Freesia

Recommendations for Maintaining Postharvest Quality

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Description

Native to South Africa, freesias thrive in mild climates and are widely produced for the florist trade. The plants are grown from seed or corms. Virus is an important problem in corm-produced plants, so care should be taken in obtaining virus-free corms from propagators. Bulbs from temperature-controlled storage can be forced year-round in the right climatic conditions.

Maturity

Stems are harvested when the first flower colors and opens. Several flowering stems may be harvested from one plant. In that case, the uppermost flower stem should be cut just above the junction of the desired lateral flowering stem. When the lateral stem reaches maturity, it too is harvested. The upper flowering stem will have more flowers per stem and better postharvest life than lateral flowering stems.

Grading & bunching

Flowers are normally sold in bunches of 10 stems, usually of the same color. There are no standard grades, but they may be graded according to maturity, number of flowers per stem and the length of stem.

Chemical solutions

Freesias should be pulsed for 18 hours in the dark with a preservative solution containing 25% sucrose. Pulsing should be carried out at about 21°C(69.8°F) and 85% R.H. This treatment will increase flower size, percentage of flowers that open, and vase life. STS (silver thiosulfate) pulse pre-treatment is effective in preventing abortion of small buds on the inflorescence - the effects of EthylBloc on freesias have not yet been tested. If stems are cut before the first flower is open and showing color, the flowers will not open sufficiently in water. Immature stems should be held in a preservative solution containing 4% sugar under cool conditions 10-20°C (50-68°F) to open flowers to the desired stage. Fluoridated drinking water should not be used for freesias, because the fluoride (as little as 1 ppm) causes freesias to open with smaller flowers and remaining buds turned brown. Preservatives containing aluminium sulfate alleviate but do not completely prevent these symptoms.

Storage

Little research has been carried out on storage of freesias, but it is possible to store them for at least a week in water at 2°C (35.6°F)and high (about 90%) R.H.

Response to CA

There have been no reports of beneficial effects of CA on freesia flowers.

Freezing injury

Freezing may occur at temperatures below -0.5°C (31°F). Symptoms include water-soaking and collapse of leaves and florets.

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