



MontGuide

Can I Grow That Here? Vegetable Seed and Transplant Schedules for Garden or Container

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**Includes information on days to maturity, planting dates, sun requirements,
weeks to transplant size and frost tolerance for 34 vegetables.**

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THIS MONTGUIDE IS DESIGNED TO HELP AGENTS

or individuals in different areas of Montana calculate the specific time to plant seeds or start transplants and plant them at the proper time. With a limited growing season in much of Montana, this should help gardeners get the most from the growing season they do have. This guideline can be completed by either the agent (if the county has uniform frost dates throughout) or by the individual gardener, once frost dates are determined.

Procedure

Define the average first frost date in the fall and the average last frost date in the spring for your area. Then, with the aid of a calendar, calculate from those dates the spring planting dates for your area and the transplant starting dates. Remember to calculate both dates if a variable is given.

Example: Weeks to transplant size, 3–5. Calculate both three weeks before your planting date and also five weeks before your planting date to give you a wider range of time in which to start transplants. This is also the way to calculate your planting dates if variables are given.

For example, snap beans can be planted one week before the last frost to 12 weeks before first frost. Calculate the date one week before last frost date and then the date 12 weeks before first frost. This is your planting range of time. For more information on particular varieties, check seed packets for special instructions and transplant guidelines.

You can also use this publication to answer the title question: Can I grow that here? Once you know the average dates of the last frost in spring and the first frost in fall, count the number of days between. If the “days to maturity” figure for the vegetable you want to grow is a larger number of days and the “frost tolerance” column indicates “none,” the sad truth is that you probably can’t grow that particular vegetable. But as you will see, there are many things that can be grown in most of Montana. Begin by establishing the specific dates for your garden space.

Average date of last frost in spring: _____

Average date of first frost in fall: _____

Number of frost-free growing days: _____

Vegetable	Days to maturity	Spring/fall planting dates	Weeks to transplant size	Sun requirement	Frost tolerance	Greenhouse grown?	Soil temperature for germination	Container size
BEAN, LIMA	Bush: 75–80 Pole: 85–90	1 week before last frost to 12 weeks before first frost Dates: _____	Direct seed	Needs full sun	None	No	65–85 degrees	12 inches wide 8–10 inches deep
Succession plant bush varieties every week or two, up to last planting date.				Container varieties: Bush Baby, Fordhook Bush Lima, Fordhook 242, Henderson				
BEAN, SNAP	52–70	1 week before last frost to 12 weeks before first frost Dates: _____	Direct seed	Needs full sun	None	No	60–85 degrees	8 inches wide 8–10 inches deep
Pole beans tend to mature later than most varieties of bush bean. Succession plant bush types once a week, up to last planting date.				Container varieties: Bush Romano, Contender, Provider and Tendercrop Stringless				
BEET	50–80	4 weeks before last frost to 8–10 weeks before first frost Dates: _____	Direct seed	Needs full sun	Hardy	No	50–75 degrees	2–12 inches deep
Succession plant every 2–3 weeks, up to last planting date.				Container varieties: Baby Canning and Spinel Baby Beets				
BROCCOLI	60–80 after transplanting	6 weeks before last frost to 14 weeks before first frost Dates: _____	6–8; Start transplants: _____	At least 5 hours daily	Hardy	No	50–65 degrees	20 inches deep
Succession planting: If summers are not too hot, plant more broccoli one month after first planting, up to last planting date.				Container variety: Any will work. Crusader Hybrid is smaller and more compact.				
BRUSSELS SPROUTS	80–90 after transplanting	6 weeks before last frost to 3 weeks after last frost Dates: _____	6–8; Start transplants: _____	At least 6 hours daily	Hardy	No	65–75 degrees	12 inches wide 12 inches deep
Sprouts harvested after moderate freezes are much sweeter in taste.								
CABBAGE	60–90 after transplanting	6 weeks before last frost to 13 weeks before first frost Dates: _____	6–8; Start transplants: _____	At least 5 hours daily	Hardy	No	50–75 degrees	8–10 inches wide 12 inches deep
Over-fertilization or cold weather in the five- to eight-leaf stage will cause poor or misshapen heading.				Container varieties: Baby Head or Dwarf Morden				
CARROT	60–80 after direct seeding	4 weeks before last frost to 13 weeks before first frost Dates: _____	Direct seed	At least 5 hours daily	Hardy	No	55–75 degrees	10–12 inches deep or deeper
Succession plant every 2–3 weeks up to last planting date.				Container varieties: short rooted such as Baby Finger Nantees, Gold Nugget, Oxheart, Short 'n' Sweet and Tiny Sweet				
CAULIFLOWER	50–95 after transplanting	3 weeks before last frost to 14 weeks before first frost Dates: _____	4–5; Start transplants: _____	At least 6 hours daily	Hardy	No	50–75 degrees	No
Weather conditions influence the growth of cauliflower more than any other vegetable. Extreme heat or cold can cause serious crop reductions								

