

## Snapdragon Snapshot™

(*Antirrhinum majus*)

### Germination

#### Stage 1 Time of radical emergence

Use a well-drained, disease-free seedling medium with a pH of 5.5 to 5.8 and EC less than 0.75 mmhos/cm (2:1 extraction).

**Germination:** 64 to 68°F (18 to 20°C)

**Timing:** 4 to 6 days

**Soil temperature:** 64 to 68°F (18 to 20°C)

**Moisture:** Medium

**Light:** Not required

**Cover:** Lightly with vermiculite

### Plug Production

#### Stage 2 Stem and cotyledons emerge

**Timing:** 7 to 14 days

**Soil temperature:** 65 to 70°F (18 to 21°C)

**Moisture:** Reduce moisture levels once radicle emergence occurs. Allow the soil to dry out slightly before watering. Irrigate early in the day so that foliage is dry by nightfall.

**Light:** 450 to 1,500 f.c. (5,000 to 16,000 Lux)

**Fertilizer:** 50 to 75 ppm N from 14-0-14 or calcium/potassium nitrate feed once per week when cotyledons are fully expanded. Alternate feed with clear water. Maintain water alkalinity at 60-100 ppm and ammonium levels at less than 10 ppm.

**Soil pH:** 5.5 to 5.8

**Soil EC:** <0.75 mmhos/cm

#### Stage 3 Growth and development of true leaves

**Timing:** 14 days

**Soil temperature:** 62 to 65°F (17 to 18°C)

**Moisture:** To promote root growth and control shoot growth, allow the soil to dry between irrigations, but avoid wilting.

**Light:** 1,000 to 2,500 f.c. (11,000 to 27,000 Lux)

**Fertilizer:** 100 to 150 ppm of 20-10-20 alternating with 14-0-14 or other calcium/potassium nitrate fertilizer, every two or three irrigations. Supplement with magnesium one to two times during this stage using magnesium sulfate (16 oz./100 gal.) or magnesium nitrate. Do not mix magnesium sulfate with calcium nitrate as precipitate will form.

**Soil pH:** 5.5 to 5.8

**Soil EC:** <1.0 mmhos/cm

**Plant Growth Regulators:** Use DIF whenever possible. A-Rest sprayed 3 and 4 weeks after sowing at 10 ppm is effective in controlling height.

#### Stage 4 Plants are ready for transplant or shipping

**Timing:** 7 days

**Soil temperature:** 60 to 62°F (16 to 19°C)

**Moisture:** Allow soil to dry thoroughly between irrigations, but avoid wilting.

**Light:** 1,000 to 2,500 f.c. (11,000 to 27,000 Lux)

**Fertilizer:** 100 to 150 ppm N from 14-0-14 or calcium/potassium nitrate feed as needed. Avoid ammonium fertilizers in Stage 4.

**Soil pH:** 5.5 to 5.8

**Soil EC:** <0.75 mmhos/cm

### Growing On to Finish

Use a well-drained disease-free soilless medium with a medium initial nutrient charge and a pH of 5.5 to 6.2.

**Temperature:** 45 to 55°F (10 to 13°C) nights and 55 to 70°F (13 to 22°C) days. Avoid night temperatures above 55°F (13°C) as this will reduce stem strength. The best time to grow Snapdragons is Autumn through early Spring, when cooler growing conditions can be maintained.

**Moisture:** Allow soil to dry slightly between waterings, but avoid wilting.

**Light:** Keep light levels as high as possible while maintaining recommended temperature.

**Fertilizer:** Every other irrigation, apply 150 ppm N from 15-0-15, alternating with 20-10-20. Alternate feed with clear water.

**Soil pH:** 5.5 to 6.2

**Soil EC:** 1.0 mmhos/cm (using 1:2 extraction). Provide good airflow at the plant level.

#### Controlling Height:

- Once plants are rooted to the sides of the containers they can be allowed to dry slightly prior to irrigation.
- Withhold fertilizer, especially phosphorous and ammonium-form N.
- Snapdragons are responsive to day/night temperature differential (DIF) and are shorter with a negative DIF.
- When grown as recommended under cool temperatures and high light, no growth regulators should be needed. B-Nine, Bonzi and Sumagic are effective in controlling height in snapdragons, but may delay flowering and will lead to less uniform flowering time.

#### Crop Scheduling

Sow to transplant (288-cell plug tray): 5 to 6 weeks

#### Common Problems

**Insects:** Thrips, aphids

**Diseases:** Downy mildew, Botrytis, powdery mildew

## Green Thumb Tips

#### For the Grower

- Good choice for producing in value packs and pots.
- Produce in early Spring when cooler growing conditions can be maintained.

#### For the Retailer

- Partial shading is beneficial to **Snapshot** snapdragons in the retail setting.
- Keep plants on the dry side, but do not allow to wilt before watering.

#### For the Home Gardener

- Grow **Snapshot** snapdragons in full sun.
- Excellent as a border in the flower beds and

landscape. Perfect for mass color in solid plantings as well.

