



HOUSE PLANT CARE: WATERING

The fastest way to kill a house plant is by over- or under-watering. When and how to water, how much water to apply, and water quality are critical factors affecting the health and longevity of house plants.

WHEN TO WATER...

It is very important to determine the dryness of the soil before watering. While some plants seem to adapt to a schedule, most plants' water needs fluctuate with the natural changes of day length, air-conditioning to central heat, flowering vs. rest period, etc.

—Press a finger down into the root ball to determine how much moisture is still in the soil. For very large containers, or where it is difficult to get into the soil, a toothpick or an unpainted skinny wooden dowel can be used to determine dryness (wood discolors where it contacts moisture.)

—Moist soil is heavier than dry soil, so the weight of the potted plant can be used to determine dryness (especially helpful for hanging baskets that are not easy to reach into.)

—Most foliage will look *and* feel dry as it begins to lose moisture (plant "turgidity".) However, remember that the foliage will begin to dry out if it is not receiving water due to soggy, rotting roots, as well as drought.

WATER QUALITY...

Try to use water that has been standing for a day or two, to allow the chlorine and other tap-water additives to evaporate (gas) out. Some plants are very sensitive to fluorine and other chemicals in our public water systems. Rain water works well, but don't use rain water collected in the winter without allowing it to come to room temperature. Slightly warm or room temperature water is absorbed more easily and will not shock the root systems of warm-climate plants. When plants are first set outside on warm spring days, remember that it takes longer for the ground temperatures to warm up, and don't use your garden hose to water the plants.

HOW TO WATER...

Top watering is usually the simplest and most common method of soaking a root ball. Pouring the water slowly and evenly around the surface of the soil allows the water to be absorbed by the root ball. Any excess water that builds up in the saucer of the container should be discarded after about 30 minutes to avoid rotting the bottom roots.

Bottom watering, or sub-irrigation, works well for small or shallow pots, where the soil can draw up sufficient water to supply moisture to the entire root ball. Bottom watering using a deep saucer filled with water is a good way to expand a root ball that has dried to the point of shrinking away from the sides of the container, making it hard to top water effectively. Again, roots should not stand in water more than 30 minutes or so.

In large pots or where a constant supply of moisture is needed, a wick system of sub-irrigating is ideal, and there are several lines of commercial wick systems or you can create your own, using a plastic container to serve as the water reservoir, and some kind of felt or cotton wick. With any wick system, make sure the wick is absorbing well, or it may need to be replaced.

HOW MUCH WATER...

Always water thoroughly—a cup of water poured onto a large root ball will probably only moisten the top inch of soil. While the root ball will appear to be moist, the plant will suffer drought symptoms, as many of its roots will still be dry. Ideally, you should apply water until it begins to seep out of the bottom drainage holes in the container, indicating that the entire root ball has been moistened.

When bottom watering, keep filling the saucer until moisture has obviously reached the surface of the soil, or until the root ball stops absorbing water (after about 30 minutes). Discard excess.

TIP: A turkey baster can be used to remove excess water from a pot that is too heavy to lift.

Special care must be taken when watering plants in containers that do not have drainage holes. The best way to prevent over-water damage is to water the soil thoroughly, then tilt the containers on its side, hold the soil in place with your hand or some paper towels, and let the excess water run out.

Factoid: The roots of potted plants need both gaseous oxygen (air) and water. The spaces (macropores) between soil particles need to be saturated with water, and then gradually be filled with oxygen as the soil begins to dry and air is pulled into the root ball. Too wet and there is no air available, too dry and there is no water available. The degree to which the soil should dry varies by species and situation.

*The Great Big Greenhouse & Nursery, 2051 Huguenot Road, Richmond, VA 23235
Phone (804) 320-1317 Fax (804) 320-9580 website www.greatbiggreenhouse.com*