Growing More Vegetables

Vegetable Gardening In Utah
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GROW IT YOURSELF

PLAN A FARM GARDEN NOW

Rural Electrification Administration, U.S. Department of Agriculture
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• Planting Your Garden
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• Vegetables Vary Greatly by Their Climatic Requirements. Each Must Be Planted at a Time That Encourages Successful Development and Maturity in Your Garden
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- Successful Gardening Requires Understanding Which Establishment Method Will Be Most Successful
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Vegetables Are

• Seeded Directly Where They Will Grow
• Grown From Purchased Transplants or
• Grown From Transplants Raised by the Gardener
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• If the Garden Site Was Fall Plowed, Rake it off and Plant the seeds or transplants
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- Check the Soil Moisture before tilling to Produce a Fine, Clod-free Area to Accommodate the Seed
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- If Soils Are Too Wet, Seed Bed Preparation Is Difficult and prevent Good Seed Germination
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- This is especially true for those vegetables we sow very early in the spring like peas and onions.
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• Early Tillage Helps Incorporate the Fertilizer Needed for Good Plant Growth. There Are No Good Guidelines for How Much Fertilizer to Add to the Garden Unless a Soil Test Is Taken
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• While Straight Rows Make Attractive Gardens Which Are Easier to Seed, They Don't Always Utilize the Limited Space of the Garden Most Efficiently
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• **Straight Rows Are Easier to Plant and Allow Tillers to Be Used for Later Weed Control**
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- Other Methods of Sowing Including Broadcast Planting, Hilling, and Intensive Spacing Can Be Incorporated Into the Garden
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• After Marking the Row, a Narrow V-shaped Trench Is Made for the Seeds. Trench Depth Is Important and must Be Tailored for the Specific Vegetable
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- A General Rule Is to Sow Seeds to a Depth of 2 to 3 Times the Diameter of the Seed. Avoid Planting Seeds Too Thickly or Crowding Will Occur As the Plants Mature
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• Most Seed Packets Give Generic Planting Depths and Plant and Row Spacings Best Production
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• Once Planted, Cover the Seed by Raking the Soil Into the Furrow and Firming It Over the Seed
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• Be Sure to Mark the Row With the Variety Planted. If the Soil Is Dry, Water Lightly to Improve Seed Germination
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• Broadcast Planting Is an Easy Method for Single Crop Beds or Broad Strips of Plants
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- Fast-growing Vegetables That Can Tolerate Some Shade Work Especially Well. These Would Include Beets, Radishes, Carrots, and Leafy Greens
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- After Preparing the Bed, Seeds Are Evenly Distributed Over the Surface and Are Raked Into the Soil
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• Raking the Soil Works Well for Small Seeds That Need A Shallow Planting Depth.
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- In the Spring, when temperatures are cool and the soil moist, germination is not a problem. During the heat of summer, frequent light irrigation may be needed.
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- Hill Planting Is a Good Way to Space Melons, Cucumbers, and Squash. Sow Several Seeds in Each Planting Hole With Hills Located Several Feet Apart. After Emergence, Hills Are Thinned to 2 or 3 Plants
Organic Matter Is Often Blended With the Garden Soil Before Making the Hills. This Favors Vigorous Plant Growth
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• Intensive Plantings Are Good Methods to Maximize Land Use and Yields. Plant Seeds or Plants Closer Together So That When They Mature the Leaves Just Touch and the Entire Area Planted Is Covered by Foliage
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• Planting Time Is Based on Locality, Frost-free Period, and Time to Crop Maturity. Knowing the Dates of the Last Killing Frost in the Spring and the First Killing Frost in the Fall Helps Determine When to Plant
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• Vegetable Production Time Varies Greatly So Plant Long Season Types As Early As Possible. These Include Potatoes, Tomatoes, Peppers, Eggplants and Onions
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- Plant Vegetables that Mature Rapidly at Intervals During the Season to Extend Their Productive Periods. These Include Spinach, Beans, Carrots, and Radishes
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• Some Seeds Are More Difficult to Establish in the Garden Than Others. Onions, Beets, and Carrots Germinate Slowly. If Soils Dry Out Rapidly, Erratic Germination and Poor Plant Stands Result
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• One Technique Used to Improve the Emergence of These Vegetables Is to Soak the Seeds in Water Prior to Planting Them in the Garden
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• The Germination Process Is Started in Ideal Environmental Conditions and Seeds Are Almost Germinated Before Planting
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• This Shortens the Time Period Needed Before Seedling Emergence but Makes the Planting Process More Difficult, Especially for Very Small Seeds

