

## Bacopa Blutopia

(*Sutera cordata*)

### Germination

Approximate Seed Count (multi-seed pellets): 12,675 to 19,845/oz.. (500 to 700/g)

#### Sowing

Do not cover the multi-seed pellets with vermiculite at sowing, and make sure to pass the plug trays through the misting/watering tunnel after sowing, as this will help in faster dissolution/breakdown of the pellet.

#### Germination takes approximately 4 days

(White may take a couple of days longer to germ).

**Germination temperature:** 68 to 74°F (20 to 23°C).

**Light:** Required during germination (10 f.c./100 Lux or more).

**Media moisture:** Keep the media medium wet (level 4) during germination.

**Relative humidity:** Maintain 95 to 97% relative humidity until cotyledons emerge.

### Plug Production

#### Media

Use a well-drained, disease-free plug media with a pH range of 5.5 to 6.0, and EC less than 0.75mS/cm (2:1 extraction).

#### Plug Tray Size

Can be produced in 288, 128 or similar cell size plug trays.

#### Sowing

Do not cover the multi-seed pellets with vermiculite at sowing, and make sure to pass the plug trays through the misting/watering tunnel after sowing, as this will help in faster dissolution/breakdown of the pellet.

**Stage 1** – Germination takes approximately 4 days (White may take a couple of days longer to germ).

**Germination temperature:** 68 to 74°F (20 to 23°C).

**Light:** Required during germination (10 f.c./100 Lux or more).

**Media moisture:** Keep the media medium wet (level 4) during germination.

**Relative humidity:** Maintain 95 to 97% relative humidity until cotyledons emerge.

### Stage 2

**Temperature:** 65 to 75°F (18 to 24°C) days; 60 to 65°F (15 to 18°C) nights.

**Light:** Up to 2,500 f.c. (26,900 Lux) during Stage 2 & 3.

**Media moisture:** Keep the media medium (level 3) to medium wet (level 4) during Stages 2 and 3.

**Fertilizer:** Apply fertilizer at rate 1 (less than 100 ppm N/less than 0.7 mS/cm EC) with a nitrate-form fertilizer with low phosphorous. Maintain a media pH of 5.8 to 6.2 and EC at 0.5 to 0.7 mS/cm (1:2 extraction).

### Stage 3

**Temperature:** 65 to 75°F (18 to 24°C) days; 60 to 65°F (15 to 18°C) nights.

**Fertilizer:** Increase the fertilizer rate to 2 (100 to 175 ppm N/ 0.7 to 1.2 mS/cm EC). Maintain a media pH of 5.8 to 6.2 and EC at 0.7 to 1.0 mS/cm (1:2 extraction).

### Stage 4

**Temperature:** 60 to 70°F (15 to 21°C) days; 55 to 60°F (13 to 15°C) nights.

**Light:** Light levels can be up to 5,000 f.c. (53,800 Lux) if temperatures can be maintained.

**Media moisture:** Keep the media medium (level 3) wet. Do not let the seedlings wilt, as they will not recover favorably.

**Fertilizer:** Same as Stage 3.

**Plant Growth Regulators:** Generally PGRs are not required during plug production if plants are shipped/transplanted on time.

**Under Northern European conditions,** foliar sprays of B-Nine/Alar (daminozide) at 640 to 950ppm (1 to 1.5g/l of 64% formulation or 0.75 to 1.15g/l 85% formulation) worked well in toning the plugs.

## Growing On to Finish

### Container Size

Can be produced in 4.5-in. (10.5-cm) or similar size containers with one multi-seeded plug per pot, or 5-6 plugs approximately for a 10-in. (25-cm) basket.

### Media

Use a well-drained, disease-free media with a pH of 5.8 to 6.2, and a medium initial nutrient charge.

### Temperature

**Night:** 55 to 60°F (13 to 15°C)

**Day:** 60 to 75°F (15 to 24°C)  
Bacopa can be grown as low as 50°F (10°C), but the crop time will be longer.

### Light

Keep light levels as high as possible while maintaining appropriate temperatures.

### Fertilizer

Starting 1 week after transplant, apply fertilizer at rate 3 (175 to 225 ppm N/1.2 to 1.5 mS/cm) using predominantly nitrate-form fertilizer with low phosphorus. If needed, a balanced ammonium and nitrate form fertilizer may be used as needed to encourage growth and balance the media pH. Maintain the media EC at 1.50 to 2.00 mS/cm and pH at 5.8 to 6.2.

### Irrigation

Avoid both excessive watering and drought. Do not let the plants wilt as this will result in flower/bud drop.

### Plant Growth Regulators

**In North American conditions:** Responds well to foliar sprays of B-Nine/Alar (daminozide) at 2,500 ppm (2.9 g/l 85% formulation or 3.9 g/l 64% formulation) applied once after transplant.

**In Northern European conditions:** Can use foliar sprays of B-Nine/Alar (daminozide) at 2,500 ppm (2.9 g/l 85% formulation or 3.9 g/l 64% formulation), and if necessary can follow-up with Cycocel (chlormequat) at 375 ppm (0.5ml/l 75% or 3.1ml/l 11.8% formulation).

### Crop Scheduling

**Sow to transplant:** 3 to 4 weeks

(Typically it takes 3.5 weeks in a 288-cell tray and a few days more in a 128-cell size liner).

**Transplant to flower:** 4 to 6 weeks.

**Total crop time (sow to flower):** 8 to 9 weeks in a 4.5-in. (10.5-cm) size pot. When finishing in larger containers such as 10-in. (25-cm) hanging baskets, the crop time can be 12 to 13 weeks. Crop time is also temperature-dependent – plants will flower slightly earlier under warmer temperatures and slightly later under cooler temperatures.

### Common Problems

**Insects:** Whiteflies.

**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.

