

# *Trickle irrigation for annual plants*

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Trickle or drip irrigation is not new to some greenhouse growers. In Connecticut many growers are using it on annual plants grown outdoors for cut flowers.

Trickle or drip irrigation is a method of slowly applying small amounts of water to the plant root zone. It assures the root zone has optimum moisture. Precious water should be placed where it will be most beneficial at the roots of the plants. The greatest benefit is that trickle irrigation requires less water and labor than any other irrigation system.

A typical design for annual beds might be

- (1) prepare soil with adequate nutrients (per soil test) and organic material,
- (2) level the site and lightly firm the soil (if possible) before planting annual seedlings,
- (3) select plant spacing (generally in double rows 2 feet apart with 3-4 feet between the pairs of rows),
- (4) stretch 2 drip lines between the rows, 4-6" from the planting line (about 16" apart),
- (5) cover with a 4' sheet of black plastic mulch (1 1/2 - 2 ml) and, bury the edges to hold it down,

- (6) stretch a guide line down the row 2" to the side (20" between the guide lines) to avoid cutting the drip line under the plastic,
- (7) punch planting holes with sharp trowel (lines 24" apart), and
- (8) place transplant through the hole taking care to avoid planting too deeply.

The plastic mulch will limit evaporation of water, control weeds and provide a good place for plants to grow. The Drip system is attached to a header line with valve control for each bed. The beds should not exceed 100 feet in length.

Fertilizer can be injected with the water as needed.

A Drip System includes water supply, main pipe to system (filters may be needed), anti-syphoning device, and individual lines to plants. Once set up, it will provide moisture as needed by the plants. All you have to do is turn it on.

Many systems are now on the market. Details can be supplied by your extension agent or favorite jobber.

Trickle irrigation has a place in annual flower production out of doors. It conserves water by directing it to the root zone and also reduces the foliar diseases often spread by overhead watering systems. If this appeals to you, give it a try this summer.