**Cultural Information for Annuals**

<table>
<thead>
<tr>
<th>Vigor</th>
<th>pH/FEC</th>
<th>Rooting Out Temperature</th>
<th>Growing Temperature</th>
<th>Holding Temperature</th>
<th>Water Requirements</th>
<th>Planting and Timing</th>
<th>Finish Times in Weeks</th>
<th>Spring Outdoor Finish</th>
</tr>
</thead>
<tbody>
<tr>
<td>ARTIST® / Ageratum</td>
<td>Vigor 2</td>
<td>5.8 – 6.2 / 6 - 3</td>
<td>65-72°F (18-22°C)</td>
<td>65-72°F (18-22°C)</td>
<td>50-60°F (10-16°C)</td>
<td>Moderate to Moist</td>
<td>Early Spring through Summer</td>
<td>Finish Plants Per Container</td>
</tr>
</tbody>
</table>

| ANGELFACE® / Angelonia | Vigor 3 | 5.8 – 6.2 / 6 - 3 | 65-72°F (18-22°C) | 70-75°F (21-24°C) | 60-68°F (16-20°C) | Moderate to Moist | Spring through Summer | Finish Plants Per Container | Do not finish outside |

| BUTTERFLY / Argentaeusen | Vigor 3 | 5.8 – 6.2 / 6 - 3 | 65-72°F (18-22°C) | 60-68°F (16-20°C) | 40-50°F (4-10°C) | Moderate to Moist | Early Spring through Fall | Finish Plants Per Container | First to go outside |

| SILVER BULLET® / Artemisia | Vigor 3 | 5.8 – 6.5 / 6 - 3 | 65-72°F (18-22°C) | 50-60°F (10-16°C) | 40-50°F (4-10°C) | Moderate to Moist | Early Spring through Fall | Finish Plants Per Container | First to go outside |

| Asparagus Fern / Asparagusum | Vigor 2 | 5.8 – 6.2 / 6 - 3 | 65-72°F (18-22°C) | 65-72°F (18-22°C) | 65-72°F (18-22°C) | Moderate to Moist | Spring through Fall | Finish Plants Per Container | Do not move outside until all danger of frost is past |

| DOUBLE DELIGHT® and SOLIDALE® / Begonia | Vigor 2 | 5.5 – 6.2 / 6 - 3 | 70-75°F (21-24°C) | 65-72°F (18-22°C) | 65-72°F (18-22°C) | Dry to Moderate | Spring through Fall | Finish Plants Per Container | Do not move outside until all danger of frost is past |

| DOUBLE UP® / Begonia | Vigor 2 | 5.5 – 6.2 / 6 - 3 | 65-72°F (18-22°C) | 65-72°F (18-22°C) | 65-72°F (18-22°C) | Dry to Moderate | Spring through Fall | Finish Plants Per Container | Do not move outside until all danger of frost is past |

| PEGASUS® / Begonia | Vigor 3 | 5.5 – 6.3 / 6 - 3 | 65-72°F (18-22°C) | 65-72°F (18-22°C) | 65-72°F (18-22°C) | Dry to Moderate | Spring through Fall | Finish Plants Per Container | Do not move outside until all danger of frost is past |

| SUREFIRE® / Begonia | Vigor 4 | 5.5 – 6.2 / 6 - 3 | 65-72°F (18-22°C) | 65-72°F (18-22°C) | 65-72°F (18-22°C) | Dry to Moderate | Spring through Fall | Finish Plants Per Container | Do not move outside until all danger of frost is past |

| CAMPFIRE® series and GOLDHOLDS ROCKS® / Bidens | Vigor 3 | 5.8 – 6.2 / 6 - 3 | 65-72°F (18-22°C) | 55-60°F (11-16°C) | 40-50°F (4-10°C) | Moderate | Early Spring through Summer | Finish Plants Per Container | Second to go outside |

| ENGLISH® / Euphorbia | Vigor 3 | 5.8 – 6.3 / 6 - 3 | 70-75°F (21-24°C) | 70-75°F (21-24°C) | 70-75°F (21-24°C) | Moderate to Moist | Late Spring through Summer | Finish Plants Per Container | Last to go outside |

