Have You Heard About "Drip" Irrigation?

By Anita Maddox, Fort Bend County Master Gardener

The best way to water your flowerbeds is by using "drip irrigation". This increasingly popular method releases the water slowly from plastic tubing laid on the surface of your garden bed, or under mulch. Why is 'drip' so beneficial for homeowners?

- Watering the soil and roots instead of watering overhead onto the leaves of plants reduces the chance of disease.
- Less water is lost to evaporation since it's supplied at ground level.
- The drip method applies water more precisely in areas where plants need it.
- Drip can be less expensive to install than in-ground irrigation systems.
- It's simple enough for homeowners to install.



- A water source (either a well or city water)
- A filter and pressure regulator, which are available in hardware stores and online. (The
 filter is needed to keep the emitters from clogging, and the pressure regulator reduces
 the water pressure to 30 PSI or less.)
- Drip tubing with water emitters, also readily available.

The most common drip tubing you can buy is one-half inch "dripline" with emitters preinstalled in the tubing at 6-, 12-, or 18-inch intervals, your choice. These preinstalled emitters generally have a flow rate of ½, 1, or 2 gallons per hour. Yes, that's Gallon Per **Hour** (GPH), compared to spray heads that deliver in Gallons Per **Minute** (GPM). With a drip system, you water more slowly and for longer periods of time, which prevents soil erosion and nutrient runoff.

To begin, you would install the system like this: faucet – filter – pressure regulator -- dripline, in that order. After setting up those components, there are limitless configurations you can design in order to suit your plants' needs. There are a variety of inexpensive accessories available that can adjust how much water you want and where to apply it. If one plant needs more water than others, you just punch a hole in the plastic dripline to add another emitter. If a plant is not in a straight line with other plants, you can punch a hole in the dripline and insert an additional emitter attached to a smaller tube to reach the plant. If you want the dripline to make a right-angle turn, insert an "elbow" attachment. You can also add a timer to make your system automatic!

The size of your plants and shrubs will increase as time passes, but that's not a problem – you can add to the dripline because of the flexibility of this system.



In general, you will set up the system in "zones", each zone containing no more than 200 GPH of emitters. Whatever brand of drip irrigation equipment you buy, the manufacturer will have instructions on how to assemble the components with guidelines on how long and how often to water.

Even if you already have an in-ground irrigation system installed in your landscape, you can still use drip irrigation just for your flowerbeds by purchasing special adapters to attach to your sprinkler risers in those areas.

Like all irrigation methods, these drip systems require some maintenance. You'll need to inspect the lines occasionally to make sure the emitters are not blocked and rinse the filter, and flush out the dripline once a year.

Setting up a drip system is pretty easy, but if you don't want to "DIY", contact a local licensed irrigator.

For more information visit <u>aggie-horticulture.tamu.edu/newsletters/hortupdate/2009/may09/Drip</u> and

aggie-horticulture.tamu.edu/earthkind/files/2010/10/lowvolume.pdf

Fort Bend County Master Gardeners are trained volunteers who assist Texas A&M AgriLife Extension Service in educating the community using research-based horticultural information.



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