







Greens include all leafy green vegetables. They often are called potherbs and are grown mostly for their tender leaves. Green vegetables include spinach, New Zealand spinach, chard, dandelion and kale. Spinach is the most popular of this group. Most greens are cool season crops and must be grown in the early spring or fall in Texas. Some greens will stand temperatures below freezing and thus can be grown all winter in many Texas areas. Greens grow best in a well drained soil in full sunlight but will tolerate partial shade.

Soil Preparation

Spinach has a deep taproot so the soil must be worked at least 8 to 10 inches deep. Dig the soil in the early spring when it is dry enough not to stick to garden tools. Break up large clods and remove trash and weeds. Work the soil into planting beds about 4 inches high. This is especially important in heavy soils. Add compost or other organic matter before digging the soil.

Fertilizing

Spinach grows best when given plenty of fertilizer. Adequate nitrogen is needed to develop the dark green leaf color. Before planting the seeds, apply a general garden fertilizer such as 10-20-10 at the rate of 2 to 3 pounds per 100 square feet or fertilize as directed by a soil test report. Mix the fertilizer into the soil about 3 inches. Spinach does best when the fertilizer is applied in a band 3 inches under the row (Figure 1).



Fig. 1. Apply fertilizer in a band 3 inches under the row.

Apply 1/4 to 1/3 cup of fertilizer for each 10 feet of row. Fertilize again about 30 days after the plants come up.

Varieties

| Spinach | Chard | New Zealand |
|-------------------|--------------|--------------------|
| Green Valley II | Lucullus | Spinach |
| Ozarka II | Ruby | |
| Fall Green | | Dandelion |
| Coho (semi-savoy) | <u>Kale</u> | |
| | Vates | Malibar |
| | Blue Knight | Manda |

Planting

Plant spinach as early as the soil can be worked in the spring or in August or later in the fall. High temperatures and long days of summer cause spinach to "bolt" or produce a seed stalk that makes it unusable for food. Substitutes for spinach during hot weather are Malibar and New Zealand spinach and Swiss chard. Malibar and New Zealand spinach are not members of the spinach family, but their flavor is similar to spinach and they often are used by home gardeners.

Swiss chard is sometimes called summer spinach in some areas of Texas, but actually it is a member of the beet family and tastes similar to beet greens. Swiss chard is very tolerant of heat and light freezes. It can be harvested all year in many areas of Texas. Kale is a cool season crop which should be planted in early spring or late fall. It is sometimes called "flowering cabbage" and makes a good border for flower beds or along sidewalks. Unless you want to freeze or can spinach, it is best to plant several short rows of spinach 10 to 15 feet long 10 to 14 days apart instead of planting all at once. This is called succession planting and it prevents having too much spinach at one time. Use a hoe handle, stick or similar tool to make planting furrows about 1/2 inch deep, 1 1/2 to

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2 feet apart down the bed. Plant seeds about 1 inch apart down the row and cover with loose soil or compost. For the fall crop, cover with sand or other light colored material to reflect heat and keep the soil cooler.

Plant New Zealand spinach in rows 3 feet apart and thin to 2 feet between plants. New Zealand and Malibar spinach will not stand as much cold as spinach. Seeds are slow to germinate. Plants can be grown indoors and transplanted to the garden after frost in the spring. Malibar is a vining plant and should be planted next to a fence or trellis for support. Leave 10 to 12 inches between plants. Dandelion is a perennial that comes back each year.

Greens can be planted by spreading seed on a bed 18 to 20 inches wide and covering them with soil. This allows more plants to be grown per foot of row, but weed control is much harder. Weeds must be pulled by hand.

After Planting

Keep plants free of weeds, especially when they are small since weeds use water and nutrients needed by the growing crop. Hand pull weeds close to the crop since hoeing can cut vegetable roots and cause plants to wilt. After the plants come up and become crowded in the row, begin thinning. Leave kale 1 foot apart, chard 6 inches apart and spinach 3 to 4 inches apart. Do not throw away thinned plants as they make excellent, tender greens.

Water plants thoroughly each week. Water is needed more often in light soils and in hot weather. Do not allow the plants to wilt. Deep soaking of the soil causes crop roots to go deeper into the soil and helps them resist dry weather. A good mulch is helpful in controlling weeds and moisture loss from the soil.

About 30 days after the plants come up, scatter 1/4 cup of garden fertilizer beside the plants for each 10 feet of row and water thoroughly.

Insects

Name and description Control



Leaf miner: small yellowish larva; tunnels with your inside leaves and causes white "trails" to form

Check county Extension agent



Aphid: 1/8 inch long; soft-bodied; green, pink, red or brown; usually on underside of leaves; sucks plant juices

Check with your county Extension agent

Diseases

Spinach often shows some disease damage on the leaves in cool, damp weather. Do not plant spinach in the same place in your garden more than once every 2 or 3 years. If your plants get spots on the leaves, ask your county Extension agent or gardening assistant about disease

Before applying any pesticide, always read the label. Follow cautions, warnings and directions and observe waiting periods between spray applications and harvest.

Harvesting

Harvest spinach when the plant is 6 to 8 inches tall. Pull up the entire plant in the spring since it stops producing in hot weather. For the fall crop in milder areas of Texas, clip the leaves just above the crown about 1 to 2 inches above ground level. Water and fertilize lightly and the plants will continue growing. Harvest lower leaves of chard and kale as the leaves grow. Harvest the tips of Malibar spinach plants when they are 3 to 4 inches long. Dandelion, a common weed in lawns and fields, can be used as spring greens when 4 to 6 inches tall. Dandelions get strong flavored if left too long. If you use dandelions from outside your garden, be sure they have not been sprayed with a weed killer before harvest.

Serving

Spinach and other greens are high in minerals and Vitamin A when cooked properly. Dandelion is the highest of all vegetables in Vitamin A. Cook greens in a small amount of water only until tender. Your county Extension agent has information on preparing and serving greens.

Cleanup

Remove all unharvested plants from the garden and place in a compost pile or turn them deep under the soil. This helps control diseases and builds the soil.

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