| LADY GODIVA® / Calendula | Vigor 3 | 5.8 – 6.3 / 6 - 3 | 50-60°F (10-16°C) | 50-60°F (10-16°C) | 50-60°F (10-16°C) | Moderate to Moist | Early Spring through Fall | Finish Plants Per Container | Second to go outside |

| SUPERBELLS® / Calibrachoa | Vigor 3 | 5.5 – 5.8 / 6 - 3 | 65-72°F (18-22°C) | 55-65°F (12-18°C) | 40-50°F (4-10°C) | Moderate to Moist | Early Spring through Fall | Finish Plants Per Container | Second to go outside |

**VIGOR KEY** – 1 through 4, with 1 representing the smaller, slower growers and 4 representing the quickest, largest growers. For combinations, choose varieties with the same vigor rating to ensure success.
### Cultural Information for Annuals

#### TRUFILLA® Pink Georgian
- **Vigor:** 4
- **pH:** 6.0 - 6.5
- **Temperature:** 50°F - 60°F (10°C - 18°C)
- **Light:** Full Sun
- **Soil:** Standard Plants Per Container
- **Water:** 1 gal/day
- **Finish:** 5 - 7 days
- **Planting:** Early Spring through Summer
- **12-18 in.**
- **Plants Per Container:** 1

#### GRACEFUL DRASSES® BABY TUT® and PRINCE TUT®
- **Temperature:** 50°F - 60°F (10°C - 18°C)
- **Light:** Full Sun
- **Soil:** Standard Plants Per Container
- **Water:** 1 gal/day
- **Finish:** 5 - 7 days
- **Planting:** Early Spring through Summer
- **12-18 in.**
- **Plants Per Container:** 1

#### QUEEN TUT® Opalina
- **Temperature:** 50°F - 60°F (10°C - 18°C)
- **Light:** Full Sun
- **Soil:** Standard Plants Per Container
- **Water:** 1 gal/day
- **Finish:** 5 - 7 days
- **Planting:** Early Spring through Summer
- **12-18 in.**
- **Plants Per Container:** 1

#### GRACEFUL DRASSES® BLUE MOHARA® Early White
- **Temperature:** 50°F - 60°F (10°C - 18°C)
- **Light:** Full Sun
- **Soil:** Standard Plants Per Container
- **Water:** 1 gal/day
- **Finish:** 5 - 7 days
- **Planting:** Early Spring through Summer
- **12-18 in.**
- **Plants Per Container:** 1

#### GRACEFUL DRASSES® Finnearn® Fairy Pearl®
- **Temperature:** 50°F - 60°F (10°C - 18°C)
- **Light:** Full Sun
- **Soil:** Standard Plants Per Container
- **Water:** 1 gal/day
- **Finish:** 5 - 7 days
- **Planting:** Early Spring through Summer
- **12-18 in.**
- **Plants Per Container:** 1

#### GRACEFUL DRASSES® Fleece® Purple Fountain Grass®
- **Temperature:** 50°F - 60°F (10°C - 18°C)
- **Light:** Full Sun
- **Soil:** Standard Plants Per Container
- **Water:** 1 gal/day
- **Finish:** 5 - 7 days
- **Planting:** Early Spring through Summer
- **12-18 in.**
- **Plants Per Container:** 1

#### GRACEFUL DRASSES® Fiber Optix Grass® Juncus®
- **Temperature:** 50°F - 60°F (10°C - 18°C)
- **Light:** Full Sun
- **Soil:** Standard Plants Per Container
- **Water:** 1 gal/day
- **Finish:** 5 - 7 days
- **Planting:** Early Spring through Summer
- **12-18 in.**
- **Plants Per Container:** 1

#### English Ivy Hedera
equilateral
- **Temperature:** 50°F - 60°F (10°C - 18°C)
- **Light:** Full Sun
- **Soil:** Standard Plants Per Container
- **Water:** 1 gal/day
- **Finish:** 5 - 7 days
- **Planting:** Early Spring through Summer
- **12-18 in.**
- **Plants Per Container:** 1

