

# Cut Flowers

Information compiled by the California Cut Flower Commission

**How Produced** – California dominates the domestic cut flower industry because of its favorable Mediterranean climate, which allows for year-round production of an enormous variety of flowers.

Cut flowers are grown in covered greenhouses and outside in open fields. The floriculture industry, which includes the production of bedding and potted plants, shrubbery and fruit stock, as well as cut flowers, and foliage, is extremely labor intensive, requiring as many as 12 workers per acre. Flowers are harvested by hand and then pre-cooled and boxed to prevent heat buildup and premature decay. United States cut flower growers ship approximately two-thirds of their product by truck and the other one-third by air. Transit time from the grower/shipper to retail outlets varies widely, but can take as little as 24 hours—even to the East Coast. Most flowers are purchased during four key holiday months: February, April, May, and December. Besides holiday sales, flowers are typically purchased for two reasons: to express an emotion or to send “get well” wishes.

**Varieties** – Color and scent are distinguishing features of cut flowers, however, flowers are generally categorized as one of four types used in floral design; line flowers, mass flowers, filler flowers, and foliage. Line flowers are tall, and give the bouquet height, width, and a balanced look. Examples of line flowers are gladiolus, snapdragons, and curly willows. Mass or “face” flowers give bouquets weight, or mass, and are generally round and full faced. They are usually the focal point of color and interest in a bouquet. Most mass flowers come with only one flower on the end of the stem. Examples include roses, carnations, gerberas, sunflowers, lilies, daffodils, tulips, iris, freesia, zinnias, alstroemeria, protea, and chrysanthemums. Filler flowers, stems with a lot of little flowers and foliage, round out the bouquet and give it a soft, full look. Casual, fresh-from-the-garden, bouquets use an abundance of filler flowers to visually connect mass and line flowers. Examples of filler flowers are baby’s breath, Queen Anne’s lace, heather, and aster. The last type of plant used in floral design is foliage. Foliage refers to the leaves and greenery used to complement floral arrangements. Foliage can also conceal the “mechanics” of an arrangement, such as floral foam. Fern, eucalyptus, salal, and myrtle are all examples of foliage.

Like most California crops, some flower varieties are available year-round while others are not. Many flowers are only available during certain times of the year based on seasonality. For the highest quality and most inexpensive California flowers, consumers can select flower varieties that are in season.

**Commodity Value** – California was the leading state in cut flower production, accounting for approximately 69% of the total U.S. cut flower wholesale value. The wholesale value of cut flowers produced in California in 2020 was \$203 million, which represents a 16% decline from 2019. Across the state retail florists employ approximately 11,000 people.

**Top Producing Counties** – San Diego is the top producing county in California for flowers and foliage, producing 72% of the state’s total. Other top producing counties include Santa Barbara (7%), Ventura (7%), San Luis Obispo (4%), and San Bernadino (3.5%).

**History** – California is considered the originator of America’s commercial cut flower industry. It began in the late 1870s when a Ventura housewife, Theodosia Shepard, was inspired to sell the flowers she raised in her garden. Soon, other women were following suit and bringing their backyard beauty to the local market, and the retail florist profession was born. This period marked a time when French Impressionists began depicting flowers in their paintings and women’s magazines began counseling homemakers on flower care and display.

At the turn of the century the state’s cut flower industry expanded even further as many immigrant families turned their love of beauty and their botanical talents to flower production. The Chinese, Japanese, Italians, and Dutch revolutionized the floriculture industry in California and make up much of the industry today.

**For additional information:**  
California Cut Flower Commission  
(916) 441-1701  
Website: [www.cffc.org](http://www.cffc.org)



# Cut Flower Activity Sheet

## Line Flowers

gladiolus, liatris, snapdragon, delphinium, veronica, curly willow

## Filler Flowers

baby's breath, Queen Anne's lace, statice, aster

## Mass Flowers

rose, carnation, sunflower, lily, iris, zinnia

## Foliage

ferns, eucalyptus, salal, myrtle, ruscus



## Beautiful Bouquet

### Lesson Ideas

- Invite a floral designer to visit your classroom to teach about floral arranging and discuss the wide variety of career opportunities in the floral industry.
- Press flowers in waxed paper. Use the flowers to create a botany book, labeling each flower with its common and scientific name.
- Create a manual illustrating the steps of cut flower pollination, fertilization, and reproduction.
- Research the Fibonacci sequence and determine how the sequence relates to cut flowers.
- Look at a variety of flowers. Categorize them as line, mass, or filler flowers. Sort by color, smell, and shape.
- Grow flowers from bulbs or seeds.
- Color a white carnation using food color in water to learn about capillary action.
- Dissect a flower and identify its parts.
- Experiment with different liquids to determine their effect on flower freshness.
- Visit a commercial greenhouse or nursery to learn how cut flowers are produced.

### Fantastic Facts

1. Mass, line, foliage, and filler flowers are the four categories of flowers used in a bouquet.
2. February, April, May, and December have the greatest number of cut flower sales because Valentine's Day, Easter, Mother's Day, and Christmas fall in these months.
3. One-third of flowers are shipped to floral retailers and wholesalers by air and two-thirds by truck.
4. Besides holidays, flowers are purchased to express emotion or send "get well" wishes.
5. The main expense in cut flower production is labor costs. It requires up to 12 workers per acre.
6. Cut flower production is just one part of the floriculture industry.
7. Theodosia Shepard, a Ventura housewife, is considered the founder of the cut flower industry.

### Lesson Plan: Make Your Own Potpourri

**Introduction:** Potpourri is a mixture of dried, naturally fragrant plant material, used to provide a subtle, natural scent in homes.

**Objective:** Students will compare flowers based on texture, color, and scent. They will use ratios to mix a potpourri recipe.

**California Standards:** CC Math: 6.RP.1, 7.RP.2; Visual Arts: 3-4, Artistic Perception 1.5

**Materials:** Fresh flower petals and herbs, citrus peels, large cardboard sheet, paper towels, large bowl, large jar with lid, cinnamon (sticks or powder), a variety of scented oils.

**Procedure:**

1. Students will sort plant material into groups based on a chosen trait: color, texture, or shape.

2. Using a mathematical ratio, students choose a specific number of items from each of their sorted groups. Have them create a table to show the ratio relationship they used.
3. Cover a piece of cardboard with paper towels. Spread the plant material on the cardboard and let dry for 2-3 weeks, fluffing the mixture occasionally. Cover cardboard with paper towels.
4. In large bowl, mix dried petals with all other ingredients except scented oil. Put a layer of mixture in the jar. Add 3-4 drops of scented oil. Continue to layer the mixture with the oil until the jar is full.
5. Put lid on the jar and leave 1-2 weeks, shaking daily to mix.
6. Finished potpourri can be used in gift baskets or to make sachets.