

Raspberries

Introduction

Raspberries are included in the group of small fruits generally referred to as ‘brambles’. They have perennial crowns and roots which produce biennial canes. The canes bear fruit the second year and then die naturally after harvest. Some raspberries, known as everbearing or fall-bearing, also produce fruit at the tips of the first year canes. Everbearing red and yellow raspberries, June-bearing red raspberries and purple and black raspberries can be successfully grown commercially in Kentucky. With favorable growing conditions, a raspberry planting may produce for 8 to 12 years.

Marketing

Raspberries in Kentucky have been traditionally sold on the farm as U-pick. Future market growth will come through local fresh markets like farmers markets, roadside stands, restaurants and local retailers. There is some limited wholesale berry marketing to large retailers in Kentucky. Smaller growers can investigate selling raspberries wholesale at Kentucky’s produce auctions, which report strong prices for fresh berry sales.

Market Outlook

The continued demand for high quality, locally-produced commercial berries offers promise for producers willing to invest the time and capital into further developing Kentucky’s raspberry market. Producers located near population centers will have the added marketing edge. Raspberry fruits do not store or ship well, which limits the market area, but increases the demand for local, quality



fruit. Value-added raspberry products (preserves and baked goods) are popular with consumers and can be a way to increase the profitability of the entire enterprise.

Production Considerations

Site selection and planting

The site should be selected the year before planting in order to allow time for adequate preparation. A well-drained, deep fertile soil, high in humus and free from hard pans is best for raspberries. When possible, plant brambles on a northern slope or where there is afternoon shade, but avoid extremely windy sites. Raspberries should not follow solanaceous vegetables (such as tomatoes and peppers), strawberries or other bramble crops for 3 to 4 years. Irrigation is essential for commercial production and beehives are needed to ensure adequate pollination.

Growers are encouraged to establish plantings from certified, virus-free nursery stock. The distance between plants and between rows varies depending on the type of raspberry grown, training method and the size of farm equipment. Raspberries are a high maintenance crop, requiring regular pruning and training to ensure maximum



fruit production. Red raspberries are trained in the hedgerow system without a trellis or with a low trellis. Vigorous everbearing red raspberries grown for a fall crop alone are generally mowed level with the ground in the spring and may require a temporary trellis several weeks prior to harvest. Purple raspberries require a low trellis which should be constructed either before planting or during the first season.

Pest management

Common disease problems include anthracnose, cane and spur blight, crown gall, *Phytophthora* root and crown rot, fruit rots and orange rust on black raspberries. Mites, cane borer, aphids, and Japanese beetles can cause damage in raspberry plantings. Good weed control is very important and can be accomplished with cultivation, mulching and/or herbicides.

Harvest and storage

The first significant harvest occurs the third year for June-bearing red raspberries and the second year for everbearing raspberries. Ripe berries should be picked regularly at least twice per week, but more often at the peak of the season and under hot, rainy conditions. Berries are placed directly into the marketing container as they are picked. Cooling within a half hour of harvest is recommended.

Labor requirements

Production and labor needs vary depending on the age of the planting and the type of raspberry being grown. Pennsylvania State University's estimated per acre labor needs for production are as follows: land preparation (4 hours), establishment (51 hours), production year 1 (30 hours), production year 2 to maturity (80 to 85 hours). Harvest will require 300 to 500 hours per acre. U-Pick operations will generally need approximately 300 customers to harvest an acre of red raspberries.

Economic Considerations

There is considerable startup cost, demanding management and a time lapse of 1 to 2 years after establishment before a raspberry crop can be harvested. Initial investments for one acre include land preparation, purchase of plants, plant establishment, and installation of an irrigation system. In addition, a trellis system may be needed, especially for purple raspberries. The cost of a cooler, which is essential to berry production, should also be included.

The UK Department of Agricultural Economics estimates the total cost of a mature planting at \$6,815 per acre with net returns to land and management of \$2,575 to \$9,075 per acre for mature raspberries (2005).

Depending on the marketing method used, raspberries will pay back their establishment costs in 5 to 8 years. Well-managed U-pick marketing has the potential to add \$0.60 to \$1.00 per pint to raspberry profitability.

More Information

- Growing Blackberries and Raspberries in Kentucky HO-15 (University of Kentucky, 2005) <http://www.ca.uky.edu/agc/pubs/ho/ho15/ho15.pdf>
- Brambles – Production Management and Marketing (Ohio State University, 1999) <http://ohioline.osu.edu/b782/index.html>
- Midwest Commercial Small Fruit and Grape Spray Guide ID-94 (Midwest Fruit Workers Group, 2005) <http://www.hort.purdue.edu/hort/ext/sfg/>
- Midwest Small Fruit Pest Management Handbook B-861 (Ohio State University, 2004) <http://ohioline.osu.edu/b861/index.html>
- Raspberries and Blackberries MF-270 (Kansas State University, 1998) <http://www.oznet.ksu.edu/library/hort2/samplers/MF720.asp>