

## Garden vegetables need uniform soil moisture

Certain home garden vegetable crops require uniform soil moisture to produce top quality material. Knobbiness in potatoes, bitterness in cucumbers or stunted carrots may



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County Agent's Corner  
By Morrow County Ag Agent  
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be due to alternating moist and dry conditions in garden soil.

There are certain times in the life of a vegetable when adequate water is extremely important. Potatoes become knobby when garden soil gets dry between waterings during mid-summer. The knobby effect occurs because the spuds grow in spurts, growing when there is moisture, and slowing to a snail's pace when they are dry.

Cucumbers and Lettuce are generally bitter because of genetic parentage, but they will be more bitter if they've had to suffer from lack of water during the vigorous growing stages.

Carrots and parsnips grown in soil with fluctuating moisture levels will be badly formed and hardly what you are expecting when it comes time to harvest.

Maintain an even moisture content level in your garden soil by watering regularly, controlling moisture-robbing weeds and by using mulches to save the moisture in the soil.

Apply at least one-half inch of water at each watering. Measure the amount of water by placing a shallow pan inside the garden sprinkler pattern. Stop watering when the pan has caught one-half inch of water or more. Then, a day later, dig down into the garden soil to see how deep the water

penetrated. Most garden vegetables need water penetration at least six inches down in the soil for plant roots to grow properly.

Water frequently enough to keep soil moist to a depth of six inches.

The water needs of home growing vegetables vary from garden to garden.

How much irrigation garden vegetables require for optimum growth depends on the garden soil type, the rooting depth of various garden plants, and current weather conditions.

Morrow County's silt loam soils hold about two inches of water per foot of soil.

Corn, tomatoes and small shrubs take water from the top one or two feet of soil. They need watering less frequently than lawn grasses and leafy vegetables, which take water from just the upper eight to twelve inches of soil.

Also, the amount of water plants use each day depends on temperature and wind conditions.

Use plant symptoms as a guide to the time for irrigation. When in need of water, many plants show a dark, bluish-green color, or wilting, or both. These symptoms first appear during the hottest part of the day.

Another method is to use a shovel to check soil moisture content. When garden soil is dry to a depth of six inches watering is needed.

Each irrigation should provide just enough water to replenish what the plants have used. For best results give the garden a thorough soaking and then don't irrigate again until necessary. Following these guidelines usually means applying about one inch of water to the garden ever 5-7 days. Of course if weather conditions change you'll have to adjust how you irrigate accordingly.

Avoid frequent watering with small amounts of water. This results in excessive evaporation without deep wetting in the root zone and encourages surface roots that will suffer from drought unless the surface is kept damp.

Hand sprinkling isn't effective because sufficient water is seldom applied.

For most efficient water use, irrigate in the early morning. Less wind and lower temperatures mean more of the water gets to the root zone instead of being lost to evaporation.

Other practices that will conserve water are:

-Don't plant on mounds or hills (a raised soil level with a rounded top) because water won't penetrate well into the mounds, which then will dry out quickly. A flat planting bed is better for taking in and retaining moisture.

-In the cool, early part of the growing season, use a plastic mulch around tomatoes, cucumbers, melons, peppers and other warm season plants. Plastic will warm the soil in addition to conserving water.

-Later in the season use an organic mulch such as straw or grass to save water and keep down weeds.

-Keep weeds under control. Weeds take moisture from vegetables plants.

Keeping weeds out of the home landscape is a matter of effectively employing a variety of control methods including weed prevention, crop management techniques, cultivation and herbicides.

Of the control options available, the safest for vegetable gardens is cultivation; the most effective for lawns is crop management; the easiest for ornamental shrub beds is herbicides, and the method that holds the greatest promise for the overall landscape is weed prevention.

In the vegetable garden, cultivate shallowly and regularly to scrape out young weeds and starve the perennial weeds by continual removal of their tops. Deep cultivation is unnecessary, and in fact may actually spread perennial weeds by chopping their roots and spreading the pieces.

Lawn weed control efforts are assisted with herbicides, but the best method of control is to manage the grass crop so that it grows more densely. Proper fertilizer along with adequate watering during the summer season will help to keep many of the annual weeds to a minimum in lawns.

In woody ornamental beds there are a number of herbicides that can effectively control weeds. Diclobenil is a granular product that should be applied immediately before irrigation to control most annual and perennial weeds.

In situations where a mixture of herbaceous and woody ornamental plants prevent the use of diclobenil, glyphosate can be used as a spot application either by painting it onto the weed or by spraying carefully.

Two new herbicides, Fluazifop (Fusilade) and Sethoxydim (Poast), are unusual in that they will control weedy grasses in flower beds containing broadleaved plants. However, as with all chemicals, check the label first to make sure they are safe to use in your situation.



### Court earns trophy

Morrow County Fair and Rodeo Court earned a second place trophy at the Prineville Parade July 11. Pictured above are Queen Cindy Davis (left) pennant bearers Charene and Tricia Coe, Princess Judy Jepsen, and Princess Kathleen Brazell. Princess Rachel Flannangen who was injured when she fell from her horse three weeks ago has been unable to ride, but is expected to be appearing with the court again in four to six weeks.

### Japanese students to arrive Friday

Five Japanese students will arrive in Morrow County this Friday to spend about a month with host families here.

### Unemployment rate decreasing

Morrow County's unemployment rate edged down just slightly in June the Dept. of Human Resources Pendleton office reports. Both employment and unemployment levels were lower, with unemployment dropping just slightly faster.

Farm employment was stable from May to June, and was running ahead of last year's levels. Wage & salary employment fell in several sectors including trade and government. The outlook for rest of the summer should be for relative stability in the county's unemployment rate, allowing for the usual seasonal surge upward when the food processors close down for their semi-annual maintenance period in late July or early August.

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Do you want to teach a fascinating class with wide appeal for Blue Mountain Community College this fall?

Do you have any ideas for fascinating classes with wide appeal for Blue Mountain Community College to offer this fall?

LET ME HEAR FROM YOU!  
MARSHA SWECK  
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