

Water Conservation FACTSHEET



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FIELD VEGETABLE WATER-SAVING TIPS

Water is a critical component of the growth and development of field vegetable crops. A water management plan can make the difference between profit and loss when facing limited water supplies.

Prior to planting, an analysis of your crop's water needs will include:

1. the crop's period of critical water need (e.g., head development for broccoli, flowering and fruit development for cucumbers, and root enlargement for carrots);
2. the crop's rooting depth (e.g., lettuce is shallow rooted (less than 30 cm); cabbage is intermediate rooted (30 – 60 cm), and asparagus is deep rooted (over 60 cm));
3. your soil's water-holding capacity (e.g., clay has a higher water holding capacity than sand);
4. your irrigation type. Trickle irrigation is more efficient than overhead irrigation, but the extra costs of purchasing and installing trickle irrigation may not be financially viable for all vegetable crops;

Water Saving Strategies

Here are some strategies to help use water as efficiently as possible:

- ✓ Reduce the area planted, and plant only the most productive land.
- ✓ Select more drought tolerant crops/cultivars, or shorter season crops/cultivars.
- ✓ Emphasize spring and fall produced crops, since those seasons are less prone to drought stress.
- ✓ Establish a proper plant stand to make the most efficient use of soil moisture.
- ✓ Use mulches (plastic or organic) to reduce soil evapotranspiration.
- ✓ Control weeds so they don't compete for soil moisture.
- ✓ Improve irrigation scheduling and system efficiency.
- ✓ Maintain soil structure and fertility (e.g., by adding soil organic matter and minimizing tillage).

Links to Other Related Information

Drought Advisory for Vegetable Production at

http://www.umassdroughtinfo.org/agriculture/drought_advisory_for_vegetable_production.pdf

Drought Advisory: Vegetable Crops at <http://cru.cahe.wsu.edu/CEPublications/em4830/em4830.pdf>

Irrigating Vegetable Crops at http://www.gov.on.ca/OMAF/english/crops/facts/info_irrigation.htm

Irrigation Tips to Conserve Water on the Farm at <http://www.agf.gov.bc.ca/resmgmt/publist/500series/500310-1.pdf>

FOR FURTHER INFORMATION CONTACT:

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