



One of the most prolific and rewarding plants in the edible garden is also one of the best-looking – and it is low-maintenance and easy to cultivate, as well! Beans (Phaseolus vulgaris) are fast-growing, heat-loving plants and can be harvested over a long period (especially if you plant them in succession). Beans have small, delicate flowers, and some cultivars, such as 'Scarlet Runner', are brightly-coloured and abundant, making them a highly decorative element. The beautiful heart-shaped leaves are another attractive feature of bean plants.



# **Types of Beans**

There are two main types of beans. Determinate beans are multi-stemmed and compact, growing in a bush form, while indeterminate beans – commonly known as pole beans - are vining. Bush beans come in a variety of pod sizes, from short and stubby to long and thin, and the pods may be flat or round. Bush beans may range in colour from green and yellow (sometimes called wax) to purple and even speckled. Pole beans vary widely in pod size and shape as well, and they may be green, purple, white, yellow, speckled, and even grey in colour. Beans fall into several sub-categories, as well, based on how they are consumed. Snap beans are harvested for their immature pods. These include the very popular green and yellow beans. Shelling beans such as lima and butter are harvested while the beans inside the pods are still green. Dry beans are harvested when the beans inside the pods are mature and dry. These include kidney and pinto beans. Try these tips for growing healthy, heavy yielding beans in your edible garden!

### Siting

Offer beans a location in full sun (at least 6 hours per day), but keep them out of drying winds and scorching hot conditions. Beans are adaptable to a wide range of soil conditions, but prefer well-drained loam. Compacted clay soils can cause water to pool and rot the root systems of plants. If necessary, condition the soil with organic matter such as compost to try to improve soil structure. Compost will also boost the nutrient content and should be used as an amendment before beans are sown into the garden bed.



## Sowing

Beans are warm-season crops and should be direct sown into warm soil (at least 10°C), well after the threat of frost has passed. The seeds will not germinate (or will be slow to germinate and possibly rot) in cool soils. There is no need to start bean seeds indoors for transplant outdoors in the spring, unless you want to get a jump on the season – most cultivars grow very quickly once germination occurs and you should be able to successfully harvest your crops before cold weather hits in the autumn, even in a region with a short growing season. If you choose to start beans indoors, you can sow them approximately three weeks before planting them out. Be sure to harden the seedlings off before they are transplanted into their summer homes. The young plants need to acclimatize to the more exposed, harsher conditions. Place the seedlings outdoors during the day, in a location sheltered from bright, hot sunlight, and drying winds. Bring them inside at night. Gradually increase the amount of hours the plants are outside over a period of approximately two weeks. By the end of this timeframe, they should be able to stay out all day and all night.

Beans should be sown 10 centimetres apart in rows or squares, according to your preference. Plant these large-sized seeds at a depth of at least 3 centimetres. There is no need to soak the seeds before planting; in fact, this may increase the chance of the seeds rotting in the soil (particularly if temperatures are on the cool side).

Beans may be grown in containers, but depending on the size of container, you may not be able to put very many bush beans in each. Pole beans may be trained up a trellis or teepee structure, and other edible or ornamental plants may be planted around the bean plants. This may save a bit of horizontal space. Bush beans do not need any sort of support and form compact, sturdy plants that are easy to harvest due to their small stature. Pole beans need a trellis or other structure to climb on, and are excellent space-savers in a small-space garden due to their ability to grow vertically when trained. (Some gardeners will grow them in the traditional Three Sisters system, where they are planted as companions to squash and corn. The beans are encouraged to grow up the stalks of corn for support).





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#### **Cultivation**

Beans need at least 2.5 centimetres of supplemental irrigation per week if rainfall isn't sufficient.

Maintaining a regular watering schedule is especially important when the plants are forming pods.

Mulching the plants with a 2.5 centimetre layer of mulch such as clean, weed-free straw will help conserve moisture, as well as regulate soil temperatures. Be sure to pull the mulch back from the plants to prevent the stems from rotting. Mulch can also make the job of weeding a bit less onerous, preventing weed seeds from germinating. Keep up with the weeding to prevent the undesirable plants from encroaching on the bean plants and robbing them of sunlight, space, water, and nutrients.

Every three weeks throughout the growing season, fertilize beans with a diluted (half-strength) solution of liquid kelp or fish emulsion. Too much nitrogen can be detrimental to the formation of pods, so don't overfertilize.





#### **Potential Problems**

Aphids can be an issue for bean plants. You can remove these tiny insects by gently rubbing them off with a soft, damp cloth or a pair of gloves. Using a blast of water from the garden hose can be highly effective in knocking them off the plants.

Another problem insect for beans are flea beetles, which can bore tiny holes in the leaves of plants. Usually, they leave the pods and beans inside alone, however. You can handpick the larvae from the plants, and wipe off the eggs from stems and leaves using a damp cloth.

Slugs are another potential pest for bean plants. If you see ragged holes and chunks taken out of the stems of your bean plants, chances are slugs are the culprits. Go out at nighttime with a flashlight and handpick the mollusks from your plants. Alternatively, use traps made from yeast and water to catch as many slugs as you can.

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## **Harvesting and Consumption**

The beans on individual plants will not all be harvestable at the same time, and it is possible to enjoy weeks of picking for many varieties. If you want to extend the harvest even further, try planting the crops in succession. Depending on your growing season and the type of beans you sow, you should be able to plant two crops (and possibly three) about two weeks apart. This gives you a longer window of harvesting. Snap beans may be pickled or blanched and frozen for later use. Fresh snap beans are delightful when steamed or cooked into stir fries, casseroles, and salads. Shelling beans are also popular in salads. Dry beans are common additions to chili con carne – and who doesn't enjoy slow-baked or barbecued beans? With so many beautiful and delicious heirloom varieties of beans available to gardeners, it's a delight experimenting with different types every year!





