

A well-planned, properly tended vegetable garden not only provides an excellent source of fresh, nutritious vegetables, but also relaxation and enjoyment for the entire family. With a few simple tools, a little space, and a desire to nurture plant growth, anyone can create a thriving vegetable garden. Even a 100-square-foot garden can produce a good portion of the vegetables for a family of four.

Successful gardening begins with proper planning. This includes knowing how much to plant, when to plant, and proper spacing, covered on the following pages. For more on this and other home gardening topics, see the [Kansas Garden Guide](#) (S51).

Vegetable Yields

| Vegetables | Average crop expected per 10 feet | Approximate planting per person | Vegetables | Average crop expected per 10 feet | Approximate planting per person |
|-------------------|-----------------------------------|---------------------------------|-------------------------|-----------------------------------|---------------------------------|
| Asparagus | 3 lb. | 10–15 plants | Muskmelon (cantaloupe) | 10 fruits | 3–5 hills |
| Beans, snap bush | 12 lb. | 15–16 feet | Mustard | 10 lb. | 5–10 feet |
| Beans, snap pole | 15 lb. | 5–6 feet | Okra | 10 lb. | 4–6 feet |
| Beans, lima bush | 2.5 lb. shelled | 10–15 feet | Onions (plants or sets) | 10 lb. | 3–5 feet |
| Beans, lima pole | 5 lb. shelled | 5–6 feet | Onions (seed) | 10 lb. | 3–5 feet |
| Beets | 15 lb. | 5–10 feet | Parsley | 3 lb. | 1–3 feet |
| Broccoli | 10 lb. | 3–5 plants | Parsnips | 10 lb. | 5 feet |
| Brussels sprouts | 7.5 lb. | 2–5 plants | Peas, English | 2 lb. | 15–20 feet |
| Cabbage | 15 lb. | 3–4 plants | Peas, southern | 4 lb. | 10–15 feet |
| Cabbage, Chinese | 8 heads | 3–10 feet | Peppers | 6 lb. | 3–5 plants |
| Carrots | 10 lb. | 5–10 feet | Potatoes, Irish | 10 lb. | 50–100 feet |
| Cauliflower | 10 lb. | 3–5 plants | Potatoes, sweet | 10 lb. | 5–10 plants |
| Celeriac | 6 lb. | 5 feet | Pumpkins | 10 lb. | 1–2 hills |
| Celery | 18 stalks | 10 stalks | Radishes | 10 bunches | 3–5 feet |
| Chard, Swiss | 7.5 lb. | 3–5 plants | Salsify | 10 lb. | 5 feet |
| Collards and kale | 10 lb. | 5–10 feet | Soybeans | 2 lb. | 50 feet |
| Corn, sweet | 1 dozen | 10–15 feet | Spinach | 4–5 lb. | 5–10 feet |
| Cucumbers | 12 lb. | 1–2 hills | Squash, summer | 15 lb. | 2–3 hills |
| Eggplant | 10 lb. | 2–3 plants | Squash, winter | 10 lb. | 1–3 hills |
| Garlic | 4 lb. | 1–5 feet | Tomatoes | 10 lb. | 3–5 plants |
| Kohlrabi | 7.5 lb. | 3–5 feet | Turnip greens | 5–10 lb. | 5–10 feet |
| Lettuce, head | 10 heads | 10 feet | Turnip roots | 5–10 lb. | 5–10 feet |
| Lettuce, leaf | 5 lb. | 10 feet | Watermelon | 4 fruit | 2–4 hills |