Vegetable	Days to maturity	Spring/fall planting dates	Weeks to transplant size	Sun requirement	Frost tolerance	Greenhouse grown?	Soil temperature for germination	Container size
CELERY	125 after direct seeding	3 weeks before last frost to 19 weeks before first frost Dates: _____	10 weeks; start transplants: _____	At least 5 hours daily	Hardy	No	50–70 degrees	No
Celery likes some shading in the heat of summer. Cold nights in early season will cause bolting.								
CHARD	55–60 after direct seeding	4 weeks before last frost to 6 weeks before first frost Dates: _____	Direct seed	At least 5 hours daily	Hardy	No	40–70 degrees	8–12 inches deep
Container variety: any variety								
CHINESE CABBAGE	45–60 after direct seeding, 40–50 after transplanting	Spring—6 weeks before last frost to frost Dates: _____ Fall—11 weeks before first frost Dates: _____	4 weeks; start spring transplants: _____ Start fall transplants: _____	At least 6 hours daily	Hardy	Yes	50–75 degrees	20 inches deep
Most varieties will bolt with first hot days of summer, so are best planted in summer for fall cropping. Some varieties dislike transplanting.								
Greenhouse varieties: any variety can be grown in a cool greenhouse. Container varieties: most varieties do well, but especially Bok Choy, Michihli and Wong Bok								
COLLARD	60–80 after direct seeding	Spring—4 weeks before last frost to 2 weeks after last frost Dates: _____ Fall—8 to 10 weeks before first frost Dates: _____	Direct seed	Needs full sun	Hardy	No	40–70 degrees	12 inches deep
Container variety: any variety grows well in containers								
CORN, SWEET	70–90+	From last frost to 3 weeks after frost Dates: _____	4 weeks; start transplants: _____	Needs full sun	None	No	55 to 85 degrees	21 inches wide 8 inches deep
Succession plant second crop 3 weeks after first.								
Container variety: any space-saving variety								
CUCUMBER	50–70	1 week before last frost to 12 weeks before first frost Dates: _____	4 weeks; start transplants: _____	At least 5 hours daily	None	Yes	65 to 85 degrees	8 inches wide 12 inches deep
Greenhouse varieties: special varieties are available including; Burpless Early Pik, Crispy Salty, Pot Luck, Patio Pik and Tiny Dill Cuke								
Container varieties: space-saving varieties such as Bush Crop, Patio Pic, Pot Luck and Space Master								
EGGPLANT	100–120	1 week before last frost to 14 weeks before first frost Dates: _____	6 to 10 weeks; start transplants: _____	Needs full sun	None	No	65 to 85 degrees	12 inches deep
Container varieties: space-saving varieties such as Dusky, Baby Bell and Morden Midget								