#### SUNCREDBLE® Helictotrichon
equilateral
- **Temperature:** 50°F - 60°F (10°C - 18°C)
- **Light:** Full Sun
- **Soil:** Standard Plants Per Container
- **Water:** 1 gal/day
- **Finish:** 5 - 7 days
- **Planting:** Early Spring through Summer
- **12-18 in.**
- **Plants Per Container:** 1

#### Lisciana Plant
equilateral
- **Temperature:** 50°F - 60°F (10°C - 18°C)
- **Light:** Full Sun
- **Soil:** Standard Plants Per Container
- **Water:** 1 gal/day
- **Finish:** 5 - 7 days
- **Planting:** Early Spring through Summer
- **12-18 in.**
- **Plants Per Container:** 1

#### AUGUSTA® Lavender
equilateral
- **Temperature:** 50°F - 60°F (10°C - 18°C)
- **Light:** Full Sun
- **Soil:** Standard Plants Per Container
- **Water:** 1 gal/day
- **Finish:** 5 - 7 days
- **Planting:** Early Spring through Summer
- **12-18 in.**
- **Plants Per Container:** 1

#### HYOPLIS® Hyposmum
- **Temperature:** 50°F - 60°F (10°C - 18°C)
- **Light:** Full Sun
- **Soil:** Standard Plants Per Container
- **Water:** 1 gal/day
- **Finish:** 5 - 7 days
- **Planting:** Early Spring through Summer
- **12-18 in.**
- **Plants Per Container:** 1

#### ROCKAPULCUS® Irresistible
- **Temperature:** 50°F - 60°F (10°C - 18°C)
- **Light:** Full Sun
- **Soil:** Standard Plants Per Container
- **Water:** 1 gal/day
- **Finish:** 5 - 7 days
- **Planting:** Early Spring through Summer
- **12-18 in.**
- **Plants Per Container:** 1

#### ILLUSION® and Sweet Carolina (sweet Carolina Bunch Chief)
- **Temperature:** 50°F - 60°F (10°C - 18°C)
- **Light:** Full Sun
- **Soil:** Standard Plants Per Container
- **Water:** 1 gal/day
- **Finish:** 5 - 7 days
- **Planting:** Early Spring through Summer
- **12-18 in.**
- **Plants Per Container:** 1

#### Sweet Carolina Upland® Suspension
- **Temperature:** 50°F - 60°F (10°C - 18°C)
- **Light:** Full Sun
- **Soil:** Standard Plants Per Container
- **Water:** 1 gal/day
- **Finish:** 5 - 7 days
- **Planting:** Early Spring through Summer
- **12-18 in.**
- **Plants Per Container:** 1

#### Cultural Information for Annuals

#### BETH’S BLUE®
- **Temperature:** 50°F - 60°F (10°C - 18°C)
- **Light:** Full Sun
- **Soil:** Standard Plants Per Container
- **Water:** 1 gal/day
- **Finish:** 5 - 7 days
- **Planting:** Early Spring through Summer
- **12-18 in.**
- **Plants Per Container:** 1

#### SAFARI®
- **Temperature:** 50°F - 60°F (10°C - 18°C)
- **Light:** Full Sun
- **Soil:** Standard Plants Per Container
- **Water:** 1 gal/day
- **Finish:** 5 - 7 days
- **Planting:** Early Spring through Summer
- **12-18 in.**
- **Plants Per Container:** 1

#### PINK CHALIS®
- **Temperature:** 50°F - 60°F (10°C - 18°C)
- **Light:** Full Sun
- **Soil:** Standard Plants Per Container
- **Water:** 1 gal/day
- **Finish:** 5 - 7 days
- **Planting:** Early Spring through Summer
- **12-18 in.**
- **Plants Per Container:** 1

#### LUCIDUS®
- **Temperature:** 50°F - 60°F (10°C - 18°C)
- **Light:** Full Sun
- **Soil:** Standard Plants Per Container
- **Water:** 1 gal/day
- **Finish:** 5 - 7 days
- **Planting:** Early Spring through Summer
- **12-18 in.**
- **Plants Per Container:** 1

