

Cleveland Seed Bank's

guide to growing

BEANS

Beans have long been cultivated for their fiber, protein, calcium, iron, and potassium content. Scientists estimate that humans domesticated beans 8,000+ years ago in what is known today as Mexico. 'Bean', a German word used even before the 12th century, is a general term describing many plants in the Fabaceae family.

Latin name: *Phaseolus vulgaris* (Bush/Pole)
& *P. coccineus* (Runner)

Sun: Full

Life cycle: Annual

Direct sow or transplant: Direct sow

Height: Bush beans ~ 2' & Pole beans 6'

Container Friendly: Yes.



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SOW



Direct sow/transplant: Beans don't like their roots disturbed and grow better when direct sown.

Common mistakes: Cold temperatures can rot bean plants, wait to sow until frost has passed. Avoid overcrowding, which increases disease susceptibility by encouraging humidity around the leaves, and can decrease bean abundance.

Days to germination: ~ 8-10 days, depending on temperature and weather.

When: Wait to direct sow beans after final frost. In NE OH, final frost is around the 2nd week of April.

Seedling Depth: ~ 2 inches deep.

Spacing: Depending on the variety, sow bean seeds every 2-4 inches. Once the cotyledons emerge, thin to 1 plant every 6 inches.

Succession sowing: Pole beans are so abundant they are only sown once. Bush beans can be succession sown every 3 weeks, until about 3 months before the first frost in fall.

Companion planting: Herbs and baby greens are a great choice - especially dill, basil, and cilantro.

GROW

Soil: Beans like semi-fertile, moist soil with a pH between 6.0-6.8. Beans can fix their own nitrogen and thus can thrive in even somewhat poor soils.

Trellising Pole beans will need support as they grow taller. Trellis support should be at least 5' tall. Bush beans typically do not need trellising, but it can help airflow.



Containers: Plant beans in 10+ gallon containers. Bush beans typically grow more easily in containers than pole beans. Grow 3-4 bean plants around the center, with 6" between them. Fill the surrounding outer edge with herbs.

Pests: Watch out for aphids, Mexican Bean beetles, and leafhoppers on bean plants. Check underneath the leaves for eggs!

Diseases: Bean Mosaic Virus, white mold, and Anthracnose all affect bean plants. Avoid overcrowding and avoid watering directly on bean leaves to prevent excess humidity around the plant.

HARVEST



All bean varieties can be harvested at different stages of maturity to collect snap, shelling, & dry beans; but most varieties have been bred with a specific maturity in mind.

Which type works best for you?

For snap beans: Harvest pods before the beans inside swell. Pick often so the bean plant produces more flowers to ensure more pods form (more abundance!).

For shelling beans: Harvest pods just before they lose their moisture and turn gold.

For dry beans: Harvest when pods dry and turn golden. Allow beans to dry further before shelling and storing.



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SAVE

Beans self-pollinate. With little chance of cross-pollination, they're an easy choice for seed savers!



2 Collect, put plants in a bag and thresh (to separate seeds by beating or stepping on them) to separate seeds from seedpods and other plant matter.

1 Ready for harvest once plants die and pods are completely dry. Mature seedcoat should not be easily nicked by a fingernail.



3 Beans can be stored for up to 4 years.



Preserving the harvest: Beans are commonly dried and stored for cooking later, but there are other ways to preserve your harvest too!

Blanch snap beans before freezing to preserve flavor and texture. Beans can also be pickled.

Always check to make sure your beans are not moldy or spoiled before preserving.

TYPES

Bush beans: Typically only growing 2' tall, bush varieties will bear fruit during a few weeks of the growing season and can be succession sown. Great for containers!

Pole beans: Pole varieties grow 5'+ tall, and need a trellis for support. They'll bear fruit throughout the season.

Runner beans: Often grown as an ornamental, their beautiful flowers can be eaten. Runners both self- & cross-pollinate, so keep *Phaseolus coccineus* varieties separate. Cook and prepare like a typical green bean, although most enjoy runner bean varieties dried.



Bush bean

Pole bean

Runner bean

Green beans: Often referring to all young tender beans, these are harvested for their whole pods. Also called snap or string beans.

Wax beans: Known also as butter beans, these beans are yellow (because they do not contain chlorophyll) with a crunchy texture and taste similar to green beans.

Haricots Verts: Also called french beans, these are long, thin, and stringless. They have a slightly sweet and nutty flavor.