

Freesias

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Freesias were commonly forced in U.S. greenhouses during the 30's and 40's, but until the last few years were not frequently grown. European growers found this to be a profitable crop and it now ranks as one of their leading cut flowers.

According to Heins (1978), freesias have many attributes which enhance their acceptance both by growers and retailers alike. These include: (1) high production 35-40 stems/sq.ft., (2) low labor, (3) abundant fragrance,

(4) wide color range, (5) something innovative, and (6) diversity of use, as it may be forced as pot plant.

Freeseias are native to South Africa, where the environment requirements are naturally satisfied. Although 19 species occur in the wild, only hybrids of Freesia refracta are generally forced.

Viruses are sometimes a problem in freesia corms, but not in those propagated from seed.

PRODUCTION FROM SEED

Seeds of F-1 hybrids are normally sown April through June in a porous medium and covered with 1/4 inch of vermiculite. Uniform moisture is important. Germination at 60-65^o occurs in about 3 weeks.

Four to five weeks after seeding, when plants are about 2 inches tall, the seedlings are transplanted into deep flats, cell paks, or pots and grown at 60-65^oF nights until the plants produce seven (7) visible leaves. The temperature is then lowered to a continuous 55^o F for floral initiation and flowering at which time they may be benched.

Freeseias normally flower in 7-8 months from seed when maintained at 55^oF. Caution - Warm autumn temperatures, above 55^oF, may delay flowering. Normal photoperiods (no light manipulation) are followed when forcing freesia.

A suggested seeding schedule follows:

<u>Seeding</u>	<u>Flower</u>
April - May	Late December - February
May	mid-February
June - August	February - early April (Slightly lower quality)

PRODUCTION FROM CORMS

Corms are planted with the tips slightly above the soil line from mid August to late October for flowering from January - April. They are spaced at 2" in 6" rows although late plantings may be 3 x 5" (Demiccio, 1985). Growers may space plantings every 2-3 weeks to stagger the cut.

Temperatures above 60^oF are desirable for vegetative growth or until 3-4 leaves are visible. Then lower the temperature to 50-55^oF until flowering.

The top ten cultivars sold in the 1983 Dutch Auctions were: Ballerina, Blue Heaven, Aurora, Miranda, Royal Blue, Fantasy, Wintergold, Uchida, Beethoven, and Escapade.

Freesia corms may be held over if the following procedures are followed:

1. After flowering, gradually reduce water and fertilizer for 4-8 weeks, allowing the foliage to die back.
2. Dig and clean corms.
3. Store corms for 13 weeks at about 88^oF. Some growers simply cure the corms in the greenhouse during the summer to satisfy the high temperature requirement.

Note - If the heat treatment is not followed, pupation occurs. This is the formation of a new corm on top of the old corm, resulting in poor or aborted sprouting.

CULTURAL POINTERS

Freesias are supported by a two or three wire system to maintain straight stems. For pots, a plastic ring support is available.

Research has shown that the use of superphosphate (single or treble) may induce tip burn. This is suspected to be caused by the fluoride in the superphosphate. Do not incorporate any "super" in Freesia media unless a soil test indicates a very low phosphorus level.

Fertilize every week or two with a light to moderate amount of complete fertilizer based on a soil test.

Happy cutting with this profitable crop.

REFERENCES

- Anonymous. 1972. Freesias. Florist's Review. September 21:74.
- Demicco, Michael. 1985. Freesias. An address presented at the Conn. Greenhouse Short Course, Oct. 24, Storrs, CT.
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