

Freesia

(*Freesia × hybrida*)

for the

Farmer Florist



MISSISSIPPI STATE UNIVERSITY™
EXTENSION

Freesia was introduced to England from South Africa in the early 19th century, making its mark among the long list of Victorian Age plant discoveries. Since its introduction, freesia has quickly risen through the ranks as a favorite of growers and florists alike. Freesia stems bear six to twelve trumpet-shaped flowers in a rainbow of colors including white, cream, yellow, orange, red, pink, mauve, lavender, and purple. With their relatively long vase life, a bouquet of freesias will fill any room with their sweet, baby powder fragrance. There are numerous single- and double-flowered cultivars available.

PRODUCTION

Corm Selection

Freesia is grown from a modified stem structure called a corm. Be sure to purchase corms from a reputable supplier to avoid any production issues (lower flower quality and smaller flower size) that can occur with low-quality corms. Corm size correlates to flower size, so choose the largest corms possible. Larger corms contain more stored energy and will result in more stems and blooms.

Like many plants native to the Mediterranean, freesia is not a winter-hardy plant. However, in areas with milder winters (Zones 9 and 10), freesia can be planted outdoors or in high tunnels in the fall to have blooms ready for any occasion from late winter to early spring. In cooler areas (Zones 3 to 8), plant freesia outdoors in the spring months for a bounty of late-summer flowers. For an ample supply of cut flowers all season long, plant corms in succession, with 7 to 14 days between plantings. We recommend growers treat freesia as an annual and purchase certified, fresh bulbs each spring.

Cultural Practices

Freesia prefers a well-drained soil. Plant corms in areas that receive full sun, but this plant can tolerate some morning shade in areas at the warmer end of the hardiness range. Flower quality will begin to suffer in areas without full sun. Plant corms in a light soil with good drainage because standing water will cause rot. In areas with poor drainage or denser mineral soils, mix organic matter (compost, manure, or pine bark) into the soil to improve drainage and prevent corm rot.

Freesia is a durable plant and does not require excessive amounts of nutrition when it first emerges from the corm (the vegetative stage). When freesia stems are about 6 inches tall, begin feeding them with 200 ppm nitrogen (N) from a balanced N-P-K source to ensure ample nutrition for the onsetting flowers.

Plant corms densely, no more than 1½ inches apart, and 2 inches deep from the base of the corm. Water freesia sparingly after planting until they sprout. The average time from planting to flowering is 110 to 120 days.

After sprouting, water plants until the soil is consistently moist. Too much or too little water after sprouting may lead to delayed flowering or plant death. Temperatures above 59°F during floral development can lead to "thumbing," a condition where the lowest two or three florets are unevenly spaced and separated from the main grouping of flowers along the spike.

Insects and Diseases

Aphids and thrips are the most common pests seen during freesia production. Both insects are difficult to detect with the human eye and can cause considerable damage, especially to the flower spikes. Early detection is critical to prevent damage to your crop. Yellow sticky traps are a useful method for early detection of these pests. Place these traps among the flower crop and check them weekly. If you detect these pests in your crop, a contact pesticide can help manage outbreaks, but timing and environmental conditions are crucial to protect pollinators.

Viruses are the most serious problem in freesia production. Once a plant contracts a virus, there is no treatment. It is recommended that producers select new stock every 3 years when treating freesia corms as perennial plants. Virus issues are not as prevalent when freesia is treated as an annual crop. *Botrytis* and *Fusarium* are other common pathogens seen during freesia production. *Botrytis* can infect the flowers, stems, and leaves of plants during the growth and postharvest phases. *Fusarium* appears as pink lesions on the corms. It proliferates in warm weather and excessively wet media. With proper care and production practices, you can avoid these issues.

Harvest and Postharvest Handling

Freesia stems need external support to ensure upright growth. Many commercial producers use netting to support the stems.

Harvest stems of freesia when the first floret is puffy and beginning to open and at least two other flower buds are well colored. Cut stems can be stored dry in refrigeration at 32 to 35°F for short periods but should be kept in water with floral preservative for longer storage periods.

Freesia is ethylene sensitive. If storing with other flowers, take extra care to store older flowers away from newer flowers. In addition, never store cut flowers with fruits or vegetables. Larger operations may consider purchasing an ethylene scrubber that removes any ethylene gas present in the post-harvest cooler.

DESIGN APPLICATIONS

Flowers to Carry

There are few flowers that can top freesia for beauty and color. It is a perfect flower for weddings, and its fragrance is often referred to as "the scent of heaven." This design was created with a bride in mind, but by varying the colors of freesia, it would be perfect for bridesmaids or prom attendees. The arrangement is a simple, hand-tied design and uses 40 to 50 stems of freesia 'Anouk' with accents of green rabbit's foot fern (*Davallia fejeensis*).



Freesia hand-tied bouquet.

