

Garden Mums

Introduction

Garden mums are generally container-grown in Kentucky; however, there is some field production in the state. Approximately 50 percent of mums are container-grown in greenhouses while approximately 35 percent are container-grown outdoors in connection with a greenhouse business. Only 15 percent of state-produced mums are field-grown.

Marketing

Field-grown mums are limited to direct sales to the consumer since they are dug at the time of the sale. Container-grown plants, on the other hand, can be sold through garden centers, nurseries, landscapers, supermarkets, farm stores, roadside stands, farmers markets and whole sale produce auctions. Retailers expect flowering garden mums to be available in mid- to late-August through mid-October. Early mums often receive a premium price.

Market Outlook

A strong market exists for garden mums because garden centers desire an inexpensive flowering potted plant to accentuate fall landscape plant sales. Additionally, as the commercial landscape market has expanded, the demand for flowering plants for fall use has increased.

Production Considerations

Propagation and general production

Garden mums are propagated by cuttings which can be purchased from greenhouse plant supply companies or companies



that grow garden mums. Cultivar selection is quite important. While most cultivars perform satisfactorily in Kentucky, certain types may perform better under some production conditions than others or are more desirable for early sales. Cuttings are traditionally planted May 20 to July 10 for natural season flowering. Plants may require pinching.

Container-grown

Container-grown garden mums can be produced either outdoors or in greenhouses. Five hundred plants will require more than 1,000 square feet of production area. Any commercial growing media for greenhouse crops should be satisfactory for production in containers. Plants will need consistent and regular watering with a trickle or drip irrigation system once or twice every day; some growers are successful with overhead sprinklers. In addition, plants require fertilization every week or with every watering.

Outdoor production is not only cheaper than greenhouse production, but plants are also shorter and tougher when grown outdoors. Pots are set on a 4-inch lime rock base on top of polypropylene ground cloth,



or possibly on black polyethylene with suitable surface drainage. Indoor mum production usually requires growth retardant treatments for height control.

Field production

Field production requires good field soil with no agricultural herbicide residue. Soils should be suitable for digging the plants in the fall. Field mums will require watering with trickle or drip irrigation during typical Kentucky summers. Garden mums are heavy feeders and need regular fertilization.

Pest management

Insect pests, such as aphids, leafhoppers, grasshoppers and caterpillars, as well as spider mites, are relatively common on garden mums. Gray mold and bacterial leaf spot are the primary disease problems. Many grass and broad leaf weeds can be a problem in fields.

Labor requirements

Labor for the growing season is estimated at 289 hours, where 71 percent of the labor is provided by the owner. This figure is based on the outdoor production of 8,200 mums in containers.

Economic Considerations

Controlling production costs is the key to the profitable production of garden mums. Initial investments vary depending on the production system used.

The cost of installation of an irrigation system (pipe, emitters, time clock, solenoid and fertilizer injectors) is about \$1.00 per pot. This cost can be amortized over the five- to seven-year life of the system. If irrigation is not used, hand watering can be costly, adding another \$0.60 to \$1.00 per pot for labor.

North Carolina State has published budgets with cost and return estimates for the outdoor production of container-grown mums sold at wholesale prices. They estimate total production costs at \$1.57 per pot with a net profit of \$1.08 per pot. Delivery costs of \$0.26 per plant would reduce this profit to \$0.82 per pot.

More Information

- Garden Mum Production for Fall Sales (University of Kentucky, 2002)
<http://www.uky.edu/Ag/HLA/anderson/gardenmums.pdf>
- Cost of Production of Garden Mums in Containers (Purdue University, 1990)
<http://www.uky.edu/Ag/NewCrops/mumbudgets.htm>
- Cost of Producing Containerized Garden Mums (North Carolina State University, 1996)
<http://www.ces.ncsu.edu/depts/hort/floriculture/NCCFGA/pdf/bulletins/1996/Aug1996.pdf>
- Chrysanthemum – Commercial Greenhouse Production (Auburn University)
<http://www.ag.auburn.edu/hort/landscape/Potmum.htm>
- Chrysanthemum Diseases (Pennsylvania State University, 2006)
http://www.ppath.cas.psu.edu/EXTENSION/PLANT_DISEASE/chrysan.html
- Fall Garden Mum Production in Alabama, ANR-1096 (Alabama Cooperative Extension System, 1998)
<http://www.aces.edu/pubs/docs/A/ANR-1096/>
- Guide to Successful Outdoor Garden Mum Production (North Carolina State University, 1998)
<http://www.ces.ncsu.edu/depts/hort/hil/pdf/hil-506.pdf>
- Understanding and Producing Chrysanthemums (Clemson Extension, 1995)
<http://virtual.clemson.edu/groups/psapublishing/Pages/Hort/HortLf65.pdf>