

Consumer Horticulture

Indiana Vegetable Planting Calendar

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Planting vegetable seeds or transplants at the correct time is important for a successful garden. The correct timing is determined by two factors: the soil temperature required for seeds to germinate and the temperature tolerance of the plants.

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The best planting dates can vary from season to season. Planting dates also differ from one location to another based on the microclimatic effects of urban areas, natural terrain, moisture, sunlight, wind exposure, and garden devices such as cloches and mulches.

Because of this variation, we can only suggest a range of safe planting dates based on the average dates of the last normal freeze in the spring (Figure 1) and the first freeze in the fall (Figure 2). You should note the current weather conditions and projections as well as your site's conditions to determine the correct planting date for a specific crop and variety.

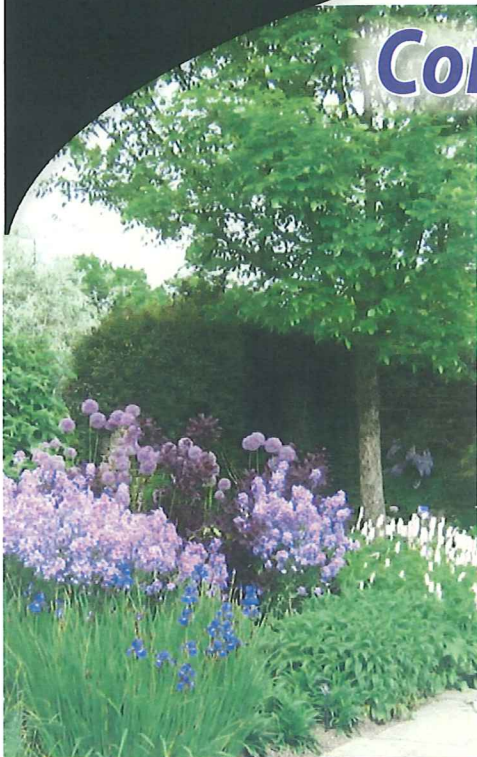
Making several plantings within these date ranges can increase the likelihood of success. Several plantings will also extend the harvest season over a longer period. If you make only one planting, then make it about midway through the range.

Table 1 indicates spring planting dates, while Table 2 suggests appropriate dates for fall garden planting.

Soil Temperature

Many summer vegetable crops do not grow well until the soil temperatures are warm. In years when cool air temperatures and rainfall do not allow the soil to warm up, delay planting warm season crops such as beans, tomatoes, squash, sweet potatoes, and peanuts until the soil temperature has reached at least 60°F for optimum germination and/or growth. Otherwise, seed and root rot disease and related disorders are likely.

For more experienced gardeners, soil temperature measurements offer an alternative to planting according to frost dates. Soil can be warmed early by using black or clear plastic mulches. Seeds that require warm temperatures for germination can then be planted successfully before the recommended dates. However, protection against late frosts for the seedlings may be required. Table 3 provides seed germination temperatures for several vegetables.



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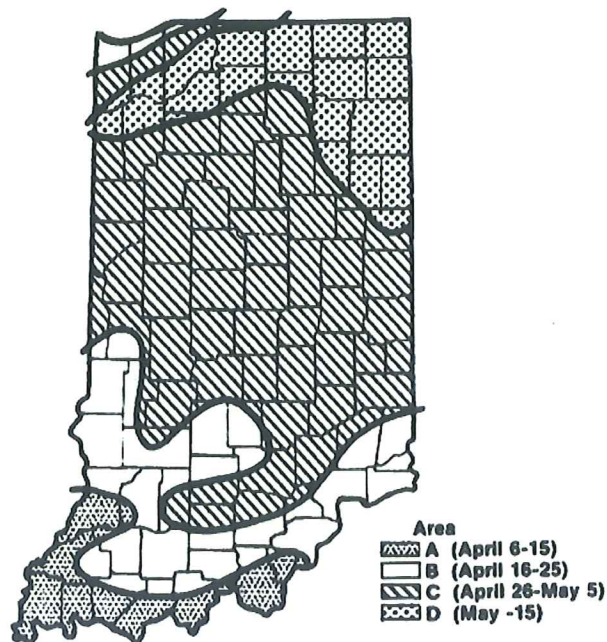


Figure 1. Average Frost Dates in Spring

After the average spring frost-free date, there is a 50 percent chance of a temperature at or below 32° F/ (0° C). About two weeks later that chance decreases to 10 percent. Thus, tender plants set out on the average frost-free date could need some protection, while delayed plantings almost never require additional protection. For spring planting date ranges for common vegetable crops, see Table 1.

