

Back to Basics

Water is essential to all living things, including plants. Nutrients that are found naturally in the soil, or even added supplements, are valueless unless they are first dissolved in water. Plants can only assimilate nutrients through their roots as the nutrients dilute. Put simply, plants need water to thrive!

Right now you are nodding your head in agreement. You know this already, but it is important to reiterate it so you can truly understand how important proper watering is to your plants

Knowing proper watering techniques and using the right tools will save time and money while producing optimum growth for your plants.

When watering plants, it is best to mimic nature and simulate a natural rainfall for deep-root watering. The success of many plants depends on the ability of roots to stand upright. Frequent and light watering will grow roots near the surface. This subjects the plant to rapid drying and damage.

> Instead, large quantities of water should be applied in a single application. Deep watering promotes the development of a deep, extensive root system. A deep-rooted plant will be able to reach moisture deep in the soil and, therefore, be able to survive many environmental stresses such as heat, dryness and even poor care at the store level.

In 1941, a florist by the name of John G. Dramm understood the importance of quickly applying very large quantities of water. He designed the 400 Water Breaker Nozzle, 400 tiny holes create a rain shower flow with no damage to plants. Like rain, the Water Breaker Nozzle adds oxygen to the water and root zone by increasing the surface area in contact with air and entraining it in the droplets. Oxygen in irrigation

water is important to the microflora surrounding roots and helps for a healthier plant.

Seventy-five years later, there is a range of nozzles designed to water everything from seedling trays to nursery containers. An extension handle allows you to effortlessly reach your plants whether they are on benches, hanging baskets or both. Adding a shut-off valve ensures water is applied only where needed.

Before working in this industry, I was under the impression that if I watered leaves and foliage, the plants were properly watered ... Oh, was I ever that young? Luckily, I knew some "Dramm" good people who quickly set me straight.



For proper watering, you want to place the Water Breaker Nozzle or other hand-watering tool near the soil. This allows the water to go directly to the soil, rather than onto the plant, reducing evaporation on leaf surfaces. Also, applying water to the base of the plant keeps foliage dry, aiding in prevention of fungal diseases, such as botrytis and mildew.

Before watering your crop, determine how much water each plant should get by watering a few plants to saturation and counting the amount of time it takes. This can be done with a large measuring cup and a few minutes. Fill the measuring cup to different levels while counting how long it takes to reach each amount. Use the measuring cup to water one plant. After waiting

several minutes, remove the plant from the pot to see how saturated the media is. After a few tries, you should have an accurate count that you can repeat from pot to pot.

When watering trays or flats, maintain an even distance to each crop. This keeps an equal amount of water per square foot and prevents unevenness.

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Raising the wand at the end of an arc is common and results in uneven water from plant to plant.

Tool selection is as important as technique. Dramm offers a wide variety of nozzles to adjust pattern, water flow, and droplet size. Selecting the right length wand will help not only reach the far side of the bench but help with posture and technique when watering on the ground. Too long of a wand might cause you to change your approach to the pot. Too short of a wand encourages lifting of the Water Breaker Nozzle at the end of the arc. Finally, determining what valve to use should be based on flow, flexibility of adjustment and frequency of on/off cycles needed, not just weight, durability or cost.

As mentioned earlier, I've learned a lot from working in this industry; information that I wouldn't have instinctively known. It truly shows the importance of training your staff on proper watering techniques.

Refresh your staff's watering skills. There are many resources available; Dramm's Watering 101 video on YouTube teaches proper technique and gives some good tips. Our Watering 2 video discusses selecting the right tool for the variety of watering situations you will encounter each day. Teaching your staff proper watering techniques will save you money and time while creating healthier plants. GDD



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