# COOPERATIVE EXTENSION SERVICE UNIVERSITY OF KENTUCKY—COLLEGE OF AGRICULTURE

# **Highbush Blueberries**

## **Marketing**

Blueberries have been great sellers when offered at Kentucky's farmers markets or other direct markets. U-Pick is one of the most desirable ways to market blueberries in Kentucky because it eliminates considerable harvest labor expense. Berries have also been marketed successfully at the Fairview Produce Auction in Christian County. Other marketing options include roadside stands, local groceries, and produce auctions.

#### Market Outlook

Blueberries are increasing in popularity and are one of Kentucky's emerging small fruit crops. Nationally, fresh blueberry prices remain strong. Kentucky producers can realize well over the national average price by marketing fresh, high quality blueberries locally. National average prices are also favorable for producers willing to invest in the equipment needed to safely package and ship wholesale blueberries.

#### **Production Considerations**

Site selection, planting and maintenance

Commercial blueberry production should be considered only if large amounts of organic mulching material are available. Blueberries thrive in a highly organic, well-drained soil with a pH of 4.5 to 5.2. While most Kentucky soils do not meet these requirements, most sites can be amended to provide an environment suitable for planting. Blueberries should be planted on a

slightly raised bed to improve soil drainage in heavier soils. Twoyear-old virus free plants, either bare-rooted or potted, should



be planted in early spring or late fall. At least two cultivars are needed for cross pollination. Honeybees must be relied upon for pollination and two hives per acre are recommended. It takes three to four years for plants to become fully established. Annual pruning, which may be done from February to bud break in the spring, is necessary to help both establish and develop vigorous plants.

While blueberries can be grown without irrigation, University of Kentucky tests show that irrigation more than doubles blueberry yields. Consequently, commercial production is not recommended without irrigation. Soil moisture needs to be closely monitored when trickle irrigation is used so that the soil is kept damp, but not wet.

# Pest management

Few diseases or insect pests have been reported on blueberries in Kentucky, generally making preventative sprays unnecessary, or minimal. The most serious blueberry pest is birds, particularly in

small plantings. Other wildlife pests can include mice, rabbits and deer. Nutritional problems, such as nitrogen deficiency and



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iron deficiency, also commonly occur.

### Harvest and storage

Blueberries should be allowed to ripen to a uniform blue color on the plant before handpicking. Berries need to be picked at least once per week during the harvest period, beginning in early to mid-June and ending in early August. Blueberries can remain on the plant for up to 10 days without a loss in quality and freshly harvested berries can be stored for up to 2 weeks with refrigeration.

# Labor requirements

Production labor needs per acre for a mature planting are about 320 to 360 hours for a farm retail operation. U-Pick farms will require approximately 20 to 100 hours per acre in labor, depending on how much management is involved while visitors are on the farm.

#### **Economic Considerations**

The major costs in establishing blueberries are the cost of plants, labor required for plant establishment and installation of an irrigation system. Producers who choose to sell their blueberries at retail or wholesale markets will also incur a significant cost in purchasing a cooling system.

While the initial investment may be large, blueberry plants, with proper care, will remain productive for as long as 40 to 50 years. Because it takes 3 years for plants to become established, blueberries will not begin to generate economic returns toward their establishment cost until the fourth season. Five-year establishment costs per acre are estimated at \$5,800 to \$9,000 (farm retail) and \$4,300 to \$7,300 (U-Pick). The payback period is 6 years after planting for farm retail and 5 years after planting for U-Pick. Annual returns to owner capital and management for an established planting are \$4,500 to \$6,000 per acre for farm retail, and \$7,500 to \$10,000

per acre for U-Pick. Illinois data indicates that it takes roughly 450 U-Pick customers to harvest an acre of blueberries, with the average customer picking 11.7 pounds of berries (about 15 pints).

#### **More Information**

- Blueberry Cost and Return Estimates Summary (University of Kentucky, 2008) http://www.uky.edu/Ag/NewCrops/blueberrysummary.pdf
- Blueberry Marketing Fact Sheet (University of Kentucky, 2005) http://www.uky.edu/Ag/NewCrops/blueberry2005.pdf
- Growing Highbush Blueberries in Kentucky, HO-60 (University of Kentucky, 2003) http://www.ca.uky.edu/agc/pubs/ho/ho60/ho60.pdf
- Highbush Blueberry Production Budgets Wholesale/Retail Marketing (University of Kentucky, 2008)

http://www.uky.edu/Ag/NewCrops/blueberrybudget.pdf

- Highbush Blueberry Production Budgets Pick Your Own Marketing (University of Kentucky, 2008)
- http://www.uky.edu/Ag/NewCrops/blueberrypyo.pdf
- Marketing Highbush Blueberries in Kentucky (University of Kentucky, 2004) http://www.uky.edu/Ag/AgEcon/pubs/ext\_aec/ext2004-01.pdf
- Blueberries: Organic Production (ATTRA, 2004)

http://www.attra.org/attra-pub/blueberry.html

- Midwest Small Fruit Pest Management Handbook, B-861 (Ohio State University, 2007) http://ohioline.osu.edu/b861/index.html
- Midwest Commercial Small Fruit and Grape Spray Guide, ID-94 (Midwest Fruit Workers Group, 2008)

http://www.hort.purdue.edu/hort/ext/sfg/