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VEGETABLE PRODUCTION SERIES

Lima Beans and Snap Beans

C. R. O'Dell, Extension Specialist, Small Fruit & Vegetable Production
and

E. A. Borchers, Virginia Truck Experiment Station, Norfolk

SOILS:

Lima beans and snap beans may be grown on a wide variety of fertile, well-drained soils. Sandy soils are preferred for early spring planting because they warm up faster. Later plantings may be made on silt and clay loams. Soils which crust and cause seedlings to lose their seed leaves during emergence should be avoided.

VARIETIES:

Lima Beans

Small-Seeded Bush Types - These varieties generally bear pods about 3" long containing 3 small beans. The tendency for the seed coat and flesh color to turn white upon maturity has been overcome to some extent by breeding and selection, so that now the popular varieties remain fairly green when mature. The most common varieties are All-Green (65 days); Clark's Bush (67 days); Green-Seeded Henderson (66 days), also known as Thorogreen Early, Improved Early Thorogreen, or Thorogreen; Nemagreen (70 days) a nematode resistant variety, Thaxter (70 days), a downy mildew resistant variety with small, relatively flat beans, pale green with white seed coat and green cotyledons, holding color well past prime stage for processing. Bridgeton, a new variety, resistant to Race A and B of Downy Mildew, is suggested for Trial Planting.

Large-Seeded Bush Types: These are more sensitive to adverse weather conditions than the small-seeded types with the exception of Fordhook 242 (75 days) which is relatively tolerant to adverse weather conditions.

Burpee's Improved Bush (75 days) - This variety produces very large, flat beans. Plants are large, vigorous and productive.

Pole Types - Carolina or Sieva (78 days) is a small seeded variety comparable to Henderson Bush. King of the Garden (88 days) is a large-seeded pole lima that is hardy, productive and vigorous. Challenger (90 days) is a hardy, productive, large-seeded variety of the Fordhook type.

Snap Beans

Before selecting a variety, consider requirements of your snap bean market. If your beans are to be sold for processing, talk with the buyer to find out his variety preferences.

Bush Varieties recommended include Bush Blue Lake 274, Provider, Harvester, Tenderette, and Bountiful (flat podded). Several new varieties look promising. Two of these recommended for trial planting are Astro and Executive. For yellow podded or wax beans, the Resistant Cherokee variety is recommended.

Pole Snap varieties recommended include white-seeded Kentucky Wonder 191, McCaslan, Blue Lake and Dade.

Varietal response to climate and soil conditions varies. Growers in different parts of the state should make trial plantings of new varieties to determine their suitability to local conditions.

FERTILIZING:

Soil pH should be 6.0 to 6.5 for lima beans, and 5.5 to 6.5 for snap beans. On all soils, broadcast before planting 500 lbs. of a 10-10-10 fertilizer per acre for lima beans 600 lbs. of 10-10-5 fertilizer per acre for spring crop snap beans, and 400 lbs. of 10-10-10- fertilizer per acre for the fall crop. Do not plant snap beans on land that received an application of more than 10 lbs. of borax per acre the previous year. A soil test should be made in the fall preceding planting.

PLANTING:

Lima Beans:

Time: - Since lima beans will not germinate in cold soil, planting should be delayed until soil becomes warm. In most areas of Virginia, the crop may be seeded from May 1 until July 1, or during July in Eastern Virginia for fall production.

Spacing: Rows should be 30" to 36" apart for bush varieties, and 36" to 48" apart for the pole varieties. The bush types should be seeded 3 to 4 seeds per foot of row, and pole varieties 2 to 3 seeds per foot of row. The seed should be planted 1½" deep at the rate of 50 to 90 pounds per acre, depending on seed size and spacing.

Snap Beans:

Time: In Norfolk and Eastern Shore sections, the late spring crop is usually planted in April, and the early fall crop from about the middle of July to late August. In southwest Virginia, the usual planting time is from early May to the middle of July.

Spacing: Plant in rows 2' to 3' apart, using 60 to 75 lbs. of seed per acre. Seed should be spaced about 6 to 10 foot of row and covered 1½" to 2" deep in light soils, or ¾" deep in heavy soils. The closer spacing should be used on the most productive soils. For Pole Beans, 25 lbs. of seed will plant an acre, using rows spaced 4 ft. apart, with seed spaced 3 to 4 per foot of row.

(Based primarily on research work of the Virginia Research Division, Blacksburg, and the Virginia Truck Experiment Station, Norfolk.)

TRAINING POLE VARIETIES:

Trellising - Set posts 20' apart along the row. Stretch 2 strands of No. 10 wire between them at 6' and 6" above the row. A trellis is formed by connecting the wires with twine in a "zigzag" fashion over the top and under the bottom wire, or by tying lengths of twine between the wires for each hill. Brace the end posts to keep the wires taut.

WEED CONTROL:

Beans should be kept free of weeds by a sufficient number of shallow cultivations. Discontinue cultivation before the plants become large enough to be injured by the operation.

DISEASE CONTROL:

Lima Beans

Seed decay and baldhead or snakehead - Purchase treated seed from reliable sources each year. Avoid using low vitality seed, and have seed bed in excellent condition.

Bacterial blights - Plant western grown, disease-free seed and rotate with crops other than beans.

Root rots - Follow cultural practices that encourage good plant growth, do not plant lima beans after Irish potatoes, and rotate crop with corn or small grain.

Sclerotinia wilt - Rotate with small grain and plant in areas with good air drainage.

Stem anthracnose and pod blight - Use disease-free seed.

Yeast spot or seed pitting - Control of southern stinkbug injury, which causes this condition, will minimize its damage.

Snap Beans

To protect seed from insects and soil-borne organisms, purchase seed treated by the supplier. Treated seed costs lightly more than non-treated, but the cost is considerably less than if treated at the farm.

Anthracnose and bacterial blight - Rotate crops and use western-grown seed.

Bean mosaic and powdery mildew - May be partially controlled by using resistant varieties.

Root rot - May be partially controlled by rotation and good cultural practices to maintain vigorous growth.

For current recommendations on the chemical control of diseases, insects, and weeds, contact your Extension Agent, or pesticide dealer.

HARVESTING:

Lima Beans

Lima beans grown for fresh market are picked when the seeds are almost full size, but before the pod becomes yellow. Slightly immature beans bring higher prices, but harvesting at this stage reduces yield.

Unshelled limas retain their quality better than shelled beans. Fresh market lima beans should be packed unshelled in baskets, refrigerated, and moved to market as soon as possible.

Snap Beans

Snap beans should be harvested just before pods are full grown, while seeds are small and before pods develop fiber and stringiness.

LABOR REQUIREMENTS:

If a mechanical seed planter is used, total labor by experienced growers up to harvest time will run 30 - 40 hours per acre for snaps and bush limas. Pole types will require building a trellis, adding up to 100 additional hours per acre. Harvesting by hand can add another 60 - 70 hours per acre, for a total of about 100 hours per acre for bush snaps and limas, to about 200 hours per acre for pole types. Mechanically harvested snaps and limas may total 40 hours labor per acre, including harvest.

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