

Cauliflower

Introduction

Cauliflower is a cool season cole crop (crucifer) that is closely related to broccoli and cabbage. It is, however, more exacting in its environmental requirements than other cole crops. Cauliflower is very sensitive to unusually hot weather and drought.

Marketing and Market Outlook

There is currently little commercial cauliflower production in Kentucky. None of the cooperatives are handling this crop and only fall cauliflower crops would appear to have potential for fresh market sales.

The U.S. per capita use of cauliflower has decreased by about 30 percent since the mid-1980s. Both fresh and frozen use decreased, but frozen cauliflower use decreased more than fresh use. Direct marketers may find niche markets for specialty cauliflower varieties, including green, orange, purple, and romanesco heads.

Production Considerations

Site selection and planting

While poorly drained soils should be avoided, slightly rolling land is suitable. Cauliflower requires high magnesium levels. This crop will do well on ground that has been in tobacco.

Cauliflower does not do well as a spring crop in Kentucky; however it will do well as a fall crop. Transplants can be placed in the field in early August. Irrigation, either trickle or overhead, is often crucial for establishing a fall crop.



Pest management

Insects can be a major problem in fall cauliflower production. Using insect traps or scouting to monitor populations can help the grower determine when and how often pesticides should be applied. Plant disease problems, such as blackrot, black leg and downy mildew, can also result in yield losses. A good crop rotation program and the use of disease resistant varieties will help in the prevention of a number of diseases.

Harvest and storage

“Blanching” is necessary in order to maintain the desirable white head or curd. This is done by pulling the leaves up over the developing head when curds are the size of a quarter. Once ready for harvest, heads are cut by hand. Pack cauliflower in cartons (nine to twelve film-wrapped heads) for wholesale fresh market sales.

Labor requirements

Cauliflower requires about 25 hours of labor per acre for production and about 125 hours per acre for harvesting and marketing.

Economic Considerations

Wholesale cauliflower production is a capital-intensive



venture requiring product Cooling, wrapping in cellophane, and packaging that meets industry standards. The cooling, irrigation, and handling equipment for proper cauliflower production are similar to those needed for broccoli; fees for these processes can easily translate to \$1.50 to \$3.00 per box of product.

Sprinkler irrigation – Assuming a cost of \$700 for a sprinkler irrigation system that services five acres, total variable and fixed expenses per acre are estimated at \$5,930.

Trickle irrigation - Since returns can vary depending on actual yields and market prices, the following per acre returns to land and management are based on three different economic scenarios (2005).

<i>Pessimistic</i>	<i>Conservative</i>	<i>Optimistic</i>
\$180	\$494	\$807

More Information

- Bt Basics for Vegetable Integrated Pest Management, ID-156 (University of Kentucky, 2005)
<http://www.ca.uky.edu/agc/pubs/id/id156/id156.pdf>
- Growers' Guide to Bt, ID-156A (University of Kentucky, 2005)
<http://www.ca.uky.edu/agc/pubs/id/id156a/id156a.pdf>
- Marketing Options for Commercial Vegetable Growers, ID-134 (University of Kentucky, 1999)
<http://www.ca.uky.edu/agc/pubs/id/id134/id134.htm>
- Vegetable Production Guide for Commercial Growers, ID-36 (University of Kentucky)
<http://www.ca.uky.edu/agc/pubs/id/id36/id36.htm>
- Cole Crops: Broccoli, Cabbage and Cauliflower, MF-1108 (Kansas State, 1998)
<http://www.oznet.ksu.edu/library/hort2/MF1108.pdf>