SUSTAINABLE GARDENING

FOR SCHOOL AND HOME GARDENS

Sweet Pepper



QUICK FACTS

- Transplant to first harvest: 55-75 days





History

Peppers are likely native to the Oaxaca region of Mexico, where they are referred to as chiles, with evidence dating back to 5000 B.C. Peppers were also widely produced in Guatemala, and evidence of this crop's presence in Peru was documented in 1609. They were transported by Spanish and Portuguese explorers and adapted to many different climates. Columbus discovered pungent (hot) peppers in the West Indies and coined the name "pepper." By the 16th century, peppers were introduced to Europe but were not commercially produced in the southern U.S. until 1925.

In Europe, pepper is dried to make the spice paprika, and in Mexico and Portugal this crop is essential in many staple culinary dishes. Peppers are also very important in Louisiana for Cajun and Creole cuisine as a member of the "Holy Trinity" along with onions and celery. Peppers are an essential ingredient in dishes like gumbo, jambalaya, etouffee and stuffing.

Pungency (heat) in pepper fruit is concentrated in glands located in the placenta, the inner white tissue that supports the seeds. Capsaicin is an odorless, colorless and flavorless alkaloid responsible for pungency in peppers and is measured in Scoville heat

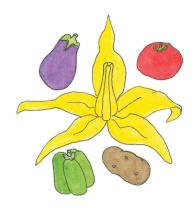


Figure 1. Sweet peppers belong to the Solanaceae plant family, along with Irish potatoes, tomatoes, tomatilloes, eggplant and many more.

units. The pungency (heat) of peppers ranges from zero to 2 million Scoville heat units: bell peppers rate zero, tabasco peppers range from 500-2,500, and the ghost pepper 855,000-1 million.

The main ingredient in Louisiana hot sauce, cayenne pepper, is the same species as bell pepper. Other common peppers used for hot sauce are tabasco and Habanero peppers, which are another species.

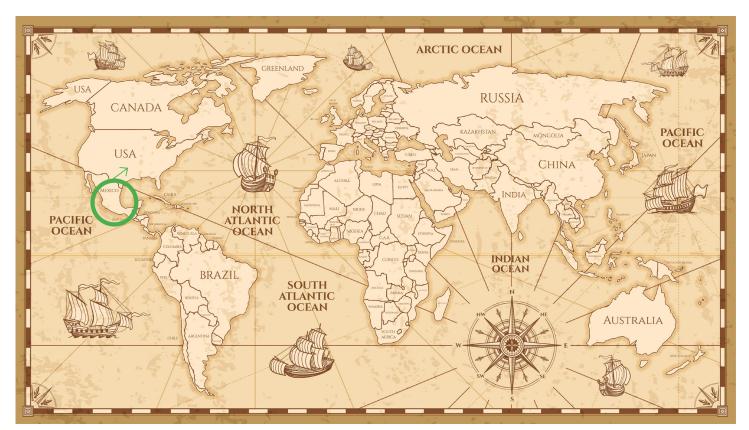


Figure 2. Map showing the origin and migration of sweet peppers to the U.S.

Growing

Varieties

Peppers can be broadly divided into sweet or hot types. The main types of sweet peppers are (1) bell or (2)

frying (see Figure 3). Hot pepper types include poblano (ancho), cayenne, jalapeño and others (e.g., Anaheim, habanero, serrano); but only recommended varieties for these types will be covered at the end of this section.

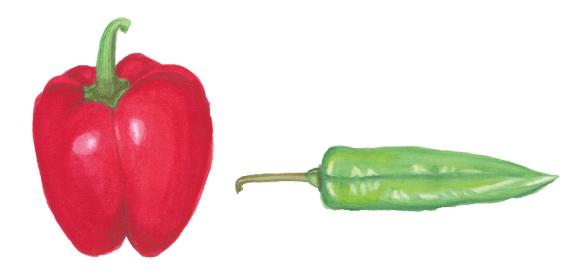


Figure 3. Main types of sweet peppers are bell and frying.

