

## Salvia Species Guaranitica

(*Salvia guaranitica*)

A Ball FloraPlant Product

### Propagation

- Choose a well-drained soilless medium with an EC of 0.75 to 0.80 mmhos, with a 1:2 extraction and a pH of 5.4 to 5.8.
- Stick cuttings immediately upon arrival within 12 to 24 hours of arrival. Cuttings can be stored overnight, if necessary, at 45 to 50°F (7 to 10°C).
- Soil temperature should be maintained at 68 to 73°F (20 to 23°C) until roots are visible.
- Once roots are visible, the media should be kept moderately wet, but never saturated.
- Begin fertilization with 75 to 100 ppm N when roots become visible. Increase to 150 to 200 ppm N as roots develop.
- Once roots are visible, the media should be kept moderately wet and never saturated. This will prevent iron deficiency and the associated chlorotic foliage that can develop.
- As the rooted cuttings develop, high light, appropriate water stress and moderate air temperatures should eliminate the need for chemical plant growth regulators (PGRs).
- Black and Bloom should be pinched at 18 to 24 days after stick, when roots are well developed, to promote early branching and improve habit.
- Black and Bloom rooted cuttings should be ready for transplanting 24 to 28 days after sticking.

### Growing On to Finish

#### Media

- Use a well-drained, disease-free, soilless medium.
- Maintain a media pH of 5.4 to 5.8.
- Salvia Black and Bloom prefers a well-drained media with as much air space as is practical.

#### Temperature

- Nights: 59 to 64°F (15 to 18°C)
- Days: 71 to 79°F (21 to 26°C)
- Avoid excessively cool temperatures, as this can impede quality growth.

#### Light

- Keep light intensities at 6,000 to 10,000 f.c. (60,000 to 100,000 Lux).
- Plants will stretch badly at light intensities below 4,000 f.c. (40,000 Lux); branching will be reduced, as well as flowering and overall quality of Salvia Black and Bloom.

### Watering

- When plants are young, allow the media to dry slightly between watering.
- Excessive moisture for prolonged periods can cause plant stretch and undesirable growth habit.
- Sustained periods of wilting should be avoided.

### Fertilizer

- Salvia Black and Bloom has moderate fertilizer requirements.
- Use constant feed with a balanced fertilizer at 175 to 200 ppm N. Fertilizer with high nitrate-based nitrogen with lower phosphorus and higher potassium is recommended.
- Excessive Ammoniacal nitrogen and phosphorus will promote unwanted vegetative growth. Both should be provided in very limited quantities.
- If new growth is chlorotic, add chelated iron to the feed.
- A full complement of minor elements should be provided at each fertilizer application.
- Controlled-release fertilizer can be used to supplement a liquid feed program.

### Pinching

- Pinching will improve overall branching and habit of the finished product.
- Pinch plants back 7 to 10 days after transplanting to improve basal branching.
- Depending on pot size, light level and other cultural factors, 1 to 2 additional pinches can be used to improve finished habit. Each pinch should be performed when 4 mature leaves can be left on the stem after terminal is removed to ensure adequate breaks after pinch. Plants should bloom 4 to 6 weeks after pinch.

### Controlling Growth

- Maintain recommended light levels and temperatures to avoid stretch.
- To control finished height a tank mix of B-Nine 2,000 to 3,500 ppm with Cycocel 750 to 1,000 ppm can be used. Applications should be made on 10 to 14-day intervals as needed.
- Once finished plant height is achieved, Bonzi 1 ppm drenches are effective to control and tone plant habit.
- These recommendations for plant growth regulators should be used only as general guidelines. Growers must trial all chemicals under their particular conditions.

## **Common Problems**

**Insects:** Thrips, Aphids, Whitefly, Fungus Gnats

**Diseases:** Botrytis, Pythium, Rhizoctonia

**Problem:** Plant collapse

**Causes:** Stem canker (Botrytis); plants grown in saturated media for extended times (Pythium)

**Problem:** Excessive vegetative growth and lack of flowers.

**Causes:** Excessive ammoniacal nitrogen in fertilizer; low light and over-watering; saturated media.

**Problem:** Poor branching and thin plants

**Causes:** Low fertilization during early stages of growth; low light

All Salvia Black and Bloom cuttings are derived from culture and virus-indexed stock from the **Ball Certified Plants®** program.

## **Black and Bloom Crop Schedule & Uses**

(Crop Schedule In Weeks)

Unrooted cuttings

4-in. (10-cm) Pots 1 PP\*: 10-12

6-in. (15-cm) Pots 1 to 2 PP\*: 11-13

10 to 12-in. (25 to 30-cm) Pots 3 to 5 PP\*: 13-15

Rooted cuttings

4-in. (10-cm) Pots 1 PP\*: 7-9

6-in. (15-cm) Pots 1 to 2 PP\*: 8-10

10 to 12-in. (25 to 30-cm) Pots 3 to 5 PP\*: 10-12

\*PP: Plants per pot or basket

**NOTE:** Growers should use the information presented here as a starting point. Crop times will vary depending on the climate, location, time of year and greenhouse environmental conditions. Chemical and PGR recommendations are only guidelines. It is the responsibility of the applicator to read and follow all the current label directions for the specific chemical being used in accordance with all regulations.