#### Galileos®
- **Temperature:** 50°F - 60°F (10°C - 18°C)
- **Light:** Full Sun
- **Soil:** Standard Plants Per Container
- **Water:** 1 gal/day
- **Finish:** 5 - 7 days
- **Planting:** Early Spring through Summer
- **12-18 in.**
- **Plants Per Container:** 1

#### WAIKIKI SUNSET®
- **Temperature:** 50°F - 60°F (10°C - 18°C)
- **Light:** Full Sun
- **Soil:** Standard Plants Per Container
- **Water:** 1 gal/day
- **Finish:** 5 - 7 days
- **Planting:** Early Spring through Summer
- **12-18 in.**
- **Plants Per Container:** 1

#### BLUSHING PRINCESS®, SNOW PRINCESS® and ROYAL VIOLET™
- **Temperature:** 50°F - 60°F (10°C - 18°C)
- **Light:** Full Sun
- **Soil:** Standard Plants Per Container
- **Water:** 1 gal/day
- **Finish:** 5 - 7 days
- **Planting:** Early Spring through Summer
- **12-18 in.**
- **Plants Per Container:** 1

#### Big Leaf Crossing®
- **Temperature:** 50°F - 60°F (10°C - 18°C)
- **Light:** Full Sun
- **Soil:** Standard Plants Per Container
- **Water:** 1 gal/day
- **Finish:** 5 - 7 days
- **Planting:** Early Spring through Summer
- **12-18 in.**
- **Plants Per Container:** 1

#### AMAZEL BASIL®
- **Temperature:** 50°F - 60°F (10°C - 18°C)
- **Light:** Full Sun
- **Soil:** Standard Plants Per Container
- **Water:** 1 gal/day
- **Finish:** 5 - 7 days
- **Planting:** Early Spring through Summer
- **12-18 in.**
- **Plants Per Container:** 1
### Cultural Information for Annuals

