

# What is Microirrigation?



***A low-volume irrigation system that operates under low pressure***

- Homeowners can install these systems on their own to efficiently water food gardens.
- There are four main types that can be mixed and matched depending upon plant needs.

## Benefits



- Can save water
- Waters the roots, not the leaves, reducing potential disease
- Can reduce weeds
- Can be moved and adjusted easily
- Easy to learn

## Scheduling



- Watering times vary depending on the soil, weather, and plant type.
- Regularly check soil moisture 1-2 inches deep and observe plants for wilting to adjust watering schedule.
- Water before 10 a.m. or after 4 p.m. to avoid evaporation.
- Seedlings and young plants require more frequent watering; mature plants require less frequent watering.
- Avoid overwatering.

## Additional Tips



- Add mulch to retain soil moisture (and reduce weeds), but leave space around base of plant.
- Check the system regularly for leaks or clogs.
- Do not use reclaimed water or rainwater from roofs for edible plants due to potential contamination (can be used for nonedible plants).

## Protecting Our Water

- Public water supply and private wells both draw from the aquifer, the same water we drink and that flows out of our local springs.
- Efficient irrigation is one way we **protect** both **our drinking water** supply **and** the health of **our springs**.



## Online Wells

Water Resources Extension Agent  
owells@ufl.edu

## UF/IFAS Extension Marion County

2232 NE Jacksonville Rd.  
Ocala, FL 34470  
352-671-8400

<https://sfyl.ifas.ufl.edu/marion/>

# Microirrigation Tips for Gardens



**Efficient  
Low-Volume  
Irrigation**

# Planning



## Planting Design

- Group plants with similar water needs together.
- Plant large gardens in rows for easier watering.
- Plan for maturing plants and rotating crops.
- Note where slopes and water pools occur.

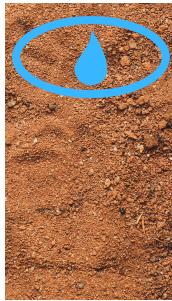
## Soil Type & Drainage



**Sandy**  
fast



**Loamy**  
medium



**Clay**  
slow

Add organic matter (compost, animal manure) to store more water and improve soil health.



## Watering

- Consider the distance from water to plants.
- Small gardens and pots can be hand-watered, but require more time.
- Overhead irrigation uses more water and has higher evaporation.
- Microirrigation systems can provide greater control and uniformity.

# Types of Microirrigation

## Drip Tubing



- Small plants, rows, and large gardens
- Pre-spaced holes 12", 18", 24"
- Easy to install
- Hard to detect clogs

## Drip Emitters



- Medium to large plants, container gardens
- Does not wet foliage
- Plug emitters into tubing where needed

## Microspray



- Medium to large plants, fruit trees
- Irrigates more area
- Variety of sizes and spray patterns on a stake 6" - 12" above ground

## Bubbler



- Good for trees, shrubs, container gardens
- Higher, adjustable flow

# Assembly



Timer

Backflow Preventer

Filter (needed for well water)

Pressure Regulator



Tubing



Fittings & Connections

## Kits



Available at stores