

HARVEST AND STORAGE OF FRUITS AND VEGETABLES



Vegetable Gardens

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A home garden is an excellent source of the freshest, most flavorful and nutritious produce. However, choosing fruits and vegetables at the "peak of perfection" eludes many gardeners. Also, harvesting at the right time is only part of the process—proper storage is vital for keeping garden freshness as long as possible.

Vegetables and fruits should be harvested through the season, as they reach ideal maturity. Timely, regular harvest not only means better products, but spreads the harvest season and may improve yields of some crops. Although individual preferences may vary, the following Harvest Guides will help you judge when to harvest fruits and vegetables for best flavor, nutritional value and appearance.

Many gardeners are faced with a surplus of produce through the season. Consider canning, freezing or drying the surplus, since all produce stored fresh, in most cases, lasts only a short time. Your county Extension office has information and publications on canning, freezing and other types of food preservation.

A refrigerator set at 35 to 50°F provides cold storage for small quantities of fruits and vegetables. Vegetable or "crisper" drawers provide slightly warmer storage than the main part of the refrigerator. If moist storage is indicated, use plastic bags to hold in moisture. Some gardeners buy old refrigerators for this purpose; automatic defrost models remove moisture, so manual defrost types are better.

When cool storage is indicated, a basement or cellar storage area is convenient. Provide a thermostatically controlled heat source where a danger of freezing temperatures exists. Many Kansas farmsteads have an outdoor cellar-shelter that is ideal for storing produce. Pits or buried containers can also be used. For additional information, check your library or Extension office for the USDA publication, *Storage of Vegetables in Basements, Cellars and Pits*.

To ensure high quality produce, select only the best fruits and vegetables for storage; discard the rest or use them quickly. Handle produce carefully since bruising can reduce storage life and break the "skin" of products, allowing diseases to start. Check produce in storage regularly and discard any items that have begun to deteriorate.

Vegetable Harvest Guide

Asparagus. Harvest by snapping 7- to 8-inch spears at ground level. Wash, trim, store in plastic bags in refrigerator; keeps up to 5 days.

Beans, green. Bean pods are most tender when inside seeds are one-fourth normal size. Pods become tougher as beans mature. Store in perforated plastic bags in warm part of refrigerator, up to 1 week.

Beets. Begin harvest when beet is 1 inch in diameter. Tender tops make excellent greens. Main harvest is when beets are 2 to 3 inches in diameter. Harvest spring-planted beets before hot weather (July). Harvest fall beets before first moderate freeze. To store, wash roots, trim tops to ½ inch, place in perforated plastic bags and store in refrigerator or cold, moist cellar or pit. Store 3 to 5 months.

Broccoli. Harvest terminal head while florets are tight and of good green color. Smaller side shoots will develop after main head is cut. Store in refrigerator in perforated plastic bags. Keeps 10 to 14 days.

Brussels sprouts. Harvest when sprouts (small heads) are firm; begin from bottom of plants. Sprouts can stand several moderate freezes. Harvest all sprouts before first severe freeze. Store in refrigerator in perforated bags. Storage life is 3 to 5 weeks.

Cabbage. Harvest when heads are solid. Press center of head with thumb to feel for firmness. Store cabbage in refrigerator, cold cellar or outdoor pit. Keeps up to 13 months.

K-STATE RESEARCH & EXTENSION MANHATTAN, KANSAS Carrots. Harvest spring carrots before hot weather (July), fall-planted carrots before first moderate freeze. To store, wash roots, trim tops to ½ inch, place in perforated plastic bags and store in refrigerator or cold, moist cellar or pit. Storage life is 4 to 5 months.

Cauliflower. Tie outer leaves above heads when heads are about 1 to 2 inches in diameter (except purple types). Heads will be ready for harvest in about 2 weeks. Store in perforated plastic bags in refrigerator. Keeps 2 to 4 weeks.

Chard (Swiss). This summer green can be harvested for fresh use nearly all season. A spring planting will provide greens from early summer to first moderate freeze. Break off outer leaves. Can be stored in plastic bags in refrigerator 10 to 14 days.

Chinese Cabbage. Harvest heads when solid or after first moderate frost in fall and store in perforated plastic bags in refrigerator, cold cellar or outdoor pit. Keeps 1 to 2 months.

Collards, Kale, Mustard, Spinach. Harvest leaves and leaf stems of greens when they reach usable size. Harvest whole plant or outer, larger leaves. Greens do not store well, but may be kept in plastic bags in refrigerator for 10 to 14 days.

Cucumbers. Harvest cucumbers before seeds become half-size. This will vary—most varieties will be $1\frac{1}{2}$ to $2\frac{1}{2}$ inches in diameter and 5 to 8 inches long. Pickling cucumbers will be a bit more blocky and not as long as slicers. Store slicing cucumbers up to 2 weeks in plastic bags in warmest part of refrigerator. Pickling cucumbers should be cooled quickly in ice water, then pickled as soon as possible.

