

Hot Weather Plant Care

Q - My plants are really suffering with this heat! What are some helpful hints to keep them from wilting and dying?

A - Water makes up 80-90% of fruit weight. We all know that water content impacts the yield, size, and quality of produce. Appropriate water content prevents toughness, blossom-end rot, and off-flavor. A quick primer to get you started is *Watering the Vegetable Garden* <https://hgic.clemson.edu/watering-the-vegetable-garden/> from Clemson University's Cooperative Extension.

First and foremost, it is very important to be familiar with your plants and understand their water requirements. Some plants are drought tolerant and do not need a great amount of water. Too much or standing water can kill these plants. Drought tolerant plants include mint, perennial salvias, coreopsis, black-eyed susan, and purple cone flower.

Our experience says that plants generally need an inch of water a week in the summer. A rain gauge will help to determine the amount of water mother nature provides. An inch of water will provide water up to 6-8 inches deep for the plant.

Avoid watering from the top of plants. Garden plants absorb little to no water by this method due to evaporation before any water is absorbed. Watering from the top will contribute to disease by keeping the leaf wet where diseases hide and spraying the disease from plant to plant. Go to the bottom of the plant and water at the base of the plant. First soak the plants at the ground, check for moisture in the subsoil, then after water drains down, water again to get to the roots. It is best to use drip or trickle irrigation.

Watering in the morning is the best time to water your plant. It prepares your plant for the day. Plants will be full of water and ready to face the heat of the day. The second-best time is late afternoon, but disease can spread because the plant does not have time to dry before night fall. Be careful not to overwater. Not only does this damage the roots but robs the plant of oxygen which is essential to the plant's health.

The UT Institute of Agriculture has several helpful hints in the publication *Summertime is All About Water* <https://uthort.tennessee.edu/summertime-is-all-about-water/>. These tips can be helpful as the hot weather settles in. Included in this publication is a link to Rutgers Cooperative Research & Extension publications titled *Using Water Wisely in the Garden*: <https://njaes.rutgers.edu/pubs/publication.php?pid=fs450>. This additional reference discusses general watering tips, vegetable, and flower watering, as well as trees and shrubs.

The Minnesota Extension has a good resource called *Hot Weather Gardening Tips* that includes information on pruning, weeding, and watering in hot weather: <https://extension.umn.edu/yard-and-garden-news/hot-weather-gardening-tips>

When planning your garden, consider amending your soil to help retain water (or to drain during wet conditions) or applying mulch to your plants to help it hold moisture so you do not have to water as often. Colorado State University Extension provides a general factsheet, *Choosing a Soil Amendment*, to help with water retention: <https://extension.colostate.edu/topic-areas/yard->

[garden/choosing-a-soil-amendment/#:~:text=A%20soil%20amendment%20is%20any,thoroughly%20mixed%20into%20the%20soil.](#)

There is also the option of “living mulch” to help retain moisture. You can plant mindfully with a mix of flowers, taller herbs, cover crops, etc. as described in this blog post from Agriculture and Natural Resources, University of California (UCANR) Master Gardeners, *Mulching for a Drought Tolerant Garden*: <https://ucanr.edu/blogs/blogcore/postdetail.cfm?postnum=49111>. The added bonus to this approach is variety in your garden.

This can be a tough issue to navigate even for the most experienced gardener, so this is always a great question. Hopefully all these resources can keep your garden and plant care on track in the heat of summer.

The Master Gardeners of Northeast Tennessee