

## Lavandula Bandera

(*Lavandula stoechas*)

### Germination

Approximate seed count (raw): 25,200 to 28,000 S./oz.  
(900 to 1,000 S./g)

#### Key flowering facts:

- First-year-flowering tender perennial to USDA Hardiness Zone 7 to 9.
- First compact, rich-flowering stoechas from seed
- Photoperiod response: facultative long day plant
- Vernalization: not required

#### Media

Use a well-drained, disease-free, soilless media with a pH of 5.5 to 6.0 and an EC of 1.0 to 1.2 mmhos/cm.

#### Sowing

Sow 1 seed per cell in 288 or 180 plug trays. Cover the seeds lightly with vermiculite. Important: do not cover the seeds too heavily as it will significantly decrease germination.

**Stage 1** – Germination takes 3 to 5 days. Pull from germination chamber at 10-15% visible radicle emergence and grow at 60-65°F (16-18°C) to avoid stretch.

**Soil temperature:** 65 to 68°F (18 to 20°C)

**Light:** Light is optional for germination but beneficial for reducing early stretching.

**Moisture:** Keep soil wet (level 4) during Stage 1.

**Humidity:** Maintain 95 to 97% relative humidity (RH) until radicles emerge.

### Plug Production

#### Stage 2

**Soil temperature:** 60 to 65°F (16 to 18°C)

**Light:** Can be up to 2,500 f.c. (26,900 Lux)

**Moisture:** Reduce soil moisture slightly (level 3 to 4) to allow the roots to penetrate into the media.

**Fertilizer:** Apply fertilizer at rate 1 (less than 100 ppm N; less than 0.7 mmhos/cm EC) from nitrate-form fertilizers with low phosphorous.

**Humidity:** Maintain 80 to 85% relative humidity (RH).

#### Stage 3

**Soil temperature:** 50 to 58°F (10 to 14°C)

**Light:** Can be up to 2,500 f.c. (26,900 Lux)

**Moisture:** Allow the soil moisture to dry to level 3.

**Fertilizer:** Increase fertilizer to rate 2 (100 to 175 ppm N; 0.7 to 1.2 mmhos/cm EC).

**Growth Regulators:** Not needed, but if necessary B-Nine/Alar (daminozide) 2,500 ppm (3.0 g/l 85% formulation or 3.9 g/l of 64% formulation) in stage 3 can be applied. **Humidity:** Maintain 70 to 75% relative humidity (RH).

#### Stage 4

**Soil temperature:** 50 to 58°F (10 to 14°C)

**Light:** Up to 5,000 f.c. (54,000 Lux)

**Moisture:** Same as Stage 3

**Fertilizer:** Same as Stage 3

#### Note:

In plug phase *L.stoechas* may stretch easily due to higher temperatures. It is advised to reduce temperature in early plug stage and remove plug trays from germination chamber when 10 to 15% of radicles have emerged. To prevent damping off, spray fungicide and keep an active growing environment with enough ventilation for low relative humidity.

### Growing On to Finish

#### Container Size

**4 to 6-in. (10 to 15-cm) square/quart pots:** 1 plug per pot

**Gallon (7 in./18 cm):** 1 to 2 plugs per pot

#### Media

Use a well-drained, disease-free, soilless media with coarse parts with a pH of 5.5 to 6.0 and an EC of 1.0 to 1.2 mmhos/cm.

### Transplanting

Don't plant too deep since Bandera has low and deep branching and Botrytis could more easily affect plants.

### Temperature (optimum)

**Nights:** 54 to 60°F (12 to 16°C)

**Days:** 65 to 68°F (18 to 20°C)

**Note:** Use frost protection when temperature is under 37 to 39°F (3-4°C).

### Light

Keep as high as possible while maintaining moderate temperature.

### Photoperiod

Bandera is facultative long day plant.

### Irrigation

Keep media medium moist (level 3; substrate color is brown to dark brown); let top soil dry in between waterings but do not allow medium to get too dry as high EC could cause root damage.

Before shipping, do not over-water the plant. Keep soil medium moist (level 3) and keep plant foliage dry.

### Humidity

Avoid medium to high relative humidity levels above 75 to 80%, especially during late afternoon and nights.

### Fertilizer

Bandera generally needs light to moderate fertilization. Apply fertilizer at rate 2 (145 to 175 ppm N; 1.0 to 1.2 mmhos/cm). Increase potassium to nitrate ratio in later growing-on stage.

**Note:** A weekly spray with Bittersalt (0.5 to 1.0 gr/ltr) improves plant quality and reduces plant loss; pay extra attention to irrigation to prevent salt stress.

### Growth Regulators

Not needed, but if necessary B-Nine/Alar (daminozide) 2,500 ppm (3.0 g/l 85% formulation or 3.9 g/l of 64% formulation) in early growing stage can be applied.

### Pinching

Not needed, as Bandera has a naturally well-branched habit.

### Crop Scheduling

**Sow to transplant (288 cell plug):** 5 to 6 weeks; 180 cell plug may take a week longer

**Transplant to flower:** 11 to 15 weeks (when transplanted Late Winter to Spring)

**Total crop time:** 16 to 21 weeks

Overwinter production for California and partly SW USA: Sow in early to later September (week 36 to 40) for natural flowering later February to March (week 9 to 12) the following year.

**Sow to transplant:** 7 to 8 weeks

**Transplant to flower:** 18 to 19 weeks

**Total crop time:** 25 to 28 weeks

### Common Problems

**Insect:** Mites, Aphids

**Disease:** Botrytis, Colletotrichum, Phytophthora, Leafspot, Root Rot

**Physiological:** When grown too dry during growing season, flowers may not express themselves and will not open totally.

**Schedule:** Bandera Purple, being listed as cool crop, should be scheduled for cool season sales. Warm season will decrease flag and spike size. For warm season sales, growers can schedule Lavandula angustifolia Ellagance and Lavance.

**Shipping advice:** High humidity inside shipping box could promote disease and damage plants, especially under warm conditions. Therefore, keeping soil medium moist (level 3) and keeping plant foliage dry before shipping are very important. In addition, using open box or box with ventilation will help to prevent disease and damage.

**Shelf life at retail:** Never use overhead watering as it could cause Botrytis easily.



## Garden and Landscape Information

- Lavandula Bandera is a first-year-flowering tender perennial to USDA Hardiness Zone 7 to 9 (0 to 10° F/-18 to -12°C minimum temperatures).
- Plant in full sun after all danger of frost has passed.
- A long-flowering and self-cleaning variety.
- Heat resistant when grown under low night temperature and low humidity conditions.
- Space plants at 12 to 14 in. (30 to 35 cm) apart in well-drained soil.

**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.