Eggplant. Harvest when fruits are nearly full-grown but color is still bright. Eggplant does not keep long, but may be stored in warm part of refrigerator up to 1 week.

Endive (Escarole). Harvest whole plant. Wash thoroughly to remove soil and sand. Store in plastic bags in refrigerator. Can keep 2 to 3 weeks.

Horseradish. Harvest after several severe freezes or store in the ground all winter (mulch with straw or leaves and dig when needed). Use larger roots and leave smaller (less than pencil diameter) for next year's crop. Keeps 10 to 12 months.

Kohlrabi. Harvest when swollen stems are 2 to 3 inches in diameter. Stems become woody if left too long before harvest or if grown under poor conditions. Cut off root and leaf stems and store in plastic bags in refrigerator or cold, moist cellar or pit. Keeps 2 to 4 weeks.

Lettuce. Head, semi-head and leaf lettuce can be stored up to 2 weeks in perforated plastic bags in refrigerator.

Lima beans. Harvest when pods have filled. For tender limas, harvest when slightly immature; for meaty limas, harvest when more mature. Shelled limas can be stored in perforated plastic bags in refrigerator for 1 week.

Muskmelon or Cantaloupe. Harvest when stem slips easily from fruit. Lift melon—if ripe, it should separate easily. Store ripe melons up to 2 weeks in plastic bags in refrigerator.

Onions, green. Harvest green onions when they reach usable size. Cut off roots; trim tops, leaving 3 to 4 inches of green. Store up to 1 month in plastic bags in refrigerator.

Onions, dry. Harvest onions when tops have fallen over and necks have shriveled. You may crush or bend necks when about half the crop has fallen over naturally. Remove tops, place in shallow boxes or mesh bags and cure in open garage or barn for 2 to 3 weeks. Dry thoroughly so no "juiciness" remains in neck before storing. When dry, clip tops to 1 to 2 inches, trim roots and store in mesh bags in as cool and dry a place as possible in mid-summer. Keep ventilated during humid weather. Storage life is 3 to 4 months.

Okra. Harvest okra pods when 2 to 3 inches long. Overmature pods are woody. Store up to 10 days in plastic bags in warm part of refrigerator.

Parsley. Parsley will over-winter if planted in protected place such as cold frame. If planted in the open, it can be taken out carefully with a ball of soil just before soil freezes, potted and taken indoors in a cool, sunny room and harvested for several weeks. Store parsley in plastic bags in refrigerator. Keeps up to 10 days.

Peas, green. Harvest when pods have filled. For tender peas, harvest when slightly immature; for "meaty" peas, harvest later. Unshelled peas can be kept up to 5 days in perforated plastic bags in refrigerator. Harvest edible-podded peas when they reach usable size.

Peas, southern. For fresh use, freezing or canning, harvest when seeds are large and plump but moist. Shelled or unshelled peas may be stored in refrigerator for 1 week.

Peppers, hot. Pull plants late in season and hang to dry in sunny, warm place. Store dried peppers in dry, cool place (usually basement) for up to 1 year.

Peppers, sweet. Harvest when fruits are firm and full size. If red peppers are desired, leave on plant until red color develops. Store sweet peppers up to 3 days in warm part of refrigerator in plastic bags.

Potato, Irish. Harvest in July when tops have yellowed or died. Do not leave in ground exposed to high soil temperatures. Wash potatoes and remove diseased or damaged ones. Bruises encourage rots to develop. Cure about l week in shaded, well-ventilated place (open barn, shed, garage). Avoid exposing tubers to light. Store in as cool a location as possible—ideally, commercial cold storage or extra refrigerator. Cool, dark basements are probably the best home storage available. Keep humidity high and provide good ventilation. Fall-grown potatoes keep better. Avoid freezing temperatures.

Pumpkins, squash, winter. Harvest pumpkins and winter squash when skin hardens and colors darken. Harvest before frost; remove from vine with some stem attached. "Cure" at 80 to 85°F for 10 days to toughen rind and extend storage life. Store on shelves in single layers to allow air circulation. Storage life is 2 to 3 months.

Radish. Harvest when ½ to 1 inches in diameter. Wash and trim both tap roots and tops, store up to 3 to 4 weeks in plastic bags in refrigerator. Winter or black radishes are stored the same as carrots.

Rhubarb. Harvest leaf stalks when ½ to 1 inch diameter. Do not use leaves. Rhubarb can be stored up to 2 weeks in refrigerator in perforated plastic bags.

Salsify, parsnips. Harvest in late fall after several moderate freezes, or store in ground. Exposure to cold develops sweet flavor. Same storage requirements as for carrots; storage life is 4 to 5 months.

Squash, summer. Harvest when fruit is young and tender. Skin should be easily broken by thumbnail. Store up to 5 days in perforated plastic bags in refrigerator.