Sweet bell pepper fruits are traditionally blocky shaped, lobed and range from 4-12 inches long. The fruit's first stage of ripeness is generally green and glossy but it continues ripening to either red, orange, yellow, brown or purple at the mature fruit stage. The seeds and stem are removed from the harvested fruit and the flesh is eaten. Sweet frying peppers have a smaller width and a more tapered (elongated) shape. A common frying variety is the Cubanelle, a Cuban pepper that is very flavorful and common in Caribbean island cooking.

Peppers have either open-pollinated (including heirloom) or hybrid varieties. Some peppers are heirloom varieties, like the Giant Marconi and Sweet Banana, meaning these seeds have been saved for at least 50 years, can be saved each season and replanted, and are open-pollinated. Peppers produce perfect (containing both male and female parts), mostly self-pollinating flowers. If saving seed, different varieties only need to be separated by a distance of 300-1,600 feet to prevent cross-pollination. Generally, it is not

recommended to save seed from fruit for future planting with hybrid varieties as they are usually not expressed properly in the next generation.

It is recommended to select disease-resistant varieties whenever possible. In Louisiana, the hot and humid climate may increase risk for disease and pest pressure in pepper plants. This may cause fruits to fail to reach full maturity or ripen past the green stage. See the recommended sweet pepper varieties for Louisiana in Table 1.

Recommended hot pepper varieties for Louisiana include: Poblano (ancho), Long Red Cayenne, Red Thick Cayenne, Super Cayenne, Jalapeño El Rey, Garden Salsa Jalapeño, Inferno, Jalapeño, Mitla Jalapeño, Mucho Nacho Jalapeño, Tam Mild Jalapeño, Tormenta Jalapeño, Anaheim Chile, Hatch Chile, Big/Giant Chile, Habanero Caribbean Red, Charleston Hot, Red Cherry Bomb, Chilly Chili, Santa Fe Grande, Habanero, Hildago Serrano, Hungarian Hot Wax, Mariachi, NuMex, Serrano, Thai and Tabasco.

Table 1. Recommended Sweet Pepper Varieties for Louisiana

Variety Name	Description	Days to Harvest*	Fruit & Plant size	Resistance
Bell				
Admiral	Green to yellow fruit; thick walls; productive; good foliage; hybrid	84 days	Fruit: 4.5x4.5" long Plant: 18-24" tall	Tobacco mosaic virus, bacterial leaf spot, potato virus Y
Aristotle	Green to red fruit; thick walls; productive hybrid	73 days	Fruit: 4x5" long Plant: 18" tall	Tobacco mosaic virus, bacterial leaf spot, potato virus Y
Big Bertha	Large, elongated variety; green to red fruit; thick walls; hybrid	70 days	Fruit: 4x7" long Plant: 20" tall	Tobacco mosaic virus
Blushing Beauty	Ivory to pink to red fruit; thick walls; sweet at any color; bushy compact habit; productive hybrid	72-75 days	Fruit: 4x4" long Plant: 18" tall	Tobacco mosaic virus, bacterial leaf spot, potato virus Y
California Wonder	Traditional variety; green to red fruit; smooth, thick walls; upright habit; heirloom variety	65-75 days	Fruit: 4x5" long Plant: 24-30" tall	Tobacco mosaic virus
Camelot	Green to red fruit; glossy, productive hybrid	75 days	Fruit: 4.5x5" long Plant: 24" tall	Tobacco mosaic virus, bacterial leaf spot
Capistrano	Green to red uniform fruit; thick walls; productive; open-pollinated	76 days	Fruit: 3.5x4" long Plant: 24" tall	
Emerald Giant	Green to red fruit; thick walls; productive; open-pollinated	74 days	Fruit: 3.5x4.5" long Plant: 30" tall	
Excursion	Large green to red fruit; glossy; thick walls; productive hybrid	84 days	Fruit: 4.5x4.5" long Plant: 30" tall	Tobacco mosaic virus, bacterial leaf spot, potato virus Y, tomato spotted wilt virus
Flavorburst	Lime green to golden yellow fruit; very sweet and flavorful; productive hybrid	67-87 days	Fruit: 3x4" long Plant: 18-24" tall	
Golden Summer	Lime green to bright yellow block fruit; productive hybrid	70 days	Fruit: 4x4" long Plant: 24-36" tall	
Islander	Violet purple to dark red fruit; thick walls; productive hybrid	56-81 days	Fruit: 4-6" long	Tobacco mosaic virus
Jupiter	Green to red fruit; good foliage; productive; open-pollinated	65-75 days	Fruit: 4-5" long Plant: 3-5' tall	Tobacco mosaic virus, drought
Keystone Giant	Green to red fruit; thick walls; productive; open-pollinated	75 days	Fruit: 3.5x4.5" long Plant: 36" tall	Tobacco mosaic virus, adverse weather conditions
King Arthur	Early variety; green to red fruit; thick walls; very sweet; hybrid	59-79 days	Fruit: 4.5x4.5" long Plant: 30" tall	Tobacco mosaic virus, bacterial leaf spot, potato virus Y
Lafayette	Green to yellow fruit; productive; thick walls; hybrid	78 days	Fruit: 2.5x3.5" long Plant: 24" tall	Potato virus Y, bacterial leaf spot, pepper mottle virus
Lilac	Large ivory to lilac lobed fruit; productive hybrid	70 days	Fruit: 3.5x4.5" long Plant: 24" tall	Tobacco mosaic virus
Marconi	Giant, tapered, horn-shaped green to red fruit; productive; Italian heirloom variety; heat tolerant	70-90 days	Fruit: 7-12" long Plant: 18-24" tall	

