
Growing Beans

During his year at Walden Pond, Henry David Thoreau labored to "make the ground say beans." Making the garden say beans makes as much sense today as it did 150 years ago. Beans are easy to grow. Nodules in their root systems fix atmospheric nitrogen, enriching the soil. And beans, especially dry beans, are nutritious - high in vegetable protein, fiber, iron and essential minerals.

Growing Conditions

Beans are warm-season crops that require full sun for good growth and yield. Although they will grow in a wide variety of soils, a sandy loam is best. Beans, especially limas, germinate slowly and grow poorly in cool, wet soil.

Maintain the soil pH in the range of 6.0 to 6.8 and follow the recommendations of a soil test, thoroughly incorporating fertilizers, rotted manure or compost into the soil bed before planting.

Planting

Wait to plant beans until after the last predicted spring frost in your hardiness zone, then consider waiting a bit longer. Beans will not germinate well when the soil temperature is less than 60° F (70° for lima beans)

Seed bush beans 1 to 1½ inches deep and 2 inches apart in rows spaced 15 to 18 inches apart; seed limas 1 inch deep if soil is heavy and limas to 4 to 6 inches apart. Seed pole beans 4 inches apart and space slender poles 12 inches apart or set up a trellis system of woven wire between sturdy posts set 10 feet apart.

Make successive plantings of green bush beans 10 to 14 days apart until about mid-July. Plant pole beans, limas, soybeans, shell beans and field (dry) beans only once, since they require a full season to mature.

Weed control

Quackgrass – Do not plant any vegetable in an area heavily infested with quackgrass. Clean out this weed by covering the area with heavy agricultural black plastic for a season, planting and tilling three successive crops of buckwheat or fallowing the ground and rototilling several times throughout the summer. The herbicide *glyphosate* is an effective quackgrass control. Follow label directions exactly. Not all beans are listed on the label.

To control annual weeds mulch with hay, straw, pine needles, chopped leaves or grass clippings after the beans are 2 to 3 inches high, or cultivate by hand while weeds are small. Practice shallow cultivation to prevent damage to bean roots.

Pest Control

To prevent bean diseases select disease-resistant varieties, thin plants to allow good air circulation

in the bean row, practice good weed control and do not work in the garden or harvest beans when the plants are wet.

Cutworms, Mexican Bean Beetle and Japanese Beetle are the major insect pests of beans in New Hampshire. In years when cutworms are numerous delay planting until the second week in June. To control Mexican Bean Beetles, begin checking young plants for signs of yellow egg clusters on the undersides of leaves or yellow, wooly larvae on the outside of leaves. Handpick and destroy. If an infestation gets out of control, spray bean plants with pyrethrum or another garden insecticide registered for bean beetles. Follow label directions precisely.

Some bean varieties resist Japanese beetles, others are highly susceptible. Although many pesticides are registered for Japanese Beetles, they often will not provide effective control especially during years of heavy infestation or in Japanese beetle-prone areas. In such cases, consider growing bush beans under spun-bonded polyester "floating row covers" available at most garden centers.

Harvest

Harvest snap beans while the pods are slender, before they begin to bulge. Harvest lima, shell, field, and soybeans for fresh use when the pods are well-filled. Dry beans (shell, field, and soybeans) should dry on the vine as long as possible (until the first heavy frost, if necessary) before threshing and storage. Pulling the plants and leaving them in the sun, laid out on a barn floor, or hung in small bunches from a rafter for 2 to 3 days will hasten drying. A thoroughly mature bean is *hard*. Give one the "bite test" before putting dry beans into storage. A properly-dried bean is nearly impossible to dent.

Storage

Store well-dried (and insect-free) beans in a can or jar with a tight cover to keep out insects and rodents. Keep in cool, dry and dark storage.

Stop! *Read the label on every pesticide container each time before using the material. Pesticides must be applied only as directed on the label to be in compliance with the law. All pesticides listed in this publication are contingent upon continued registration. Contact the Division of Pesticide Control at (603) 271-3550 to check registration status. Dispose of empty containers safely, according to NH regulations.*

Fact sheet originally developed by Dr. Otho Wells, former UNH Cooperative Extension Vegetable Specialist, revised 2/01

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