Vegetable	Days to maturity	Spring/fall planting dates	Weeks to transplant size	Sun requirement	Frost tolerance	Greenhouse grown?	Soil temperature for germination	Container size
KALE	55 to 75 after direct seeding	Spring—5 weeks before last frost to 2 weeks after last frost Dates: _____ Fall—6 to 8 weeks before first frost Dates: _____	Direct seed	Needs at least 5 hours daily	Hardy	No	40 to 70 degrees	8 inches wide 8 inches deep
					Container variety: any variety will work.			
KOHLRABI	45 to 60 after direct seeding, 25 to 35 after transplanting	Spring—5 weeks before last frost to 2 weeks after last frost Dates: _____ Fall—10 weeks before first frost Dates: _____	6 to 8 weeks, Start spring transplants: _____ Start fall transplants: _____	Needs at least 5 hours daily	Hardy	No	50 to 75 degrees	No
					Kohlrabi does not grow well in containers or in the greenhouse.			
LETTUCE	40 to 60 after direct seeding, 25–35 after transplanting	4 weeks before last frost to 6 weeks before first frost Dates: _____	4 to 6 weeks; start transplants: _____	At least 5 hours daily	Hardy	Yes	45 to 75 degrees	8 inches wide 8 inches deep
	Succession plant lettuce every 2 weeks up to last planting date, shifting to warm weather varieties for the summer months. Oak Leaf lettuce is heat resistant.				Greenhouse varieties: Loose leaf varieties such as Arctic King, North Pole and Parris Cos perform best. Container variety: Any variety grows well, with partial shade.			
MUSKMELON	80 to 100 after transplanting	1 week before last frost to 16 weeks before first frost Dates: _____	3 to 4 weeks; start transplants: _____	Needs full sun	None	Yes	65 to 85 degrees	At least 24 inches deep
	Greenhouse Varieties: New Hampshire Granite and Minnesota Midget				Container varieties: Burpee's Sugar Bush, New Hampshire Midget, Yellow Baby Hybrid, Musketeer and Bush Star			
OKRA	55 to 65 after direct seeding	1 week before last frost to 16 weeks before first frost Dates: _____	6 to 8 weeks; start transplants: _____	Needs full sun	None	No	70 to 95 degrees	No
					Okra does not grow well in containers or in the greenhouse. Okra responds well when grown with black plastic mulch.			
ONION	40 to 70 from sets	Planting for sets and seeds—3 weeks before last frost to 2 weeks after last frost Dates: _____	4 to 8 weeks; start transplants: _____	Needs at least 5 hours daily	Hardy	Yes	50 to 80 degrees	10 to 12 inches deep
	For fall scallions, plant a second crop 8 weeks after the spring planting. Keep seedling tops trimmed to 1/2 inch until a week before planting outdoors.				Container varieties: Any variety can be grown, but bunching onions are more productive in small spaces. Try Beltsville Bunching and White Pearl. Greenhouse Variety: Try any variety.			

Vegetable	Days to maturity	Spring/fall planting dates	Weeks to transplant size	Sun requirement	Frost tolerance	Greenhouse grown?	Soil temperature for germination	Container size
PARSNIP	100 to 120 after direct seeding	2 to 4 weeks before last frost to 4 weeks after last frost Dates: _____	Direct seed	At least 5 hours daily	Hardy	No	50 to 70 degrees	No
Parsnips do not grow well in the greenhouse or in containers.								
PEAS	55 to 90 after direct seeding	Spring—4 to 6 weeks before last frost to 2 to 3 weeks after last frost Dates: _____ Fall—12 weeks before first frost Dates: _____	Direct seed	Needs full sun	Very hardy	No	40 to 70 degrees	12 inches deep
Container varieties: space-saving varieties such as Laxton's Progress, Little Marvel, SugarBon, SugarMel and Sugar Rae Dwarf peas still require a low trellis to keep air circulating through the vines. Keep plants picked to encourage production, and keep soil moist once flowers appear.								
PEPPER	50 to 75 after transplanting	1 week before last frost to 17 weeks before first frost Dates: _____	6 to 8 weeks; start transplants: _____	At least 6 hours daily	None	No	65 to 85 degrees	12 inches deep
Container varieties: space-saving varieties such as Canape, Gypsy Hybrid, Italian Sweet, Pepper Pot or any hot pepper variety								
POTATO	80 to 140	1 week before last frost to 17 weeks before first frost Dates: _____	Direct plant	Needs full sun	Vegetation tender, potato tubers hardy	No	60 to 65 degrees	No
Potatoes cannot be grown in the greenhouse or in containers.								
PUMPKIN	100 to 120 after transplanting	After last frost date to 15 weeks before first frost Dates: _____	4 weeks; start transplants: _____	Needs full sun	Foliage tender, pumpkins take a light frost or two	No	65 to 85 degrees	No
Harvest before a heavy freeze. Pumpkins cannot be grown in the greenhouse or in containers.								
RADISH	20 to 49 after direct seeding	Spring—6 weeks before last frost Dates: _____ Fall—7 weeks before first frost Dates: _____	Direct seed	At least 6 hours daily	Hardy	Yes	40 to 85 degrees	4 to 6 inches deep
Greenhouse varieties: French Breakfast and Sparkler Container varieties: Cherry Belle, Early Scarlet Globe, French Breakfast and Sparkler. The round red and white tipped varieties do best in containers. Stay away from large winter radishes.								
RUTABAGA	90 to 100 after direct seeding	6 weeks before last frost to 16 weeks before first frost Dates: _____	Direct seed	At least 6 hours daily	Hardy	No	65 to 75 degrees	No
Rutabagas cannot be grown in the greenhouse or in containers.								