<table>
<thead>
<tr>
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<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>AMAZON BASIL</strong></td>
<td>Vigor 4</td>
<td>6.0 - 6.5/0.6 - 0.9</td>
<td>65-75°F (18-22°C)</td>
<td>65-75°F (18-22°C)</td>
<td>Moderate to High</td>
<td>Spring through Summer Finish. Standard Plants Per Container.</td>
<td>For 4.5, 6, 6”, 8, 8”, 10”, 12”, 14”</td>
<td>Last to go outside</td>
</tr>
<tr>
<td><strong>BRIGHT LIGHTS</strong></td>
<td>Vigor 2</td>
<td>5.8 - 6.2/6 - 9</td>
<td>65-75°F (18-22°C)</td>
<td>56-90°F (12-18°C)</td>
<td>Dry to Moist</td>
<td>Early Spring through Full Finish. Standard Plants Per Container.</td>
<td>For 4.5, 6, 6”, 8, 8”, 10”, 12”, 14”</td>
<td>Last to go outside</td>
</tr>
<tr>
<td><strong>CHARMED</strong></td>
<td>Vigor 1</td>
<td>5.8 - 6.2 /4 - 8</td>
<td>65-75°F (18-22°C)</td>
<td>50-80°F (10-16°C)</td>
<td>Moderate to High</td>
<td>Early Spring through Summer Finish. Standard Plants Per Container.</td>
<td>For 4.5, 6, 6”, 8, 8”, 10”, 12”, 14”</td>
<td>Do not finish outside</td>
</tr>
<tr>
<td><strong>BOLDLY</strong></td>
<td>Vigor 3</td>
<td>6.0 - 6.5/D - 1.5</td>
<td>65-75°F (18-22°C)</td>
<td>50-80°F (10-16°C)</td>
<td>Moderate to High</td>
<td>Spring through Summer Finish. Standard Plants Per Container.</td>
<td>For 4.5, 6, 6”, 8, 8’, 10”, 14”</td>
<td>Do not move outside until all danger of frost is past</td>
</tr>
<tr>
<td><strong>SUNSTAR</strong></td>
<td>Vigor 2</td>
<td>6.0 - 6.6/6 - 9</td>
<td>70-79°F (21-24°C)</td>
<td>50-80°F (10-16°C)</td>
<td>Moderate to High</td>
<td>Spring through Full Finish. Standard Plants Per Container.</td>
<td>For 4.5, 6, 7, 8-10”</td>
<td>First to go outside</td>
</tr>
<tr>
<td><strong>SUPERTUNIA</strong></td>
<td>Vigor 3</td>
<td>5.5 - 5.8/D - 2.0</td>
<td>65-75°F (18-22°C)</td>
<td>56-90°F (12-18°C)</td>
<td>Moderate to High</td>
<td>Early Spring through Full Finish. Standard Plants Per Container.</td>
<td>First to go outside</td>
<td>Do not finish outside</td>
</tr>
<tr>
<td><strong>INTENSE</strong></td>
<td>Vigor 4</td>
<td>5.8 - 6.2/D - 2.0</td>
<td>65-75°F (18-22°C)</td>
<td>50-80°F (10-16°C)</td>
<td>Moderate to High</td>
<td>Early Spring through Full Finish. Standard Plants Per Container.</td>
<td>For 4.5, 6, 6”, 8, 8”, 10”, 14”</td>
<td>Succeed to go outside</td>
</tr>
<tr>
<td>** COLORBLAST®**</td>
<td>Vigor 2 - 3</td>
<td>6.0 - 6.5/0.5 - 0.8</td>
<td>65-75°F (18-22°C)</td>
<td>50-80°F (10-16°C)</td>
<td>Moderate to High</td>
<td>Spring through Summer Finish. Standard Plants Per Container.</td>
<td>For 4.5, 6, 6”, 8, 8”, 10”, 12”, 14”</td>
<td>Do not finish outside</td>
</tr>
<tr>
<td><strong>SDVIBRANT</strong></td>
<td>Vigor 4</td>
<td>6.0 - 6.5/0.5 - 0.8</td>
<td>65-75°F (18-22°C)</td>
<td>50-80°F (10-16°C)</td>
<td>Moderate to High</td>
<td>Spring through Full Finish. Standard Plants Per Container.</td>
<td>For 4.5, 6, 6”, 8, 8”, 10”, 12”, 14”</td>
<td>Last to go outside</td>
</tr>
<tr>
<td><strong>ROCKSTAR®</strong></td>
<td>Vigor 2</td>
<td>5.8 - 6.2/6 - 9</td>
<td>65-75°F (18-22°C)</td>
<td>50-80°F (10-16°C)</td>
<td>Moderate to High</td>
<td>Spring through Summer Finish. Standard Plants Per Container.</td>
<td>For 4.5, 6, 6”, 8, 8”, 10”, 12”, 14”</td>
<td>Last to go outside</td>
</tr>
<tr>
<td><strong>WHIRLWIND®</strong></td>
<td>Vigor 2</td>
<td>5.5 - 5.8/6 - 9</td>
<td>65-75°F (18-22°C)</td>
<td>50-80°F (10-16°C)</td>
<td>Moderate to High</td>
<td>Early Spring through Full Finish. Standard Plants Per Container.</td>
<td>For 4.5, 6, 6”, 8, 8”, 10”, 12”, 14”</td>
<td>Do not finish outside</td>
</tr>
</tbody>
</table>

**Online Cultural Guide**

When you have growing questions, you can access our online growing guide at provenwinners.com/cultural-information for answers. By providing easy, 24/7 access to this information, we save you time — and money — so you can spend it tending to business and building that business, too.
6 Critical Production Tips

Want to produce full and floriferous container recipes using Proven Winners annuals? Follow these six production tips from our growers who have decades of experience growing gorgeous hanging baskets.

1. The Key to Success
   Starting with exceptional quality liners is the most important thing you can do to get your container recipes off to a great start. Even if you encounter issues along the way as you produce your crop, they will be far easier to navigate if you start with quality liners. Your propagator will be happy to work with you to determine the best liner size and delivery date to fit your production model.

2. Start Your Liners Off Right
   Minimizing stress on newly planted liners will avoid complications down the road. As a standard practice, we apply a preventative broad spectrum fungicide drench one week after transplant to all newly transplanted liners. This protects their roots from potential attacks.

