REGAL GERANIUM

PROPAGATION

PELARGONIUM GRAZIOSA

*Pelargonium x domesticum*

### TRAY & ROOTING

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Form</td>
<td>Vegetative Cutting</td>
</tr>
<tr>
<td>Rooting Hormone</td>
<td>Yes</td>
</tr>
<tr>
<td>Tray Size</td>
<td>32, 52, 72, 102 strip</td>
</tr>
<tr>
<td>Plants Per Cell</td>
<td>1</td>
</tr>
<tr>
<td>Days In Mist</td>
<td>8-16</td>
</tr>
<tr>
<td>Wks. From Stick To Transplant</td>
<td>4-5</td>
</tr>
<tr>
<td>Pinch?</td>
<td>Optional</td>
</tr>
<tr>
<td>Days To Pinch</td>
<td>14</td>
</tr>
</tbody>
</table>

### FERTILITY

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fertilize Through Mist?</td>
<td>No</td>
</tr>
<tr>
<td>Fertilizer Rate</td>
<td>Moderate: 100-150 ppm (20-10-20 constant feed)</td>
</tr>
<tr>
<td>EC Range</td>
<td>Moderate (1.0-1.5 mS via SME)</td>
</tr>
<tr>
<td>pH Range</td>
<td>6.0-6.4</td>
</tr>
</tbody>
</table>

### TEMPERATURE

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Vernalization Required?</td>
<td>To improve flowering</td>
</tr>
<tr>
<td>Average Soil Temperature</td>
<td>68-72°F (20-22°C)</td>
</tr>
<tr>
<td>Average Air Temperature</td>
<td>65-72°F (18-22°C)</td>
</tr>
</tbody>
</table>

### IRRIGATION FREQUENCY

Level 2: Keep media moderately moist with mild dry cycles

### LIGHT (SUPPLEMENTAL)

When light levels fall below 1000 fc (10,800 lux)

### SHADE

Keep light intensity between 700-1200 fc (7500-12900 lux) until callus formation, 2000-2500 fc (21500-26900 lux) during root initiation, and 2500-4000 fc (26900-43100 lux) for toning.

### POTENTIAL DISEASES

*Xanthomonas, Rhizoctonia, Botrytis*

### POTENTIAL PESTS

thrips, aphids, fungus gnats

### PGR SUGGESTIONS

- 1,500-2500 ppm *Daminozide* (85%) spray

### CULTIVAR LIST

Merlot Picotee, Purple Picotee, Merlot Red, Red, Royal Lavender, Royal Lilac, Royal Salmon, Royal White

### TIPS

- Apply a 200 ppm IBA spray (or equivalent product) within 24 hours of sticking to aid root formation.
- Once rehydrated, Regals with root quickly under drier conditions and high light.

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Joel Kempfer - Product Manager
J.Kempfer@DummenOrange.com
614-850-9551
DummenOrange.com
# REGAL GERANIUM

## FINISHING

### PELARGONIUM GRAZIOSA

*Pelargonium x domesticum*

<table>
<thead>
<tr>
<th>CONTAINER SIZE</th>
<th>PLANTS PER POT</th>
<th>EARLY SEASON</th>
<th>MID SEASON</th>
<th>LATE SEASON</th>
</tr>
</thead>
<tbody>
<tr>
<td>4 in. (10 cm)</td>
<td>1</td>
<td>11-13</td>
<td>10-12</td>
<td>9-11</td>
</tr>
<tr>
<td>6 in. (15 cm)</td>
<td>2</td>
<td>12-14</td>
<td>11-13</td>
<td>10-12</td>
</tr>
<tr>
<td>8 in. (19 cm)</td>
<td>3</td>
<td>13-15</td>
<td>12-14</td>
<td>11-13</td>
</tr>
<tr>
<td>10 in. (22 cm)</td>
<td>4</td>
<td>14-16</td>
<td>13-15</td>
<td>12-14</td>
</tr>
</tbody>
</table>

