



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

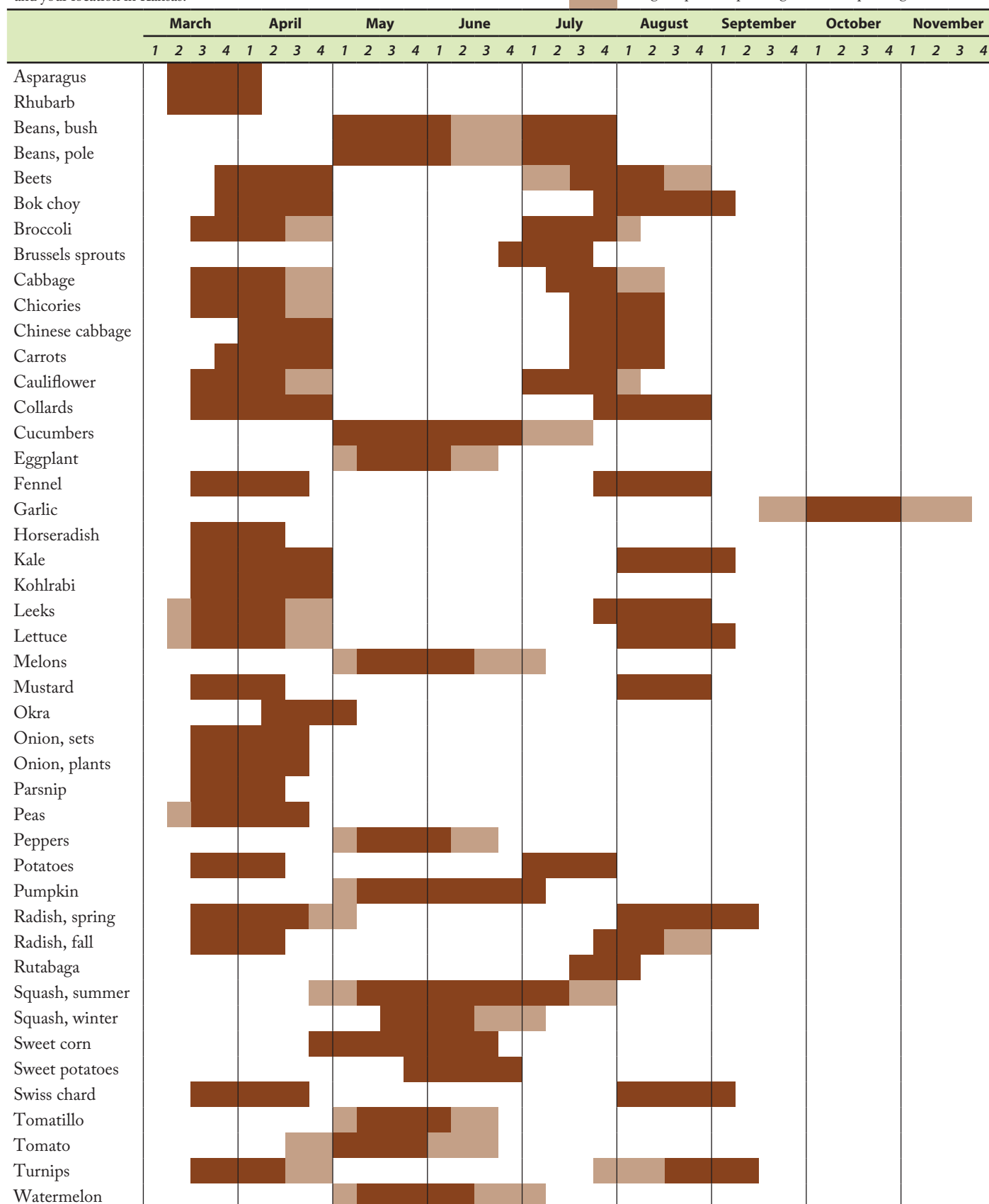
Vegetables	Average crop expected per 10 feet	Approximate planting per person	Vegetables	Average crop expected per 10 feet	Approximate planting per person
Asparagus	3 lb.	10–15 plants	Muskmelon (cantaloupe)	10 fruits	3–5 hills
Beans, snap bush	12 lb.	15–16 feet	Mustard	10 lb.	5–10 feet
Beans, snap pole	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

Average Expected Planting Calendar

All planting windows are approximate and may need to be adjusted earlier or later depending on the weather each season, varieties chosen, preferred harvest quality, and your location in Kansas.

