

STAYING WATER-WISE MICRO-IRRIGATION SYSTEM

There are many ways to conserve water in your vegetable garden. Applying mulch is the most basic thing you can do to help your plants conserve water. Spread a light layer of mulch around the base of your plants keeping it a few inches away from the plant stems. This keeps moisture in the soil where the plants' roots can reach it, and prevents water loss through evaporation. Adding moisture retaining organic soil amendments like well mixed compost is one of the best things you can do for your vegetables.

Another excellent method of water conservation in the garden is to water your plants using drip irrigation or soaker hoses. These two methods don't require high water pressure or gallons of water. The water simply drips out at the base of the plants where it is needed. They also allow the plant foliage to remain dry, which helps eliminate disease problems. Drip irrigation delivers water slowly above and below the surface of the soil. This minimizes water loss due to runoff, wind and evaporation. Small adjustable drip emitters placed directly under the plants provide necessary moisture without waste.

As the weather heats up take advantage of nature when you water. Water early in the morning. This is when plants best absorb water and it is cool enough for the heat of the sun not to evaporate water quickly. During summer months avoid watering at mid-day when evaporation losses are highest. Do not spray plants lightly every day. That is the worst possible way to water. Instead, soak the soil to a depth of at least 6 to 8" to encourage roots to seek water and nutrients deep in the soil. A thorough soaking every 3 to 4 days is a good general guide to irrigating your vegetables.

As much as vegetables like moisture, over-watering is harmful. Over-watering not only wastes water, it also prevents the roots from getting air. If your plants look wilted on a hot summer afternoon, that's normal. They will usually perk up overnight. If your plants are wilted in the morning, don't wait-water!

Weeds are the unnecessary sponge of the vegetable garden. They absorb moisture and vital nutrients from your plants. Pull weeds as close to the soil as possible. If the weed breaks off, dig out the roots with a small shovel to prevent regrowth.

Try these water-wise tips:

- Apply three to four inches of mulch keeping it a few inches away from plant stems
- Use drip irrigation to apply water directly to the roots of your plants where it is needed most and not wasted
- Water early in the morning to reduce evaporation
- Control weeds, which compete for water, light and nutrients
- Water longer but less frequently.
- Check your watering system for leaks.

Gardening is more than just planting seeds and squirting them with water. Careful watering practices not only produce better vegetable with higher yields, it also helps to conserve one of the most valuable resources on our planet. If watering restrictions are imposed, water conservation becomes a critical issue for our Community Garden!

MICRO IRRIGATION SYSTEM DESIGNS:

Basic micro-irrigation layouts with soaker hoses. Options can include a dripper, soaker, or sprayer. See the different attachments below.

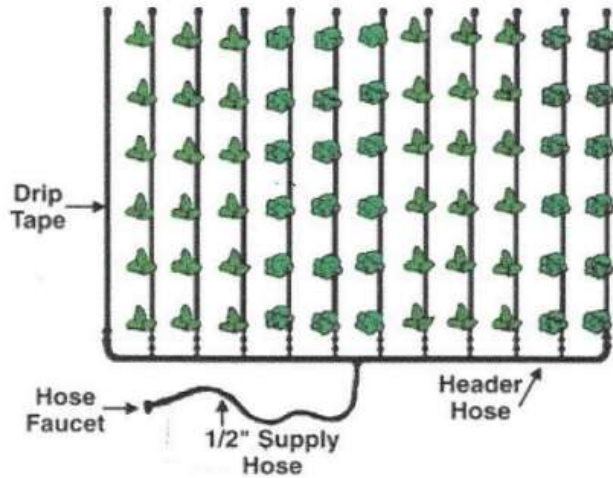
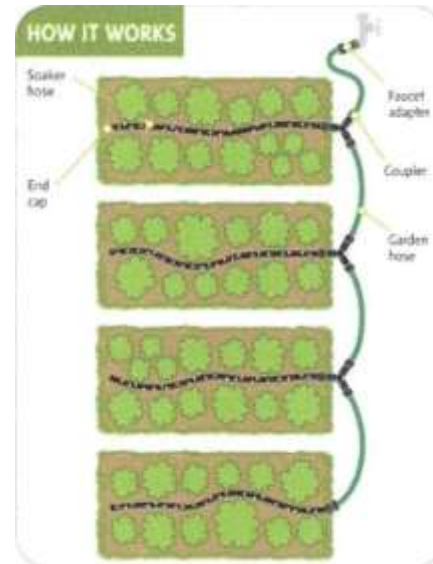


Fig. 9. Typical design (layout) of a drip system for a home vegetable garden.



MICRO-IRRIGATION STARTER KITS:

Kits are available at your nearby hardware store or nursery.



Micro-Irrigation Timers:

Irrigation timers can be purchased at your nearby hardware store.