### TIPS

- For liners, place into vernalization once roots are established. If vernalizing a pinched liner or finished container, wait until lateral breaks are at least 0.25in. (0.64 cm) in length before placing into vernalization. Vernalization is properly conducted at 50°F (10°C) average daily temperature for 4-5 weeks. We suggest you heat at 45°F (7°C) and vent at 59°F (15°C).
- To promote full flowering, provide 16 hour days with at least 10 fc (108 lux) at plant height using daylength extension. During the extended photoperiod, provide at least 200 fc (2150 lux) with supplemental lamps.
- Pinching is not recommended as it will add 2-3 weeks to production time.
- Plants can be grown at a constant day/night temperature of 50-54°F (10-12°C) to improve flower display at finish though this cool period is not required for flowering and will add production time.
- Graziosa is a facultative long-day series meaning it will flower sooner under long days than short days but does not require long days to flower. For timing, we suggest a 16 daylength or with night interruption lighting from 10pm-2 am.
- Consider direct-stick with callused cuttings to reduce overall production time by 1-2 weeks.

### FERTILITY

- **Fertilizer Rate:** Moderate: 100-150 ppm N (15-5-15 or similar calcium-nitrate formula alternated with 20-10-20)
- **EC Range:** Low (0.8-1.5 mS via SME)
- **pH Range:** 5.6-6.4

### TEMPERATURE

- **Day Temperature:** 65-72°F (18-22°C)
- **Night Temperature:** 60-67°F (16-19°C)

### IRRIGATION

- **Irrigation Frequency:** Level 2: Keep media moderately moist with mild dry cycles

### LIGHT

- **Daylength Neutral?** Facultative long-day
- **Supplemental** Yes
- **Benefits From Shade?** No

### PINCHING

- **Finishing Pinch?** No

### POTENTIAL DISEASES

*Xanthomonas, Rhizoctonia, Botrytis*

### POTENTIAL PESTS

thrips, aphids, fungus gnats

### PGR SUGGESTIONS

- 750-1500 ppm Chloromequat (11.8%) as needed

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J.Kempfer@DummenOrange.com
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DummenOrange.com
REGAL GERANIUM
FEATURES AND BENEFITS

PELARGONIUM GRAZIOSA
*Pelargonium x domesticum*

DESCRIPTION

Graziosa is an early season regal geranium series with medium vigor and smaller flowers than the Elegance series offered by Dümmen Orange.

KEY GARDEN INFORMATION

<table>
<thead>
<tr>
<th>Exposure</th>
<th><strong>Sun to Partial Shade</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>Height</td>
<td><strong>12-18 inches (30-46cm)</strong></td>
</tr>
<tr>
<td>Garden Spacing</td>
<td><strong>12-18 inches (30-46cm)</strong></td>
</tr>
<tr>
<td>Watering instructions</td>
<td><strong>Allow soil to dry slightly between thorough waterings.</strong></td>
</tr>
<tr>
<td>Hardiness Zone</td>
<td><strong>10-12</strong></td>
</tr>
</tbody>
</table>

CONSUMER APPEAL

- Regal geraniums truly fit their namesake. With large clusters of voluptuous (oftentimes multicolored) flowers, consumers can’t resist the alluring luxury of the Graziosa series.

- Due to regal cold-tolerance, these geraniums can be sold early-season as a pot plant before transitioning outdoors to the landscape.

GARDEN ATTRIBUTES

- If planted in the landscape, Pelargonium prefer rich well-drained soils. However, they can tolerate heavy clay soils if not overwatered.

- Although not favored by bees, the long bloom season and bright flowers of Pelargonium naturally attract hummingbirds. Additionally, their recognizable foliage aroma is a natural deterrent to rabbits, deer, and herbivorous insects.

- Pelargonium can be overwintered indoors for extended seasonal interest.

NATIVITY

Of hybrid origin: parental lineages native to Southern Africa.

‘Graziosa Merlot Red’

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