Maché™, Magic™

**RANUNCULUS ASIATICUS**

**Minimum Germination Rate:** 80%

**Seed Product Form:** Pelleted, raw

**FLOWERING**

**Time frame when plants are receptive to flower initiation:** 10 – 12 leaves are present.

**Flowering Type:** Obligate long-day plant – long days required for initiation.

**Specific Flowering Mechanism:** Days greater than 13.5 hours with high irradiance (15 – 20 mols) will induce and enhance flowering. After initiation and while buds are immature, provide short day to enhance flower size and uniformity.

**PLUG CULTURE**

**Germination:** Optimum conditions for seedling development that begins the day the crop is sown until cotyledon expansion. Expect radicle emergence in 14 – 21 days. Remove plug trays from the chamber when immature cotyledon growth is observed.

**Cover:** Seeds may be covered with a thin layer of medium-grade vermiculite to maintain moisture levels.

**Media:**
- pH: 5.8 – 6
- EC: 0.75 – 1

**Light:** Light is not required for germination. Day 15 – 29 provide 1,500 – 2,000 foot candles (15,000 – 20,000 lux or 4 – 6 mols of light).

**Moisture:** Saturated (5) for days 0 – 14 or until radicle emergence. On day 15, alternate between saturate (5) and moist (3); dry back must occur within 18 hours.

**Humidity:** 100% until radicle emergence (approximately day 14).

**Dehumidify:** 40% on day 15 after radicle emergence.

**Temperature:** 50 – 55°F (10 – 13°C) for highest number of usable seedlings and young plant quality. As temperature increases to 56 – 65°F (13.5 – 18.5°C) usable seedling quality will be reduced and young plant quality will decrease. Apply at -3 to -5°F DIF or morning drop day 15 – 29.

**Fertilizers:** 14-4-14 or 17-5-17 at 100 – 150 ppm to maintain an EC of 0.75 – 1.

**Plug Bulking:** Optimum conditions during the vegetative period, beginning at cotyledon expansion, needed for the root to reach the edge of the plug cell.

**Media:**
- pH: 5.8 – 6
- EC: 1.25 – 1.75

**Light:** 2,500 – 3,000 foot candles (25,000 – 30,000 lux or 8 – 10 mols of light). Make sure plants remain under short days (less than 13 hours) to avoid premature flowering and corm development. After approximately day 52, provide 4,000 – 5,000 foot candles (40,000 – 50,000 lux or 14 – 18 mols of light).

**Temperature:** 52 – 55°F (11 – 13°C) with a -4 to -6°F (-2 to -3.5°C) DIF or morning drop.

**Moisture:** Alternate between saturate (5) and moist (3); dry back must occur within 18 hours.

**Humidity:** 40%

**Fertilizers:** 14-4-14 or 17-5-17 at 75 – 125 ppm nitrogen to maintain an EC of 1.25 – 1.75. Provide 8 – 12 ppm phosphorus.

**Growth Regulators:** May be necessary if optimal conditions have not been provided. B-Nine spray at 1,500 – 2,500 ppm.

**PRODUCT USE**

<table>
<thead>
<tr>
<th>Pots, containers, mass plantings, gift item, garden cut flowers</th>
<th>GARDEN SPECIFICATIONS</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Light:</strong> Partial shade</td>
<td><strong>USDA Hardiness Zone:</strong> 11</td>
</tr>
<tr>
<td><strong>AHS Heat Zone:</strong> 4 – 1</td>
<td><strong>Garden Height</strong></td>
</tr>
<tr>
<td>Maché</td>
<td>12 – 16” (30 – 40 cm)</td>
</tr>
<tr>
<td>Magic</td>
<td>6 – 8” (15 – 20 cm)</td>
</tr>
</tbody>
</table>

**RANUNCULUS SCHEDULING IN WEEKS**

<table>
<thead>
<tr>
<th><strong>Total crop time</strong></th>
<th>Maché</th>
<th>Magic</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>288’ plug crop time</strong></td>
<td>21 – 24</td>
<td>22 – 26</td>
</tr>
<tr>
<td><strong>Transplant to finish crop time</strong></td>
<td>8 – 10</td>
<td>8 – 10</td>
</tr>
<tr>
<td>4” crop</td>
<td>12 – 15</td>
<td>14 – 16</td>
</tr>
<tr>
<td>6” crop</td>
<td>13 – 16</td>
<td>N/A</td>
</tr>
</tbody>
</table>

Ranunculus is traditionally sown in August/September for January/February sales. Additional crops can be sown in September/October for March/April sales.

Note: These suggestions are only guidelines and may have to be altered to meet individual grower’s needs. Check all chemical labels to verify registration for use in your region.