Gardeners Should Consider the Many Benefits of Drip Irrigation

Texas A&M AgriLife Extension Service — Galveston County Office

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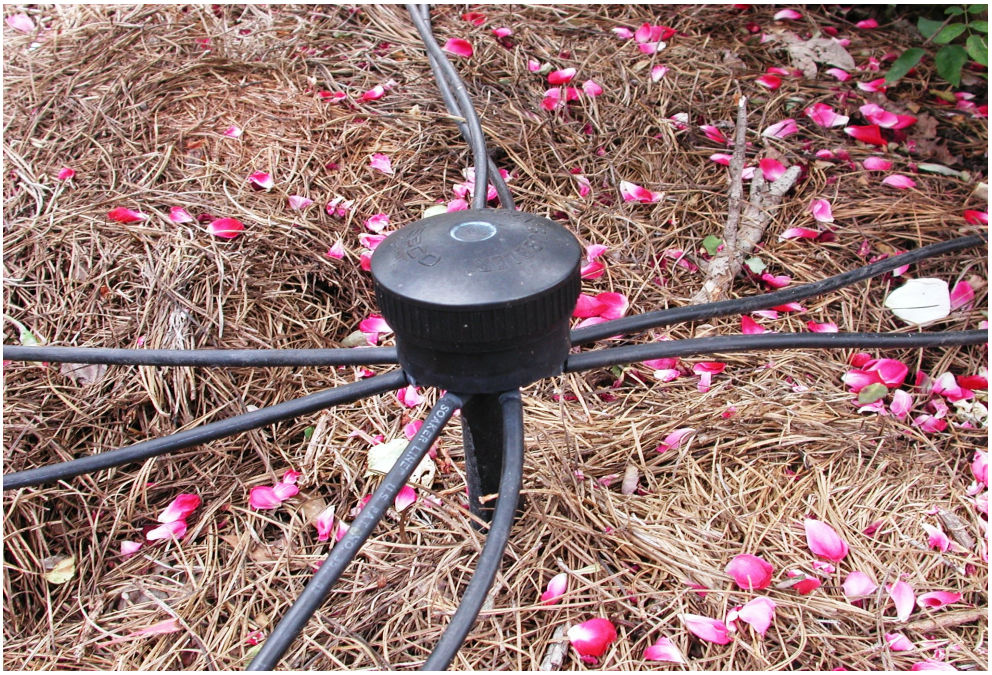

PHOTO BY Dr. William M. Johnson

Drip irrigation is basically a network of plastic pipes that carry water to plants. Water is applied directly to the soil at a low pressure and a slow rate. It has a greater than 90 percent irrigation efficiency.

Can you conserve water, reduce water bills and still keep your plants happy during our hot Texas summers? Yes you can! Drip irrigation slowly distributes water and reduces evaporation and run-off, allowing your soil to absorb the maximum amount of water.

In this day and age, when water is in the spotlight as a critical resource (remember the record drought of 2011), there is great potential for any home gardener to practice water conservation (and lower water bills) using drip irrigation. Drip irrigation, also commonly known as trickle- or micro-irrigation, is merely the precise application of water where and when plants need it.

I am always amazed at the number of folks who have never used drip irrigation, much less know what it is! In working with a variety of drip irrigation applications on a variety of plants in our Horticulture Demonstration Garden in Carbide Park, I have come to take it somewhat for granted. However, its use is not nearly as widespread as I once thought judging from discussions with other gardeners.

More home gardeners are becoming interested in drip irrigation nowadays for their gardens, lawn, and landscape. Given this interest, an educational program entitled "Drip Irrigation . . . Easy and Efficient" will be presented by Master Gardener Susan Roth on Tuesday, March 26, 2013, from 6:30 - 8:00 p.m.

The program will be conducted at the Galveston County AgriLife Extension Office located in Carbide Park (4102 Main in La Marque). Pre-registration is requested to ensure availability of handouts (phone 281-534-3423 ext. 12 or e-mail GALV3@wt.net).

Susan Roth will discuss how to design, install and maintain a drip irrigation system for the

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home garden and landscape. Susan has considerable experience in designing and installing drip irrigation systems.

Learn about the different types of drip irrigations systems and emitter heads which are available to determine the system which will best serve your irrigation needs. Gain firsthand knowledge of how to plan and assemble a drip irrigation system. This will include a discussion on layout, parts, tools and specifics on assembly.

The key to making drip irrigation work in home landscapes is in scheduling—knowing when and how long to water. The best absorptive roots for most plants are in the top 6-to-12 inches of the soil, since this upper soil area contains a lot of oxygen. The deeper one goes into the soil, the less oxygen is present, and root growth is less. In order for water to be absorbed by the plant, oxygen must be present. If oxygen is not present, plants cannot take up water, and the roots will drown if the saturated conditions continue.

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Water applied directly to the soil reduces run off, wind drift and evaporation. For maximum efficiency and attractiveness, drip lines can be covered with a generous layer of mulch to reduce evaporation of water from the soil and shield the tubing from UV rays.

Conventional methods of watering (including hand-watering) are actually wasteful and can be damaging; they deliver water to the landscape faster than plant roots can absorb, causing the water to run off, taking topsoil and nutrients with it.

Drip irrigation can be used for virtually any watering need, including potted plants, hanging baskets, trees, ground cover, and shrubs. They work great for both large and small watering areas dispersing equal amounts of water to all the plants.

The beauty of drip irrigation is that it drips. It doesn't spray or gush, sending a lot of water where it isn't needed. Instead it slowly drips where the water does the most good, thus saving both water and money. And, you save time, because the system works for you.

Drip systems usually need a pressure regulation device. If installed without such a device, too much pressure can build up in the system and instead of a slow drip, you may get a stream, although not necessarily a flood. In a worst-case-scenario, the entire system could blow out.

Consider designing and installing a drip irrigation system for one area and see how it works. Drip irrigation works well in the vegetable and flower garden. If you like the system, you can expand it into other areas. In the meantime, you'll be able to learn from the first endeavor.

Drip irrigation is a wonderful, labor-saving and water-conservation device for the home owner. For some, such devices have been the salvation for their gardening efforts. Many wish they had discovered it years ago, and wonder how they made it before. You'll be amazed at the time you save and how wonderful your plants look even in the heat of a Texas summer. Plants are happy plants when they are watered at metered levels on a regular schedule.

Now is a good time to plan ahead for summer heat and water conservation. Consider drip irrigation