Variety Name	Description	Days to Harvest*	Fruit & Plant size	Resistance
Paladin	Green to red fruit; blocky, large hybrid	61-82 days	Fruit: 4-6" long Plant: 24-36" tall	Tobacco mosaic virus, Phytophthora root rot
Pimento L	Wide, heart-shaped, green to red fruit; productive; open-pollinated	95 days	Fruit: 2.5x4.5" long Plant: 18" tall	Tobacco mosaic virus
Purple Beauty	Green to purple to red fruit; bright green flesh; thick walls; productive; open-pollinated	55-80 days	Fruit: 3x3-4" long Plant: 3' tall	Tobacco mosaic virus
Red Knight	Green to red fruit; thick walls; productive hybrid	78 days	Fruit: 4x4" long Plant: 24" tall	Tobacco mosaic virus, bacterial leaf spot, potato virus Y
Revolution	Green to red fruit; thick walls; early variety; productive hybrid	72 days	Fruit: 4x4" long Plant: 36" tall	Bacterial leaf spot, Phytophthora root rot, cucumber mosaic virus
Super Heavyweight	Largest, heaviest, thickest-walled variety; green to bright yellow fruit; flavorful hybrid	77 days	Fruit: 5-6x7" long Plant: 24-36" tall	
Tequila	Lavender to orange to red fruit; very productive; attractive, blocky hybrid	65 days	Fruit: 4x4.5" long	Tobacco mosaic virus, blossom-end rot
Yolo Wonder	Improved version of California Wonder; green to red fruit; heirloom variety	70 days	Fruit: 4" long Plant: 24-28" tall	Tobacco mosaic virus
Frying				
Biscayne	Cubanelle-type; yellow-green to red fruit; productive; great for the South; hybrid	80 days	Fruit: 2x7" long Plant: 30" tall	
Carmen	Similar to Corno di Toro variety in Italy; green to red tapered fruit; productive hybrid	60-80 days	Fruit: 2.5x6" long Plant: 20" tall	
Cubanelle	"Cuban pepper;" thin walled, yellow- green to orange-red fruit; flavorful; twisted and long shape; open- pollinated	68-70 days	Fruit: 6-8" long	
Gypsy	Tapered yellow to orange to red fruit; eat at any ripeness stage; productive; suitable for containers; hybrid	65 days	Fruit: 2x5" long Plant: 24-36" tall	Tobacco mosaic virus
Sweet Banana	Tapered, banana-shaped yellow to orange to red fruit; eat at any ripeness stage; productive heirloom variety	65-70 days	Fruit: 6" long Plant: 42" tall	
Tiburon Poblano	Mild heat; glossy green to red fruit; productive, uniform hybrid	60 days	Fruit: 7" long Plant: 30-36" tall	Tobacco mosaic virus, bacterial leaf spot, cucumber mosaic virus

