



Heirloom Beans

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Introduction

Heirloom beans are vintage varieties of the warm-season crop (*Phaseolus vulgaris*) that have been handed down from generation to generation. There is a long tradition of saving bean seed in Appalachia, and heirloom beans are sought by customers at Kentucky farmers markets. Heirloom bean varieties, often named after particular areas or families, appeal to buyers because of both taste characteristics and cultural heritage.

Heirloom bean varieties were often selected for their eating quality when the beans were mature or nearing maturity. This makes heirloom types different from modern stringless green bean varieties, which are usually picked when the beans are at an immature green stage.

Marketing

Sales of heirloom beans at the Lexington Farmers Market date back to the early 1970s. The popularity and availability of heirloom beans grew as the number of Kentucky community farmers markets increased between 1998 and 2008. Farmers markets remain an important marketing channel for heirloom beans. Other fresh market options include community supported agriculture (CSA) subscriptions, on-farm sales and roadside stands. Small-volume wholesaling to local grocery stores and restaurants is also an option.

Heirloom bean varieties were traditionally grown to produce dry beans for use in soups (soup beans) and beans dried in the pod, called shuck beans or “leather britches” in southern Appalachia. This makes some heirloom varieties possibilities for value-added products, and Kentucky producers have marketed heirloom soup beans as part of dry soup mixes. Producers should identify and follow any applicable regulations and food safety requirements when selling value-added products.



‘Aunt Sal Purple Pod’ heirloom beans

Bean names often include references to bean appearance and growth habit, and producers may need to educate customers about what traditional names mean. “Greasy” bean varieties lack fuzzy skins, giving the hulls a shiny or greasy luster. “Cut-short” beans are varieties where beans grow tightly together in the hulls, resulting in a squared-off or “cut short” hull. Heirloom beans can also be described by their growth habit: bush, half-runner and pole (or cornstalk) beans. These are further described in the cultivar section below.



Market Outlook

Heirloom beans have a particular appeal to customers interested in traditional and heritage cuisine. Flavorful or novel varieties can be rapid sellers at farmers markets

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and farm stands. In addition, heirloom bean varieties fit into the appeal of local cuisine at fine dining and niche restaurants. The National Restaurant Association ranked hyper-local cuisine and vegetable dishes as two of the hottest trends in restaurant cuisine in 2018. Fresh market green bean usage in the U.S. also remains steady, on a per capita basis, according to the USDA.

Heirloom beans can also present growers with opportunities for niche marketing and “add-on” purchases. Soup beans in dry soup mixes are one fairly common example. Some producers have also created a niche by saving and selling heirloom bean seed. Stories about heirloom bean varieties, and information about the tradition and use of beans in a local area, can greatly appeal to some new consumers. Some international heirloom bean varieties have certain appeal to different ethnic groups, another possible market segment for local sales in some areas.

Production Considerations

Cultivar selection

Most heirloom snap bean varieties are “string beans,” named because of the fiber or string running along the pod seam. String beans have at least one string per side, which need to be removed before the beans are cooked or dried. Stringless beans, first selected in the 1890s, dominate commercial vegetable bean production; however, many consumers still prefer the flavor and texture of the stringed types, as stringless beans tend to be tough.

Heirloom beans are most often pole types, with a smaller number of bush types, compact plants 1 to 2 feet in height. Pole or “cornfield” beans produce vines that may reach 8 to 10 feet or more in length. Half-runners have a growth habit between bush and runner, producing vines that are at least 3 feet long and sometimes much longer. Typically, pole beans set pods over a longer period of time than bush beans. Pods of either type may be round or flat in shape. While green is the most common color, pods may be yellow (wax beans), purple or streaked. Unique and novel colorations add to the appeal of many heirloom varieties.

Seed sources are an important consideration as some bean diseases can be spread by seed. To reduce the possibility of seed-borne disease, purchase from inspected or certified seed sources. In cases of local varieties where only a limited amount of seed is available, practice sound management practices to avoid potential disease spread.

Site selection and planting

Snap beans grow best in well-drained soils with good water-holding capacity. They are best planted after the danger of the last killing frost in spring. Successive plantings every two to three weeks are desirable for fresh market sales. Some heirloom cultivars are known for later planting and fall maturity. Seed sizes may vary between varieties, and this could require special equipment or hand seeding for some varieties.



