



**CORNELL
COOPERATIVE
EXTENSION OF
ONEIDA COUNTY**

HOME GROWN FACTS

121 Second Street Oriskany, NY 13424-9799
(315) 736-3394 or (315) 337-2531 FAX: (315) 736-2580

GROWING PEPPERS



Sometimes peppers are a challenge to grow in cooler areas of New York. The many varieties of sweet and hot peppers thrive on full sun, warm weather, well-drained soil and modest fertility.

Site Characteristics

Sunlight:

- full sun

Soil conditions:

- requires well-drained soil

Well-drained, light, moderately fertile soil, high in organic matter. Needs steady supply of water for best performance.

Special locations:

- outdoor containers - Provides attractive plants and ornamental as well as edible fruit

Plant Traits

Lifecycle: annual

Perennial in tropical regions, grown as a tender annual in New York.

Ease-of-care: moderately difficult

Fruiting can be temperamental. Requires warm temperatures. Using black plastic and row covers can speed early growth.

Height: 1 to 3 feet

Spread: 1 to 3 feet

Bloom time:

- early summer
- mid-summer
- late summer

Flower color: white

Foliage color: dark green

Foliage texture: medium

Shape: upright

Shape in flower: same as above

Special characteristics:

- not native to North America - Native to tropical America.
- bears ornamental fruit - Green bell peppers turn red when fully ripe. Other varieties are yellow, orange, purple and chocolate brown. Hot peppers, chiles, and others come in many interesting shapes.

Helping You Put Knowledge to Work

Growing Information

How to plant:

Propagate by seed

Germination temperature: 70 F to 95 F - Will not germinate below 55 F.

Days to emergence: 7 to 10 - at soil temperatures around 85 F.

Seed can be saved 2 years.

Maintenance and care:

Sow seeds indoors, 1/4 inch deep in flats, peat pots or cell packs, 8-10 weeks before you anticipate transplanting outside. Seed germinates best when soil temperature is 80 F or higher. It will not germinate below 55 F.

Keep plants indoors in a warm (70 F during the day, 65 F at night), sunny location. Lack of light will produce leggy, unproductive transplants.

Don't be in a rush to transplant outside. Cold temperatures can weaken plants and they may never fully recover. A few days at 60 F to 65 F with reduced water will help harden plants and reduce transplant shock. Over-hardened plants grow slowly after transplanting.

Set plants out 2 to 3 weeks after average last frost when the soil has warmed and the weather has settled. Plant them 12 to 24 inches apart, in rows 24 to 36 inches apart, or spaced about 14 to 16 inches apart in raised beds.

Use black plastic and/or row covers to speed soil warming and early growth. Use caution with row covers not to overheat plants and cause them to drop their blossoms.

If not using black plastic, mulch plants after they are well established and the soil has warmed to retain moisture and control weeds.

Peppers can be temperamental when it comes to setting fruit if temperatures are too hot or too cool. Night-time temperatures below 60 F or above 75 F can reduce fruit set.

Too much nitrogen fertilizer may promote lush vegetative growth but fewer fruits. Peppers usually responds well to phosphorus fertilizer.

Stake tall varieties for earlier and heavier harvest.

Peppers need even moisture for best performance. An even supply can reduce blossom end rot, a disorder caused by lack of calcium.

Do not plant in same spot more than once every 4 years.

Pests:

Aphids - A hard stream of water can be used to remove aphids from plants. Wash off with water occasionally as needed early in the day. Check for evidence of natural enemies such as gray-brown or bloated parasitized aphids and the presence of alligator-like larvae of lady beetles and lacewings.

Borers - Remove by hand. Destroy infested plants.

Other pests:

Tarnished plant bugs

Diseases:

Cucumber mosaic virus - Disease causes ringspots and oak-leaf patterns on fruit. Rogue plants. Remove and destroy entire infested plant. Control aphids that spread the virus. Eliminate perennial weed sources such as milkweed, marshcress and yellow rocket and avoid planting next to susceptible ornamentals.

Blossom end rot - Water during drought or mulch to keep moisture level constant. Grow in soil high in organic matter. Fertilize properly. Avoid cultivating close to plants.

Varieties

In cooler areas of the state, choose short-season varieties. Disease-resistant varieties are good for warm, humid conditions.

Peppers are often classified by the shape of their fruit -- the familiar bell, round cherries, heart-shaped anchos, long cayennes. Any of these shapes may be either sweet or hot.

Two of the hottest peppers are closely related but different species: *Capsicum chinense* (habañero) and *Capsicum frutescens* (tabasco).

Some varieties recommended for New York include:

Early: Ace, Apple, Golden Bell, Gypsy, Lipstick, New Ace, Redstart,

Main Season: Boynton Bell, Golden Bell (Yellow), King Arthur, Lady Bell, Sweet Banana, Sweet Chocolate, Yellow Belle II

Hot: Anaheim, Biscayne, Cayenne Long, Habanero, Hungarian Yellow Wax, Jalapeño, Mucho Nacho, Serrano, Super Chili

Stuffing: Joe E. Parker

Thin Walled Frying Types: Cubanelle, Italian Sweet

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