

Drip Tips

Drip systems are a great way to get water exactly where needed, helping plants to thrive and conserving water at the same time, but they are often installed or managed incorrectly. This can result in plants that are starving instead of thriving. Of primary importance is the number of emitters placed around a particular plant, the size of those emitters and the frequency and length of watering times. There are many details to setting up drip irrigations system and we can refer you to some excellent resources for doing so, but by addressing just these basic topics we hope to accomplish a great deal in our effort to improve gardener's success managing plantings watered via drip systems.

Does your plant have enough drip emitters placed around it to nurture its whole root zone?

Various plants start out in the same size container but achieve widely varying sizes at maturity. A new plant needs to have drips right at the base as they get started, but it also needs an appropriate number of emitters around the plant to moisten the area into which the plant roots will be growing this year and next. This means a plant that you expect to reach 4'x4' will need to have more emitters than a similar plant that is only expected to reach 2'x2'. As a rule of thumb, plant roots reach as wide as their leaf canopy does (plus a little more). When setting out a drip system or upgrading an existing one, a gardener needs to place enough drip emitters out from the plant to moisten the soil to its full mature width.

There are different sizes of emitters and this makes a big difference in how many emitters are needed. Emitters are generally sized by the number of gallons they emit per hour (GPH).

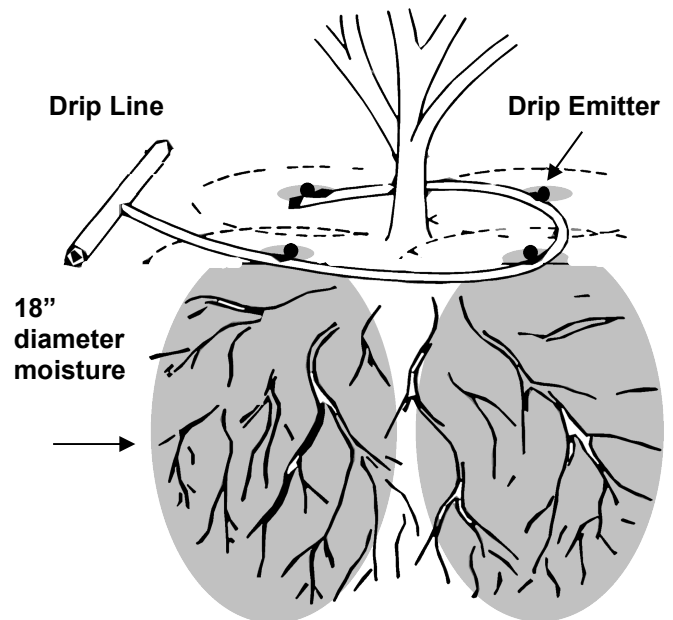
Are you watering deeply and infrequently?

Think about watering from a plant's point of view. Most roots grow within the top 18" of soil. It takes a good amount of water to reach all the way through the soil to saturate all those roots, then, it takes a few days to dry out again. The most common error in scheduling drip systems is to water a little bit every day. A little bit is not enough water - 5 minutes with one emitter is typically less than 12 ounces. Imagine pouring 12 ounces of soda on the ground on a hot day. In an hour it will have evaporated. Drip systems should be run for 1 or more hours a few times a week, except in the case of containers when they should be run daily for a few minutes.

The following chart may be helpful:

Plant Type	GPH per Emitter	# of Emitters	Placement of Emitters	Length of Time	Frequency
Containers	1	2-3+	About every 6"	10 Minutes	Almost Daily
Groundcover, Flowers or Vegetables	1	1 to 2	At base of plant	1 hour	Every 2-7 Days
Small to medium shrubs, 3'-10'	1	2 to 5	6-24" from base	2-3 hours	Every 4-7 days
Large Shrubs or trees to 12' and up	1-2	4-6+	3-4' apart	3-6 hours	Every 6-10 days

These times are guidelines and should be adjusted for shade or changing weather conditions.



Position emitters to moisten entire root zone