Vegetable Crop Information

| Crop | Type of Planting | Days to First Harvest | Plants or Seeds Per 10' Row ¹ | Days to Germinate | Optimum Temperature (F) | Depth of Planting (In.) | Avg. Spacing Within Row (In.) | Avg. Spacing Between Rows (In.) | Frost Resistance ⁴ |
|-------------------------|--------------------|-----------------------|--|-------------------|-------------------------|-------------------------|-------------------------------|---------------------------------|-------------------------------|
| Asparagus | Perennial: Crowns | 2nd Season | 7 | — | — | 8 | 18 | 48 | Hardy |
| Asparagus | Seed: Transplant | 4th Season | 150 | 10–20 | 65–75 | 1 | 3 | 6 | Hardy |
| Rhubarb | Perennial : Crowns | 2nd Season | 3 | — | — | 1 | 36 | 35–48 | Hardy |
| Beans, Snap | Seeded | 50–60 | 50 | 5–8 | 70–85 | 2 | 3–4 | 36 | Tender |
| Beans, Lima | Seeded | 65–75 | 40 | 5–8 | 75–85 | 2 | 4–8 | 36 | Tender |
| Beets | Seeded | 55–65 | 40 | 7–10 | 50–60 | ½ | 2–4 | 18 | Half-Hardy |
| Broccoli | Transplant | 60–80 ² | 7 | (6–8) | (50–60) | (½) | 18–24 | 36 | Hardy |
| Brussels Sprouts | Transplant | 85–95 ² | 10 | (6–8) | (50–60) | (½) | 12–18 | 36 | Hardy |
| Cabbage | Transplant | 65–80 ² | 7 | (6–8) | (50–60) | (½) | 12–18 | 36 | Hardy |
| Chinese Cabbage | Seeded | 80–90 | 30 | 5–7 | 55–70 | ½ | 10–12 | 36 | Hardy |
| Carrots | Seeded | 70–80 | 150 | 10–12 | 55–70 | ½ | 2–3 | 18 | Half-Hardy |
| Cauliflower | Transplant | 85–100 ² | 7 | (6–8) | (55–70) | (½) | 18–24 | 36 | Half-Hardy |
| Cucumbers | Seed or Plants | 60–65 | 10 or 6 | 5–8 | 75–85 | ½–1 | 24 | 36–72 | Very Tender |
| Eggplant | Transplants | 75–90 ² | 5 | (8–12) | (75–85) | — | 18–24 | 36 | Very Tender |
| Garlic | Sets | 140–160 | 3 to 7 | — | — | 1 | 4–6 | 18–36 | Hardy |
| Horseradish | Roots | Fall | 7-10 roots | — | — | 3–4 | 12–18 | 36 | Hardy |
| Kale | Seeded | 60–90 | 120 | 6–9 | 50–60 | ½ | 12 | 36 | Hardy |
| Kohlrabi | Seed or Transplant | 60–75 ² | 40-60 or 20 | (6–8) | (50–60) | (½) | 5–6 | 18–24 | Hardy |
| Lettuce, Seed | Seeded | 45–50 | 120 | 6–8 | 50–70 | ¼ | 2–4 | 18–24 | Half-Hardy |
| Lettuce, Plants | Transplants | 35–45 | 10–20 plants | (6–8) | (50–70) | (¼) | 6–12 | 18–24 | Half-Hardy |
| Lettuce, Head | Transplants | 60–85 ² | 7-10 | 6–8 | 60–70 | ½ | 12–15 | 18–24 | Half-Hardy |
| Muskmelon ³ | Seed or Plants | 80–90 | 15 or 7-10 | 7–12 | 75–85 | 1–1½ | 48–72 | 48–72 or | Very Tender |
| Mustard | Seeded | 50–60 | 120 | 6–8 | 50–60 | ½ | 2–4 | 12–18 | Hardy |
| Onion, Sets | Sets | 100–120 | 30 | — | — | 1½–2 | 3–4 | 12–24 | Hardy |
| Onion, Plants | Transplants | 100–120 ² | 25-30 | — | — | 1½–2 | 3–5 | 12–24 | Hardy |
| Okra | Seeded | 50–60 | 40 | 6–12 | 75–85 | ½ | 18–24 | 36 | Tender |
| Parsley | Seeded | 60–70 | 100-150 | 8–10 | 55–70 | ½ | 2–4 | 12–18 | Half-Hardy |
| Parsnip | Seeded | Fall | 240 | 10–12 | 55–70 | ¼–½ | 3–4 | 18–24 | Half-Hardy |
| Peas | Seeded | 60–80 | 100-120 | 7–10 | 50–65 | 2 | 1–2 | Don't thin | Hardy |
| Peppers | Transplants | 65–80 ² | 5-7 plants | (10–14) | (75–85) | (½) | 18–24 | 36 | Tender |
| Potatoes | Tuber Pieces | 70–90 | 1 lb. | — | 50–60 | 2–3 | 8–12 | 36 | Half-Hardy |
| Pumpkin ³ | Seeded | 110–130 | 8 | 7–10 | 75–85 | 1 | 72–96 | 84–120 | Half-Tender |
| Radish | Seeded | 25–30 | 100-150 | 4–6 | 50–60 | ½ | 2–3 | 12–18 | Hardy |
| Rutabaga | Seeded | 90–120 | 40-60 | 5–10 | 50–60 | ½ | 4–6 | 18–24 | Hardy |
| Salsify | Seeded | 140–150 | 100-120 | 8–12 | 55–70 | ½ | 2–3 | 12–18 | Half-Hardy |
| Spinach | Seeded | 40–45 | 120-150 | 9–12 | 55–70 | 1 | 2–3 | 12–18 | Half-Hardy |
| Squash, Summer | Seeded | 50–55 | 20-30 | 7–10 | 75–85 | 1 | 18-24 | 48–72 | Very Tender |
| Squash, Winter | Seeded | 50–55 | 10-20 | 7–10 | 75–85 | 1 | 24-36 | 96 | Very Tender |
| Sweet Corn | Seeded | 80–100 | 10-20 | 6–8 | 70–80 | 2 | 9-12 | 36 | Tender |
| Sweet Potatoes | Plants | 130–140 ² | 7-10 plants | — | — | — | 12–18 | 36–48 | Very Tender |
| Swiss Chard | Seeded | 50–60 | 120 | 9–12 | 55–70 | ½-1 | 6–8 | 18–24 | Half-Tender |
| Tomato | Transplants | 70–85 ² | 3–6 plants | (7–10) | (75–85) | (½) | 24–48 | 36–48 | Tender |
| Turnips | Seeded | 45–65 | 60-80 | 5–10 | 60–70 | ½ | 3–4 | 12–18 | Hardy |
| Watermelon ³ | Seeded | 80–90 | 6-8 | 8–12 | 80–90 | 1–2 | 72–96 | 72–96 | Very Tender |

