Kalanchoe
Culture
Top Tips
1. Avoid sudden changes to the growing environment. Any necessary adjustments should be gradual.
2. Keep plants as dry as possible in the first 8-14 days during the long-day period.
3. If a PGR application during the long-day period is needed, apply as a spray rather than a drench.
4. Short days must be a minimum of 14 hours of darkness for at least 6 weeks for flower initiation.
5. If you can read a newspaper under blackout, it is not dark enough.
6. Short-day interruption should be avoided whenever possible (street lights, moonlight, etc.).
7. Use of PGR at the beginning of the short-day period is essential.
8. Stretching is mainly caused by humidity.
9. Avoid overhead watering in general but especially during short days, and never use cold water (always 50°F+).
10. Avoid use of oil-based liquid chemicals.

Ideal temperature is between 64–68°F.
- As a general rule, for each 2° drop below 64°, the crop will experience production delay of a week and post-harvest quality will decline.
- Temperatures under 60° or over 74° will cause significant delays and may not allow the crop to initiate flowering.
- Daytime temperatures over 90° will cause stretching. Temperature should be kept as stable as possible.

Humidity should remain between 70-90% (ideal is 85%). Humidity above 90% and/or changes of 20% or more in humidity levels will cause stretching. Condensation of moisture leads to an increased risk of disease.

The micro-climate should be closely monitored. The use of a capillary mat can improve the micro-climate by keeping humidity levels high. Keep in mind that a cooling pad & fan system will disturb the micro-climate.

Growing media should be well-drained but able to retain moisture with a high air porosity and a pH of 5.5-6.0.

To root cuttings, water growing media and allow to drain before sticking.
- Cuttings should be kept very dry at 70-74°F for the first 8-14 days.
- Water only when media is dry – misting is not recommended.
- Rooting must take place under long days (13-18 hours of light).

To maintain vegetative growth, ensure plants receive between 13-18 hours of light. If natural daylength is insufficient, night interruption should be provided with supplemental light, starting 2-3 hours after sunset and ending 2-3 hours before sunrise.

Lighting should be very bright to maintain a strong crop, but when in excess of 5500 footcandles, crop will benefit from shading. Typically, shading is required during the afternoon in the summer when the sun is directly overhead.

To initiate flowering, crop should be placed under short days with a minimum of 14 hours of darkness for at least 6 weeks. Protect crop from night interruption sources such as nearby street lights or moonlight, which can disrupt the short-day period.

Irrigation should keep the media moist – never wet.
- Wet media may lead to soft plants and root rot.
- High frequency/low volume is better than low frequency/high volume.
- A red coloration on underside of leaves indicates crop is being kept too dry.
- Avoid overhead watering whenever possible.

Maintain pH between 5.5–6.1 (ideally 5.8).

EC range: see schedule below.
- Long days: 0.6-1.0
- Short days: 1.0-1.5
- Flowering: 0.8-1.1
- Maintain a lower EC in daytime temperatures above 76°F.

Growth regulation is necessary to keep crop compact, otherwise the stems are not strong enough to support the flower-heads. Growth regulation is recommended by applying B-Nine/Dazide (Diminozide), Cycocel/Citadel (Chlormequat), or a combination of the two. Before using, check the label carefully. The following guidelines for frequency of treatment depend on variety, season, desired plant size, pot size, and growing environment, and should be adjusted based on your program needs.

<table>
<thead>
<tr>
<th>Season</th>
<th>Spring</th>
<th>Summer</th>
<th>Autumn</th>
<th>Winter</th>
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<tbody>
<tr>
<td>Frequency</td>
<td>10-15 days</td>
<td>7-10 days</td>
<td>10-15 days</td>
<td>14-21 days</td>
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Suggested production schedule (adjust to your needs)

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<tbody>
<tr>
<td>Stage</td>
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<td>P</td>
<td>T</td>
<td>P</td>
<td>V</td>
<td>V</td>
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S=stick, P=prop, TP=transplant, V=vegetative, R=reproductive, SH=ship
* Daminozide application necessary. ° Daminozide application suggested