

Calandiva® Specialty

Kalanchoe blossfeldiana



Calandiva® Specialty features single and double flowering varieties with unique colors, patterns and flower forms. A premium product perfect for complementing a traditional program with an upscale twist.

An extremely programmable crop, Calandiva® Specialty prefers a philosophy of TLC to ensure a top-quality finished product. Achieve optimal plant quality with gradual changes in environmental conditions and low pest or disease threshold levels.



Discodip



Gloss



Fogo



Citrine



Weaver

| STATUS   | CULTIVAR            | CULTIVAR CODE | RESPONSE TIME | VIGOR | LEAF SIZE | ROCOMMENDED POT SIZE           |
|----------|---------------------|---------------|---------------|-------|-----------|--------------------------------|
| TOP PICK | Citrine             | 52410         | 10.5          | ●●●○○ | M/L       | 2" (5cm), 4" (10cm), 6" (15cm) |
|          | Discodip            | 52219         | 8.5           | ●●●●○ | S         | 2" (5cm), 4" (10cm), 6" (15cm) |
|          | Fogo                | 52645         | 10            | ●●●○○ | M         | 4" (10cm)                      |
| TOP PICK | Gloss               | 52364         | 11            | ●●●○○ | M         | 2" (5cm), 4" (10cm)            |
|          | Midi Sunkissed Pink | 52131         | 9             | ●●●●○ | M         | 4" (10cm), 6" (15cm)           |
|          | Novo                | 52785         | 9.5           | ●●●○○ | M         | 4" (10cm), 6" (15cm)           |
| TOP PICK | Tweed Imp II        | 52398         | 13            | ●●●●○ | M         | 2" (5cm), 4" (10cm), 6" (15cm) |
|          | Weaver              | 52117         | 12            | ●●●○○ | M/L       | 4" (10cm), 6" (15cm)           |

●○○○○ Compact   ●●○○○ Medium-compact   ●●●○○ Medium   ●●●●○ Medium-vigorous   ●●●●● Vigorous

**Calandiva® Specialty***Kalanchoe blossfeldiana***MEDIA**

|                           |                                                                                                                                            |
|---------------------------|--------------------------------------------------------------------------------------------------------------------------------------------|
| Rooting Hormone?          | <b>No</b>                                                                                                                                  |
| Direct Stick Instructions | <b>Fill and saturate containers, wait for at least half a day before sticking, keep media as dry as possible for 6-8 days after stick.</b> |

**FERTILITY**

|                   |                                                            |
|-------------------|------------------------------------------------------------|
| Fertilizer Rate   | <b>50-75ppm N with 20-10-20 (when roots begin to form)</b> |
| Long-Day EC Range | <b>0.6-0.8 mS via SME</b>                                  |
| pH Range          | <b>5.5-6.0 (Ideally 5.8)</b>                               |

**TEMPERATURE**

|                          |                          |
|--------------------------|--------------------------|
| Average Soil Temperature | <b>68°F (20°C)</b>       |
| Average Air Temperature  | <b>68-72°F (20-22°C)</b> |

**IRRIGATION**

|                                     |                                                           |
|-------------------------------------|-----------------------------------------------------------|
| Irrigation Frequency (after day 14) | <b>Level 3 (keep media moderately moist at all times)</b> |
|-------------------------------------|-----------------------------------------------------------|

**LIGHT**

|                                       |                                                                                                                                                                                                                                                                                                                                                     |
|---------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Vegetative Photoperiodic Requirements | <b>Long Day</b>                                                                                                                                                                                                                                                                                                                                     |
| Supplemental                          | <b>To maintain vegetative growth: 14-18 hours daily or night interruption starting 2-3 hours after sunset and ending 2-3 hours before sunrise. The long-day phase should last between 6-10 weeks after stick depending on container size and cultivar vigor (General rule of thumb, apply long days until the plant is 2/3 the desired height).</b> |
| Benefits From Shade?                  | <b>When transitioning out of prolonged low-light conditions, start shading at 4200 fc (45000 lux). During high-light months, shading must be applied at 5500 fc (59200 lux) or as-needed for cooling.</b>                                                                                                                                           |

**POTENTIAL DISEASES AND DISORDERS**

*Botrytis, Pythium, powdery mildew, Fusarium, Phytophthora, oedema/edema*

**POTENTIAL PESTS**

Aphids, fungus gnats, mites, thrips

**PGR SUGGESTIONS**

- Daminozide (85%) at 2500ppm using an ultra-fine (mist) nozzle. Only one spray in propagation at 3<sup>rd</sup> week of long days.
- Daminozide (85%) at 2000-2500 ppm + Chlormequat (11.8%) at 1000ppm tank mix using an ultra-fine (mist) nozzle to substitute Daminozide-only application.
- Chlormequat (11.8%) at 2000 ppm as an alternative to Daminozide for slow growing cultivars. Apply at 2<sup>nd</sup> week of the long days.