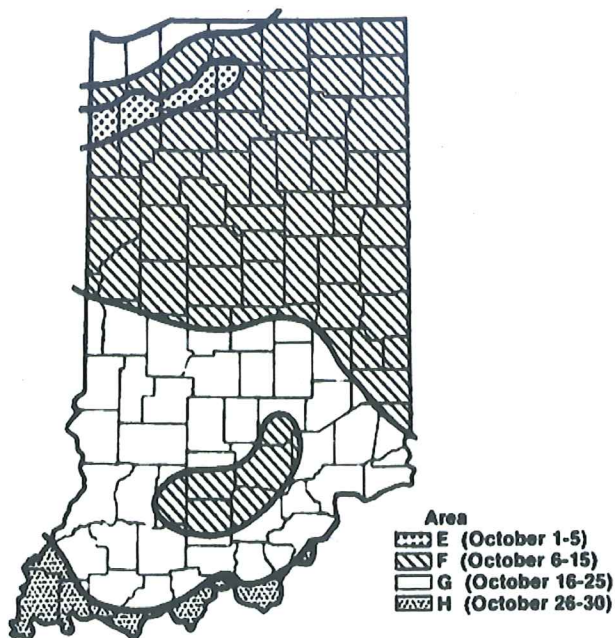


Figure 2. Average First Frost Dates in Fall

The chance of a frost on the average first frost date is 50 percent. However, the likelihood of a 32° F (0° C) temperature is only 10 percent two weeks prior to the average first frost date. For fall planting date ranges for common vegetable crops, see Table 2.

Table 1. Earliest Dates and Ranges of Dates for Spring Planting of Selected Vegetables in the Garden*