Notes: *From transplant to harvest

Table varieties selected from recommendations from LSU AgCenter, UF Extension, Texas A&M Extension and Southeastern U.S. Vegetable Crop Handbook. Variety descriptions compiled from High Mowing Organic Seeds, Johnny's Selected Seeds, Reimer Seeds, Southern Exposure Seed Exchange, Sow True Seed, All-America Selections, Hoss Tools and Osborne Seed.

Other recommended sweet pepper varieties for Louisiana include: Bell: Aladdin, Bell Boy, Bell Tower, Declaration, Enterprise, Heritage, Jackpot, Plato, Stiletto, Valencia. Frying: Banana Supreme.

When and How to Plant

Peppers are warm-season, frost-sensitive, tropical perennials grown as an annual in Louisiana. Pepper seeds should be started inside 6-8 weeks before the desired transplant date (refer to Pepper Planting Guide, Table 2). Using seed germination trays (with at least 1.5-inch diameter cells), plant one seed per cell at a shallow depth, about 1/8-inch deep, just deep enough

to be covered with a thin layer of soilless potting mix (see Figure 4). Seeds will germinate best in a well-lit area in soil temperatures between 65 and 95 degrees Fahrenheit (optimum germination temperature is 85 F). It is essential to keep soil moist, which usually requires daily light watering. A seedling heat mat and plastic dome lid are helpful in maintaining ideal germination conditions.



Figure 4. Planting seeds in a germination tray.

Table 2. Sweet Pepper Planting Guide

Transplant Outside Dates	Plant Spacing (inches)	Row Spacing (inches)	Rows Per Bed	Days to Harvest*
North LA: April-May 15, July-Aug. 15 South LA: March 15- May 15, July-Aug. 15	12-18	36	1-2 rows, 6-12" apart in 30-40" beds	90-100 days (55-75 days)

^{*}First range of days: seed to first harvest; second range of days in parenthesis: transplant to first harvest.

Note: Table adapted from LSU AgCenter and UF Extension Planting Guides and Southeastern U.S. Vegetable Production Handbook.

As a warm-season crop, peppers are sensitive to cold temperatures below 50 F and hot temperatures above 90 F. Bloom drop and a reduction in fruit size may occur in temperatures over 95 F. The optimum growing conditions are warm days (80-90 F) and cooler nights (65-70 F). The expected growing season for peppers is 13-15 weeks.

Where to Plant

Since peppers are a warm-season crop, well-draining, warm soil and full sun (at least 6 hours/day) are required. Pepper plants prefer a soil pH between 5.5 and 6.8, are sensitive to a low pH, but will tolerate heavier soils. It is recommended to plant peppers in box beds or in traditional raised garden rows that are about 12 inches tall to ensure good drainage. In all types of gardens, it is recommended to add a layer of compost, peat moss, rotted hay or other organic matter and mix into the soil to optimize plant health. This is especially important for pepper plants, as they thrive in soil high in organic matter.

Reflective plastic mulch — or a plastic fabric/film — is recommended to deter aphids that transmit viruses, increase soil temperature and control weeds. Drip irrigation is also recommended when using plastic mulch to maintain ideal soil moisture and to encourage productive plants.

Each season rotate plant families — avoid planting crops from the same plant family in the same area of the garden — to reduce disease and pests. A longer crop rotation is recommended for *Solanaceae* crops to reduce pest pressure and risk of disease.

