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# Specialty flowers dry flower production

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The interest in cut dry flowers (or everlastings) has increased dramatically in the Inland Northwest during the past 5 years. The production of specialty flowers is a new venture for our region. Most commercial production in the Inland Northwest is in market or home gardens that sell to gift and craft shops.

The potential for profitable dry flower production is good if you emphasize crops that are adapted to our northern climate, pay attention to flower quality, and focus on niche marketing. The types of crops that can be grown efficiently will determine what you can offer the market, and market price and demand will determine what can be grown profitably. The aim of this publication is to introduce potential growers to the enterprise of producing and marketing specialty flowers.

## Challenges

While the potential for profit in dry flower production is certainly there, many challenges face the grower, particularly the new grower. These challenges may be grouped under three headings: markets, money, and labor.

### Markets

Before any flower seeds are in the soil, you must first identify one or more markets for your planned crop and know something about that market. You should consider joining any existing local flower production or marketing cooperatives or organizing one yourself. Flower wholesalers and retailers require reliability; they need consistent quality and quantity. Established volume growers can stockpile large quantities, providing fierce competition and a formidable marketing challenge to smaller and newer businesses. A problem all domestic growers face is the competition from foreign floral imports.

### Money

Long-term budgeting is a frequently overlooked requirement for a new enterprise. Often, a grower will have the capital necessary to plant a crop, but not enough to see it into production or to survive a year or two of bad weather. Take the time to identify all costs and prepare a monthly cash flow. This will help determine if you have the capital needed to successfully establish the crop. It is better to start small and ensure survival than to gamble — and lose — on a larger project. The University of Idaho College of Agriculture has several publications aimed at helping the small grower to handle the financial aspects of a new enterprise.

In planning a new enterprise, equipment requirements should be carefully considered. If the new crop can be integrated into existing farming efforts, the enterprise has a much better chance of being profitable than when equipment must be purchased solely to be used on a new crop. Remember equipment costs such as repairs, taxes, depreciation, interest either lost or paid, and insurance premiums.

### Labor

Commercial dry flower production is very labor intensive. Your production systems must take into account your site location, soil composition, and sources of heat and light; you must provide frost and wind protection, drip or trickle irrigation, fertilizer, weed and pest control, disease management, and storage and drying facilities. For some everlasting crops, additional value-added labor and materials will be needed to provide a marketable product.

The successful grower of specialty flowers must be more than creative with flowers; he or she must be creative in financing, management, production, and marketing.



## Management and production

Management, production, and marketing are obviously intertwined skills. For the purposes of this brief introduction, the first two will be dealt with together.

### Overview

Most commercially grown dry flowers are biennials or perennials requiring full sun. They will grow under most soil conditions with good air and water drainage and a growing season of a minimum of 80 days. Annual, biennial, and perennial flowers are usually harvested from June through September in the Pacific Northwest and marketed shortly thereafter. Field crops of dry flowers can be slow to establish and do not compete well with weeds. Don't expect a commercial harvest the first season for biennial and perennial crops that are field-established. It may take up to 3 years to reach establishment and full production.

### Crop selection

Several perennial dry flowers that grow in the Inland Northwest are traditionally used by the floral industry. These include baby's breath (*Gypsophylia paniculata*), a hardy perennial requiring full sun and preferring slightly alkaline and well-drained soils; German statice (*Limonium sinuatum*), a biennial or half-hardy annual plant requiring full sun, average soil conditions, and good drainage; and caspia (*Limonium bellidifolium*), a tender perennial or annual that will tolerate partial shade and can be grown on poor, light soils as long as good drainage is provided. Over 150 other annual, biennial, and perennial cut flowers and ornamental grasses may be grown from seed for dry or specialty flower production.

### Starting

Plugs or plants can be purchased in quantity from national plant wholesalers. Many of the dry flower crops are relatively easy to start from seed in a greenhouse or home. Seeding should start in late January. Good air circulation is needed. New plants, commercially purchased or owner grown, can be set out in June or after the last killing frost. Be sure to "condition" your plants before they are planted in the field.

### Site selection

Select sites where chemical residues from previous crops (cereal grains, sugarbeets, etc.) will not impact your plantings. Also avoid potentially harmful herbicide or pesticide drift by selecting sites away from crops that may be sprayed.

### Bed preparation

The preparation of perennial beds requires more work than for annual beds, since perennials will live in one place for several years. The soil profile must be deeper to accommodate long, large roots. The soil must also be richer to provide greater nourishment year after year. Drainage must be good since heaving soil in the spring

and standing water on plant roots and crowns during the winter are both sure ways to kill perennials. Also, plants can withstand greater extremes in temperature if drainage is good.

### Establishment

Plant perennials with wide spaces (24" to 36") between the rows. Mulching or planting annual flowers between the perennials is a good way to reduce weed growth. But if you plant annuals, make sure not to crowd out the perennials during their first season. First-time growers can expect to lose 10 percent of their plants if they are doing a good job.