Crop	Area A	Area B	Area C	Area D
Asparagus (1)	Mar 10-Apr 10	Mar 15-Apr 15	Mar 20-Apr 15	Mar 10-Apr 30
Bean, Lima	Apr 1-June 30	May 1-June 20	May 15-June 15	May 25-June 15
Bean, Snap	Apr 10-June 30	Apr 25-June 30	May 10-June 30	May 10-June 30
Beet	Mar 10-June 1	Mar 20-June 1	Apr 1-June 15	Apr 15-June 15
Broccoli, sprouting(1)	Mar 15-Apr 15	Mar 25-Apr 20	Apr 1-May 1	Apr 15-June 1
Brussels sprout (1)	Mar 15-Apr 15	Mar 25-Apr 20	Apr 1-May 1	Apr 15-June 1
Cabbage (1)	Mar 1-Apr 1	Mar 10-Apr 1	Mar 15-Apr 10	Apr 1-May 15
Cabbage, Chinese	(2)	(2)	(2)	Apr 1-May 15
Carrot	Mar 10-Apr 20	Apr 1-May 15	Apr 10-June 1	Apr 20-June 15
Cauliflower	Mar 1-Mar 20	Mar 15-Apr 20	Mar 1-Mar 20	Mar 15-Apr 20
Celery and celeriac	Apr 1-Apr 20	Apr 10-May 1	Apr 15-May 1	Apr 20-June 15
Chard	Mar 15-June 15	Apr 1-June 15	Apr 15-June 15	Apr 20-June 15
Chervil and chives	Mar 1-Apr 1	Mar 10-Apr 10	Mar 20-Apr 20	Apr 1-May 1
Chicory, witloof	June 10-July 1	June 15-July 1	June 15-July 1	June 1-June 20
Collard (1)	Mar 1-June 1	Mar 10-June 1	Apr 1-June 1	Apr 15-June 1
Corn salad	Feb 1-Apr 1	Feb 15-Apr 15	Mar 1-May 1	Apr 1-June 1
Corn, sweet	Apr 10-June 1	Apr 15-June 15	May 10-June 15	May 10-June 1
Cress, upland	Mar 10-Apr 15	Mar 20-May 1	Apr 10-May 10	Apr 20-May 20
Cucumber	Apr 20-June 1	May 1-June 15	May 15-June 15	May 20-June 15
Eggplant (1)	May 1-June 1	May 10-June 1	May 15-June 10	May 20-June 15
Endive	Mar 15-Apr 15	Mar 25-Apr 15	Apr 1-May 1	Apr 15-May 15
Fennel, Florence	Mar 15-Apr 15	Mar 25-Apr 15	Apr 1-May 1	Apr 15-May 15
Garlic	Feb 20-Mar 20	Mar 10-Apr 1	Mar 15-Apr 15	Apr 1-May 1
Horseradish (1)	Mar 10-Apr 10	Mar 20-Apr 20	Apr 1-Apr 30	Apr 15-May 15
Kale	Mar 10-Apr 1	Mar 20-Apr 10	Apr 1-Apr 20	Apr 10-May 1
Kohlrabi	Mar 10-Apr 10	Mar 20-May 1	Apr 1-May 10	Apr 10-May 15
Leek	Mar 1-Apr 1	Mar 15-Apr 15	Apr 1-May 1	Apr 15-May 15
Lettuce, head (1)	Mar 10-Apr 1	Mar 20-Apr 15	Apr 1-May 1	Apr 15-May 15
Lettuce, leaf	Mar 15-May 15	Mar 20-May 15	Apr 1-June 1	Apr 15-June 15
Muskmelon	Apr 20-June 1	May 1-June 15	May 15-June 15	June 1-June 15
Mustard	Mar 10-Apr 20	Mar 20-May 1	Apr 1-May 10	Apr 15-June 1
Okra	Apr 20-June 15	May 1-June 1	May 10-June 1	May 20-June 10
Onion (1)	Mar 1-Apr 1	Mar 15-Apr 10	Apr 1-May 1	Apr 10-May 1
Onion, seed	Mar 1-Apr 1	Mar 15-Apr 1	Mar 15-Apr 15	Apr 1-May 1
Onion, sets	Mar 1-Apr 1	Mar 10-Apr 1	Mar 10-Apr 10	Apr 10-May 1
Parsley	Mar 10-Apr 10	Mar 20-Apr 20	Apr 1-May 1	Apr 15-May 15
Parsnip	Mar 10-Apr 10	Mar 20-Apr 20	Apr 1-May 1	Apr 15-May 15
Peanut	Apr 25-May 15	May 5-June 1	May 15-June 1	—
Pea, garden	Feb. 20-Mar 20	Mar 10-Apr 10	Mar 20-May 1	Apr 1-May 15
Pea, black-eye	May 1-July 1	May 10-June 15	May 15-June 1	—
Pepper (1)	May 1-June 1	May 10-June 1	May 15-June 10	May 20-June 10
Potato	Mar 10-Apr 1	Mar 15-Apr 10	Mar 20-May 10	Apr 1-June 1
Pumpkin	Apr 20-June 1	May 1-June 15	May 1-May 30	May 10-June 10
Radish	Mar 1-May 1	Mar 10-May 10	Mar 20-May 10	Apr 1-June 1
Rhubarb (1)	Mar 1-Apr 1	Mar 10-Apr 10	Mar 20-Apr 15	Apr 1-May 1
Rutabaga	(3)	(3)	May 1-June 1	May 1-June 1
Salsify	Mar 10-Apr 15	Mar 20-May 1	Apr 1-May 15	Apr 15-June 1
Shallot	Mar 1-Apr 1	Mar 15-Apr 15	Apr 1-May 1	Apr 10-May 1
Sorrel	Mar 1-Apr 15	Mar 15-May 1	Apr 1-May 15	Apr 15-June 1
Soybean	May 1-June 30	May 10-June 20	May 15-June 15	May 25-June 15
Spinach	Feb 15-Apr 1	Mar 1-Apr 15	Mar 20-Apr 20	Apr 1-June 15
Spinach, New Zealand	Apr 20-June 1	May 1-June 15	May 1-June 15	May 10-June 15
Squash, summer and winter	Apr 20-June 1	May 1-June 15	May 1-May 30	May 10-June 10
Sweet potato	May 1-June 1	May 10-June 10	May 20-June 10	—
Tomato	Apr 20-June 1	May 5-June 10	May 10-June 15	May 15-June 10
Turnip	Mar 1-Apr 1	Mar 10-Apr 1	Mar 20-May 1	Apr 1-June 1
Watermelon	Apr 20-June 1	May 1-June 15	May 15-June 15	June 1-June 15

