



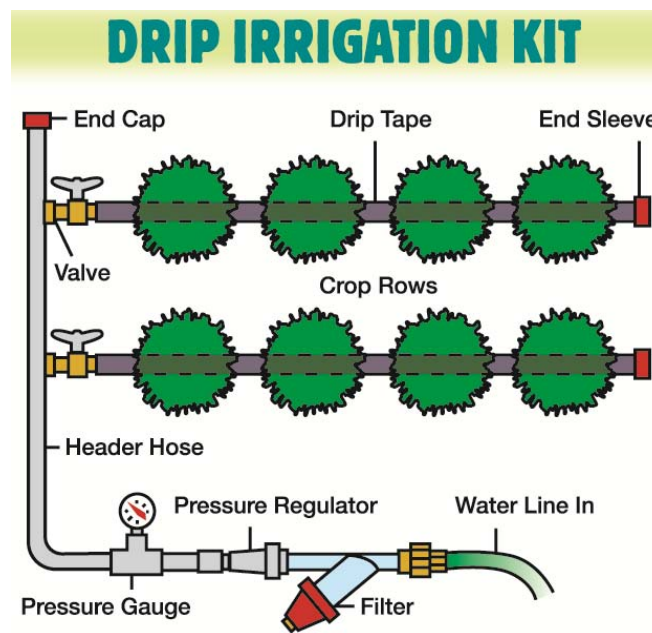
HARRIS SEEDS

DRIP IRRIGATION BROCHURE, No. 90002-900

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355 Paul Road Rochester, NY 14624

www.harrisseed.com



A well-designed drip irrigation system benefits the environment (and your plants!) by conserving water and fertilizer, and requires very little labor. Drip irrigation sends a uniform distribution of water directly to the root zone of plants, avoiding waste and runoff. A system such as ours tends to use up to 50% less water than conventional systems, and minimizes such negatives as soil compaction, erosion and weed growth. Its use also tends to minimize leaf burn, and fungal diseases.

For the grower needing to irrigate a small area (1/4 to 1/2 acre), our system is ideal, as it includes all components for operation. The 250 ft. of 1" header pipe and 3000 ft. of drip tube (high quality T-Tape brand), punched at 12" increments make for a highly configurable system (You cut the header and drip tube to your specified lengths). The maximum length that each drip line should be cut, is 550 ft., for best water distribution. Our system may be used with black plastic mulch.

Water is usually applied on the soil surface, just next to the row of plants, and the drip tape may be laid under the surface of plastic mulch for even more effectiveness in preventing evaporation. In dry years, fewer weeds will germinate, because the water is placed exactly where it is needed—close to the root zone of the plants.

PLACEMENT OF THE DRIP SYSTEM IN THE FIELD:

Slope: A slope of less than 2 degrees is ideal. Tape should run across the slope, or downhill, for best results. We suggest watering only certain lines at one time, turning individual valves on and off, to maintain water pressure, on a slope.

Placement of drip tape: The drip tape may be placed from 6 to 12 inches away from the plants in the row, 12 inches away at the most. The soil type and water movement will help determine this distance. Tying the drip line to a stake at the end of each row helps to ensure that the tape movement from side to side (due to temperature fluctuations) will be minimized.

40131-900 Drip Irrigation Kit for Smaller Acreage Farms

An all-inclusive kit, for ¼ to ½ acre, depending upon configuration

Filter: A screen filter is included with our kit. This filter will help prevent clogging of the emitters along the drip tape. Cleaning the filter daily will help keep the lines open to your plants.

Pressure Regulator: 10 PSI is best for a system such as ours, and this gauge must be checked daily. If the pressure drops below 6 PSI, close some of the rows, or clean the filter screen.

Pressure Gauge: Supplied with a stake.

Header Line: 250 ft. of 1" header line is supplied with our kit, and this diameter is fine for the use with the full total length of the drip tape (3000 ft. of drip tape). An end cap is also included.

Drip Line: The 3000 feet of line (quality 10 mil. "T-Tape" brand) may be placed in any one of many configurations, to conform to your own land area. Be sure that the maximum length of any drip line is less than 550 feet, to maintain water pressure.

Drip Line Connectors with Shutoff Valves: (Qty. 30) valves are supplied with this kit; more than enough for most configurations.

Drip Line End Sleeves: (Qty. 30) Used to easily secure the end of each drip tape.

Hole Punch for Header Line: Used to punch holes in the header line for installation of drip tape.

Drip Line repair couplers: (Qty. 6) Used to repair holes in drip tape.

40184-900 Medium Drip Irrigation Kit (For approx. 1/8 acre)

Filter: A screen filter is included with our kit. This filter will help prevent clogging of the emitters along the drip tape. Cleaning the filter daily will help keep the lines open to your plants.

Pressure Regulator: 10 PSI is best for a system such as ours, and this gauge must be checked daily. If the pressure drops below 6 PSI, close some of the rows, or clean the filter screen.

