

How to Water Plants

By Kathy Wolfe
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Take time to monitor your plant's needs

Most gardeners have relied on the rule of thumb that the garden needs an inch of water per week to stay healthy, but the fact is that a plant needs different levels of water at different stages of growth and in different environmental conditions, such as weather and humidity.

Why is watering correctly so important for plant health?

Water is required for a plant's metabolism and cell expansion by bringing nutrients from the roots and distributing them throughout the plant's vascular system.

Water is necessary for propagation to allow the seeds to germinate. Even if you propagate through leaf cuttings or air layering, water is needed for the process.

Water provides the stiffness of the herbaceous parts of the plant (turgidity) which allows plants to stand up straight and leaves not to wilt.

Photosynthesis is the fuel for plants to thrive. Water + CO₂ + sunlight + chlorophyll combines to form sugar and oxygen that is essential to plant health.

During photosynthesis, plants release moisture through the pores of the underside of their leaves (transpiration). This continuous cycle of absorbing water through the soil and then releasing it into the atmosphere can be affected by variations of the air around the plant. If the weather is dry, windy or hot, more moisture gets released. If it is cool, cloudy or humid, less moisture is released.

New plantings need the best watering techniques to get them settled in and started well. A good root system requires water to grow and must be established to ensure shoots above the soil will have the best chance to thrive. Plants established for a year or two may be able to withstand less watering if their root system is healthy.

Adding organic matter aids the soil's ability to hold water, helping the water cling to soil particles, much like a sponge. Mulch creates air pockets for water to remain longer before draining away, leaving more time for the roots to absorb. The more moisture-holding ability a soil has, the longer your plant can go between watering.

Can you rely on Mother Nature to do the watering for you? She might need your help. If rain has fallen, check your rain gauge to determine how much moisture arrived. If your plant is in a

sheltered spot where rain does not penetrate, planted where competition from surrounding plants might affect it, or has large leaves that may disburse the water away from the roots, test for soil moisture to make sure the roots have been well watered. If not, get out the watering can.



Watering cans come in many different styles, but the technique should always be to water the roots, not the leaves. *Photo by Jessamyn Tuttle / WSU Skagit County Extension Master Gardeners.*

How can you tell if your plant needs water? Although soil moisture testers can be used, your finger works just as well. Place a spade into the soil and push back several inches to see how it looks and feels. If the hole is dry, water deeply and thoroughly at the root level, not on the leaves themselves, which may encourage fungal disease. Watering in the morning will allow time for the leaves to dry out during the day if water falls on them.

Soaker hoses or drip irrigation systems are more effective than overhead sprinklers because water is applied directly to the roots, so little is lost to wind or evaporation by the sun. Test your system to determine how much water comes out over a designated time so you will know how long to run your system.

Remember that shallow watering will lead to shallow roots, so it is better to water longer and less frequently than to run a short duration, shallow watering. You may need to adjust time and length during different weather conditions so continue moisture measuring during different seasons.

To give your new plant its best start, follow this technique. Dig an appropriately sized hole. The depth of the hole should allow the crown of the plant to sit at grade level unless directed otherwise on the plant tag. The width of the hole should be large enough for good root growth to expand on all sides. Place the root ball into the hole. Before filling in, leave the root ball in the hole and fill with water. Allow the water to drain then fill in some of the soil and water again. Continue this process until planting is complete. Watering will settle the dirt around the new root ball and get your plant off to a good start.

Remember to do a moisture check on your potted plants as well because they can dry out sooner than those planted in the ground. Multiple plantings in one pot will need extra water. Water the root ball slowly and deeply so that water does not just run off and out around the sides. Watch for water draining from the bottom of the pot to determine if the water has penetrated to the correct depth. Pots exposed to more wind or sunlight will require more watering than those sheltered in shade.

Taking time to monitor your plant's needs so they are not too wet or too dry will keep your garden looking great throughout the seasons.



Water potted plants slowly and deeply until water drains from the bottom.

Photo by Jessamyn Tuttle / WSU Skagit County Extension Master Gardeners.

RESOURCES:

- “Efficient Use of Water in the Garden and Landscape.” Larry Stein and Doug Welsh, Extension Horticulturalists, Earth-Kind Landscaping. Texas A&M AgriLife Extension. [Efficient Use of Water in the Garden and Landscape - Earth-Kind® Landscaping Earth-Kind® Landscaping \(tamu.edu\)](#)
- “Water Efficient Gardening and Landscaping.” Denny Schrock, Department Of Horticulture. University of Missouri Extension. [Water-Efficient Gardening and Landscaping | MU Extension \(missouri.edu\)](#)
- “Water the Garden (not the plants), a 101 with Daryl Beyers.” A Way to Garden podcast, June 26, 2020. [watering the garden \(not the plants\), a 101 with daryl beyers - A Way To Garden](#)
- “When to Water.” Gardener’s Supply Company. [Watering Tips, When to Water | Gardener's Supply](#)
- “How to Dig Holes for Plants.” Shelley Frost, Home Guides, SF Gate. [How to Dig Holes for Plants \(sfgate.com\)](#)