*The areas in this table come from Figure 1.

(1) Plants (transplant instead of direct seeding on indicated dates)

(2) Generally fall-planted

(3) Substitute turnips in Area A and B

— No information available

Source: *Growing Vegetables in the Home Garden*, USDA Bulletin 202.

Table 2. Latest Dates and Ranges of Dates for Planting a Fall Crop of Selected Vegetables in the Garden*

Crop	Area E	Area F	Area G	Area H
Asparagus (1)	—	Oct 20-Nov 15	Nov 1-Dec 15	Nov 15-Jan 1
Bean, Lima	June 1-June 15	June 1-June 15	June 15-June 30	July 1-Aug 1
Bean, snap	June 1-July 10	June 15-July 20	July 1-Aug 1	July 1-Aug 15
Beet	June 1-July 10	June 15-July 25	July 1-Aug 5	Aug 1-Sept 1
Broccoli, sprouting	June 1-June 30	June 15-July 15	July 1-Aug 1	July 1-Aug 1
Brussels sprout	June 1-June 30	June 15-July 15	July 1-Aug 1	July 1-Aug 15
Cabbage (1)	June 1-July 10	June 1-July 15	July 10-July 20	Aug 1-Sept 1
Cabbage, Chinese	June 1-July 15	June 15-Aug 1	July 15-Aug 15	Aug 1-Sept 15
Carrot	June 1-July 10	June 1-July 20	June 15-Aug 1	July 1-Aug 15
Cauliflower (1)	May 10-July 15	June 1-July 15	July 1-Aug 5	July 15-Aug 15
Celery (1) and celeriac	June 1-July 5	June 1-July 15	June 1-Aug 1	June 15-Aug 15
Chard	June 1-July 5	June 1-July 20	June 1-Aug 1	June 1-Sept 10
Chervil and chives	(2)	(2)	(2)	(2)
Chicory, witloof	June 1-July 1	June 1-July 1	June 15-July 15	July 1-Aug 10
Collard (1)	June 15-July 15	July 1-Aug 1	July 15-Aug 15	Aug 1-Sept 15
Corn salad	July 15-Sept 1	Aug 15-Sept 15	Sept 1-Oct 15	Sept 15-Nov 1
Corn, sweet	June 1-July 1	June 1-July 10	June 1-July 20	June 1-Aug 1
Cress, upland	July 15-Sept 1	Aug 15-Sept 15	Sept 1-Oct 15	Sept 15-Nov 1
Cucumber	June 1-July 1	June 1-July 1	June 1-July 15	June 1-Aug 1
Eggplant (1)	May 20-June 10	May 15-June 15	June 1-July 1	June 1-July 1
Endive	June 15-Aug 1	July 1-Aug 15	July 15-Sept 1	July 15-Aug 15
Fennel, Florence	June 1-July 1	June 15-July 15	June 15-Aug 1	July 1-Aug 1
Garlic	(2)	(2)	(2)	(2)
Horseradish (1)	(2)	(2)	(2)	(2)
Kale	June 15-July 15	July 1-Aug 1	July 15-Aug 15	July 15-Sept 1
Kohlrabi	June 15-July 15	July 1-Aug 1	July 15-Aug 15	Aug 1-Sept 1
Leek	(2)	(2)	(2)	(2)
Lettuce, head (1)	June 15-Aug 1	July 15-Aug 15	Aug 1-Aug 30	Aug 1-Sept 15
Lettuce, leaf	June 1-Aug 1	July 15-Sept 1	July 15-Sept 1	Aug 15-Oct 1
Muskmelon	May 15-June 1	June 1-June 15	June 15-July 20	July 1-July 15
Mustard	June 15-Aug 1	July 15-Aug 15	Aug 1-Sept 1	Aug 15-Oct 15
Okra	June 1-July 1	June 1-July 15	June 1-Aug 1	June 1-Aug 10
Onion (1)	(2)	(2)	(2)	—
Onion, seed	(2)	(2)	(2)	—
Onion, sets	(2)	(2)	(2)	—
Parsley	June 1-July 15	June 15-Aug 1	July 15-Aug 15	Aug 1-Sept 15
Parsnip	June 1-July 1	June 1-July 10	(2)	(2)
Pea, garden	June 1-Aug 1	(2)	(2)	Aug 1-Sept 15
Pea, black-eye	—	June 1-July 1	June 1-July 1	June 1-Aug 1
Pepper (1)	June 1-July 1	June 1-July 1	June 1-July 10	June 1-July 20
Potato	May 1-June 15	May 15-June 15	June 15-July 15	July 20-Aug 10
Pumpkin	May 15-June 1	June 1-June 15	June 15-July 20	July 1-July 15
Radish	July 1-Sept 1	July 15-Sept 15	Aug 1-Oct 1	Aug 15-Oct 15
Rhubarb (1)	Oct 1-Nov 1	Oct 15-Nov 15	Oct 15-Dec 1	Nov 1-Dec 1
Rutabaga	June 1-July 1	June 15-July 15	Jul 10-July 20	July 15-Aug 1
Salsify	June 1-June 20	June 1-July 1	June 1-July 1	June 1-July 10
Shallot	(2)	(2)	(2)	(2)
Sorrel	June 1-July 15	July 1-Aug 1	July 15-Aug 15	Aug 1-Sept 15
Soybean	May 25-June 10	June 1-25	June 1-July 5	June 1-July 15
Spinach	July 1-Aug 15	Aug 1-Sept 1	Aug 20-Sept 10	Sept 1-Oct 1
Spinach, New Zealand	May 15-July 1	June 1-July 15	June 1-Aug 1	June 1-Aug 1
Squash, summer	June 1-July 1	June 1-July 15	June 1-July 20	June 1-Aug 1
Squash, winter	June 1-June 15	June 1-July 1	June 1-July 1	June 10-July 10
Sweet potato	—	May 20-June 10	June 1-June 15	June 1-June 15
Tomato	June 1-June 20	June 1-June 20	June 1-July 1	June 1-July 1
Turnip	June 1-Aug 1	July 1-Aug 1	July 15-Aug 15	Aug 1-Sept 15
Watermelon	May 15-June 1	June 1-June 15	June 15-July 20	July 1-July 15