Plant Care

It is recommended to follow <u>sustainable gardening</u> principles.

Watering: Check for adequate soil moisture every 2-3 days. The soil should remain moist but take care not to oversaturate, as this encourages blossom-end rot. Drip irrigation helps to meet the high-water demand for this crop, which is especially important during the fruiting stage. Deep watering is important to encourage a more extensive root system. If plants are stressed for adequate water, this will significantly impact pepper production.

Fertilization: Blossom-end rot is the most common nutritional disorder of peppers. A dark, leathery, sunken patch on the part of the fruit farthest from the stem, it develops when calcium is unavailable to the plant. Often, the soil has sufficient calcium, but the gardener is not

watering frequently enough to keep soil calcium dissolved and available for root uptake. If the disorder continues after watering problems are corrected, conduct a soil test and discuss results with a local county extension agent.

Organic fertilizers, such as compost, fish emulsion, composted poultry litter or manure, worm castings, and blood or bone meal, originate from living organisms. They are safer and far more environmentally sustainable than traditional synthetic fertilizers. They naturally release nutrients more slowly and over a longer period of time. When applying organic fertilizer, it is important to use in unison with compost, cover crops and crop rotation, which all work together to build soil health. Learn how to convert inorganic fertilizer recommendations to organic fertilizers here.

Alternatively, a synthetic fertilizer may be used at a rate of about 1.25 pounds (2.5 cups) of 13-13-13 for every 25 feet of row or 75 square feet. Broadcast, or sprinkle evenly, over the soil and then mix in about 3-6 inches using a rake. Supplemental side-dressing, or reapplication of synthetic or organic fertilizer, is recommended when the first immature fruits are visible. Side-dressing is the addition of fertilizer to the soil around already established plants when the plant begins to fruit or vine, primarily to provide nitrogen. If using synthetic fertilizer, sprinkle 2 tablespoons around each plant, keeping it about 6 inches away from the plant stem, and water into the soil. Repeat every 3-4 weeks. Because of their slow, steady release of nitrogen, crops fertilized with organic fertilizer do not usually need to be side-dressed, but fish emulsion is a good, quick-release source of organic nitrogen for side-dressing if needed.

Support: Pepper plants must be staked to support the fruit; this will also optimize yield and fruit quality. Drive 2-3-foot wooden stakes that are 1-inch wide into the ground (about 10 inches deep) before transplanting at the recommended plant spacing intervals (about 12 inches apart). One transplant should be planted beside each stake and secured to it using garden or butcher twine. When plant reaches 12-15 inches tall, tie to the stake with a loose loop to prevent future stem girdling. Continue securing the plants to the stakes for every 12-15 inches of growth. See Figure 5.



Figure 5. Staking and securing pepper plants.

For extra support, the Florida Weave technique may be used in addition to individual pepper plant staking, though this method may not be sturdy enough to replace staking entirely. For the Florida Weave technique, place a metal T-post at the end of each row and one in the middle, then place squared wooden stakes between every few peppers. When the plants are 12-15 inches tall, use garden or butcher twine to run line on each side of the row of plants (about 10 inches above the soil) and tie the twine to the stakes (do not zigzag string between plants, as they are tender and breakable). In this method, the plant is never tied to the twine or stake. It's recommended to do one more level of twine when the plants have grown another 12-15 inches, about 10 inches above the last support weave. Watch this helpful video tutorial on the Florida Weave system (skip to 5:20 for pepper-specific trellising).

Weeds: Plastic mulch will control most of the weeds; hand pull weeds close to the plant, especially in the planting holes. Pepper plant roots grow at a shallow depth, so take care using hand tools to weed.

Insect pests and diseases: Aphids and thrips are common insect pests for pepper plants and can transmit harmful viruses. Peppers are susceptible to viruses (e.g., tomato spotted wilt virus, tobacco mosaic virus and potato virus Y), fungal diseases (e.g., Phytophthora root rot and anthracnose), and physiological disorders (e.g., blossom-end rot and sun scald). Many pepper varieties are resistant to specific diseases and these should be selected and planted — especially if the garden has been afflicted by one or more diseases in previous growing seasons. See Table 3 to aid in diagnosis and management of some common pepper insect pest and diseases, but common prevention and management methods include removal of plant debris, crop rotation and increased air circulation.

