direct sunlight should fall on the foliage for three or more hours each day. Keep the plant out of drafts and away from heat sources such as vents or radiators.

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- As a tropical plant, a poinsettia will NOT tolerate cold temperatures. Keep them away from areas where they are subjected to frequent drafts such as near entry doors.
- Poinsettia don't need to be fertilized while in bloom.
- Interested in having your poinsettia rebloom next year? [Read this article from University of New Hampshire.](#)

Disease Resistant Vegetables

In our southern climate, we have ample opportunity for plant diseases in the vegetable garden. Some diseases we can count on seeing them each year despite our best efforts at prevention or control. I generally recommend to home gardeners planting disease resistant varieties in their garden as the foundation of disease control, particularly when a gardener chooses to forego or limit pesticide usage. If a plant is disease resistant, that means if the disease is present, the variety should give a better yield than those varieties that are susceptible.

Unfortunately, resistance is not immunity and there are limitations to the advantage it gives.

- Resistance is a continuum meaning that a plant may be strongly or weakly resistant to a particular disease. When conditions favor the disease, stressed plants, wet weather, etc., resistance may not be enough to prevent significant losses from disease.
- Resistance is also specific to a particular disease. The plant can be susceptible to other diseases and those become the pathogen that harms the plant regardless of its inherent resistance. No variety is resistant to every potential disease. There can also be different races (think strains) of a disease and a resistance might not be equal to every race of a particular disease.
- A resistant variety with your preferred color, growth habit, seasonality may not exist. A superbly disease resistant red slicer tomato is a poor substitute when you are wanting a black cherry tomato.
- Resistance does not remove the necessity of other disease control strategies that can include pesticide usage and maintaining plant health. Providing fertility, irrigation, insect controls, etc., to fully maximize the potential of disease resistance is part of the strategy.
- Resistant varieties might only be sold by a few online companies and may not be available locally as transplants. Many resistant varieties are oriented toward commercial producers, rather than home gardeners, and are often not readily available. This means a gardener has to specifically seek them out for use.
- Resistant varieties are often benefitted by being physically separated in distance from susceptible varieties. Because resistance is not immunity, limiting the plants exposure to a pathogen improves their outcome; not dissimilar to us not visiting someone with the flu.



Even given these limitations disease resistance is still of sufficient value to keep in mind when selecting varieties. I encourage you to consider trying some disease resistant varieties in next year's garden and to that end I've compiled some excellent contenders for your consideration.

One thing to mention is that most of the varieties I will recommend are hybrids and not open pollinated varieties. This means you can't save seed from these, but often a single seed packet will contain seed sufficient for several seasons depending on the size of garden you grow. Hybrids have been specifically bred for multiple disease resistance and consequently are the better option in regards to disease resistance.

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The table on page 3 is not exhaustive and I'm certain many good varieties have been omitted. Cornell has actually attempted to create [an exhaustive list of resistant varieties](#). It also has [spreadsheet downloads that includes sourcing information](#) that is useful, but is also somewhat cumbersome to navigate given the enormity of the task.

Many of the varieties suggested in our [2023 Home Garden Variety Trial Report](#) are excellent options as well, but might not have the specified resistance below. The varieties reported in this publication are the result of Tennessee home gardeners from across the state conducting variety trials.

When compiling this list, I attempted to focus on varieties that carried resistance to what I considered the most devastating disease that a particular vegetable might be facing. There are other diseases that are serious and I tried to highlight varieties with multiple disease resistance to not focus on a one trick pony.

Some Highly Resistant Vegetable Varieties		
Vegetable/Herb	Disease of Primary Concern	Suggested Varieties
Tomatoes	Early Blight	Iron Lady, Stellar, BrandyWise(not a typo), Summer Sweetheart, Plum Perfect, Mountain Magic, Mountain Merit
Tomatoes	High Heat Tolerance (not a disease, but a useful trait)	Celebrity, Juliet, Large Red Cherry, Sweet Chelsea, Sweet 100's
Cucumbers	Downey Mildew	DMR 401, Brickyard, Bristol
Cantaloupe	Downey Mildew	Trifecta, Edisto47
Lettuce	Blight, Downey Mildew	Salanova series of lettuces, Jericho, Super Jericho, Ilima Bellevue, Brentwood, Red Deer Tongue
Basil	Downey Mildew	Prospera, Amazel, Pesto Besto, Thunderstruck, Obsession

For questions about your home and garden please feel free to contact me, Adam Watson, Agriculture Extension Agent watson@utk.edu.

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