() = Seeding information for hotbed or greenhouse; allow 6 to 8 weeks in hotbed or greenhouse.

¹ Seeded plants may need to be thinned to recommended spacing.

² From date of transplanting

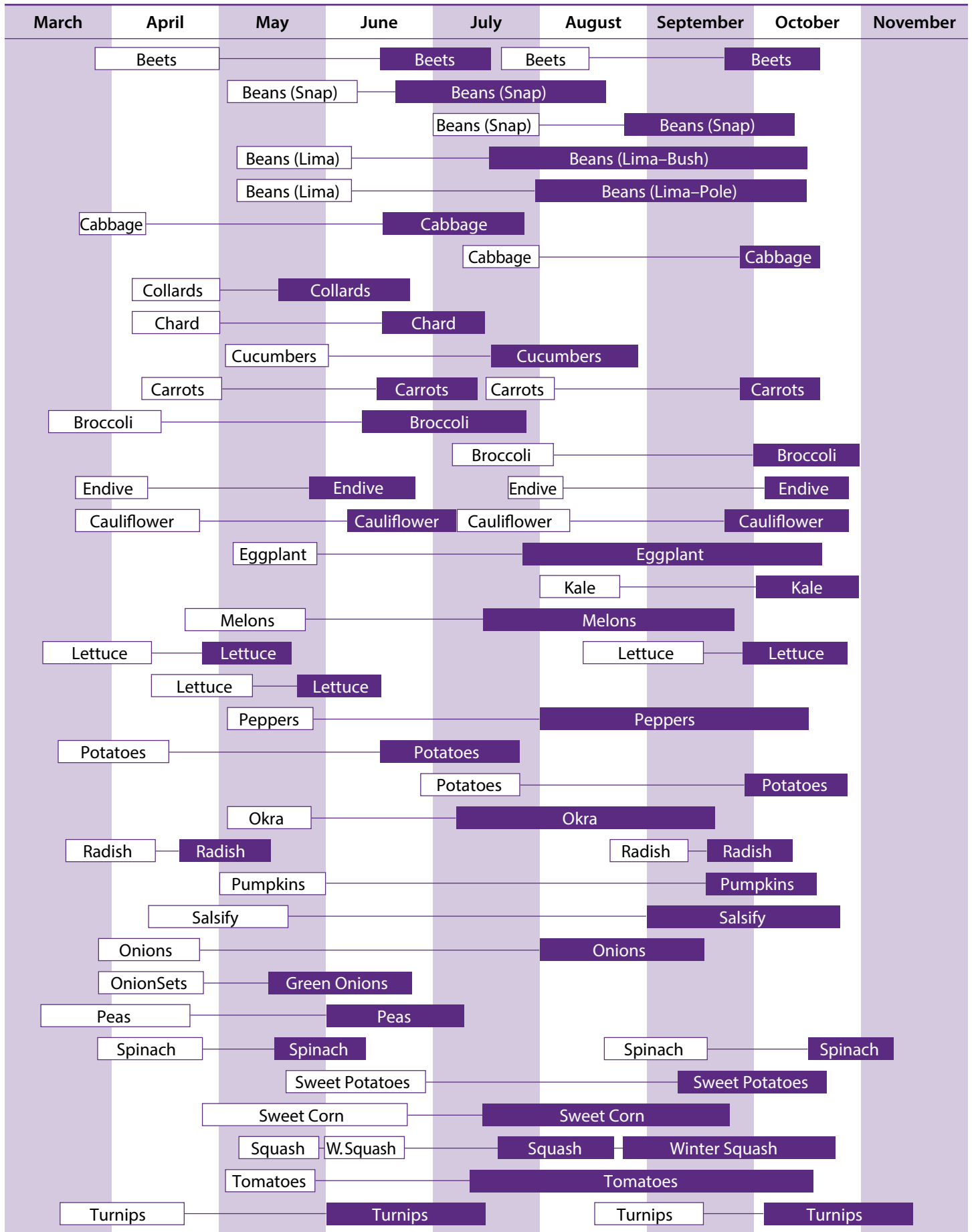
³ Seed planted in hills with 4 to 5 seeds per hill. Thin to 2 to 3 plants per hill. Spacing is distance between hills.

