

Pumpkins

Marketing

Most pumpkins are used for ornamental purposes, with the greatest market demand during the Halloween season. Marketing options include: roadside stands, local retailers, wholesale markets, grower marketing associations, and U-pick. Kentucky faces major competition in wholesale pumpkin production from surrounding states, especially Tennessee.

Higher and more stable prices can be expected from direct sale or even “pumpkin festival” sales, but this market can become saturated with too many growers. In some cases smaller growers can help supply the larger festival market grower to obtain prices that may be higher than wholesale. Smaller growers could also consider joint marketing efforts in order to attract wholesale buyers. Larger producers and those who do not have time for direct sales will need to find wholesale buyers or, in some cases, can sell directly to supermarkets.

Market Outlook

Although consumer demand for pumpkins has expanded considerably in recent years, more growers are getting into production. Because demand has not kept pace with increased supply, wholesale pumpkin prices were lower during the late 1990s and into 2000.

Production Considerations

Site selection and planting

Pumpkins grow best on well-drained, fertile soil. To help avoid some soil-borne disease



problems, select fields where other cucurbit crops have not been grown for at least 3 years. Pumpkins are typically planted between mid-May and early June, with a mid-September harvest for wholesale marketing.

Honeybees are necessary for pollination and are essential for obtaining high yields of good quality fruit. Supplemental irrigation is critical in dry summers during flowering and fruit-set. Abnormally hot weather can present problems in obtaining fruit-set.

Some growers have successfully produced pumpkins using a no-till system of either seeding or transplanting into rye stubble or rye-legume cover crop that has been killed with herbicide. This method can eliminate the need for washing pumpkins prior to marketing, it may reduce fruit rots and it makes an easier and cleaner field to walk in for U-pick customers.

Pest management

Insect pests of pumpkin include aphids, leafhoppers, cucumber beetles, squash vine borer, spider mites and squash bugs. Using insect traps or scouting to monitor



populations can help the grower determine when and how often insecticides should be applied. Black rot, downy mildew and powdery mildew are the most important diseases of late summer and fall cucurbits in Kentucky. Other diseases that can cause crop losses include Fusarium wilt, yellow vine, and several viruses. A good fungicide spray program is essential to produce quality fruit that will store.

Harvest and storage

Multiple harvests over a period of 3 to 4 weeks are common. Pumpkins can be stored for 2 to 3 months at the proper temperature and relative humidity.

Labor requirements

Labor needs per acre for non-irrigated pumpkins are approximately five hours for production, 40 hours for harvest and 30 hours for hauling and handling. An additional 10 hours per acre is needed for black plastic removal following harvest.

Economic Considerations

Initial investments include land preparation and the purchase of seed or transplants. Additional start-up costs can include the installation of an irrigation system and black plastic mulch.

Production costs for non-irrigated pumpkins are estimated at \$513 per acre, with harvesting and marketing costs at \$770 per acre. Total variable and fixed expenses per acre are approximately \$1,404. Presuming gross returns of \$1,760 per acre for 22,000 pounds of pumpkins (18 to 22 pound size sold at \$0.08 per pound), returns to land, capital and management would be approximately \$196 per acre.

Irrigating pumpkins would add to the above production costs and labor requirements. However, the use of drip irrigation has made the difference between high profits and total crop failure for some Kentucky pumpkin growers in recent years; it pays for itself in a drought year.

More Information

- KY Pumpkin Integrated Pest Management Manual, IPM-12 (University of Kentucky, 1998) <http://www.uky.edu/Ag/IPM/manuals/ipm12pum.pdf>
- Marketing Options for Commercial Vegetable Growers, ID-134 (University of Kentucky, 1999) <http://www.ca.uky.edu/agc/pubs/id/id134/id134.htm>
- Pumpkin, Winter Squash, and Gourd Marketing Fact Sheet (University of Kentucky, 2005) <http://www.uky.edu/Ag/NewCrops/pumpkin2005.pdf>
- Vegetable and Melon Enterprise Budgets (University of Kentucky, 2004) http://www.uky.edu/Ag/AGEcon/pubs/software/budgets_veg_melon.html
- Vegetable Production Guide for Commercial Growers, ID-36 (University of Kentucky) <http://www.ca.uky.edu/agc/pubs/id/id36/id36.htm>
- Commercial Production and Management of Pumpkins and Gourds, B-1180 (University of Georgia, 2001) <http://pubs.caes.uga.edu/caespubs/pubcd/B1180.htm>
- Drip Irrigation for Vegetables, MF-1090 (Kansas State University, 1993) <http://www.oznet.ksu.edu/library/hort2/samplers/MF1090.asp>
- Guide to Commercial Pumpkin and Winter Squash Production, ANR-1041 (Alabama Cooperative Extension, 2000) <http://www.aces.edu/pubs/docs/A/ANR-1041/ANR-1041.pdf>
- Organic Pumpkin and Winter Squash Production (ATTRA, 2004) <http://www.attra.org/attra-pub/pumpkin.html>
- Plastic Mulches for Vegetables, MF-1091 (Kansas State University, 1993) <http://www.oznet.ksu.edu/library/hort2/samplers/MF1091.asp>
- Pumpkins: Commercial Vegetable Production, MF-2030 (Kansas State University, 2004) <http://www.oznet.ksu.edu/library/hort2/samplers/mf2030.asp>