GrowerFacts

Fuseables® Petunia-Bacopa

(*Petunia hybrida, Sutera cordata*)

Germination

Approximate seed count (multi-pelleted seed): 878 to 935 S./oz. (31 to 33 S./g)

Media
Use a well-drained, disease-free seedling medium with a pH of 5.5 to 6.0 and an EC of 0.75 mS/cm (1:2 extraction).

Sowing
Can be produced in a 288, 105/128, 72 liner, but recommend 105/128 cells or larger. Do not cover the seed. Water adequately after sowing to completely dissolve the pellet.

Stage 1 – Germination takes approximately 4 days.

Germination temperature: 71 to 76°F (22 to 24°C).

Light: Lighting is beneficial.

Media moisture: Keep soil very wet (level 5) during Stage 1 for optimal germination.

Relative humidity: Maintain 100% relative humidity (RH) until radicles emerge.

Plug Production

Stage 2

Temperature: 68 to 76°F (20 to 24°C).

Light: Up to 2,500 f.c. (26,900 Lux).

Media moisture: Start to slightly reduce soil moisture (level 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 mS/cm EC) from nitrate-form fertilizers with low phosphorous.

Stage 3
Temperature: 65 to 70°F (18 to 21°C).

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

Media moisture: Allow media to dry further until the surface becomes light brown (level 2) before watering. Keep the moisture to wet-dry cycle (moisture level 4 to 2).

Fertilizer: Increase the fertilizer level to rate 2 (100 to 175 ppm N/ 0.7 to 1.2 mS/cm EC). If growth is slow, apply a balanced ammonium and nitrate-form fertilizer with every other fertilization. Maintain a media pH of 5.8 to 6.2 and EC between 1.0 and 1.5 mS/cm (1:2 extraction).

Growth Regulators: If possible, try to grow Multi-Species Fuseables Petunia x Bacopa plugs without any PGRs. The competition amongst the multiple seedlings in each plug cell will provide natural growth control and also cooler temperatures during stage 4 will provide natural toning of the plugs.

If PGRs are needed, use Bonzi (paclobutrazol) 2 to 5ppm (0.5 to 1.3 ml/l, 0.4% formulation) foliar sprays. **Avoid using B-Nine at rates higher than 1000ppm for growth control during the plug stage as it could stunt bacopa and result in spreading petunia dominating the plug cell.**

Stage 4
Temperature: 59 to 64°F (15 to 18°C).

Light: Up to 5,000 f.c. (53,800 Lux) if temperature can be controlled.

Media moisture: Same as Stage 3.

Fertilizer: Same as Stage 3.

Growing On to Finish

Container Size
6 to 8-in. (15 to 20-cm) pots: 1 plug per pot

10 to 12-in. (25 to 30-cm) color bowls or baskets: 3 plugs per color bowl or basket.

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

Temperature
Nights: 56 to 64°F (13 to 18°C).

Days: 62 to 76°F (17 to 24°C).

Multi-Species Fuseables Petunia x Bacopa can be grown at temperatures as low as 35ºF (2ºC). Crop timing (time to flower) is related to daily average temperature when grown under proper daylength. Plants will take longer to flower when grown under cooler conditions.

Light
Keep light levels as high as possible while maintaining moderate temperatures.

Fertilizer
Apply nitrate-form with low phosphorus fertilizer at rate 3 (175 to 225 ppm N (1.2 to 1.5 mS/cm EC) every other irrigation. Apply a balanced ammonium and nitrate-form fertilizer with low phosphorus as needed to encourage growth and to balance media pH. Maintain media pH 5.8 to 6.2.

For constant fertilizer program, apply fertilizer at rate 2 (100 to 175ppm N or 0.7-1.2 mS/cm EC) while maintaining the above recommended EC and pH ranges.

Growth Regulators
Bonzi (paclobutrazol) drench about 2-4 ppm (0.5 to 1.0 ml/l, 0.4% formulation) works well for Multi-Species Fuseables Petunia x Bacopa plant size control. Cotton Candy is more vigorous than Silk N' Satin and can use the higher range of the rates. Drench can be done when foliage is close to reaching the edge of the container.

Do not use B-Nine/Alar (daminozide) at rates higher than 1000ppm or Topflor (flurprimidol) as they will stunt bacopa.

To determine the best rate for your conditions, we recommend that you run an in-house trial.

Photoperiod
Bacopa is not sensitive to daylength, but Easy Wave petunias are slightly sensitive to daylength. All varieties of Easy Wave can flower successfully at 10 hours daylength with crop time delay of a couple of days depending on the Easy Wave petunia varieties compared to the long day conditions.

Crop Scheduling
Sow to transplant (288-cell plug tray):
4 weeks

Sow to transplant (105/128-cell plug tray):
5 weeks

Sow to transplant (72-cell plug tray):
5 to 6 weeks

Transplant to flower:
6-7 weeks from 288 cells
5-6 weeks from 105/128 cells
4-5 weeks from 72 cells

Total Crop Time:

Container Size: 6 to 8-in. (15 to 20-cm) pot

Plants per Pot or Basket: 1

Spring (weeks): 8 to 11

Summer (weeks): 7 to 9

Container Size: 10-in. (25-cm) color bowl or basket

Plants per Pot or Basket: 1-3

Spring (weeks): 10 to 12

Summer (weeks): 8 to 10

Container Size: 12-in. (30-cm) color bowl or basket

Plants per Pot or Basket: 4

Spring (weeks): 10 to 12

Summer (weeks): 8 to 10

Common Problems
No major problems will occur if good cultural and IPM practices are used.

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.

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