## TTGCOOPERATIVE EXTENSION SERVICE UNIVERSITY OF KENTUCKY—COLLEGEOFAGRICULTURE

## Greenhouse-grown Specialty Cut Flowers

## Introduction

"Specialty cut flowers" generally refers to cut flower species other than roses, carnations and chrysanthemums. Some of the specialty cut flowers that can be grown successfully in greenhouses include anemone, aster, bachelor button (cornflower), celosia, coral bell, freesia, larkspur, lisianthus, snapdragon and sweetpea.

## Marketing

The market constantly shifts as consumer preferences change. Growers must be willing to adjust their production to meet these demands. Potential retail outlets include farmers markets, roadside stands, and Consumer Supported Agriculture (CSA) subscriptions. Some growers sell and arrange flowers for special events, such as weddings. Wholesale options include wholesale florists, supermarkets, garden centers, and craft stores. Hotels, restaurants and the Internet may offer other marketing opportunities. Growers should develop several different marketing avenues.

## Market Outlook

The market for cut flowers is very large in the U.S.; however, much of the greenhouse cut flower industry has shifted to South America where labor costs are considerably cheaper. Despite this, there is a niche for uncommon specialty cut flowers grown in Kentucky. Local growers will have the market advantage



Asters

of being able to supply fresher flowers, as well as being able to provide the hard-to-find/difficult-to-ship specialty flowers. Cut flowers are currently produced in less than five greenhouses in the state and the competition is fierce. While field production has become popular, greenhouse production offers the advantage of an extended season and yearround income. In addition, early cuts and winter cuts may bring higher market prices.

## Production Considerations

Site selection and planting
The grower will need to be familiar with the different production and harvest requirements of a diverse group of plant material. In general, cut flowers prefer fertile, well drained field soil or soilless mix. Growers may choose to use transplants or direct seed into containers or greenhouse production beds. Transplants may be grown inhouse or purchased as plugs. Most cut flowers require support

[^0]in order to prevent lodging and to ensure straight stems. Sequential plantings can ensure a continuous supply of the cuts that are in demand year-round.

## Pest management

Greenhouse conditions that favor plant growth also favor the rapid build-up and spread of insects and diseases. Potential disease problems include damping-off, root rots, powdery mildew, fungal leaf spots and impatiens necrotic spot virus. Common insect pests include thrips, aphids and white flies. Prevention and careful monitoring are the keys to insect and disease control. Weed control in and around the greenhouse will also help reduce insect pests and disease problems.

## Harvest and storage

The proper stage of harvest will depend upon a number of factors, including type of market, cultivar, distance to market and intended use. Once harvested, stems are placed in a bucket of water containing floral preservative. Harvested flowers should then be placed in a cooled area or cooler until sold. Floral preservative and refrigeration are essential to keeping flowers fresh and extending their shelf life and vase life.

## Labor requirements

Cut flower production is highly labor- and management-intensive. Trained labor is required for all aspects of production and harvest.

## Economic Considerations

Greenhouse cut flower production is a high risk business with significant start-up costs, as well as demanding labor and management. Initial
investments include greenhouse construction, production system costs and equipment. The cost of a production-ready greenhouse, excluding land costs, can run approximately $\$ 10$ per square foot.

Production costs and returns vary greatly depending on crops grown, greenhouse size, production system, and marketing strategy. Typically, the profit margin for growing cut flowers is $\$ 1$ to $\$ 2$ per square foot.

## More Information

- The Greenhouse Business in Kentucky - A Review of Crops and How to Begin a Business (University of Kentucky, 2002)
http://www.uky.edu/Ag/HLA/anderson/greenho usesinkentucky.pdf
- Selected Resources and References for

Commercial Greenhouse Operators (University of Kentucky, 2002)
http://www.uky.edu/Ag/Horticulture/anderson/ greenhousereferences.pdf

- Specialty Cut Flower Production and

Marketing (ATTRA, 2006)
http://attra.ncat.org/attra-pub/cutflower.html

- Specialty Cut Flowers by A. M. Armitage and Judy M. Laushman, $2^{\text {nd }}$ edition. 2003. Timber Press. Portland, OR


## Floriculture Web sites

- Association of Specialty Cut Flower Growers http://www.ascfg.org
- Floriculture (Purdue University) https://sharepoint.agriculture.purdue.edu/ agriculture/flowers/default.aspx
- International Cut Flower Growers Association http://www.rosesinc.org


[^0]:    Agriculture \& Natural Resources • Family \& Consumer Sciences • 4-H/Youth Development • Community \& Economic Development