3. Moderate Your Watering
   It is very easy to overwater newly transplanted liners, so take care not to create this unnecessary stress. During the first few weeks after transplant, the root system is still small and does not yet extend down the bottom of the container. At this time, frequent but low volume water applications are required to provide the liners just the right amount of water they need without becoming overly wet.

4. Build a Strong Foundation
   When your liners are young and are newly transplanted into hanging baskets, focus on developing a strong root system for the plants. Timing is key. We closely monitor the growing temperature, pH and EC of the growing media, and fertility while the plants are becoming established in the container.

5. Trimming and Shaping
   As the plants are growing, a series of pinches and/or PGR applications are used to shape the plants in the containers. For many plants, we trim around the edges of the containers as needed, prior to spacing uprights and hanging the baskets. PGR rates are listed on our website for all of the plants we offer.

6. Feed Those Plants!
   Premium quality hanging baskets and upright containers will fly out of inventory in spring, so be sure you are feeding your entire crop well to get the most out of your inventory. We recommend using fertilizers that contain micronutrients and 100% EDDHA as the source of iron. Call our grower hotline if you need fertilizer recommendations.

Cultural Information and Growing Tips

To produce the highest quality plant material, growers must have detailed crop culture information. In order to help our grower customers produce the best finished crops, our propagators have developed this user-friendly guide which categorizes plants by their basic cultural needs – pH, growing temperature, and fertilization. The goal is to aid our growers customers in setting up custom growing environments for plants grouped by their basic needs. Visit provenwinners.com for more detailed cultural information on all Proven Winners varieties.

Proven Winners® Annuals

<table>
<thead>
<tr>
<th>Growing Temp</th>
<th>A pH 5.5 - 5.8</th>
<th>B pH 5.8 - 6.2</th>
<th>C pH 6.0 - 6.5</th>
</tr>
</thead>
<tbody>
<tr>
<td>C 70º-75º F (21-24º C)</td>
<td>Angelflora® Angelonia, licorice Plant Helichrysum, Hipo® Hypoestes, Fiber Optic Grass Isophlo, Luscious® Lantana, Gold Dust® Mecardonia, Fireworks®, Purple Fountain Grass and ‘Sky Rocket’ Pennisetum, A-Peel® Thunbergia, Catalina® and Summer Wave® Senecio</td>
<td></td>
<td></td>
</tr>
<tr>
<td>D 70º-85º F (21-29º C)</td>
<td>Endless® Brownwax, Vermilion®® Crape, Blue My Mind® and Blue My Mind® XL Evolvulus, Sweet Caroline Upside® ‘Princess and Knight’ Penta</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

In growing group codes, the first letter represents the Growing Temp and the second letter represents the pH.

Fertilizer rate for all plants listed above is 150-200 Constant Liquid Feed (CLF) with the following exceptions:

- 75-100 CLF: Endless® Brownwax, Blue My Mind® Evolvulus
- 100-150 CLF: Asparagus Fern Asparagus, Double Delight® Begonia, Double Up® Begonia, ‘Variegatum’ Chrysanths
- 200-250 CLF: Toxcan® Canna, Sofia® Dianthus Illusion®‘, Sweet Caroline, and Margarita Pompone® Bolшиб® Pelargonium Intensia® Phlox, Superbuna® Petunia, A-Peel® Thunbergia

For more detailed cultural information on all Proven Winners varieties, visit provenwinners.com.
Culture Notes and Groups:

pH:
A: pH 5.5-5.8
B: pH 5.6-6.2
C: pH 6.0-6.5

EC:
A: < .6
B: .6-9
C: 1.0-2.0

Well-Balanced Fertilizer
N-P-K: 2:1:1.5 with adequate amounts of micronutrients
Low: 100-150 ppm Constant Liquid Feed
Medium: 150-200 ppm Constant Liquid Feed
High: 200-300 ppm Constant Liquid Feed

Fertilizer Disclaimer:
It is good practice to clear water (leach) once every 3-4 times you water to lower soluble salt levels in the media. EC should also be monitored using weekly EC measurements.