Primary expected planting window for most of Kansas

Marginal possible planting window depending on conditions



Vegetable Crop Information

Crop	Type of Planting	Days to First Harvest	Plants Per 10' Row*	Days to Germinate	Optimum Temperature (F)	Depth of Planting (In.)	Avg. Spacing Within Row (In.)	Avg. Spacing Between Rows (In.)	Frost Resistance
Asparagus	Perennial: Crowns	2nd Season	5-7	-	—	8	18-24	48	Hardy
Asparagus	Seed: Transplant	4th Season	150	10 to 20	65-75	1	3	6	Hardy
Rhubarb	Perennial: Crowns	2nd Season	3	-	—	1	36	35-48	Hardy
Beans, Bush	Seeded	50-60	30	5-8	70-85	2	3-5	36	Tender
Beans, Pole	Seeded	55-70	10-20	5-8	70-85	2	6-12	48-60	Tender
Beets	Seeded	50-65	40	7-10	50-60	½	2-3	18	Half-Hardy
Bok Choy	Seed or Transplant	40-55	10-30	6-8	50-60	1/2	4-12	18-24	Half-Hardy
Broccoli	Transplant	(60-80)	5-7	(6-8)	(50-60)	(½)	18-24	36	Hardy
Brussels Sprouts	Transplant	(85-110)	5-7	(6-8)	(50-60)	(½)	18-24	36	Hardy
Cabbage	Transplant	(65-100)	7-10	(6-8)	(50-60)	(½)	12-18	36	Hardy
Chicories	Seed or Transplant	45-75	10-40	10-21	55-68	⅝-¾	3-12	18-24	Half-Hardy
Chinese Cabbage	Seed or Transplant	48-80	7-10	5-7	55-70	½	12-18	36	Half-Hardy
Carrots	Seeded	54-80	60	10-12	55-70	½	1-2	18	Half-Hardy
Cauliflower	Transplant	(45-80)	5-7	(6-8)	(55-70)	(½)	18-24	36	Half-Hardy
Collards	Seed or Transplant	(50-60)	5-7	6-8	55-70	1/2	18-24	36	Hardy
Cucumbers	Seed or Transplant	45-65	5	5-8	75-85	½-1	24	48-72	Very Tender
Eggplant	Transplants	(50-75)	5-7	(8-12)	(75-85)	—	18-24	36	Very Tender
Fennel	Seed or Transplant	80-90	20-30	6-12	50-70	1/4	4-6	12-15	Hardy
Garlic	Sets	140-160	20	--	—	1	6	18-36	Hardy
Horseradish	Roots	Fall	7-10	--	—	3-4	12-18	36	Hardy
Kale	Seed or Transplant	55-65	10-15	6-8	50-60	½	8-12	36	Hardy
Kohlrabi	Seed or Transplant	40-80	20-30	6-8	(50-60)	(½)	4-6	18-24	Hardy
Leeks	Seed or Transplant	(75-120)	20	7-10	(50-75)	(¼)	6	12-15	Hardy
Lettuce	Seed or Transplant	45-65	10-30	6-8	50-70	¼	4-12	18-24	Half-Hardy
Melons	Seed or Transplant	60-90	2-3	7-12	75-85	1-1½	18-24	48-72	Very Tender
Mustard	Seeded	40-60	30	6-8	50-60	½	2-4	18-24	Hardy
Okra	Seeded	50-60	7-10	6-12	75-85	½	12-18	36	Very Tender
Onion (Sets)	Sets	90-120	30	--	—	1½-2	3-4	12-24	Hardy
Onion (Plants)	Transplants	(90-120)	30	--	—	1½-2	3-4	12-24	Hardy

