

## Edible Flowers

### Introduction

Edible flowers, which have been used in the culinary arts for centuries, are experiencing renewed popularity. Flowers can serve as an essential ingredient in a recipe, provide seasoning to a dish, or simply added as a garnish. Flowers are commonly used fresh, dried or stir-fried.

### Marketing and Market Outlook

Edible flowers can complement a cut flower or herb business, providing additional opportunities for value-added products. Flowers can be marketed fresh, dried, candied, in prepackaged salads, in teas and in many other products. Flowers intended for human consumption must be grown without pesticides, giving organic growers a production edge.

Edible flowers require a specialized niche market that may take some time to develop. Market research conducted in Michigan indicates that packaging different colors and varieties of edible flowers in the same container appeals the most to consumers. Including varieties with more appealing fragrances in such a mixture also encourages positive consumer reaction.

Potential growers should talk to up-scale restaurant chefs and caterers. Candied flowers can be marketed to fine bakeries as well. Growers will need to be able to demonstrate an ability to provide a dependable supply of consistently high quality product to meet buyer demand. Producing a colorful and diverse range of edible varieties will be critical to tapping into any market.



### Production Considerations

#### *Site selection and planting*

The cultural requirements for edible flowers are very similar to those of ornamental flowers. Edible flowers, however, must be grown without pesticides. Flowers obtained from most commercial florists, garden centers and nurseries are not pesticide-free and are, therefore, not suitable for consumption. While many commonly cultivated flowers are edible, others are either not palatable or are considered poisonous. Only flowers known to be edible should be grown for this purpose.

In general, edible flowers prefer fertile, well-drained soil and full sun throughout the day. Many producers prefer growing plants in 4- to 6-inch raised beds to improve drainage and ease harvest. A source of water for trickle irrigation is essential to production.

Planting dates depend upon the market and type of plant being grown. Annuals are planted as soon as danger of frost has



passed in the spring and staggered plantings are common. Because transplants come into flower sooner than direct-seeded plants, growers may choose to use transplants to capture the early market and then direct-seed later plantings. Transplants can be started in a greenhouse or cold frame.

#### *Pest management*

Edible flowers must be grown without the use of chemical pesticides. Insect control consists of hand picking harmful insects and the use of beneficial insects to help decrease insect populations. Following good cultural practices and diversifying plantings can aid in the control of both insect and disease problems. Weed control is critical since weed competition not only reduces plant quality and quantity, but also raises labor costs by increasing the time needed for harvest.

#### *Harvest and storage*

Edible flowers are harvested in the cool of the day during the peak of bloom. Only flowers free of insect and disease problems should be selected. Generally, unopened flowers or those past their prime are not suitable. To maintain freshness, flowers should be cooled immediately after harvest. The stems, sepals, pistils and stamens of most flowers are removed prior to use.

Candied flowers are prepared by painting each petal with egg white, then sprinkling with granulated sugar. Once the sugar has crystallized, flowers are stored in an airtight container.

#### *Labor requirements*

Edible flower production is labor- and management-intensive. Planting, weeding and harvesting all require trained labor. Since an edible product is being handled, additional time and care will be needed to transport the product from field to market. Initial market research indicates that consumers are most interested in

purchasing edible flowers when different varieties are packaged together, requiring additional packing labor.

### **Economic Considerations**

Initial edible flower market research conducted in Detroit has shown consumers and chefs are interested in purchasing a well-packaged product. Consumers were most willing to pay \$2.99 for an 8-ounce plastic container with varying colors of 6 nasturtiums and 14 violas. The addition of other edible varieties to a mix, especially those with desirable fragrance, enhances consumer interest.

A package of 20 flowers sold at \$3.00 would require growers to be able to harvest and package 20 flowers in 10 minutes or less in order to generate a \$1.50 return to preharvest costs of production. Considering the cost of an 8-ounce plastic container (about 10 cents) and the minimal cost of material to produce flowers, a \$3.00 per 8-ounce retail price would return \$1.00 to \$1.25 to land, labor and management per 20 flowers. Due to uncertainties in quantities of edible flowers demanded, producers should target markets that are willing to pay \$6.00 per pound or more for an edible flower mix in order to generate reasonable returns to land and management.

### **More Information**

- Edible Flowers (ATTRA, 2004)  
<http://www.attra.ncat.org/attra-pub/PDF/edibleflowers.pdf>
- Edible Flowers (North Carolina State University, 1999)  
<http://www.ces.ncsu.edu/depts/hort/hil/hil-8513.html>
- Edible Flowers (Colorado State, 2003)  
<http://www.ext.colostate.edu/pubs/Garden/07237.html>
- Specialty Flowers (Small Farm Center, University of California-Davis, 1990)  
<http://www.sfc.ucdavis.edu/pubs/brochures/specialtyflo.html>