Figure 1.

“Sunny Border Blue” makes an attractive flowering potted plant.

Figure 2.

“Sunny Border Blue” cuttings taken from unchilled stock plants will not flower without cold treatment.

Figure 3.

After cold treatment, “Sunny Border Blue” flowers under all daylengths.

3. PHOTOPERIOD

“Sunny Border Blue” is a day-neutral plant; following cold, all plants flower regardless of photoperiod (Figure 3). Therefore, natural photoperiods are recommended.

4. PROPAGATION

The only method of propagation is by cuttings. Stock plants should not be exposed to cold unless flowering of cuttings is desired. Cuttings with two to three nodes root readily within 2-3 weeks.

5. MEDIA AND FERTILIZATION

Plants prefer a moist, well-drained medium maintained at a pH of 5.5 - 6.0. Constant fertilization of 100 to 150 ppm N, 10 to 20 ppm P, and 100 to 150 ppm K2O is recommended (for example, 20-10-20).

6. LIGHTING AND SPACING

Moderate to high light levels are recommended during forcing of “Sunny Border Blue.” Supplemental lighting at 400-500 footcandles improves plant quality during winter.

7. IRRIGATION

Although “Sunny Border Blue” is a relatively slow grower, plants have thick leaves and require frequent irrigation, especially when grown in small pots. Rapid wilting is of particu-
TABLE 1. Veronica longifolia ‘Sunny Border Blue’ Production Schedule

<table>
<thead>
<tr>
<th>Growing Time</th>
<th>Cultural Practice</th>
<th>Temperature</th>
<th>Photoperiod</th>
</tr>
</thead>
<tbody>
<tr>
<td>2-3 weeks</td>
<td>Take cuttings</td>
<td>72°-77°F (22°-25°C)</td>
<td>Natural photoperiods</td>
</tr>
<tr>
<td></td>
<td>Rooting</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>OR purchase plugs</td>
<td></td>
<td></td>
</tr>
<tr>
<td>≥10 weeks</td>
<td>Cold treatment</td>
<td>35°-45°F (1°-7°C)</td>
<td>9 hours of light</td>
</tr>
</tbody>
</table>

Begin Forcing. Pinch Tips.

<table>
<thead>
<tr>
<th>Temperature</th>
<th>Visible Bud to Flower</th>
</tr>
</thead>
<tbody>
<tr>
<td>60°F (15°C)</td>
<td>60°F (15°C) - 29 days</td>
</tr>
<tr>
<td>65°F (18°C)</td>
<td>65°F (18°C) - 25 days</td>
</tr>
<tr>
<td>70°F (21°C)</td>
<td>70°F (21°C) - 22 days</td>
</tr>
</tbody>
</table>

‘Sunny Border Blue’ flowers faster under warm temperatures, but plants are more attractive when grown at daily averages of 60°-70°F (15°-21°C). Photo courtesy of Shi-Ying Wang.

8. PLANT HEIGHT CONTROL
Pinched plants are naturally 12-16 inches tall. Pinching the tips of cuttings before forcing will induce lateral breaks, increasing the number of flower spikes and reducing plant height by a few inches. Growth retardants are recommended to control plant height only when plants are grown in 4-inch pots. Our research indicates that A-Rest, B-Nine, Bonzi, and Sumagic effectively reduce stem elongation and cause only slight flowering delay. If growth retardants are applied, spray after 2-3 weeks of forcing or when stems begin to elongate.

9. TEMPERATURES AND CROP SCHEDULING
Time to flower depends on forcing temperature (Figure 4). ‘Sunny Border Blue’ is most attractive when grown at daily averages of 60°-70°F (15°-21°C). Plants grown above 70°F (21°C) have light-green foliage and small inflorescences. Plants grown at 60°F (15°C) have the largest inflorescences but flower slowest. At 60°F (15°C), buds are visible after 8 weeks of forcing and begin to flower after 12 weeks. Plants grown at 65°F (18°C) reach visible bud after 6 weeks and flower within 10 weeks. Plants grown at 70°F (21°C) have visible buds after 5 weeks and begin to flower in 8 weeks.

10. DISEASE AND INSECT PESTS
Botrytis is often a problem on lower leaves. Spraying for Botrytis is recommended before and after cold treatment. Powdery mildew is also a frequent problem; fungicide applications are advised once symptoms become apparent. Starting with disease-free cuttings is a must.

11. POSTHARVEST CONCERNS
Plants should be shipped once the first flowers open. Spent flowers remain on the lower part of inflorescences, making plants less attractive.

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FORMULA FOR SUCCESS: ‘SUNNY BORDER BLUE’
1. Unchilled rooted cuttings should be given at least 10 weeks of cold at 41°F (5°C).
2. Pinch tips of cuttings at the beginning of forcing.
3. Force at 60°-70°F (15°-21°C) under natural daylengths. Supplemental lighting during winter improves plant quality.
4. Plants grown in 4-inch pots need to be irrigated frequently, especially once they have visible buds.
5. Apply growth retardants after 2-3 weeks of forcing if plants are grown in 4-inch containers.