• Beans, Peas, and Sweet Corn Can Be Successfully Planted by This Method
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• Transplanting vegetables
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• Bed Preparation Procedures Are Similar for Both Seeded and Transplanted Vegetables. Closer Spacing May Actually Increase Total Yields While Decreasing Yield Per Plant. Intensive Plant Spacing Is Easier to Achieve With Transplants
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• This method Helps Concentrate Yield and Maturity when Produce Is Grown for Freezing or Canning
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• With Most Vegetables, Transplanting Has Little Long-term Detrimental Effect on Plant Performance. Tomatoes, Broccoli, Lettuce, and Celery All Transplant Easily and Grow Rapidly Once Placed in the Garden
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- Beans, Sweet Corn, Squash, Cucumbers, and Melons can be transplanted if they are handled with care.
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- Easily Transplanted Vegetables Have Rapid Root Replacement and Slow Top Growth While Vegetables That Are Difficult to Transplant Have Rapid Top Growth and Slow Rate of Root Replacement
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• Healthy, Vigorous Growing Plants With Adequate Nutrient Levels and Water During Early Growth That Are Carefully Planted to Avoid Root Damage Generally Show No Transplant Stress (Shock)
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- Transplants Can Be Broken Down Into Three Groups: Bare-root, Flat-grown, or Cell-grown Plants. While Planting Methods for All Three Are Similar, Success After Planting May Vary
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• In Most Cases, Total Yield Is Similar for All Three Types of Transplants but Early Yield Is Less With Those That Have the Greatest Amount of Root Damage
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• Plant Size Also Influence the Transplant Performance. Most Cucurbitas Suffer Less Transplant Shock If Planted When They Have 1 to 2 True Leaves. Brassicas Grow Best When They Have 4 to 6 True Leaves.
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- Plant Age Has a Significant Effect on Overall Performance. Young Tomato Plants Produce the Highest Yields With a Long Growing Season.
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• Older Plants Do Better in Short Growing Seasons Because They Set Fruit Sooner.
• Older Plants Generally Produce Lower Yields Because They Sacrifice Vegetative Growth to Supply the Developing Fruit
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- Old Broccoli and Cauliflower Transplants Often Produce Very Low Yields Because the Floral Tissue (Head) Has Been Initiated Before Planting. If Stressed After Planting, Small Buttons (Heads) Form Before Good Plant Growth Occurs.
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• Hardening Slows Plant Growth and Enables Plants to Better Withstand the Transition From Greenhouse to Field Environment
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- The Need to Harden Depends on the Kind of Vegetable, the Weather, and Other Conditions Expected After Transplanting
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- Hardening is generally not necessary when transplanting during the summer. Soils are warm and air temperatures favorable for rapid growth.
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• Vegetables That Are Induced to Flower by Cold Temperatures Should Not Be Hardened by Exposure to Very Low Temperatures
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• This Leads to Early Bolting (Going to Seed) with Cabbage, Onion, and Celery and Buttoning (Premature Head Formation) of Broccoli and Cauliflower
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• Cucurbits Generally Do Not Benefit From Hardening Since Rapid, Uninterrupted Growth Is Needed
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• Transplanting Depth Varies With the Vegetable. Tomatoes Can Be Planted Deeply Since They Develop Roots Out of Their Stems. Plant Cell Grown Plants Slightly Deeper Than the Root Ball to Keep the Media From Drying Out After Planting
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- Transplants Do Best When Planted Late in the Day or on Cloudy Days. Some Protection Is Required If Conditions Are Extremely Dry and Hot. Water Transplants Before and After Planting
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• Starter Solutions (Dilute Fertilizers) Have Readily Available Nutrients for Rapid Growth. Starter Solutions With a High Phosphorous Encourage Root Growth
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• The End