Freesia florets are indispensable for small-scale floral designs such as corsages, boutonnieres, and flower girl bouquets. We created a flower girl pomander with just a few materials: nylon tulle and florist's cold glue. Both materials perform well in refrigeration, allow for speedy work, and create a pleasing design.

Here's how to make your own flower girl pomander:



Step 1. Create three to four bows using nylon tulle. Use lengths of tulle to bind each bow.



Step 2. Cut a length of tulle and knot it. You will use this piece to bind the series of bows together. Make sure the loop is the appropriate size for the flower girl to carry.



Step 3. After binding the bows, cut any extraneous lengths of tulle to create a uniform pouf.



Step 4. Dampen a paper towel and lay it on the work counter. The wet towel lowers the transpiration rate of the freesia florets, slowing their rate of wilting. Dab the floret ends into florist's cold glue and allow it to become tacky. Insert the florets deeply into the pouf, taking care to conceal the glued blossom end. Allow the glue to dry for a few minutes, then coat the design with anti-transpirant spray.



Step 5. You can attach the pomander to the handle of a wicker basket to keep the globe form from flattening during refrigeration and transportation to the wedding site. Add fluffy, waxed tissue to create a cushion, then place the bride's bouquet in the basket. This allows the dual designs to remain fresh and intact after being delivered to the wedding site or picked up by the customer. The cost of the basket can be included in the final wedding flower charge.



Step 6. Wrap the entire basket with cellophane to prevent wilting, and store the unit in refrigeration set between 33 and 38°F.

For teens and adults, make the pomander bouquet slightly larger. Consider this easy-to-carry design as an alternative to bouquets for dance recitals.

Flowers to Wear

Wiring and taping is a long-established mechanical technique in floral design. We encourage florists to practice and build aptitude in all techniques. When the occasions arise for the special arrangement of various types of flowers, the well-practiced florist remains comfortable and confident.



A traditional corsage.



Component design.



Component vases joined with horsetails.

One to two stems of freesia can make a delicate corsage suitable for a shoulder, handbag, or wrist. This design also can be attached to a prayer book for a wedding ceremony.

We prepared five freesia florets using the hook wiring method and one cluster of tip buds using the wrap-around wiring method. A few glacier ivy leaves (*Hedera helix* 'Glacier') and small sprigs of boxwood (*Buxus sempervirens*) provide verdant green accents.

Table Arrangements

We are big fans of component floral designs—using multiple containers clustered together to create a

tablescape. Just a few vases of freesia are all you need to complete a beautiful look. We placed three to four stems in each vase. This combination is fine for both rectangular and round tables; just arrange the vases to follow the tables' lines.

Another approach is to join the vases with line material. Here, we have added horsetails (*Equisetum hyemale*) jutting from vase to vase. These dynamic lines change the effect of the composition, lending an architectural structure to the romantic combination of freesia bouquets.

REFERENCES

- Butler, S., DelPrince, J., Fowler, C., Gilliam, H., Johnson, J., McKinley, W., Money-Collins, H., Moss, L., Murray, P., Pamper, K., Scace, P., Shelton, F., Verheijen, A., & Whalen, K. (2008). *The AIFD guide to floral design*. Intelvid Group.
- Dole, J., & Wilkins, H. (2005). *Floriculture: Principles and species* (2nd ed.). Pearson.
- Longfield Gardens (n.d.) *All about freesia*. <https://www.longfield-gardens.com/article/All-About-Freesia>
- Armitage, A., & Laushman, J. (2003). *Specialty cut flowers: The production of annuals, perennials, bulbs, and woody plants for fresh and dried cut flowers* (2nd ed.). Timber Press.
- Scace, P., & DelPrince, J. (2021). *Principles of floral design*. Goodheart-Willcox.
- Stevens, A. B., & Gast, K. L. B. (1992). *Specialty cut flowers: A commercial grower's guide*. Kansas State University Cooperative Extension Service MF-1034.



Publication 3751 (POD-04-22)

By **Anthony Bowden**, Research Associate, South Mississippi Branch Experiment Station; **James M. DelPrince**, PhD, AIFD, PFCI, Associate Extension Professor, Coastal Research and Extension Center; **Patricia Knight**, PhD, Research Professor and Director of Coastal Horticulture Research; and **Christine Coker**, PhD, Associate Research Professor, Coastal Research and Extension Center.

Copyright 2022 by Mississippi State University. All rights reserved. This publication may be copied and distributed without alteration for nonprofit educational purposes provided that credit is given to the Mississippi State University Extension Service.

Produced by Agricultural Communications.

Mississippi State University is an equal opportunity institution. Discrimination in university employment, programs, or activities based on race, color, ethnicity, sex, pregnancy, religion, national origin, disability, age, sexual orientation, gender identity, genetic information, status as a U.S. veteran, or any other status protected by applicable law is prohibited.

Extension Service of Mississippi State University, cooperating with U.S. Department of Agriculture. Published in furtherance of Acts of Congress, May 8 and June 30, 1914. GARY B. JACKSON, Director