Crop	Type of Planting	Days to First Harvest	Plants Per 10' Row*	Days to Germinate	Optimum Temperature (F)	Depth of Planting (In.)	Avg. Spacing Within Row (In.)	Avg. Spacing Between Rows (In.)	Frost Resistance
Parsnip	Seeded	100-120	30	10-21	55–70	¼–½	2-4	18–24	Hardy
Peas	Seeded	50-80	30	7-10	50–65	2	2-4	12–24	Hardy
Peppers	Transplants	(50-110)	6-10	(10-14)	(75–85)	(½)	12-24	36	Tender
Potatoes	Tuber Pieces	70-90	10	--	50–60	2–3	12	36	Half-Hardy
Pumpkin	Seeded	85-130	2	7-10	75–85	1	48-60	72–90	Half-Tender
Radish, spring	Seeded	25-40	40-60	4-6	50–60	½	2–3	12–18	Hardy
Radish, fall	Seeded	35-60	20-30	4-6	50-60	1/2	4-6	12-18	Hardy
Rutabaga	Seeded	90-120	20-30	5-10	50–60	½	4-6	18–24	Hardy
Spinach	Seeded	25-40	20-40	7-12	55–70	1	3-6	12–18	Hardy
Squash—Summer	Seeded	45-55	5	7-10	75–85	1	24	48–72	Very Tender
Squash—Winter	Seeded	80-105	2	7-10	75–85	1	48-60	96	Very Tender
Sweet Corn	Seeded	68-90	10-18	6-8	70–80	2	8-12	36	Tender
Sweet Potatoes	Slips	90-105	10	--	—	—	12	36–48	Very Tender
Swiss Chard	Seed or Transplant	40-65	15-20	7-12	55–70	½–1	6–8	18–24	Half-Tender
Tomatillo	Transplants	(60-75)	3-4	(7-14)	(75–85)	(1/2)	36	36-60	Very Tender
Tomato	Transplants	(52-120)	3-5	(7-10)	(75–85)	(½)	24-36	36–48	Tender
Turnips	Seeded	40-50	30-60	5-10	60–70	½	2-4	12–18	Hardy
Watermelon	Seed or Transplant	65-90	2	8-12	80–90	1–2	48-60	72–90	Very Tender

() = Seeding information for indoor seed starting; allow for 4–8 weeks indoors.

* For seeded crops, you will usually need to plant more seeds than the final number of plants per row and thin after germination.

Average Expected Harvest Calendar

All harvest windows are approximate and may need to be adjusted earlier or later depending on the weather each season, varieties chosen, preferred harvest quality, and your location in Kansas.

 Primary expected harvest window for most of Kansas

 Marginal possible harvest window depending on conditions

	What you can grow in Kansas																																							
	March				April				May				June				July				August				September				October				November							
	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4				
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Common Garden Problems*

Symptom	Possible Causes	Corrective Measures
Plants stunted in growth; yellow color	Lack of soil fertility or abnormal soil pH Plants growing in compacted, poorly-drained soil. Insect or disease damage Poor-quality seed or plants	Fertilize and correct pH according to soil test. Use 3 to 4 pounds of fertilizer per 100 square feet in absence of soil test. Modify soil with organic matter. Use a regular spray or dust program. 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 Insect or nematode damage	Use organic matter. Use recommended varieties and soil insecticides.
Plants tall, spindly and unproductive	Excessive shade Excessive nitrogen	Relocate to sunny area. Keep weeds down. Reduce applications of nitrogen.
Blossom drop	Hot, dry periods Low night temperatures Overwatering or disease	Use mulch and water. Avoid planting too early in spring. 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 <http://hnr.k-state.edu/extension/info-center/plant-pest-problems.html>

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.

Ward Upham, Horticulturist;

Rebecca McMahon, Horticulture Agent, K-State Research and Extension-Sedgwick County

Revised from original by Charles W. Marr, Extension specialist, horticulture, retired.

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