Table 3. Organic and Natural Management for Common Pepper Insect Pests and Diseases

Symptoms	Diagnosis	Organic and Natural Management
 Wet, humid conditions Sunken spots on fruit, with pink spores 	Anthracnose	 Plant resistant varieties; select against red and yellow fruit varieties Crop rotation (3 years) Avoid working in fields when plants are wet Mulch; avoid overhead irrigation Regular harvest; remove diseased fruit Organic/natural fungicides
 Curled and yellowed leaves Stunted crops Sticky honeydew on leaves 	Aphids (green peach, melon)	 Timely planting and harvest Reduce water stress Weed control Use water jet to dislodge Reflective mulches, insect barrier fabric Beneficial insects: lady bugs, lacewings, predatory stink bugs, syrphid flies Insecticidal soap, neem oil, pyrethrin, Azera
 Warm, humid conditions Small yellow-green, water-soaked spots on lower and older leaves Older spots become brown-black with yellow halo Yellowed leaves; defoliation Blossom drop and yield loss 	Bacterial leaf spot	 Plant resistant varieties Avoid overhead irrigation Avoid working in fields when plants are wet Reduce plant stress Copper-based fungicide sprays
 Green-yellow or black sunken spot on bottom of fruit Premature fruit ripening Calcium deficiency Drought stress, root damage Over-irrigation, high humidity 	Blossom-end rot	 Plant resistant varieties Keep soil pH at 6.0 to 6.5 Fertilize (abundant calcium) and mulch Adequate, consistent irrigation, avoiding very wet/very dry cycles If soil is calcium deficient, drench soil around plants with calcium solution; remove fruit
 Small irregular holes in leaves Concentrated damage in young plants and seedlings Stunted plants, reduced yield 	Flea beetle	 Timely planting Perimeter trap cropping (radishes) Super Light Insect Barrier or AgroFabric Pro to protect transplants Crop rotation Reflective mulches Beneficial insects: parasitic nematodes Insecticidal oil, spinosad, pyrethrin, Azera
 Small yellow larvae Tunnels inside leaves with white trails 	Leaf miners	 Row cover. Beneficial insects: parasitic wasps Remove infected leaves Spinosad
 Active June-August Maggots exit at blossom end; tiny round holes Oval brown pupae inside fruit Premature ripening or fruit decay 	Pepper maggot	 Yellow sticky cards (3x5") attract flies, which lay the eggs; attach to small wire stakes near soil Perimeter trap cropping (cherry peppers) and spray or remove pests with vacuum

Symptoms	Diagnosis	Organic and Natural Management
 Wet soil at plant base Late summer, early fall Stunted plants; off-color Plant wilt and death 	Phytophthora root rot	 Well-draining soil; add compost Plant resistant varieties Remove diseased plants
Aphid-transmittedLeaf streaking, mottlingStunted plants; yield loss	Potato virus Y	 Plant resistant varieties Reflective mulches Trap cropping, weed control Remove infected plants, control aphids
 Girdled stem Plant wilt and death Soil warming in spring White fungal growth; mustard seed-like structures at plant base 	Southern blight	 Remove diseased plants and topsoil Crop rotation with nonhost crops to reduce levels
Overexposure to sunlightThin foliage canopy, defoliationDrought stress	Sun scald	Plant varieties with thick foliageThick foliage canopy or shade cloth
 Mottled (mosaic), light and dark green foliage Stunted plants Uneven fruit ripening; yield loss 	Tobacco mosaic virus	 Plant resistant varieties Reflective mulches Remove diseased plants immediately
 Black, irregularly shaped lesions on leaves Discolored or lesioned fruit Stunted plants; wilt Transmitted by thrips 	Tomato spotted wilt virus	 Plant resistant varieties Weed control, reflective mulches Avoid growing ornamental bedding plants with pepper transplants Remove diseased plants immediately
 Transmitted by whiteflies Yellowed and distorted leaves Stunted plants; small leaves; bushy appearance Reduced yield, blossom drop 	Tomato yellow leaf curl virus	 Plant resistant varieties Manage whiteflies; cover plants with floating row covers Weed control, reflective mulches Remove and discard infected plants immediately
 Leaf discoloration and wilt Tiny white flies flutter when plants are disturbed Sticky honeydew on leaves Black sooty mold fungus 	Whiteflies	 Regular monitoring of plants Crop rotation Insect netting (50+ mesh) Beneficial insects: lacewings, parasitic wasp, predatory mite Insecticidal soap, neem oil, Beauveria bassiana