‘Grandma Barnett’ heirloom beans

Heirloom pole beans and half-runners will require the construction of a trellis or other support before the plants begin to produce runners. There are different types of supports that can be built or strung, including manufactured trellis material. Producers should match the type and style

of trellising with their field situation and farm resources.

Snap beans need a continuous supply of moisture, especially during pod set and pod development. Some growers have reported extremely high yields and a cleaner harvest growing bush beans in raised beds with black plastic and drip irrigation. This has also been the case with trellised beans.

Pest management

Potential bean disease problems include seed rots, damping-off, bacterial blights, rust, anthracnose and viruses. Following good cultural practices, growing resistant varieties when available, and purchasing treated seed can help in disease prevention. Fungicide/bactericide sprays may be needed most years. Aphids, Mexican bean beetle, spider mites and leafhoppers can cause losses if not controlled. Scouting to monitor populations can help the grower determine when and how often insecticides should be applied. Herbicides and cultivation can help

control weeds. A good rotation plan and sanitation are critical in reducing pest populations and diseases.

Harvest

Heirloom beans are often harvested when seeds are more developed than commercial snap beans, requiring some harvesting experience to pick beans at optimal maturity for the variety. Heirlooms most often require hand harvest. Commercial pole bean varieties are harvested an average of five times with each harvest three to five days apart; heirloom varieties may require more frequent picking. Beans for the fresh wholesale market are packed in bushel baskets or cartons. Cooling can be used to preserve fresh snap bean quality.

Labor requirements

Labor requirements are dependent on the scale of operation and the specialized harvesting and packing equipment used. Hand-harvested beans are labor-intensive and can require up to 300 hours per acre.

Economic Considerations

Initial investments include soil preparation, purchase of seed, and installation of an irrigation system. Additional expenses can include black plastic mulch and trellises.

A 2017 estimate for small-scale snap bean production in Kentucky indicates good profit potential for direct-marketed heirloom bean varieties. Assuming a retail price of \$2.50 per pound, a 100-foot row of heirloom beans returned an estimated \$102 to operator labor, land and management. This includes harvest labor wages. A \$1 increase in price, to \$3.50, would result in about twice the return to labor, land and management.

Farmers market prices for beans in Kentucky were reported in the \$2 to \$4 range for 2017, with higher prices occurring at urban farmers markets and later in the season. These estimates indicate good farm profitability potential for excellently managed heirloom bean production, especially with well-planned marketing.

Selected Resources

Online publications

- “Heirloom Seed Saving Demonstration.” (Kentucky State University, 2009) <http://organic.kysu.edu/Heirloom.shtml>
- “Heirloom Dry Bean Variety Trial.” (University of Vermont, 2016) <http://www.uvm.edu/extension/cropsoil/wp-content/uploads/2016-Heirloom-Dry-Bean-Variety-Trial.pdf>
- Vegetable Production Guide for Commercial Growers, ID-36 (University of Kentucky) <http://www2.ca.uky.edu/agcomm/pubs/id/id36/id36.pdf>
- Heirloom Beans (Sustainable Mountain Agriculture Center, Inc., 1998) <http://www.heirlooms.org/heirloom-beans.html>
- Southern Appalachian Bean Terminology (Sustainable Mountain Agriculture Center, Inc., 2011) <http://www.heirlooms.org/bean-terminology.html>
- Pole Bean Production, HIL-3A (North Carolina State University, 2005) <https://content.ces.ncsu.edu/pole-bean-production>
- Small-Scale Snap Bean Budget (University of Kentucky, 2017) <http://www.uky.edu/ccd/tools/budgets>

In print

- Best, B. 2013. Saving Seeds, Preserving Taste: Heirloom Seed Savers in Appalachia. Athens, OH: Ohio University Press. 224 pp.
- Best, B., and D. Adams. 2017. Kentucky Heirloom Seeds – Growing, Eating, Saving. Lexington, KY: University Press of Kentucky. 320 pages.
- Abramson, R., and J. Haskell, editors. 2006. Green Beans. In the Encyclopedia of Appalachia. Knoxville, TN: University of Tennessee Press. 1,832 pp.

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For additional information, contact your local **County Extension** agent