



Antirrhinum

(Snapdragon)

Recommendations for Maintaining Postharvest Quality

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Description

Snapdragons can be produced year-round in greenhouses and most of the year in the field. Some greenhouse cultivars can be used in the field, but there are also specially selected cultivars for field growing. Snapdragons are commonly grown as a single-stemmed crop. A pinched crop produces more flowers (but of lower grade) and reaches maturity later.

Maturity

For local sales, snapdragons are typically harvested when the flowers on the lower one-half to two-thirds of the spike are open. A less mature stage is desirable for shipping and/or short term storage.

Harvesting

Snapdragons are harvested with shears.

Grading & bunching

Snapdragons are bunched in groups of 10 by color. Flowers must have straight stems and reasonably healthy foliage. Foliage on the lower third of the stem should be removed.

Pre-treatments

Pulsing for one hour with an STS solution containing 0.5 oz(14 ml) concentrate per gallon(4.5L) of water protects flowers from ethylene-induced shattering. Another method is

to pulse with a solution containing 0.1 oz(2.8 ml) concentrate per gallon(4.5L) and 7% sucrose overnight at 21° C(70° F). Upper flowers on spikes treated in the latter manner open with better color than control flowers.

Chemical Solutions

Snapdragons are best stored with only a few flowers open, but this often results in poor development of the flowers on the spike and fading of color at the tip. Spikes cut with only one or two flowers open should be opened in a solution containing 300 ppm 8-hydroxyquinoline citrate (8-HQC) and 1.5% sucrose. This bud-opening solution can also be used as a vase solution.

Addition of 25 ppm of the growth regulator n-dimethylamino succinamic acid (Alar, B-nine) increases flower quality and also counteracts the excess spike length that sometimes results from placing snapdragons in 8-HQC and sucrose.

Spikes held in 8-HQC and sucrose under 200 foot candles light will have better flower color and quality than spikes held in the dark.

Geotropism

If stored for even a short time in a non-vertical position flowers on harvested spikes assume a permanent, upward bend, thus reducing quality. If snapdragons are shipped at warm temperatures, they should be packed upright in snapdragon hampers. Researchers have shown that treatment of snapdragons immediately after harvest with naphthylphthalamic acid overcomes the geotropism.

Storage

Snapdragons can be stored at 4° C (39° F) for 3 to 4 days either dry or in water without loss in vase life. Storage for 7 to 10 days is acceptable if spikes are held in water and wrapped in polyethylene film to retard moisture loss. Snapdragons have been satisfactorily stored for up to 3 weeks at 1° C (34° F).

Ethylene sensitivity

Snapdragons used to be considered very sensitive to ethylene, but the newer cultivars have been selected for ethylene resistance, and ethylene normally causes a problem only when present in moderate concentrations. Flower drop (shattering) occurs in 24 hours if ethylene is present in the air at concentrations of 0.5 ppm or more.

Rates of Respiration

Remain to be determined.

Response to CA

There is no published evidence that controlled or modified atmospheres will improve the shelf life of stored antirrhinum.

Freezing injury

Freezing will occur at temperatures below -0.9°C (30°F). Symptoms include water-soaking and collapse of leaves and florets.



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