



**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 POLE BEANS



Pole beans yield two to three times more than bush beans from the same space, are easier to harvest, and many gardeners believe they are better tasting. Both types have similar requirements, except pole beans need a 5- to 8-foot-tall support. Can provide strong background or vertical element in flower garden.

Site Characteristics

Sunlight:

- full sun

Can tolerate partial shade but will reduce yield.

Soil conditions:

- requires well-drained soil

Prefers well-drained soil, but with consistent moisture. Only requires average fertility. pH 6.0 to 6.8

Plant Traits

Lifecycle: annual

Tender annual

Ease-of-care: easy

Height: 5 to 10 feet; Needs support of trellis or other structure.

Spread: 1 to 2 feet

Bloom time:

- mid-summer
- late summer

Flower color: white

Foliage color: medium green

Foliage texture: medium

Shape: climbing / vine

Shape in flower: same as above

Growing Information

How to plant:

Propagate by seed - Do not start seeds inside. Beans do not like to be transplanted.

Germination temperature: 70 F to 80 F—Germination is slow and poor when soil temperatures are below 60 F.

Days to emergence: 8 to 10 - Germination may take two weeks or more if soil temperatures are below 60 F.

Seed can be saved 5 years.

Helping You Put Knowledge to Work

Maintenance and care:

Do not plant until danger of frost has passed and soil has warmed. Germination is poor when soil temperature is below 60 F. Cold air temperatures (even above freezing) can injure plants and reduce yields.

Construct trellis, teepee, or single-pole support before seeding to avoid injuring plant roots later. Bamboo poles or saplings lashed together make easy, inexpensive supports. Do not locate trellis where it will shade other plants that need full sun.

Plant seed 1 inch deep (deeper if soil is dry), in hills of four to six seeds at the base of each pole. Plant 3 inches apart in rows along the base of linear trellises.

Soaking beans to hasten germination may damage seeds. Do not start seed inside.

Beans require even moisture - about 1 inch per week - especially when flowering and developing pods. If you water, avoid wetting foliage, which encourages disease. Water early in the day so foliage dries quickly. Mulch after second set of true leaves develops to help retain moisture.

Do not use nitrogen fertilizers. Inoculating seed with rhizobium bacteria may increase yields, especially in soils where beans have not been grown before.

Pod set is often poor when temperatures exceed 90 F.

Deformed pods may be the result of lack of moisture, poor soil fertility or insect damage during blooming.

A three-year rotation helps reduce some diseases.

Pests:

Mexican bean beetles - Handpick and destroy beetles and eggs in small plantings. Plant early to avoid this pest. Turn under any infested plants after harvest.

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.

Leafhoppers - Small, light green to gray wedge-shaped insects that suck plant juices, causing stunting, and carrying virus diseases. No cultural control available.

Seedcorn maggot - Avoid heavy manure or organic matter in garden which attract maggot flies and encourages egg laying. Purchase insecticide-treated seed. Use gloves to plant.

Spider mites (two-spotted) - Wash off with water occasionally as needed early in the day. A hard stream of water can be used to remove many mites from plants.

Diseases:

To reduce disease spread, do not work among wet plants.

Bacterial blights - Avoid wetting foliage if possible. Water early in the day so aboveground plant parts will dry as quickly as possible. Avoid crowding plants. Space apart to allow air circulation. Eliminate weeds around plants and garden area to improve air circulation. Do not save your own seed.

Bean common mosaic virus (BV-1 and NY 15) - Remove and discard or destroy entire infested plant along with immediately surrounding soil and soil clinging to roots. Use resistant varieties: Lancer, Provider, Blue Bush 274, Golden Butterwax, Royal Burgundy, Tendercrop, Improved Tendergreen. Manage insect vectors.

White mold - Avoid wetting foliage if possible. Water early in the day so aboveground plant parts will dry as quickly as possible. Avoid crowding plants. Space apart to allow air circulation. Eliminate weeds around plants

and garden area to improve air circulation. In autumn rake and dispose of all fallen or diseased leaves and fruit. Crop rotation is essential.

Varieties

Pole bean varieties mirror bush beans. Pod color ranges from dark green to yellow (often called wax beans) and even to purple. Pods may be round or flat. (Romano types typically have broad, flat pods.) French filet varieties are slender and you should harvest them when they are 1/8 to 1/4 inch in diameter. Be sure to choose resistant varieties if you experience problems with bean diseases in your garden. You can harvest most varieties as snap beans, shell beans or dry beans. But each variety is usually best at just one of the three stages. Many heirloom varieties are available.

Some varieties recommended for New York include:

Green pods:

Blue Lake

Fortex

Kentucky Wonder

Kentucky Blue

Source: <http://www.explore.cornell.edu> 2006

This publication may contain pesticide recommendations. Changes in pesticide regulations occur constantly, some materials mentioned may no longer be available, and some uses may no longer be legal. All pesticides distributed, sold, and/or applied in New York State must be registered with the New York State Department of Environmental Conservation (DEC). Questions concerning the legality and/or registration status for pesticide use in New York State should be directed to the appropriate Cornell Cooperative Extension Specialist or your regional DEC office. **READ THE LABEL BEFORE APPLYING ANY PESTICIDE.**