

# Asparagus

## Marketing

Asparagus is a high-value, early producing perennial vegetable crop with excellent potential for increased production in Kentucky. This crop is grown primarily in Kentucky for fresh market, especially near large population centers.

Asparagus has great potential for farmers markets, for direct sales to local supermarkets and to local and regional wholesalers. Direct sales to local restaurants may also be possible. Kentucky's market window for asparagus is during late May through the month of June.

## Market Outlook

Per capita use of asparagus in the US has increased by 40 percent since 1988. This increase is solely due to a steady surge in fresh market asparagus consumption.

## Production Considerations

### *Site selection*

Choose a relatively level, rock-free site with light to medium-textured loam soil where asparagus has never been grown. Soils should be deep and without a hardpan. Asparagus will survive short periods of flooding but not prolonged, waterlogged soils. Adjusting the fertility level before planting is essential since an asparagus planting may last 15 to 20 years and cannot be plowed or tilled once the crowns are set.

### *Establishing a new planting*

An asparagus bed may be established from greenhouse-



grown 10- to 12-week-old transplants or from one-year-old crowns. Crowns can be purchased from a reputable plant producer or you can grow your own in a plant bed. Direct-seeding to the field is another method of establishing a new planting; however, weeds can be a serious problem. You will need 9,000 to 11,000 plants per acre. Crowns should be planted in March or early April while seeding or transplanting should be done in late April or early May.

### *Pest management*

Asparagus can be grown using either a no-till or minimum tillage system of weed control. Fusarium crown rot is the major cause of asparagus decline. Rust disease can also result in reduced yields. Insect pests include asparagus beetle, Japanese beetle, aphids and cutworms. Asparagus has potential for organic production.

### *Harvest and storage*

Studies show that harvesting one year after planting does not reduce future yields and does give growers some income one



year early. As a rule of thumb, you can harvest for two weeks the first year, four weeks the second year and six to eight weeks after that.

Asparagus to be shipped and sold wholesale is usually hydro-cooled after harvest in order to retain high quality. Asparagus can then be stored for up to 3 weeks. Spears are cut to uniform length, tied in 2 to 2½ pound bunches and packed in pyramid crates for wholesale market sales.

#### *Labor requirements*

Labor needs for the year of establishment are estimated at 50 to 60 hours per acre. For the following years, asparagus requires approximately 15 to 20 hours per acre for production and 40 to 50 hours per acre for harvest and packing.

### **Economic Considerations**

The cost of establishing a new asparagus field may be as high as \$2,640 per acre, including one year of soil buildup; however, this is recouped in the fourth year of production. The major establishment costs are crowns and fertilizer. Once established, asparagus is one of the least expensive vegetable crops to maintain. Per acre costs for subsequent years are estimated as follows: \$548 for the second year and \$1,006 for the third year. Total costs until asparagus reaches full production in the second year after planting will fall in the \$2,500 per acre range.

Since returns vary depending on actual yields and market prices, the following per acre returns to land and management for the fourth year are based on three different scenarios. Conservative

estimates represent the University of Kentucky's statewide cost and return estimates (2005).

PESSIMISTIC	CONSERVATIVE	OPTIMISTIC
\$510	\$1,513	\$2,481

The average yield for asparagus is about 1,800 pounds per acre, while 2,500 pounds per acre is considered a good yield.

### **More Information**

- Commercial Asparagus Production, HO-66 (University of Kentucky, 2008)  
<http://www.ca.uky.edu/agc/pubs/ho/ho66/ho66.pdf>
- Marketing Options for Commercial Vegetable Growers ID-134 (University of Kentucky, 1999)  
<http://www.ca.uky.edu/agc/pubs/id/id134/id134.htm>
- Sample Asparagus Production Budget for Kentucky (University of Kentucky, 2005)  
<http://www.uky.edu/Ag/NewCrops/asparagusbudget05.pdf>
- Vegetable Production Guide for Commercial Growers ID-36 (University of Kentucky)  
<http://www.ca.uky.edu/agc/pubs/id/id36/id36.htm>
- Asparagus: Commercial Vegetable Production (Kansas State University, 1997)  
<http://www.oznet.ksu.edu/library/hort2/samplers/mf1093.asp>
- Asparagus Production, Management and Marketing Bulletin 826 (Ohio State, 1993)  
<http://ohioline.osu.edu/b826/index.html>
- Organic Asparagus Production (ATTRA, 2001)  
<http://attra.ncat.org/attra-pub/asparagus.html>