

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

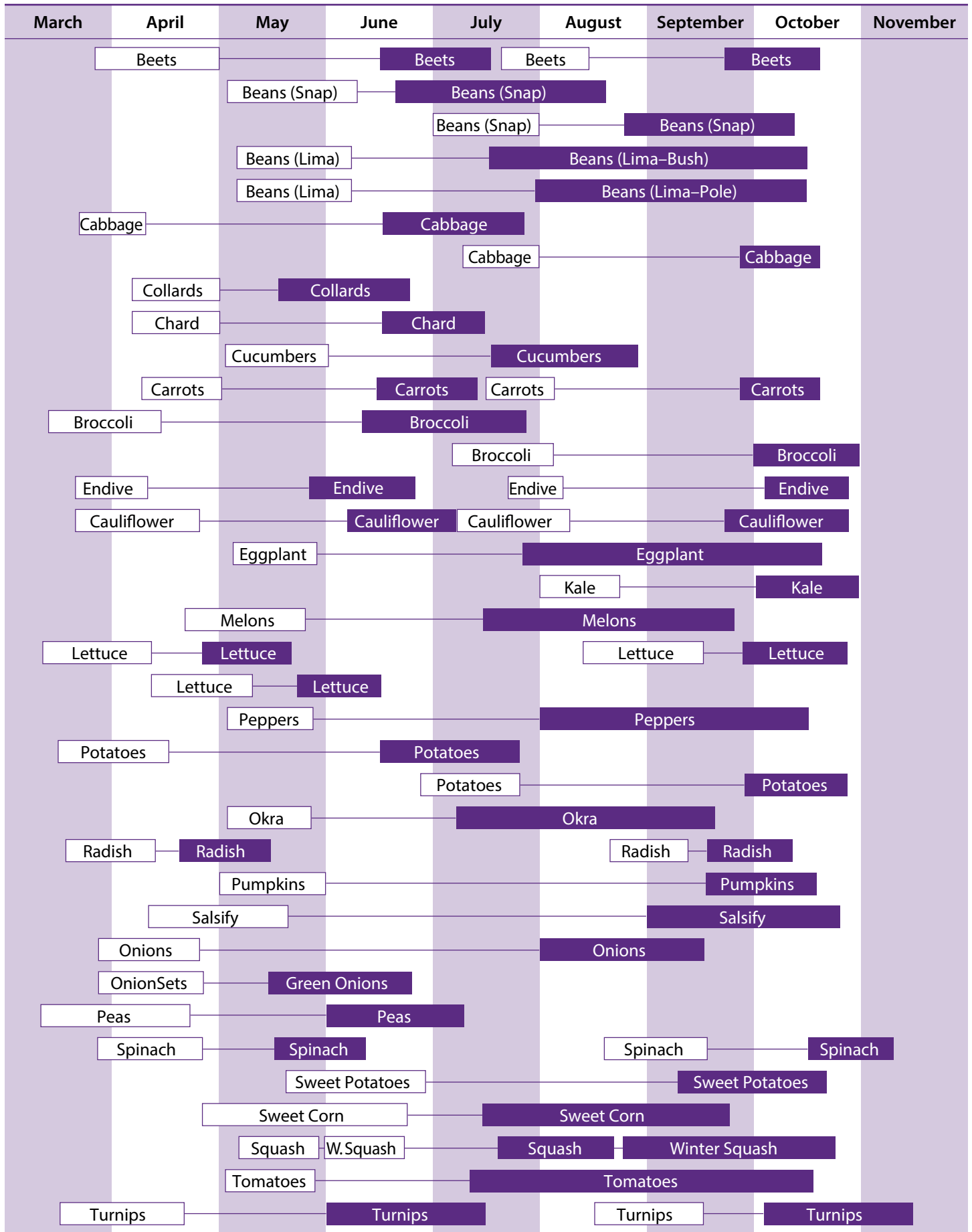
³ Seed planted in hills with 4 to 5 seeds per hill. Thin to 2 to 3 plants per hill. Spacing is distance between hills.

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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