⁴ Frost Resistance – Hardy: Damaged when temperatures reach the low 20s. Half-Hardy: Damaged when temperatures reach the mid- to upper-20s.

Tender: Damaged by frost. Very tender: A week of daytime temperatures below 55 degrees F can stunt the crop.

Kansas Vegetable Garden Calendar

Plant Harvest



Common Garden Problems*

| Symptom | Possible Causes | Corrective Measures |
|---|---|---|
| Plants stunted in growth; yellow color | Lack of soil fertility or abnormal soil pH | Fertilize and correct pH according to soil test. Use 3 to 4 pounds of fertilizer per 100 square feet in absence of soil test. |
| | Plants growing in compacted, poorly-drained soil. | Modify soil with organic matter. |
| | Insect or disease damage | Use a regular spray or dust program. |
| | Poor-quality seed or plants | Use high-quality seed or plants of recommended varieties. |
| Plants stunted in growth; sickly, purplish | Low temperature | Plant at proper time. Don't use light-colored mulch too early in the season. |
| Holes in leaves; leaves yellowish and drooping, or distorted in shape | Insect damage | Use recommended insecticides. |
| Plant leaves with spots; dead, dried areas; or powdery or rusty areas | Plant disease | Use resistant varieties, remove diseased plants when noticed, and use a regular spray. |
| Plants wilt even when water present | Soluble salts too high or root system damage | Have soil tested. Use soil insecticides. |
| Plants with weak root systems | Poor drainage | Use organic matter. |
| | Insect or nematode damage | Use recommended varieties and soil insecticides. |
| Plants tall, spindly and unproductive | Excessive shade | Relocate to sunny area. Keep weeds down. |
| | Excessive nitrogen | Reduce applications of nitrogen. |
| Blossom drop | Hot, dry periods | Use mulch and water. |
| | Low night temperatures | Avoid planting too early in spring. |
| | Overwatering or disease | Stop watering or use regular spray program. |
| Tomato leaf roll | Excessive pruning or soil moisture fluctuations | Remove suckers when small. Use mulches. |
| Leathery, dry, brown blemish on the blossom end of tomato fruit | Blossom end rot | Maintain a uniform soil moisture supply. Avoid overwatering and excessive nitrogen. |

*[Learn more about common vegetable problems at the Horticulture Information Center.](#)

Tips for a Successful Home Garden

- Use mulches to conserve moisture, control weeds, and reduce rots.
- Keep plants free of insects and diseases.
- Examine plants often to keep ahead of potential problems.
- Keep weeds out.
- Remove tomato suckers when they form (1 to 2 inches long).
- Sample soil and have it tested every three to four years.
- Apply fertilizer to garden area as recommended. See [Fertilizing Gardens in Kansas](#) (MF2320).
- Thin when plants are small.
- Avoid walking and working in the garden when the foliage and soil are wet.
- Wash and clean the sprayer well after each use.

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