*The areas in this table come from Figure 2.

(1) Plants (transplant instead of direct seeding on indicated dates)

(2) Generally spring-planted

— No information available

Source: *Growing Vegetables in the Home Garden*, USDA Bulletin 202.

Table 3. Soil Temperatures for Vegetable Seed Germination

Vegetable	Optimum/Optimum Range (°F)	Minimum/Maximum (°F)
Asparagus	75/60-85	50/95
Bean	80/60-85	60/95
Bean, Lima	85/65-85	60/85
Beet	85/50-85	40/95
Cabbage	85/45-95	40/100
Carrot	80/45-85	40/95
Cauliflower	80/45-85	40/100
Celery	70/60-70	40/85
Chard, Swiss	85/50-85	40/95
Corn	95/60-95	50/105
Cucumber	95/60-95	60/105
Eggplant	85/75-90	60/95
Lettuce	75/40-80	35/85
Muskmelon	90/75-95	60/100
Okra	95/70-95	60/105
Onion	75/50-95	35/95
Parsley	75/50-85	40/90
Parsnip	65/50-70	35/85
Pea	75/40-75	40/85
Pepper	85/65-95	60/95
Pumpkin	90/70-90	60/100
Radish	85/45-90	40/95
Spinach	70/45-75	35/85
Squash	95/70-95	60/100
Tomato	85/60-85	50/95
Turnip	85/60-105	40/105
Watermelon	95/70-95	60/105

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