

DRIP IRRIGATION

Most home gardeners use sprinklers attached to hoses. This is an inefficient system for watering home gardens.

The advantages of drip irrigation compared to overhead watering via sprinklers are well documented, but many home gardeners still have not adopted the technology. If you're one of those gardeners, maybe it's time to take another look.

Drip irrigation is adaptable to many agricultural and landscape situations. If you're still a doubter or on the fence about drip irrigation, you are encouraged to keep reading. Perhaps this is the year for you to change your mind.

Drip irrigation will not be perfect for all situations, but it does have several advantages in those situations where it can be used. Those advantages are described in detail below.

Increased yield. This is especially true if it can be combined with plastic mulch. Some vegetable gardeners say that by switching from bare ground production with overhead irrigation to raised, plastic-mulched, drip-irrigated beds, they were able to double yield.

Water savings. Drip irrigation waters only the area where plants are growing using up to 50 to 70 percent less water than if the same area were irrigated with sprinklers. Irrigation can also occur during the heat of the day when plants most need water. This is when a significant portion of overhead irrigation would be lost to evaporation

Lower pressure/lower volume. Most drip systems operate with pressures of 10 to 15 pounds, not 60 pounds or more like many overhead systems. They also don't need the significantly higher volumes required for overhead.

More efficient use. Being able to achieve higher yields off fewer plants makes fertilizer, pesticide, labor and other factors more efficient. Plant maintenance activities, like pruning, staking, spraying, harvesting, etc., can also be conducted while irrigation is taking place.

More consistent soil moisture levels. Drip irrigation makes it is easier to maintain uniform soil moisture leading to more consistent uptake of nutrients needed for good growth. This is important

for reducing physiological disorders such as blossom end rot in tomatoes, peppers and other susceptible crops.

Easily automated. Any size system can be set up so it can be turned on and off using programmed timers. The systems can also be controlled remotely.

Improved fertilizer application. Plants can be fed on an “as needed” basis, increasing nutrient use efficiency, plant and fruit quality and yield.

Environmentally friendly. Slow application rate and the ability to regulate flow and time decreases potential for runoff and leaching.

Flexible delivery. Drip irrigation offers many delivery mechanisms. The ability to use tapes, emitter tubes, drippers, spikes, misters and other mechanisms and also flow rates within these mechanisms makes the system highly adaptable to many applications.

Ref: MSU Extension, “Is it Finally Time to Take the Plunge to Drip Irrigation?”

The **Master Gardener Hotline** is open from April to October, Monday through Friday. Lines are available 9:00 am to noon and 1:00 pm to 4:00 pm at 888-678-3464

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