Rooting Out Temperatures:
The first 10 days of container growth: establishing root system to outside edge of container from the newly planted liner.

Growing Temperatures:

- A: 40-50º F (4-10º F) outdoors*
- B: 50-60º F (10-16º F)
- C: Maintain Growing Temperatures

Soil Mix for Container Growing:
Use a high-quality, professional grade soil mix that is adjusted to work with your water quality and growing style to help manage pH and water control.

- Use a well-drained, high-quality professional grade soil mix. A peat-lite based soil or equivalent that gives you 60% organic matter and 40% secondary aggregates, such as perlite, rock wool, coir, and/or bark, will provide proper soil porosity (well-drained soil).

Growth regulator Disclaimer:
All PGR rates should be trialed by each individual grower before applications are made to entire crop to ensure desired results.

Light Levels:

- High: Full sun crops need very high, bright light
- Moderate: Sun to partial shade crops, High to moderate light
- Low: Partial to full shade crops, Moderate to low light

Moisture Regimes:

- Transplant: Water lightly to maintain moisture level within root zone until roots reach the side of the finished container. Once roots are developed to the side of the pot, see finish watering regime.

- Finish Watering Regimens:
  - A: Dry to Moderate. Water thoroughly without over-saturating, keep moist during root development; allow soil surface to dry completely before watering after the crop is rooted to the edge of the pot.
  - B: Moderate to Moist: Water thoroughly without over-saturating, keep moist but not wet throughout entire growth cycle.
  - C: Moist to Wet: Water thoroughly and keep moisture constant throughout entire growth cycle.

Standard Plants Per Pot (PPP):
- 1-5": 1-2 ppm
- 6": 2-3 ppm
- Gallon: 1-3 ppm
- 8": 3 ppm
- 10-12": 3-5 ppm

More cuttings per pot will yield faster finishing times.

- The higher light and temperatures experienced with summer production will dramatically reduce crop times.

- Ability of plants to flower freely regardless of daylength.

- Spring Outdoor Finish:
  - Many Proven Winners crops can be finished outdoors under cool temperatures. Finishing under cool temperatures will allow you to expand production area, allows additional spacing inside greenhouse, allows additional turns, and improves quality of the product. Those plants finished outdoors will need additional time for finishing as specific finishing times are difficult to predict due to variability in weather patterns.
  - Outdoor mum production areas are perfect to use as spring cold temperature finishing space. Before plants are moved outside, they should be acclimated to colder temperatures using holding temperatures stated below.
  - Ideally, plants should be moved outdoors on an overcast day, with moderate temperatures, little wind, and no severe cold (freezing temperatures) forecasted for the next 24 hours. Often a full moon will mean clear skies, which will allow temperatures to drop more than expected. To maintain proper nutrition after a heavy rain, a light water application with 400-500 ppm N can be used on the already wet plants (this high fertilizer application on dry plants will result in burn).
  - Plants vary in ability to withstand cold temperature finishing.
  - To help you manage when crops can be placed outdoors, we have split our plant material into 3 groups (Not all crops can be moved outdoors.)
  - Group A: 55-65º F (12-18º C)
  - Group B: 60-72º F (15-22º C)
  - Group C: 70-75º F (21-24º C)

- Disease Management:
  - Treat with preventative broad spectrum fungicidal drench using current rates.
  - All PGR rates should be trialed by each individual grower before applications are made to entire crop to ensure desired results. All rates are given as a spray unless otherwise stated. Winter production may require higher PGR rates when crops are grown indoors. Proven Winners and its affiliates are not responsible for misapplication or misuse of these products. Check manufacturers’ labels for approved rates and usage recommendations.

- Pest Management:
  - A: 200-300 ppm Constant Liquid Feed
  - B: 150-200 ppm Constant Liquid Feed
  - C: 100-150 ppm Constant Liquid Feed

PGRs Disclaimer:
- It is generally too cold for insects and disease to prosper. You should continue to scout for problems, however, chemical control measures probably won’t be needed. Plant growth regulators will not be needed to control growth.

Need help? Give us a call.
We’re totally committed to helping you grow quality crops.