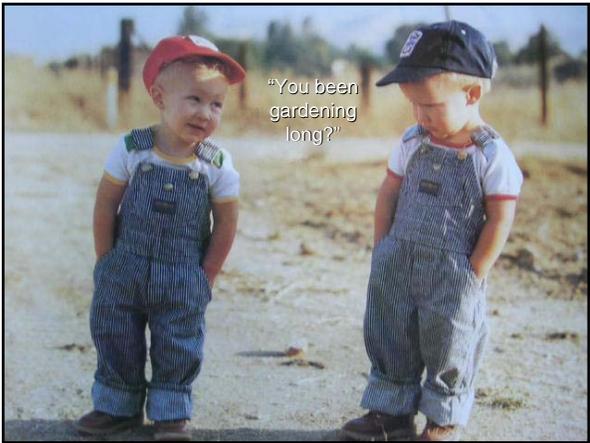


Home Garden Drip Irrigation System

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Early 1900's
Furrow Irrigation



Experimental
Drip Irrigation

Current Garden Irrigation Methods

- Furrow Irrigation
- Sprinkler Irrigation
- Drip Irrigation





Drip Irrigation

DRIP IRRIGATION

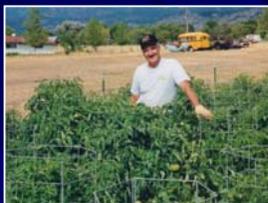
Drip irrigation is a method of applying slow, steady, and precise amounts of water and nutrients to specific areas of trees, vines, ground covers, potted plants, or shrubs.

Benefits of Drip Irrigation

- Water savings, since only those areas directly around plants root zone are irrigated.
- Plants undergo less stress from variations in soil moisture.
- Slow application rate prevents excess surface water build-up and reduces evaporation.
- Weed growth is reduced because areas between plants are not irrigated.
- System can be designed for use in all types of terrain and soil conditions.
- System's low flow rate allows irrigation of larger areas and more plants can be watered at once.
- Through the use of fertilizer dispensers, chemicals and nutrients can be fed directly to the plant in controlled quantities.
- The water application rate can be tailored to fit each individual plant.

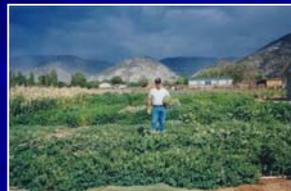
Drip Irrigation System Design

There is no one right way to design a system. A person must judge for themselves the kind of system that would work the best for them. Water cost, water availability, product and installation costs and maintenance skill level requirements are all factors to be considered when deciding which system to use.



Vegetable Garden

Brent Taylor
Levan, Utah



1/4 Acre garden
using drip system



Jeff Banks
Nephi, Utah



Test Plot
Garden Area



Drip System Layout



Drip system
uses manual valves
& plugs



For squash, tomatoes etc.,
3 1/16 inch holes drilled
3 inches apart & every 5 ft.

For corn, peas, carrots
etc. 1/16 inch hole
drilled every 6 inches



Fertilizer Injector



Beginning of Season



Peas & Carrots in early stages



Corn & Tomatoes in early stages



Mid Season



Mid Season



Late Summer



Late Summer



Irrigation Comparison

<u>Irrigation details</u>	<u>Furrow System</u>	<u>Drip System</u>
Irrigation season	180 days	180 days
Ave. watering intervals	6 days	6 days
Ave. watering time	1.5 hours	.5 hour
Water rate	10 gal/min.	7 gal/min.
Total water used	1.5 hours x 10 gal/min. x 30 times = 27,000 gal.	.5 hours x 7 gal/min. x 30 times = 6,300 gal.

20,700 gallons saved

Material Costs: \$130.00
Expected life of material: 10-12 years

Major Benefits

- Water Savings: 75%
- Weeding time saved: 75%
- Time saved watering: 75%
- Healthier plants
- Higher production
- Higher quality produce

Questions?



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