Drip Irrigation

At our Horticulture Research Center, we use drip irrigation whenever possible to conserve water. Drip irrigation allows you to put the water directly where you want it at the root zone, reduces runoff, and prevents weeds from establishing in other areas. Another bonus of drip irrigation is that the aisleways remain dry allowing workers access to the the field during and immediately after irrigation. Watering with drip tape rather than sprinkler irrigation keeps the foliage dry and reduces fungal diseases.

Furrow irrigation

Drip irrigation on spinach

At the HRC, we run municipal water through the drip tape after it passes through a filter and a pressure regulator. Our runs are approximately 400 feet long and slightly uphill so we use about 12 psi to get the water to the ends. Because we grow a wide range of crops with different irrigation needs, each irrigation line is controlled with a valved connector.

Drip irrigation submain

During the August 10, 2004 hail storm we observed a very rare, but troubling event with the drip tape on top of the soil. The drip tape had 2-4" splits at the seams when the hail hit the pressurized drip tape. Many lines had to be completely replaced and many were repaired. Drip lines that were not running during the hail storm were not damaged.

Other Sources of Information About Drip Irrigation

Several of our Grower Grant projects involve using drip tape: **Certified Naturally Grown Table Grapes, Raspberries, and Blackberry Production with Drip Irrigation, Growing Seedless Watermelon in the Arkansas Valley**, and **Using Row Covers and Plasticulture to Produce Earlier Harvest and Greater Yields.** Web pages with useful information on drip irrigation is produced by **Oregon State University** and **Penn State University (Center for Plasticulture).**