



Department of Horticulture

Purdue University Cooperative Extension Service • West Lafayette, IN

Leafy Greens for the Home Garden

B. Rosie Lerner and Michael N. Dana

Leafy vegetables are more nutritious and less caloric than most other vegetables, and they're also easy to grow. Most greens can be grown in relatively short, cool growing seasons, making them available for fresh harvest earlier than most other crops. If properly planned, fresh, leafy greens can be harvested all season long.

Leafy vegetables adapted to cool Indiana spring and fall growing conditions include lettuce, spinach, mustard, collards, endive, and kale. Many new cultivars of these cool season crops have improved heat tolerance, making them productive into early summer. Root crops such as beets and turnips may also be harvested for their young, tender foliage. Greens that produce in the heat of summer include New Zealand spinach and Swiss chard.

Planning

Plan your garden on paper before you plant. Specify which crops and cultivars will be planted where and when. Replace early maturing crops with summer crops, and follow summer harvested greens with a fall planting to make the most of the growing season. Leafy vegetables are well-adapted to band planting, which makes more efficient use of garden space.

Leafy greens grow best in an open, level area where the soil is loose, rich, and well-drained. Although leafy crops tolerate shade better than those grown for their fruits or roots, at least 6 hours of sunshine daily will help ensure a high quality harvest. Avoid heavy clay or sandy soils. Soil pH should be between 5.8 and 6.8.

Planting

Most leafy vegetables can be planted as early in spring as the soil can be worked. Soil is ready for tilling and planting if a handful of soil crumbles when squeezed. If soil forms a muddy ball when squeezed, it is still too wet and will form hard, long-lasting clods if worked.

Get greens off to a good start by incorporating fertilizer when you work up the soil. A soil test will indicate proper

rates. In the absence of a soil test, 2 to 3 pounds of a balanced, low analysis fertilizer such as 12-12-12 can be applied to 100 square feet of soil.

Seed of most leafy vegetables may be directly sown in the garden. Most leafy crops have very small seed and must be planted at the proper depth to ensure good germination (see Table 1). Crops such as lettuce, kale, and collards may be transplanted to get an early start.

Culture

Thin seedlings to their proper spacing (see Table 1) while they're small; crowded crops compete with each other for water, light, and nutrients and cause a poor yield. Weeds must also be controlled for the same reasons. Many leafy vegetables have shallow root systems, so be sure cultivation is shallow. Organic type mulch applied around the plants will help control weeds, conserve soil moisture, and cool soil temperature. A few materials that make good mulch are compost, bark chips, grass clippings, clean straw, and hay.

Plants need a steady supply of water throughout their growing season. If rainfall is inadequate, irrigate with 1 to 1-1/2 inches of water per week in a single application. Frequent light sprinklings encourage shallow roots, making plants more susceptible to drought.

Longer season leafy crops such as spinach, kale, collards and turnip greens will benefit from a side-dressing of nitrogen fertilizer when plants are about one third grown. Apply one-third pound of actual nitrogen per 100-foot row alongside the crop. For short season crops, a nitrogen application during seedbed preparation should be sufficient.

Insects and Diseases

A number of insects are common to many leafy crops including aphids, leaf miners and leafhoppers. Diseases such as downy mildew may also infect leafy greens.

Harvesting

Commercial growers find it most economical to harvest whole plants as the leaves develop to full size. Home gardeners can choose that approach or may decide to harvest a few leaves as they are needed, allowing for a longer harvest season from a single planting. Harvest outer, more mature leaves first, leaving the young, inner leaves to continue growing. An exception is collards, from which the center rosette of leaves is the harvested portion. As the days grow longer and warmer, the cool

season greens tend to bolt (flower) and become tough or bitter. Plants are best discarded at this point, but be sure to replace them with a successive planting.

Storage

Most leafy vegetables will keep up to 2 weeks if stored under cold, moist conditions. Place produce in perforated plastic bags and store in the refrigerator. Crops such as spinach, kale, mustard, and collards may be frozen for longer storage.

Table 1. Planting chart for leafy vegetables.

Crop	Days to Harvest	When to Plant	Row Spacing (in.)	Plant Spacing (in.)	Seeds per 100 ft row (oz.)	Seed Planting Depth (in.)
Beet greens	50	Apr 1, Aug 1	12	3	1	1/2
Collards	80	Apr 15, Aug 15	24	15	1/4	1/4
Endive	90	Apr 1, Aug 15	24	15	1	1/2
Kale	60	Apr 1, Aug 15	24	18	1/4	1/2
Lettuce, Leaf	40	Mar 30, Sept 1	12	4	1/4	1/4
Mustard	50	Apr 1, Aug 15	24	8	1/4	1/4
Spinach	45	Mar 20, Sept 1	12	3	2	1/2
Spinach, New Zealand	70	May 15, July 15	18	6	1	1/2
Swiss Chard	60	Apr 15, Aug 1	24	8	1	1/2
Turnip greens	40	Apr 1, Aug 1	18	2	1/2	1/2



For more information on the subject discussed in this publication, consult your local office of the Purdue University Cooperative Extension Service.