

POLK COUNTY FACTSHEET

Micro-Irrigation for Home Landscapes

What is micro-irrigation?

Micro-irrigation is a way to water plants using low-pressure (30 gph or less). It can be easy to install and inexpensive to purchase. Install micro-irrigation above, on, or below the soil or mulch in landscape beds. There are four types of micro-irrigation systems available.

Types of micro-irrigation

Drip emitters

Use drip emitters where plants are spaced far apart such as containerized plants or hanging baskets. You can install the emitters directly into the main tubing line or attach them to the “spaghetti” tubing that can be placed directly at the base of plants. If you do not have uniform spacing in the garden the latter method may work the best.

Bubblers

Bubblers are often used to establish and maintain large plants, such as trees. They can also be used in containers or on large shrubs. They can be installed directly into the main tubing line or on short stakes.

In-line drip tubing

You can place in-line, or drip, tubing under the soil surface or under the mulch. This type of irrigation can be completely hidden. There are evenly spaced holes in the tubing line so it is important that there are holes near the base of the plants you are watering. Many people space their plants according to the spacing of the distribution holes. This type of system works well for annual bedding plants where layout matches the emitter holes on the irrigation line.

Micro-sprayers

Micro-sprayers (or micro-sprinklers) must be installed above the mulch. They wet the largest



DRIP EMITTER



IN-LINE DRIP TUBING



MICRO SPRAYER



BUBBLER

area of any type of micro-irrigation. Many different spray patterns are available and can water up to 8 feet in diameter. They work well in mixed planting beds such as perennial gardens.

Why use micro-irrigation?

There are many benefits to using micro-irrigation.

- Can reduce water use, saving money and conserving water.
- Can reduce disease if a drip or bubbler system is used and foliage is kept dry.
- Can reduce weeds by focusing water on the plants and not on open areas.
- Requires low water pressure making micro-irrigation exempt from watering restrictions.
- Systems are easy to install, inexpensive and can make watering odd shaped gardens easy.

Design and installation

Micro-irrigation can be installed with a battery operated timer on an outside hose bib, or attached to an existing in-ground sprinkler system. If you attach it to an in-ground system, you will need to install a new valve to accommodate the low-pressure needs of the system. Always remember to keep like sprinkler heads on the same zone and never mix with other types of sprinkler heads. Micro-irrigation sprinkler heads should not be mixed with rotors or pop-up spray heads.

Maintenance

Frequent inspection is key with any micro-irrigation system. This style of watering can make detecting leaks or other issues difficult. Look for wet/dry soil and decline in plant health. Turn on system frequently and inspect while the system is running. Remember to check timer batteries and

run times to maintain efficiency.

The small plastic parts of a micro-irrigation system can be damaged by mowing and maintenance equipment so take care when using machinery around these systems.

Micro-irrigation is an efficient way to water your vegetable gardens, containerized plants, hanging baskets and garden beds. Look for a system that works for you. The systems are flexible and easy to expand and adapt to changing landscapes over time.

Where can I find more information?

For a list of our programs and related topics, go to our website <http://polkextension.com>

Or, Call your County Extension Agent:

Anne Yasalonis

Residential Horticulture Agent

Master Gardener Coordinator

UF/IFAS Extension Polk County

P: (863) 519-1047

E: anneanne@ufl.edu

W: <http://polkextension.com>