



**CORNELL
COOPERATIVE
EXTENSION OF
ONEIDA COUNTY**

HOME GROWN FACTS

121 Second Street Oriskany, NY 13424-9799
(315) 736-3394 or (315) 337-2531 FAX: (315) 736-2580

GROWING SPINACH



This easy-to-grow, nutritious, cool-season crop is among the first greens ready to harvest. But plant it early because it's quick to turn bitter and go to seed (bolt) as the weather warms and the days lengthen. Dark green color and handsome texture of savoyed varieties are great for edible landscaping.

Site Characteristics

Sunlight:

- full sun
- part shade

Soil conditions:

- requires well-drained soil

Well-drained, fertile soil, high in organic matter. Plentiful, consistent moisture. Tolerates slightly alkaline soils but is sensitive to acid soils. pH should be at least 6.0, but preferably in the 6.5 to 7.5 range.

Special locations:

- outdoor containers

Plant Traits

Lifecycle: annual

Ease-of-care: moderately difficult

Must be planted early and grown when temperatures are cool. Needs consistent moisture. Will go to seed (bolt) if too dry, or when days lengthen and temperatures warm.

Height: 0.5 to 1 feet

Spread: 0.5 to 1 feet

Foliage color: dark green

Foliage texture: medium

Varieties with savoyed (curly) leaves add interest for edible landscaping.

Shape: cushion, mound or clump

Tolerates:

- frost - Young plants can withstand temperatures as low as 15 F to 20 F.

Growing Information

How to plant:

Propagate by seed

Germination temperature: 40 F to 75 F - May fail to germinate in warm soils.

Days to emergence: 6 to 10 - About 3 weeks at 50 F. About 5 days at 77 F, but germination drops to about 30 percent .

Helping You Put Knowledge to Work

Cornell Cooperative Extension provides equal program and employment opportunities. NYS College of Agriculture and Life Sciences, NYS College of Human Ecology, and NYS College of Veterinary Medicine at Cornell University, Cooperative Extension associations, county governing bodies, and U.S. Department of Agriculture, cooperating.

Seed can be saved 2 years.

Maintenance and care:

As soon as you can work the soil in spring, sow seed ½ inch deep, 1 inch apart in rows 12 to 18 inches apart (or broadcast seed across a wider area). Thin to 2- to 6-inch spacings. Closer spacings can stress plants and cause them to go to seed (bolt) sooner.

Early planting is critical as dry soil, heat and lengthening days also encourage bolting. Later plantings benefit from some light shade from other crops. Follow early plantings with warm-season crops such as tomatoes or beans.

Make succession plantings every week or two until average last frost date. Use bolt-resistant varieties for later plantings. Sow again in mid- to late summer for fall harvest. Seeds do not germinate well in warm soil, so increase seeding rate to compensate. Or pre-germinate seeds by placing them between sheets of moist paper towel in a plastic bag and refrigerating until they sprout.

Spinach seedlings are difficult to transplant. For spring crops, start inside only if your garden stays too wet in spring to allow direct seeding. Start transplants inside about 3 to 6 weeks before last frost.

Spinach is shallow-rooted and requires consistent moisture to prevent bolting. Water to keep soil moist. Mulch after plants are well established to maintain moisture and suppress weeds. Use floating row covers to prevent insect damage.

Do not over fertilize with nitrogen. Only apply supplemental fertilizer if leaves are pale green. Add lime to make sure pH is at least 6.0. You should suspect that your soil is too acid if germination is poor and leaf tips and margins are yellow or brown.

Plant in fall and mulch heavily for early spring crop.

Pests:

Leaf miners - Cover plants with fine netting or cheesecloth or floating row cover to protect plants from adult flies. Handpick and destroy infested (mined) leaves. Control weeds.

Varieties

Choose slow-bolting varieties for later spring plantings. Disease resistance is more important for fall crops. Savoyed (curly) leaves are handsome and keep better, but are harder to clean.

New Zealand spinach and Malabar spinach are warm-season greens similar to spinach, but different species. See separate Growing Guides.

Some varieties recommended for New York include:

Spring: America, Dark Green Bloomsdale, Indian Summer, Melody, Space, Tyee

Summer: New Zealand spinach, Malabar spinach

Fall: Melody, Tyee, Winter Bloomsdale

This publication may contain pesticide recommendations. Changes in pesticide regulations occur constantly, some materials mentioned may no longer be available, and some uses may no longer be legal. All pesticides distributed, sold, and/or applied in New York State must be registered with the New York State Department of Environmental Conservation (DEC). Questions concerning the legality and/or registration status for pesticide use in New York State should be directed to the appropriate Cornell Cooperative Extension Specialist or your regional DEC office. **READ THE LABEL BEFORE APPLYING ANY PESTICIDE.**