Note: Adapted from LSU AgCenter, Texas A&M AgriLife Extension, UMass Extension Vegetable Program, and Alabama A&M and Auburn Universities Extension. The Louisiana Pesticide Law regulates the use of pesticides in schools to protect children and staff from harmful exposure to chemicals and is enforced by LDAF. The recommended alternative to routine pesticide use is integrated pest management (IPM), which combines pest control, disease management techniques and organic/natural alternatives, many of which are found in this table.

Harvest and Storage

Peppers may be harvested at any stage of ripeness, usually marked by color from dark green to red, yellow, orange, brown or purple. The fruit should have reached mature size and be firm and glossy. Harvest the fruit by hand using harvest/pruning snips to clip the stem of the fruit from the plant.

Peppers are usually harvested every week for at least 3-5 weeks, or until fruit production stops. The fruit is bruised easily and should be handled with care post-harvest. Fruit will continue to ripen post-

harvest; storing at room temperature will speed up this process.

Harvested peppers should be stored in the refrigerator and are best consumed within 5-7 days. Ideal storage temperatures for peppers are 45-55 F with high humidity (90-95%). In these conditions, peppers will hold for 2-3 weeks. Take care not to store peppers below 45 F, as they are cold sensitive.

Preserve peppers by freezing or canning.

Nutrition

Peppers Are Nutritious and Good for You

Good source of vitamin A and lutein

Important for eye health, a strong immune system and cell growth.

Rich in vitamin C, E and B6

Important for bones, skin and blood vessels; repairs damaged cells; supports immune system and brain health.

Recipes

Basics of cooking with sweet peppers: extension.purdue.edu/foodlink/food.php?food=sweet%20pepper General information on selecting, pairing, preparing and storing. Also includes a list of recipes.

Video on how to prepare sweet peppers: youtu.be/SlixzXi3gfo

Ever wondered about the basics of how to prepare sweet peppers? Chef Allison Kingery shows a couple of options for preparing this vegetable.

Taste Test Ideas







Stuffed Bell Peppers

Veggie Fajitas

Pizza with Peppers

Other websites with many sweet pepper recipes:

Arizona Health Zone

Visit www.azhealthzone.org/recipes and search for pepper recipes.

USDA MyPlate Kitchen

Visit www.myplate.gov/myplate-kitchen/recipes and search for pepper recipes.

California's Eat Fresh

Visit <u>eatfresh.org/find-a-recipe</u> and search for pepper recipes.

Produce for Better Health Foundation fruitsandveggies.org/fruits-and-veggies/bell-peppers/?view=recipes Recipes include stuffed pepper soup, grilled vegetables and more.

Oregon State University's Food Hero

foodhero.org/recipes/category/1297

Recipes include vegetarian chili, veggie quesadillas and more.

Sources

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- Alabama A&M & Auburn Universities Extension, Crop Production www.aces.edu/blog/category/farming/crop-production
- UMass Extension Vegetable Program: Disease, Insect, and Mites Fact Sheets ag.umass.edu/vegetable/fact-sheets
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 cals.arizona.edu/fps/sites/cals.arizona.edu.fps/files/cotw/Sweet_Pepper.pdf
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