**TIPS**

- Bottom heat is suggested to speed rooting and stabilize media temperature. Ensure media temperature does not surpass ambient air temperature.
- Avoid sudden changes to the growing environment; any necessary adjustments should be gradual.
- Avoid use of oil-based liquid chemicals unless otherwise advised by Dümmen Orange.
- European growers oftentimes apply Propiconazole (41.8%) at 2-4ppm the 3<sup>rd</sup> or 4<sup>th</sup> week of long days. Although primarily used as a fungicide, one treatment can be applied to control leaf size on large-leafed cultivars.

**Calandiva® Specialty***Kalanchoe blossfeldiana***FERTILITY**

|                           |                                                                   |
|---------------------------|-------------------------------------------------------------------|
| Fertilizer Rate           | <b>100-200 ppm N with 20-10-20 plus additional micronutrients</b> |
| Short Day EC Range        | <b>0.7-1.1 mS via SME</b>                                         |
| Finish Flowering EC Range | <b>0.7-1.1 mS via SME</b>                                         |
| pH Range                  | <b>5.7-5.9 (ideally 5.8)</b>                                      |

**TEMPERATURE**

|                   |                                              |
|-------------------|----------------------------------------------|
| Day Temperature   | <b>68-74°F (20-23°C) [ideally 68°F/20°C]</b> |
| Night Temperature | <b>66-70°F (19-21°C) [ideally 68°F/20°C]</b> |

**IRRIGATION**

|                      |                                                           |
|----------------------|-----------------------------------------------------------|
| Irrigation Frequency | <b>Level 3 (keep media moderately moist at all times)</b> |
| Humidity             | <b>70-90% (Ideally 85%)</b>                               |

**LIGHT**

|                                      |                                                                                                                                                                                                           |
|--------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Flowering Photoperiodic requirements | <b>Short Day</b>                                                                                                                                                                                          |
| Photoperiodic Instructions           | <b>Minimum 14 hours of darkness for 7 weeks minimum (black out conditions)</b>                                                                                                                            |
| Supplemental                         | <b>Optional on cloudy days</b>                                                                                                                                                                            |
| Benefits From Shade?                 | <b>When transitioning out of prolonged low-light conditions, start shading at 4200 fc (45000 lux). During high-light months, shading must be applied at 5500 fc (59200 lux) or as-needed for cooling.</b> |

**POTENTIAL DISEASES AND DISORDERS**

*Botrytis, Pythium, powdery mildew, Fusarium, Phytophthora, oedema/edema*

**POTENTIAL PESTS**

Aphids, fungus gnats, mites, thrips

**PGR SUGGESTIONS**

- Daminozide (85%) at 2000-2500ppm + Chlormequat (11.8%) at 1000ppm tank mix 3<sup>rd</sup> or 4<sup>th</sup> week of short days. After this initial tank-mix application, transition to a Daminozide only regimen.
- Daminozide (85%) at 2500-4000ppm: (6-10 day summer rotation) (8-12 day spring/autumn rotation) (10-15 day winter rotation). Start after initial tank mix application.
- Paclobutrazol (0.4%) at 2-4ppm only under emergency situations or long holding periods.

**TIPS**

- Avoid overhead watering in general but especially during short days. Never use cold water, always 55°F (13°C) and warmer.
- Maintain a lower EC range when daytime temperatures are above 76°F (24°C).
- Stretching is primarily caused by humidity above 90% and/or a fluctuation of 30% or more.
- A red coloration on the underside of leaves indicates the crop is being kept too dry, too cold (below 62°F [17°C]) or is stressed in another regard.
- Kalanchoes are very sensitive to ethylene. A buildup of more than 0.1ppm should be avoided. Keep this in mind when shipping.
- A swift drop or rise of more than 4°F (2.2°C) can cause major production issues. As with all Kalanchoes, but particularly with Calandiva® Sublime, gradual changes are necessary.