



The main difference between bush and pole beans is the plants' growing styles: bush beans tend to grow more compactly and do not require support, while pole beans will vine and need to be grown up stakes or trellises. Bush beans generally require less maintenance and are easier to grow, but pole beans typically yield more beans and are very disease resistant.

How to Grow Beans

Planting

Beans need a warmer soil to germinate, at least 15 C (60F), cold soil can actually cause permanent shock to plants and they never recover. Sow in rows 75 cm (30 in) apart when danger of frost is past, 3 to 5 cm (1 to 2 in) deep and 5 cm (2 in) apart. Press down soil and keep moist till germination. Thin seedlings to 10 cm (4 in) apart. Several sowing ten days apart insure a fresh supply till frost. Bean roots are close to surface, do not cultivate too deep. 50 gram packet sows 10 m (33 ft) row. For best results use Nature's Aid Legume Inoculant, an organic non-chemical product which enhances root growth and yield.

Pole beans will grow as a climbing vine that may reach up to 15 feet tall. Therefore, pole beans require a trellis or staking. Bush beans will spread up to 2 feet, but do not require support.

- * Do not start seeds indoors; they may not survive transplanting.
- * Seeds can be sown outdoors anytime after the last spring frost; minimum soil temperature is 60 degrees F.
- * Plant 1 inch deep in normal soil, and a little deeper for sandier soils.
- * Bush beans: Plant 2 inches apart.
- * Pole beans: Set up trellises and plant 3 inches apart.
- * For a harvest that lasts all summer, sow beans every 2 weeks.

Care

- * Mulch soil to retain moisture; make sure that it is well-drained.
- * Water regularly, from start of pod to set. Water on sunny days so foliage will not remain soaked.
- * Beans require normal soil fertility. Only fertilize where levels are low. Begin after heavy bloom and set of pods.
- * Use a light hand when applying high-nitrogen fertilizer, or you will get lush foliage and few beans.
- * Weed diligently and use shallow cultivation to prevent disturbing the root systems.
- * Bean blossoms will drop from the plant if the weather is too hot, and too much nitrogen in the soil will prevent pods from setting.



Pests/Diseases

Downy or Powdery mildew: Are also fungi spread via spores although cool, moist conditions foster spore dispersal in downy mildew while absence of rain does so in powdery mildew. Fungicide application may be helpful as well as crop rotation, debris removal at the end of the growing season.

White Mold: also known as sclerotinia, is a fungal disease that affects over 360 different plants, including beans, peas, lettuce, and members of the cabbage family. White mold is sometimes called timber rot when it affects tomatoes. Mold symptoms appear on blossoms, stems, leaves, and pods that have water-soaked spots. Leaves will wilt, yellow, and die; pods may rot.

Plant in well drained soil and do not overcrowd plants and When watering your plants, try not to water the tops of them. Or water the plants early in the day so they have the chance to dry before nightfall. You can also spray your plants with a fungicide such as copper spray to help prevent infection. Spray the plants right before they bud, then spray again a week later.

Aphids: Multiply rapidly and suck the sap of the plant, resulting in weak and stunted specimens. This also results in very few pods and possible disease contagion such as pea leaf roll and mosaic virus.

End-All is an organic method of pea pest control in this instance.

Companion Planting

Because beans fix nitrogen in the soil, they are great helper plants in the garden. They are particularly good to plant with the following vegetables, which need nitrogen to thrive: Carrots, Beets, Broccoli, Brussel Sprouts, Celery, Corn, Eggplant, Peas, Kale, Potatoes, Radishes, Squash, Tomatoes, Strawberries, Peas, Swiss Chard.

Marigolds deter beetles and other insects from many garden plants including beans. African and French marigolds both produce a substance that suppresses nematodes—the microscopic worms that attack the roots of plants. Marigolds, in fact, are a recommended companion for many different edible plants.

Avoid planting with onion, garlic, leeks or scallions, kohlrabi, basil, and fennel. Beans grow poorly with sunflowers nearby. They don't get along at all.