# **COOPERATIVE EXTENSION**

Bringing the University to You

# Fact Sheet-87-34



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Vegetable gardening is a year-round hobby for southern Nevadans who develop an appreciation and a desire for fresh, nutritious vegetables and fruits. Fall, an often forgotten time to plant, is ideal for continuing the production of high quality vegetables in southern Nevada. Here is why:

- \* Cooler temperatures create an ideal working condition.
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- \* There are less weeds, insects and diseases.

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- \* Cooler temperatures result in sweeter tasting vegetables.
- \* Fall gardening requires less water and work.

These advantages all add up to a delightful gardening experience.

## **VEGETABLES TO PLANT IN THE FALL**

Cool season vegetables are divided into five groups: green crops; root crops; bulb crops; cole crops and others. Choose these vegetables to plant between August 10 and October 10.

GREENS	ROOTS	BULBS	COLE CROPS	OTHERS
Chard, Swiss	Beets	Garlic	Broccoli	Beans
Endive	Carrots	Leeks	Brussel Sprouts	Celery
Lettuce	Parsnips	Onions	Cabbage	Peas
Mustard	Radishes	Shallots	Cauliflower	
Parsley	Rutabaga		Collards	
Spinach	Salsifv		Kale	
	Turnips			

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#### SOIL PREPARATION

Southern Nevada soils are high in salts and alkali and are void of organic matter. Vegetables must be free to extract nutrients from the soil to produce quality products. If the soil is compacted, as is often the case, expect beets without bottoms, bitter lettuce, stubby carrots, misshapen pithy radishes and stunted growth throughout the garden. Here's how to improve your soils for quality production. Clear the garden area of all debris; Spread organic matter (compost, peat moss, etc.) 4 to 6 inches deep over the garden area. A 100 square foot area for example requires 1 to 2 cubic yards of organic matter; Add 1 to 2 pounds of 16-20-0 fertilizer and 2 to 3 pounds of sulfur per 100 square feet; Thoroughly rototill or spade the organic matter and fertilizer 10 to 12 inches deep in the soil; Level the garden by rake in preparation for planting; Moisten the garden area to settle the soil.

You are now ready to plant.

#### PLANTING

Bright sunny days during August and September produce high soil temperatures (140'~ plus). Rapid drying of the soil surface causes poor germination and a poor stand of vegetables. To achieve a uniform stand in the fall, apply these special treatments at planting time:

- 1. Soak the larger seeds overnight;
- 2. Plant small seeds a quarter of an inch deeper and larger seeds a half inch deeper than for spring planting;
- 3. Keep soil moist by watering three to four times a day to cool the soil and to prevent the soil from crusting or hardening;
- 4. Mulch over the garden rows with an organic product such as straw. Mulching cools the soil and stops crusting;
- 5. Remove the mulched materials as the seedlings emerge.

Here are other desirable practices to help plants cope with the desert heat at planting time:

- 1. Make a furrow 2 to 3 inches deep;
- 2. Plant the desired seeds in the bottom of the furrow;
- 3. Lightly cover the seed with soil;
- 4. Keep the soil surface moist until the seedlings emerge;
- 5. Select the largest and sturdiest seedlings at each location and remove the rest.

### THINNING

Thinning is a major stumbling block for even the most avid gardener. No one likes to remove established plants. Vegetables must have room to grow. If you fail to thin, expect small, stunted and deformed produce. Thin plantings when the first true leaves appear or when the seedlings are about 1 to 2 inches high. Here's how:

- 1. Moisten the soil around the new seedlings the day before;
- 2. Select the first and healthiest plant in the row;
- 3. Place two fingers around the seedling to protect it while removing the excess plants;
- 4. Follow the recommendations on the back of the seed packet. For example, space head lettuce 10 to 12 inches apart; space carrots 2 to 3 inches apart;
- 5. Move to the next desired plant and do the same as above;
- 6. Finally, remove all plants in between the two saved plants;
- 7. Irrigate after thinning.

Do not discard the removed seedlings. Transplant them to another portion of the garden or eat them. Use them in salads or steam them as you would spinach. You can save seed, heartache and tough decisions at thinning time, and simplify things, if you:

- 1. Mark your rows for planting;
- 2. Mark the desired spacing by following the thinning recommendations;
- 3. Plant three to four seeds at these locations rather than spreading them down the entire row;
- 4. Irrigate the crop using the same furrow to establish the crop. (Deeper planting and the moisture cools the area);
- 5. Once the seedlings emerge, fill in the furrow around the vegetable;
- 6. Make a new irrigation furrow 3 inches to the side of the seedlings.

Vegetables germinate at different rates. The excessive heat may hasten or sometimes slow germination. For example, radishes germinate in three to five days while carrots may take 14 to 21 days. You'll find a germination schedule on the back of the seed packet.

#### FERTILIZER

Fertilize the vegetables with ammonium sulfate (21-0-0) or (34-0-0) after the thinning. Sprinkle the fertilizer along the sides of the plants. Keep fertilizer off the foliage because excess fertilizer burns the leaves. Deep water the garden after you fertilize. Fertilize every four to six weeks up to a month before harvest.