
Growing Spinach

Like many leafy greens, spinach (*Spinacia oleracea*) is a cool-season vegetable crop that prefers sunny locations and fertile, well-drained soil. Spinach is a great crop for raised beds and small garden spaces. It tastes best when plants grow rapidly in spring and fall. As days grow hotter and longer, spinach tends to flower and go to seed (called bolting) making it largely unsuitable for warm season planting. However, there are varieties available that are reported to be slower to bolt.

Proper soil preparation is critical for the success of any annual crop. Before adding anything, a soil test is recommended for new beds and every few years for any garden soil. This helps identify deficiencies and excesses as well as potential problems such as excess sodium. All leafy greens require some available nitrogen to produce abundant foliage. Most soils in northern Arizona are well suited for spinach production. Spinach prefers well-drained soils rich in organic matter for best growth. Heavy clay soils will benefit from the addition of even more organic matter to improve drainage and aeration. Utah State University Extension recommends incorporation of 2 to 4 inches of well-composted organic matter and an application of 2 to 4 cups of all-purpose fertilizer per 100 square feet, worked into the top 6 inches of soil.

Several spinach varieties are available and most of these should perform well in northern Arizona. Three types are usually described in seed catalogs: smooth-leaf, arrowhead, and savoyed-leaf. Smooth-leaf spinach has flat leaves and is often sold as bagged spinach at stores. Arrowhead has arrow-shaped leaves and is also called Asian-leaf. Savoyed-leaf spinach has recurved leaves with indented leaf veins. Try several varieties to discover your personal favorite.

Spinach seed germinates readily after soil temperatures reach 40°F. Plant in rows 12" apart and thin plants to 3" within each row. Spinach can be planted more densely, and the thinned plants can be used in salads. Under optimum conditions, spinach can mature in as little as four weeks, so succession planting every two weeks can lengthen the spinach harvest.

Spinach appreciates regular irrigation when natural precipitation is inadequate. One to two inches of water can be applied per week depending on temperatures. Utah State University Extension recommends a light fertilizer application after four weeks of growth. Individual leaves can be harvested any time before the plant bolts and can be stored fresh for 1 to 2 weeks.

Weed control is particularly important during establishment of your spinach crop. Closely spaced plants will help control weeds. Cultivate shallowly and avoid root pruning to ensure uninterrupted growth. Aphids, slugs, and snails can become pests of spinach depending on the growing season. Soap sprays can help manage aphids and hand-picking at night and trapping are the safest slug and snail management practices. As with many crops, rotating locations from year to year will help control most diseases.

Two "spinach substitutes" available in seed catalogs which can be grown during the hot summer months are New Zealand spinach (*Tetragonia tetragonioides*) and Malabar spinach (*Basella rubra*).

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