

BEAN

Gardeners can pick from a wide variety of beans to grow: snap, dry, shelling, fava, and soy. Except for the soybean (Asia) and Fava beans (Mediterranean), all other beans originate from the Americas. Most are frost-sensitive, heat lovers that are easy to grow from seed and produce for a short amount of time, then die at the first signs of frost. Despite their short lifespan, beans will stand out as one of the most productive vegetables in your garden.

SOIL PREPARATION

Beans prefer a sandy soil, rich in organic matter, well drained, and not too heavy. They also need full sun exposure. Before planting, incorporate 1-2 inches of well composted organic matter, Humic, and 1 lb. of all-purpose fertilizer (we recommend "That's all it Takes" complete fertilizer or Happy Frog Organic Tomato & Vegetable Food) per 100 square feet and work them in to a depth of 4-6 inches. Heavy, clay-based soils must be amended with compost and organic matter to encourage and allow for good root development. For best results, add 2-4 inches of a variety of different types of organic matter and 50 lbs. of Zeolite soil conditioner per 100 square feet each fall for multiple years to increase drainage and nutrient availability. By doing this yearly, over time you can create a better growing environment for your garden plants to thrive in and produce. Please consult our Soil Preparation Guide in the attached appendix.

PLANTING

Beans germinate best when the soil and air temperature has consistently reached 60 degrees, which in Cache Valley usually occurs around mid-May. We recommend planting about a week before our last average frost date (May 20) as the seed won't germinate well until after the possibility of frost is past. Plant the beans about 1/2 to 1 inch deep and about 2 inches apart. Don't worry if you get the seeds closer, as beans are very forgiving when it comes to spacing. Since beans produce very quickly, and generally for a short amount of time (bush beans last for 2-3 weeks and pole beans produce for 4-8 weeks), they can be planted every few weeks until about the middle of July for a continuous crop all summer long. Beans can be planted after your cold crops are finished, even as late as mid-July for an excellent fall crop before first frost in late September.

VARIETIES

Some new varieties of beans have become available the last few years that really stand out above the rest. We still recommend Blue Lake Bush as a consistent producer of high yields of processing-quality beans. They are our customers' favorite for bottling. For flavor & high quality, try Jade or Valentino. Long, slender beans, delicious taste, and excellent quality, frozen or bottled, will make you ask for these beans by name year after year. For rich flavor, Mark enjoys Romano more than any other. Blue Lake Stringless is our best pole bean and produces longer, almost perfectly stringless pods and tastes great however you use them.

Mark says:
"Don't forget to inoculate your beans with a nitrogen fixing bacteria (Azos). Not only will the beans thrive and produce more beans for longer, but it will build up your soil with extra nitrogen."

WATER

Beans need consistent watering for high quality and quantity production. Water stress during flowering and pod formation will result in flower drop, poor fruit set, and poor quality. Use a soaker hose for uniform water distribution and water lightly every 3 days to maintain soil moisture during these essential growth stages. A light compost mulch can help as well if daytime temperatures start to climb over 90 degrees. Moisture is essential, but too much water can result in root rot diseases and slow plant growth. Consistency is key.

FERTILIZER

An all-purpose fertilizer at planting time ("That's All it Takes" complete fertilizer or Happy Frog Organic Tomato & Vegetable Food) will satisfy most beans need for nutrients. A light application of the same slow release fertilizer at the time pods begin to form will enhance production and extend your yield. Watch for signs of iron chlorosis in clay or heavy soils; new growth will pale first, and darker green

veins will stand out against the lighter color leaf tissue. A chelated iron spray (Iron Combo Chelate or Iron Chelate EDDHA) and/or drench will quickly correct the problem.

Don't forget to inoculate your beans with a nitrogen fixing bacteria (Azos). Not only will the beans thrive, and produce more beans for longer, but it will build up your soil with extra nitrogen. We also recommend treating your bean seed with beneficial microbes and mycorrhizae (Kangaroots or Myke). These added helpers bring nutrients and water directly to the plants that host them, making them stronger, more resistant to insects and diseases, and more drought tolerant.

SUPPORT

Bush beans only grow about 2 feet tall and do not need support for optimal production. Pole beans, however, must have something to grow on as they can stretch to 8 feet tall or even more. Wood poles, bamboo stakes, metal fence posts, chain link fence, and many other options work well to support the growing vines. Personally, we have made teepee trellises with 8 ft tall bamboo poles and a little string wrapped in a spiral up the poles that have produced as many beans per plant as our sophisticated, more permanent, 20 ft long steel post and wire fence. The beans climb like crazy on their own, and don't need any extra encouragement to grow for the sky. They will climb on whatever apparatus you provide.

BEAN	
PLANTING TIME	Group C
PLANTING METHOD	Rows
PLANT SPACING	12-18" Bush, 2-4' Pole
ROW SPACING	2-3'
SEED DEPTH	1/2"-1"
TIME TO HARVEST	60-80 days green, 90-110 days dry
WATER NEEDS	1/2-1", 2x weekly
TRANSPLANT/ DIRECT SOW	Direct
SPECIAL ISSUES	Weeds Spider Mites Aphids Iron Chlorosis



COMMON PROBLEMS

Aphids, spider mites, Mexican Bean beetles, leaf hoppers and cutworms all love beans and will devour and damage them without remorse. Organic and synthetic insecticides are available and safe to use to control all these pests (Fertilo-me Triple Action and Hi-Yield Indoor/Outdoor Insecticide give you the best of both worlds). And don't forget to protect them from browsing deer as well!

HARVESTING

Harvest your bush and pole beans before the pods are fully mature, usually when the beans are 5-7 inches long, slender, with firm, crisp flesh and very small, immature seeds inside. Pods are ready for picking generally 7-14 days after they begin flowering. Pick regularly to maintain a steady crop and use the beans immediately for the best quality and flavor. Refrigerate if you don't use the beans right away. Dry beans take 70-80 days to get to the shelling stage, and another 2-3 weeks to reach the dry bean stage. When the pods begin to dry out, pull up the plants and let the pods remain on the bush for another 5-7 days in the garden until they dry out completely. Once dry, remove the pods, shell out the seeds, and allow some additional drying time in a warm dry location. For long term storage, keep the beans in a sealed container in a cool dry place until needed.