Vegetable	Days to maturity	Spring/fall planting dates	Weeks to transplant size	Sun requirement	Frost tolerance	Greenhouse grown?	Soil temperature for germination	Container size
SPINACH	40 to 60 after direct seeding	Spring—6 weeks before last frost to 7 weeks before mid-summer Dates: _____ Fall—6 to 8 weeks before first frost Dates: _____	Direct seed	At least 5 hours daily	Hardy	No	40 to 75 degrees	4 to 6 inches deep
					Container variety: any variety Good hot weather substitute is New Zealand Spinach.			
SUMMER SQUASH	45 to 60 after transplanting	From last frost to 10 weeks before first frost Dates: _____	4 weeks; start transplants: _____	Needs full sun	None	No	65 to 85 degrees	24 inches deep
					Container varieties: Early Yellow Summer Crookneck, Goldbar Straightneck, Park's Creamy and Scallopine			
WINTER SQUASH	85 to 100 after direct seeding, 60 to 80 after transplanting	1 week before last frost to 13 weeks before first frost Dates: _____	3 to 4 weeks; start transplants: _____	Needs full sun	None	No	65 to 85 degrees	24 inches deep
					Container varieties: space-saving bush varieties such as Butterbush			
TOMATO	70 after transplanting	1 week before last frost to 17 weeks before first frost Dates: _____	6 to 10 weeks; start transplants: _____	Needs at least 8 hours or more full sun daily	None	Yes	65 to 85 degrees	Dwarf varieties 6 inches deep Standard varieties 24 inches deep
		Greenhouse variety: Patio, Small Fry and Tiny Tim						
		Container varieties: Patio VF, Pixie, Small Fry VFN, Sweet 100, Toy Boy, Tumbler Tom, Yellow Pear, and others designed for containers						
TURNIP	Greens—30 to 75 after direct seeding, Roots—60 to 75 after direct seeding	Spring—6 weeks before last frost to mid-summer Dates: _____ Fall—6 to 8 weeks before first frost Dates: _____	Direct seed	At least 5 hours daily	Hardy	No	60 to 75 degrees	10 to 12 inches deep
					Succession plant every 3 weeks till midsummer. Container variety: Any variety can be grown in containers.			
WATER-MELON	30 to 100 warm days after transplanting	1 week before last frost to 16 weeks before first frost Dates: _____	3 to 4 weeks; start transplants: _____	Needs full sun	None	No	65 to 75 degrees	24 inches deep
					Container varieties: special varieties such as Sugar baby			

This information was compiled from "Rodale's Garden Problem Solver," by Jeff Ball and "Planting Dates for Vegetables," Montana State University Leaflet 187



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