### Weed control

Begin weed control the season before the crop is planted. Several cultural and chemical options are available. First, avoid buying or renting land that is seriously infested with noxious or hard-to-control weeds such as Canada thistle, yellow nutsedge, goldenrod, and bindweed. If you cannot avoid such a site, control weeds before planting by repeated applications of a systemic, nonresidual herbicide, or discing or harrowing. If you choose to use herbicides, read chemical labels to make sure they are registered for ornamental use before buying or applying them.

### Irrigation

Drip or trickle irrigation systems are preferred to overhead watering systems. Overhead irrigation is less expensive, but can cause damage to flowers.

### Fertilizing

You should test the intended sites for nutrient levels before planting. Many sites in the Inland Northwest have poor soils, and the addition of commercial fertilizer or natural soil amendments will be necessary to produce a flower crop.

### Protection

Winter survival for perennials can be a problem. Straw may be used in the fall as a mulch for protection against the cold.

### Disease management

Some diseases can survive for years in the soil as resting spores or on dead plant debris. Sanitation and good cultural practices are extremely important at new crop sites for this reason. Be sure to put transplants into well-drained soil, avoid excessive nitrogen application, and allow free air movement to prevent disease problems. Cold, dark soils harbor disease in the spring. Growers often spray cut flower fields with a fungicide 2 weeks before harvest to reduce mildew. Select two or more cultivars of each cut flower crop the first season to determine disease susceptibility at each site.

Dry flower growers in Minnesota report problems with Anthracnose disease on established plantings. In addition, seed rot, seedling damping-off, and root rot



caused by *Pythium* spp., *Rhizoctonia* spp., and *Fusarium* spp. resulted in reduced quality and yield of field-grown perennials.

## Insect control

Insect problems reported by growers include thrips and cutworms. A complete integrated pest management program should be developed during the first growing season.

## Harvesting

Make 1-pound bunches and cut the stems as long as possible. Use rubber bands around the bottom stems only. Be careful not to crush the bunches, and store them in a dark, airy place. Make certain there is good air circulation around the bunches, since they must dry well to prevent mildew.

## Drying

Dry flowers need to be dried in the dark to maintain quality. Ideally, the drying area should have a temperature between 60° and 80°F and humidity of less than 60 percent. You can use two layers of black plastic to block out light and use a dehumidifier in greenhouses, barns, or similar out-buildings.

## Marketing

This section is short because the information you need for marketing your flower crop must be specific to your crop and area. Particularly if you are attempting to grow and sell a new crop, you should get information from many sources. Search libraries, talk to people who have grown the crop, and consult the Extension system agent in your county. Research will pay dividends in minimizing risks and uncovering alternative crops and methods of production.

The Association of Specialty Cut Flower Growers can provide ongoing production, marketing, and other support for growers. Write to Association of Specialty Cut Flower Growers, 155 Elm Street, Oberlin, Ohio 44074, or call (216) 774-2887.

Markets for baby's breath, German statice, and caspia are well established. These dried flowers are used extensively in the floral industry for fillers and wreaths. They are frequently dried, softened, bleached, and/or dyed before sale. Your planning efforts should consider the possibility of doing these value-added functions before a sale.

Buyers frequently require samples. Be sure to reserve several 1-pound samples to use in establishing new markets should your primary market not be available.

The price structure of dry flowers tends to be erratic. Supplies tend to fluctuate and prices respond accordingly. Plan marketing and financial strategies to survive a low-price market. A critical water situation in California during the '80s led dry flower wholesalers to find

new supplies in the Inland Northwest. Specialty flower markets will be affected annually by growing conditions in California and other international growing regions.

## You still want to grow flowers?

Okay, you still have visions of baby's breath in your head? We urge you to start production with no more than a 3,000-square-foot area. If larger plantings are established, invest no more than you can afford to lose. Specialty flowers have been raised for years in California and more recently in Minnesota. These areas have higher growing season "heat units," different rainfall, and different summer humidity patterns than northern Idaho, western Montana, and northeastern Washington. Specialty flowers are a new crop for most regional agricultural enterprises. Careful consideration needs to be given to the challenges, management, production practices, and marketing of specialty flowers under Inland Northwest growing conditions before a crop is planted. Raising a specialty crop such as dried flowers requires an uncommon dedication. You are gardening on a grand scale and must be prepared to make your project a labor of love.

## For further reading

*Dried Flowers*, prepared by Carol Kopolow, Reference Branch, National Agricultural Library, Beltsville, Maryland 20705.

*Commercial Field Production of Cut and Dry Flowers*. Proceedings of 1988 National Symposium, University of Minnesota, Extension Special Programs, 405 Coffey Hall, Eckes Ave., St. Paul, Minnesota 55108. \$20.00.

- CIS 146 Perennial Ornamental Plants (35¢)
- CIS 942 Pricing Nontraditional Products and Services (50¢)
- EXT 741 Marketing Products Directly to Consumers (\$1.00)
- EXT 743 Specialty Farming in Idaho: Is It for Me? (\$1.00)
- EXT 744 Specialty Farming in Idaho: Selecting a Site (\$1.00)

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