

Winter Squash

Marketing

Fresh market options for Kentucky-grown winter squash include wholesale markets, cooperatives, restaurants, farmers' markets and roadside stands. Local retail markets, such as supermarkets, are also an option. Point-of-purchase materials, such as recipes and other preparation tips, are effective marketing aids for increasing winter squash sales.

Market Outlook

Although winter squash does not move in the same volume as summer varieties, quantities of winter squash demanded have been strong as more people diversify their diets. The key to maintaining farm profitability for winter squash in Kentucky may be storing the squash in cold storage and arranging off-season sales when prices are higher.

Production Considerations

Site selection and planting

Winter squash produces best on well-drained soil where 10 to 12 tons of well-rotted manure has been applied per acre. Squash is a warm season crop that should not be seeded until all danger of frost has passed. Honeybees are necessary for pollination and are essential for obtaining high yields of good quality fruit. If bees are not abundant in the field at flowering time, hives should be placed next to the field, with at least one hive per acre. Winter squash performs well using black plastic on raised beds with trickle irrigation.

Pest management

Potential disease problems



ACORN SQUASH

include black rot, downy mildew, *Phytophthora* blight, powdery mildew, yellow vine and viruses. A good fungicide spray program is essential to produce quality fruit.

Cucumber beetles, squash vine borer, spider mites and squash bugs can become serious pests if not controlled. Using insect traps or scouting to monitor populations can help the grower determine when and how often insecticides should be applied. Special precautions should be taken with insecticide treatments during bloom in order to avoid damaging bee populations.

Harvest and storage

Winter squash should be harvested when the fruit is mature. Rinds should be tough and not easily punctured with a fingernail. While a curing period has been recommended in the past, recent research has shown that it may not be necessary. It has not been beneficial for several types of squash including Butternut and may, in fact, be detrimental to Acorn squash. Winter squash are often placed in cold storage; however, once removed from storage, the



squash should be marketed immediately.

Labor requirements

Labor needs per acre for trickle-irrigated winter squash are approximately 40 hours for production and 80 hours for harvest. An additional 18 hours may be needed for black plastic disposal.

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 trickle-irrigated winter squash are estimated at \$1,000 per acre, with harvest and marketing costs at \$1,367 per acre. Fixed and variable costs can total \$2,486. Since net returns vary depending on actual yields and market prices, the following per acre returns to land and management estimates are based on three different scenarios.

Conservative estimates represent the University of Kentucky's statewide average cost and return estimates for 2005.

<i>Pessimistic</i>	<i>Conservative</i>	<i>Optimistic</i>
\$124	\$879	\$1,562

More Information

- 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.pdf>
- 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, 1997) <http://www.aces.edu/pubs/docs/A/ANR-1041/>
- 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>