



Vegetable Gardening Tips

Growing Information for the Home Gardener Series

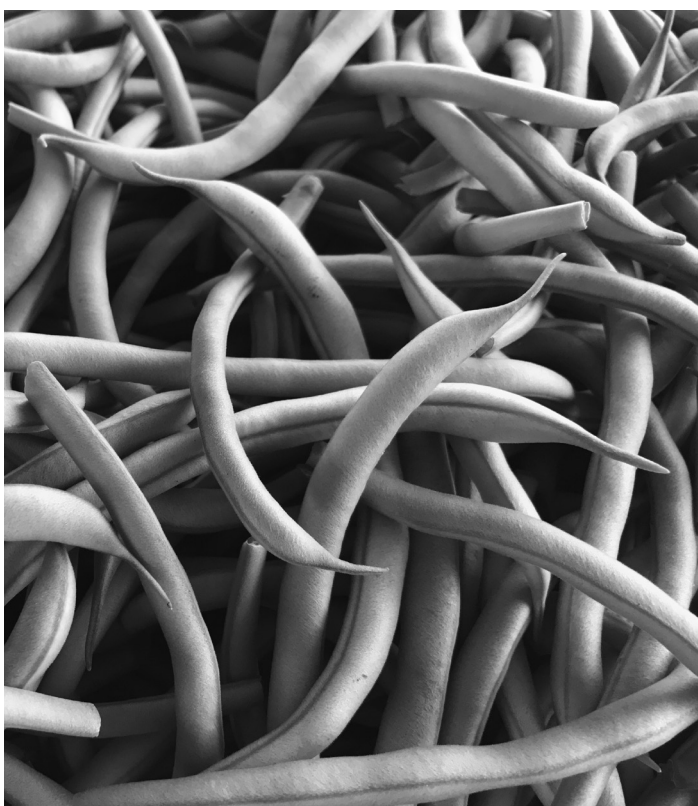


Beans

Lima Beans

The lima bean, also called butter bean, is a warm-season crop that is well-adapted to Louisiana's climate. The large seeded types were developed in South America and received the name "lima" from the capital city of Peru. Lima beans are a nutritious vegetable – high in protein, calcium, phosphorus, iron, potassium and the vitamins thiamine and niacin.

In Louisiana, lima beans are planted in both the spring and fall. Spring crops are planted well after frost danger has passed. The soils should be 60°F or warmer. These conditions are found in mid- to late March in south Louisiana and mid- to late April in north Louisiana. Plantings can be made through mid-May in most of the state. Plantings made much later than this yield poorly because high temperatures interfere with pod set. Fall crops are planted beginning in early August in north Louisiana and through mid-August in south Louisiana.



You can choose either the bush or pole beans. Pole beans mature later but produce higher yields and produce for a longer period than bush types. For small gardens, consider pole types. They produce the largest yield per square foot and generally have fewer disease problems because of their tall form. Small seeded lima varieties called "butter beans" are best for the South.

Recommended pole lima beans include Florida Speckled, King of the Garden, Christmas or Willow Leaf. Good bush lima beans for Louisiana include Henderson Bush, Eastland, Jackson Wonder, Thorogreen, and Dixie Speckled Butterpea.

Snap Beans

The original snap beans were grown for their dry or green shelled seed. Breeding advances gave us the "string bean" before being further developed into today's high quality snap bean. Although not as nutritious as the lima bean, snap beans are a well-balanced, low calorie food.

For a continuous harvest of fresh beans, make plantings about two weeks apart until mid-May. Plant bush snap beans again in mid- to late August for a fall harvest. Quality is usually excellent in the fall.

Good bush snaps for Louisiana are Contender, Strike, Provider, Bush Blue Lake 274, Ambra, Bronco, Caprice, Dusky, Lynx, Magnum, Storm and Valentino.

All-America Selections include Blue Lake 274, Derby, Greencrop (flat) and Burpee Tenderpod (heirloom). Roma II is a flat Italian bush bean. For a purple pod, bush snap, try Royal Burgundy. Those who prefer the yellow wax bush beans should choose Carson, Cherokee Wax (AAS), and Golden Rod.

For pole snap beans, choose Kentucky Blue (AAS), and McCaslan. For pole beans with striped pods, select Rattlesnake.

For those who want a bean that sets well in the heat, try the vigorous Yardlong Asparagus Bean. Harvest these pods when they are 18 inches long or less.

Other Beans

Minor beans or beanlike crops may also be grown in Louisiana. If beans are to be shelled green or dry, choose the large seeded horticultural beans for best results. These beans were developed for harvest of their seed.

They often have large and striped or mottled pods. Most horticultural beans are bush types, but pole types are also available. Culture is similar to that of snap beans. Vegetable soybeans (edamame) have been bred for a higher eating quality than the field soybeans. Shell in the mature green stage. Green pods will shell much easier if they are blanched for two minutes. Culture is similar to that of lima beans.

Fava beans are a cool-season crop requiring several months from planting to harvest. The plants are tall and slender, producing a fairly woody stem. The long, broad, glossy green pods are snapped and eaten green or allowed to dry for shelling and storage. Fava beans are planted in October and November and harvested in March and April of the next year. Seeds are planted 3 to 4 inches apart in rows 3 to 4 feet apart.

