

Okra

Introduction

Okra (*Abelmoschus esculentus*) is a heat-loving vegetable in the Hibiscus family. It is particularly popular in the South, where the immature pods are used as an ingredient and thickening agent in soups, stews, and gumbos. Okra can also be fried and pickled.

Marketing

Okra is a very minor part of Kentucky's commercial vegetable production; most is grown for farmers markets or community supported agriculture (CSA) sales. Kentucky growers have shipped limited amounts of okra for commercial wholesale in the past. While wholesale okra prices can be very good, the quantity demanded at these prices is low and growers should have a wholesale market defined before planting large acreages.

Okra is also a desirable vegetable for direct marketing to local restaurants, where chefs are often willing to pay a premium for smaller sizes of okra. Growers should consider targeting restaurants specializing in Southern, Creole, and/or Cajun dishes. Ethnic restaurants may have different preferences for okra variety, maturity, and size.

Production Considerations

Site selection and planting

Well-drained, fertile, silt loam soils are most desirable; however, okra will grow on a wide range of soil types as long as they are well-drained. Okra is a hot weather



plant and should be seeded only after the soil has warmed up in the spring. This crop does poorly in a cool, wet spring/summer. Ten to 12 pounds of seed are required to plant an acre. Planet Junior-type push or tractor-drawn seeders can be used effectively. Very high yields have also been obtained with transplanted okra using black plastic mulch and drip irrigation.

Pest management

Okra is highly susceptible to root knot nematodes. Other common diseases include fungal wilts (*Verticillium* and *Fusarium*) and fruit rots. These diseases are controlled primarily by following proper cultural practices, including crop rotation. Insect pests include aphids, Japanese beetles, and corn earworms. Scouting to monitor populations can help growers determine when and how often insecticides should be applied. Weeds are controlled with herbicides and cultivation.

Harvest and storage

Pods are cut from the plant when they are 2 to 3½ inches long and are graded according

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to size. During periods of rapid growth, pods may need to be picked every day or every other day. It is very important that growers have labor on hand to harvest in a timely fashion. Pods that are allowed to stay on the plant will become too large for commercial sales. In hot weather the difference between having a profitable harvest and having pods that are too large to be sold can just be a few days. Although okra can be harvested over several weeks, harvesting should be done on a regular basis to increase yields. Yields average 8,000 to 10,000 pounds per acre. Okra may be stored for up to 10 days under the proper conditions.

Labor requirements

Labor needs for production are about 10 to 15 hours per acre. An estimated 40 hours per acre is needed for hand harvesting, grading, and packing. More labor is required for specialty (smaller) sized okra. Due to the difficulty in harvesting okra it is often challenging to get labor to harvest large acreages.

Economic Considerations

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

Production costs (2009) for trickle-irrigated okra are estimated at \$910 per acre, with harvest and marketing costs at \$4,140 per acre. Total expenses per acre, including both variable and fixed, would come to approximately \$5,485. Presuming gross returns of \$6,300 per acre, returns to operator labor, land, capital, and management would be approximately \$815 per acre.

Selected Resources

- Vegetable and Melon Budgets (University of Kentucky, 2008)
<http://www.uky.edu/Ag/cdbrec/vegbudgets08.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 of Okra in Mississippi (Mississippi State University, 2003)
<http://msucares.com/pubs/infosheets/is1510.pdf>
- Okra for Fresh Harvest budget (Clemson Extension, 2009)
<http://cherokee.agecon.clemson.edu/okra6.pdf>

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For additional information, contact your local [County Extension](#) agent