



How To Water

Water Thoroughly, Then Wait Until Plants Need It Again

Everything explained below is based on the principle that plants need both water and air around their roots, and therefore you must allow the soil to dry out to some degree between waterings.

This rule of thumb works for nearly all plants: Water until everything is soaking wet, for example until water runs out the bottom of a pot. Then wait until the soil just slightly damp before watering again. Enough so you can feel the moisture with your finger, but not so wet as to let you squeeze water out of it or to make a sticky clod.

One reason to water so thoroughly is so the water will penetrate deeply, which encourages roots to grow deeply as well. If you only get the soil surface wet then that's where all the roots will grow, and you'll have to water more often because that part that dries out fastest.

Some plants have special requirements, but the vast majority will be fine if you water this way.

It's Hard To Water Too Much, But It's Easy To Water Too Often

This one surprises many people, because they assume that too much or too little water is bad. Too little water is indeed bad, but if you give your pot or your garden bed more water than it needs, if you have reasonably good soil then the excess water just drains away. Where many people run into trouble, particularly in cooler weather, is they water too often and never let the soil dry out. And when the soil stays wet all the time, the roots will eventually start to rot.

Test Soil Moisture With a Finger

The simplest way to test the moisture level in your soil is to stick your finger in below the soil surface and feel it. You should feel a little moisture in the soil about an inch below the surface, or closer to the surface in a small pot like a 6" pot. When that moisture is just about gone, it's time to water. Never let the soil dry out completely – water when it's just slightly damp to the touch.

For Small Pots, Test Their Weight

There's another easy way to gauge dampness on a pot that's light enough to pick up: Feel how heavy it is. A pot that's ready to be watered is much lighter than a freshly watered pot, and once you've felt the difference you'll easily be able to tell in a moment. The difference will be much less on a clay pot than a plastic pot because the clay pot weighs much more than a plastic pot to begin with, but you can still learn to tell the difference.

Air and Soil Temperature Matter

So how quickly does soil dry out? The most important factor is no surprise: Soil dries out faster when it's warmer. What may surprise you just how much faster: A plant that only needs to be watered every 3 days when it's overcast and damp at 60 degrees may need to be watered every single day if the weather is 75 degrees and sunny. The reason isn't just because the heat dries it out, it's because warm sunny weather makes the plant grow, and growing plants drain water out of the soil much faster through a process called "transpiration".

Soil Quality Affects Water Retention

Another factor that greatly affects how often you need to water is how well your soil drains or retains water. If you have coarse, sandy soil with nothing added to hold on to moisture then you'll need to water much more often than if you have a fine grained soil with a lot of organic matter to hold on to the moisture. Some package soils include ingredients to help them retain water, such as natural biochar (very fine charcoal).

Pots Dry Out Faster Than Garden Beds

The last factor influencing how fast your soil will dry out is whether your soil is in a pot or in a garden bed. Pots dry out faster, for three reasons. First, pots usually drain better than garden beds. Second, they heat up faster on a hot day. Third, plants in pots have smaller root systems than plants in a garden bed, simply because of limited space. Smaller root system means less soil to draw moisture from, and plant dries out soil faster. And small pots dry out much faster than big ones!

Every Spot In Your Garden Is Different

The factors I mentioned above are just a few of the many things that affect how often you'll need to water. For example, a spot with good air circulation will dry out faster. In reality, every spot in your garden has its own unique microclimate and you'll learn by experience which places dry out faster and which dry out slower.

Just Tell Me How Often To Water!

I wish I could tell you exactly how often to water, but there are too many factors to give a simple, precise answer. Nevertheless, there are some simple rules of thumb that will give you a place to start. (1) You won't have to water outdoors until it stops raining long enough to let the soil dry out. (2) In cool spring weather you'll probably water pots every few days, and garden beds less often. (3) In hot weather you'll probably water pots every day, and garden beds every few days. (4) Houseplants generally need to be watered once a week, possible more often for very small pots.