Cultural Practices

Use treated seed for protection from rotting. Treated seeds are dusted with a fungicide, so wash hands thoroughly with soap and water immediately after planting. Choose a fertile, well-drained area that receives full sunlight. Prepare a good seedbed for planting. Gardens in most areas of the state will benefit by building rows up 8 to 10 inches to improve aeration and drainage. Beans cannot tolerate excessively wet soils and may wilt.

For soils of moderate fertility, use 1 pound of an 8-24-24 fertilizer or its equivalent per 20 feet of row. Excessive nitrogen will cause the plant to become very vining and will cause blooms to drop instead of setting pods. The soil pH at which beans do best is between 5.8 and 6.8. A soil test will determine pH and the amount of lime (if required) to adjust it.

Bush beans are planted in rows 3 feet apart. Plant 1/2 inch deep. After plants are up (7-12 days), thin limas to 3-5 inches apart and snap beans to 3 inches apart. A double drill of bush beans can be planted down a bed, spacing lines 18 inches apart. Do not soak or pre-sprout bean seed.

For pole beans, plant hills of two or three seeds every 12 inches apart in the row. Space these rows 3-4 feet apart. Soils that pack or crust after a rain interfere with seedling emergence. For soils of this nature, cover the seeds with a garden loam, sand, fine compost or potting soil to help seedlings emerge. Incorporate organic matter into these soils. As the plants grow, select the best one for each pole and thin the remaining plants. Position a support pole near the bean.

Supports can be bamboo poles, wires, cords, a fence, a trellis, or some other item. Using corn plants for support is not a good practice because they may not be sturdy enough. Many pole varieties will grow 10-12 feet, so be prepared.

A good response has been obtained from sidedressing pole beans with nitrogen, especially on light, sandy soils. Young plants in the three true leaf stage (4-6 inches tall) can benefit from 1/2 pound of calcium nitrate or its equivalent down 20 feet of row. This light dressing, applied well before flowering, will allow for a larger plant and produce more pods. Keep soil moist, especially at flowering and pod fill. Plantings that experience moisture stress will yield poorly and produce many small "pigtailed" pods.

Harvesting

Snap beans are most commonly harvested in the early mature green stage. This is when the pods are first filled out but have not had time to toughen. At this stage, pods will show a slight bulge of the seeds inside but still have a healthy green color (or bright yellow for wax types).

Limas at the proper stage for harvest (mature green and bulging) will be much easier to shell than the immature ones. Pods also may be picked younger but should be at least two-thirds filled out. For fresh use, it's better to pick a little early than a little late!

When harvesting, you may need to use two hands; one to support the stem and one to pull the bean. Otherwise you may pull off a whole branch while removing some pods.

Be sure to remove all pods that are ready or overmature. Leaving even a few overmature pods on the plants will greatly reduce their productivity. For fresh use, you'll need to pick every few days.

Pest Control

Weeds

Bean roots grow near the surface; therefore, hand-pulling or careful and shallow cultivation are recommended. Mulches are also useful tools for weed prevention: pine straw, leaves and hay are acceptable materials. Grasses such as crabgrass and bermudagrass can be controlled after they emerge with sethoxydim (Poast, Hi-Yield Grass Killer) without injuring beans. Trifluralin (Treflan, Miracle Gro Weed Preventer) is an herbicide that controls many weeds before they emerge from the soil. Incorporate trifluralin into the top 2 inches of the soil and then plant bean seed.

Insects

Stink bug: Green and brown stink bugs can be important pests of beans in Louisiana. Stink bugs will use their piercing sucking mouth parts to inject digestive enzymes in developing beans causing seed abortion, discoloration and secondary pathogen infection. Stink bug monitoring should begin when pod elongation is initiated until harvest. Depending on the abundance of stink bugs, one to three applications of insecticides like bifenthrin, permethrin, carbaryl etc. may be necessary to prevent damage. Handpicking eggs, nymphs and adults helps in managing population buildup of stink bugs. Planting beans early also helps in avoiding heavy infestations in late summer and fall.



Mexican bean beetle: Mexican bean beetles are rarely pests of beans in Louisiana, and control of these pests are often not warranted.



Diseases

A common foliar fungal disease, anthracnose, occurs during wet conditions. On the pods, it causes reddish brown, sunken spots with pink centers. Stems and leaf veins develop elongated, dark red cankers. Foliar sprays with chlorothalonil or copper-based fungicides on regular intervals help reduce disease spread.

Damping-off of seedlings is caused by soil-borne fungi and fungus-like microorganisms. Disease becomes serious in cool, wet soils. Disease results in death of the seedlings. Good cultural practices including planting healthy disease free seeds in well-drained fertile soils, avoiding previous spots with disease history and good irrigation practices help reduce disease infection. Captan can be used for seed-rot treatment.

Some other important soil-borne fungal diseases of beans in Louisiana include southern blight, white mold, fusarium wilt and black root rot. These diseases may persist in the infected soils for a long time in the absence of host. Removing disease plants and crop debris, deep plowing, raised beds and soil solarization are some of the cultural practices that will help to reduce these soil-borne diseases.

Beans are susceptible to several plant virus diseases, such as bean common mosaic, bean golden mosaic and cucumber mosaic. Symptoms of plant viruses mainly constitute stunting of plants, mosaic and mottling of leaves and leaf deformation. Management practices include weed removal because they harbor both insects and plant viruses; managing insects with natural or synthetic insecticides or horticultural oils; and removing and discarding diseased plants.

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