Pressure Gauge: Supplied with a stake.

Header Line: 50 ft. of 3/4" header line is supplied with our kit, and this diameter is fine for the use with the full total length of the drip tape (3000 ft. of drip tape). An end cap is also included.

Drip Line: The 1000 feet of line (quality 10 mil. "T-Tape" brand) may be placed in any one of many configurations, to conform to your own land area. Be sure that the maximum length of any drip line is less than 550 feet, to maintain water pressure.

Drip Line Connectors with Shutoff Valves: (Qty. 20) valves are supplied with this kit; more than enough for most configurations.

Drip Line End Sleeves: (Qty. 20) Used to easily secure the end of each drip tape.

Hole Punch for Header Line: Used to punch holes in the header line for installation of drip tape.

Drip Line repair couplers: (Qty. 6) Used to repair holes in drip tape.

For our full line of Drip Irrigation Components visit www.harrisseed.com

FERTIGATION:

This is defined as the injection of water soluble fertilizer into irrigation water. Before fertilizer is injected into a system, the entire system should be filled with water at full operating pressure. After fertilization, the system should be completely flushed, to help prevent clogging due to chemical precipitates.

We offer two types of injectors: the “EZ-Flo” tank type, and the Dramm “Siphonject” type, which siphons concentrated liquid from a bucket.

FERTILIZER INJECTORS:

TANK TYPE:

EZ-Flo Fertilizer Injector

Ideal for use with our Drip Irrigation System

The EZ-Flo Fertilizer injector is easily installed in a garden hose line for feeding of plants through a variety of end devices, such as a drip system, sprinkler, mister system, or hand-held spray nozzle. It may be attached to a standard exterior faucet with anti-siphon protection (hose bib), or connected after any valve on an existing drip irrigation system or sprinkler, as long as the unit is only under pressure while operating. To operate, fill the $\frac{3}{4}$ gallon poly tank with any liquid or dry water soluble fertilizer, set any one of four flow rates, and turn on the water. It works up to a max. of 80 lbs. water pressure. EZ-Flo’s patented flow technologies ensure that the proportion of fertilizer to water remains constant through the entire cycle.

40132-900 EZ-Flo Fertilizer Injector, $\frac{3}{4}$ gallon Poly Tank/ Tubes/ Fittings

41030-900 EZ-Flo Fertilizer Injector, 2 gallon Poly Tank/ Tubes/ Fittings

BUCKET SIPHON TYPE:

Dramm “Siphonject” Fertilizer Mixer

This unit draws a concentrated fertilizer solution from a bucket through a flexible suction tube, diluting it with the passing water stream at an approx. 16 to 1 ratio. The solid plastic siphon unit contains $\frac{3}{4}$ ” male & female hose threads.

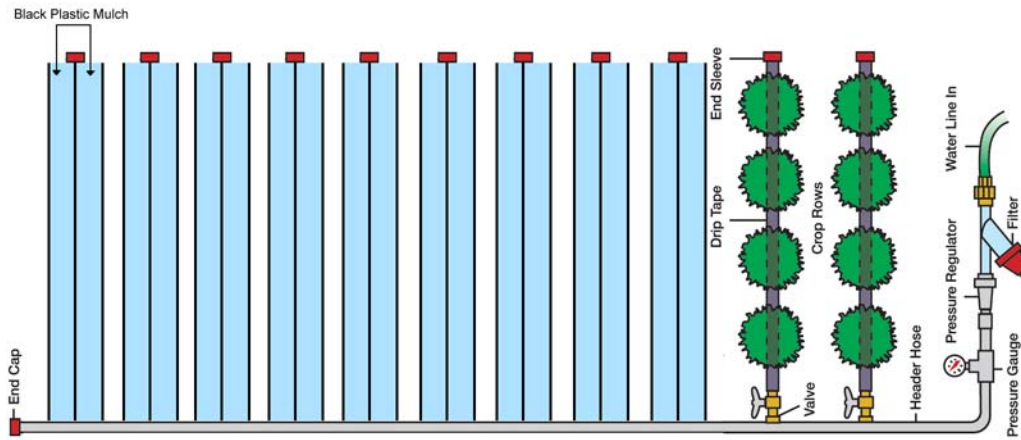
40122-900 Dramm Siphonject Fertilizer Mixer

SUGGESTED FIELD LAYOUTS FOR THE DRIP IRRIGATION SYSTEM:

The following layouts are presented as samples for a drip irrigation system installation with and without black plastic mulch. Obviously, you may set up any lengths of drip line you wish, as long as they are less than 550 feet each.

Field Layout “A”: Black Plastic Mulch with a Drip Irrigation System:

Please note that the “blue” tinted areas in the following illustration represent the width of a roll of black plastic mulch. The single line running through the center of the “mulch” represents the drip line, positioned under the plastic.



Field Layout “B”: Drip Irrigation System without plastic mulch:

The individual lines running upward from the header line represent the drip lines.