Sweet corn. Harvest sweet corn when kernels are plump and tender. Silks will be dry and kernels filled. Check a few ears for maturity—open top of ear, press a few kernels with thumbnail; if milky juice squirts out, corn is ready for harvest. Sweet corn has a very short storage life. Harvest at peak of quality, husk to conserve space, and refrigerate in plastic bags for no more than 2 days.

Sweet potatoes. Harvest in fall before frosts and freezing temperatures. Handle carefully to avoid bruising while digging. Cure I week in warm, humid conditions (temperature 80 to 85°F and 85 percent relative humidity), then store

in a warmer location, always above 50°F. Storage life is 4 months.

Tomatoes. Ripe tomatoes will keep l week in refrigerator at 45 to 50°F. Green, mature tomatoes, harvested before frost, should be kept at 55 to 70°F; for faster ripening, raise temperature to 65 to 70°F. Mature green tomatoes—about normal size, with whitish-green skin color—can be kept 3 to 5 weeks by wrapping each tomato in newspaper and checking for ripeness each week.

Turnips. Turnips can be harvested when 1 inch in diameter. They are best as a fall crop and can withstand several light freezes. Store in perforated plastic bags in refrigerator or cold, moist cellar or pit. Storage life is 4 to 5 months.

Watermelon. Harvest when underside of fruit turns from whitish to yellowish. On some varieties, tendril at joining of fruit stem and vine usually dies when fruit is mature. Thumping an immature melon gives a ringing, metallic sound, while mature melons give a dull thud. Watermelons will store at room temperature about 1 week, at 45 to 50°F for 2 to 3 weeks.



Fruit Harvest Guide

Fruits listed below retain quality best when refrigerated at about 35 to 40°F. Suggested storage times are for fruits stored at these temperatures.

Small Fruit

Blackberries. Fruit develops dull black color with plump, juicy fruitlets as it ripens; fruits soften and develop characteristic flavor. Harvest every 2 to 3 days. Cool immediately, use within 3 to 5 days.

Currants. Mature fruit will soften slightly, become juicy, and develop an intense color. For jelly, harvest before completely ripe, when pectin content is high. Store in refrigerator up to 2 weeks.

Elderberries. Harvest when fruit is plump, color changing from shiny to dull purple, and just beginning to soften. Use within 3 to 5 days.

Gooseberries. Harvest as fruit color changes to light green. Some varieties may have pink blush. Pick when berries are still firm; may be stored for 2 weeks.

Grapes. A characteristic flavor and aroma develops as fruit matures. Color may develop earlier so color alone is not a guide. As grapes mature, sugar content increases and cluster stems turn from green to brown. Remove clusters with scissors or hand shears. Store in refrigerator up to 2 months.

Raspberries. Ripe raspberries develop full color and separate easily from vine. Harvest fruit as it ripens, every 2 to 3 days. Pick by gently lifting berries with thumb or finger. Cool immediately; use within 3 to 5 days.

Strawberries. Fully ripe strawberries are a uniformly red color, and firm but beginning to soften slightly. Harvest with green caps on to retain firmness and quality—pinch stem off about ¼ inch above cap. Refrigerate immediately; use within 2 to 5 days. Select soft berries for immediate use.

Tree Fruit

Apples. Sample for characteristic flavor and aroma as fruit begins to change color. The under color (green, immature color) will change to light green or cream. Yellow

or golden varieties develop golden surface color when ripening. Some varieties release from tree easily as they begin to ripen and should all be picked; other varieties can be picked as they mature. Fruit will continue to ripen after picking. Store in refrigerator 1 to 6 months.

Apricots. Harvest as fruit begins to soften and develop characteristic flavor. Handle carefully to prevent bruising. Cool immediately; store up to 2 weeks. Fruit will continue to ripen after picking.

Cherry, red tart or pie. Mature fruit is juicy, somewhat soft and full-flavored. Quality holds better if picked with stems on. Cool after harvesting; store up to 2 weeks.

Peaches, nectarines. Taste fruit for characteristic flavor and aroma. Fruit softens and becomes juicy as it ripens; ground color (immature, green color) changes to light green or cream. Fruit will continue to ripen after picking. Handle

fruit carefully to avoid bruising. Cool immediately after harvest; store up to 2 weeks.

Pears. Pears should be picked before they are tree-ripe; however, harvesting too early will result in poor flavor and shriveling in storage. Harvest just as pear flavor and aroma can be detected when sampling, and small spots on fruit surface change from white to brownish color. Pears harvested after best time will have some stone cells and poor flavor. Fruit will continue to ripen after picking. Storage life is 1 to 3 months.

Plums, prunes. Fruit softens and develops characteristic flavor as it ripens. Color may indicate beginning of ripening, but is not a good guide. Handle gently; cool after harvest. Fruit will continue to ripen after picking. Store up to 2 weeks.

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