

# Kirigami™ Aquilegia Culture Guide

*Aquilegia caerulea*

- Truly Programmable:** Minimal vernalization requirement allows growers to dial-in production for sequential cropping and retail delivery
- Unmatched Uniformity:** Narrow flowering window across the entire series helps ensure consistent bench-run sales
- Retail Impact:** Bold, vibrant colors with upward facing flowers give Kirigami impactful consumer appeal

**Habit:** Upright

**Container size:** Quarts, gallons

**Selling Season:** Spring

**Vernalization:** 50–55 °F (10–13 °C) for minimum of four weeks

## Garden Specifications

**Garden height:** 14–24"

**Garden width:** 12–20"

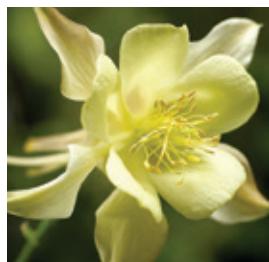
**Light:** Part shade to full sun

**Natural blooming season:** Spring blooming perennial

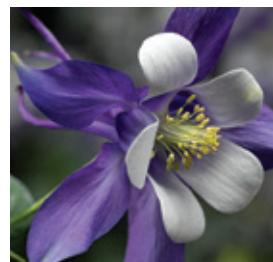
**USDA Hardiness Zone:** 5–9

**AHS Heat Zone:** 8–1

**Product use:** Landscape beds, mass plantings



Kirigami™ Yellow Aquilegia



Kirigami™ Deep Blue and White Aquilegia

## Germination

**Germination time:** 6–8 days

**Media temperature:** 70–72 °F (21–22 °C)

**Chamber:** Optional

**Light:** Required for germination

**Seed cover:** Seeds may be covered with a thin layer of vermiculite.

**Moisture level:** Alternate between a level 4 (wet) and level 3 (medium) from radicle emergence until cotyledon expansion.

**Recommended tray size:** 288-cell tray

**Seeds per cell:** 1 (3–4 seeds per cell for more flower stems)

## Young Plant Production

### TEMPERATURE:

**Day:** 64–68 °F (18–20 °C)

**Night:** 64–68 °F (18–20 °C)

### LIGHTING:

**Recommended day length:** Long days, greater than 13 hours

**Light intensity:** 2,000–3,000 foot candles (400–600 micro mols)

**Day length response:** Facultative long day

**Daily light integral:** Greater than 10 mols/day

**Vernalization:** A four-week vernalization period at 50–55 °F (10–13 °C) is necessary for flowering. Cold treatment can be delivered during young plant stage or during finishing. Plants are receptive to vernalization treatment once plants have established root systems and are 6–8 weeks old.

**Media pH:** 5.5–6.2

**Media EC:** 0.5–1.0 mS/cm (saturated media extract)

**Fertilizer:** 100–150 ppm nitrogen

**Pinching:** No

**Moisture level:** After cotyledon expansion, allow soil to dry back to a level 2 (medium).

**Plant growth regulators (PGRs):** If needed, spray B-Nine® (daminozide) PGR at 1,500–3,000 ppm.

**Plug grow time:** 9–10 weeks in a 288-cell size tray

## Finishing

### TEMPERATURE:

**Day:** 60–65 °F (16–18 °C)

**Night:** 50–55 °F (10–13 °C)

**Average daily temperature:** 60–65 °F (16–18 °C)

### LIGHTING:

**Recommended day length:** Long days, greater than 13 hours

**Light intensity:** Greater than 4,500 foot candles (900 micro mols)

**Day length response:** Facultative long day

**Daily light integral:** Greater than 15 mols/day

**Vernalization:** If not delivered during the plug stage, a four week vernalization period at 50–55 °F (10–13 °C) is necessary for flowering and to increase uniformity and quality of flowering.

**Media pH:** 5.5–6.2

**Media EC:** 1.5–2.0 mS/cm (saturated media extract)

**Fertilizer:** 100–150 ppm nitrogen

**Pinching:** No

**Moisture level:** Alternate between a level 4 (wet) and level 2 (medium). Allow soil to dry back to a level 2 (medium) before irrigating up to a level 4 (wet).

**Plant growth regulators (PGRs):** If needed, B-Nine (daminozide) at 2,500–5,000 ppm or Bonzi® (paclobutrazol) drench at 10–15 ppm are effective. PGR applications are more effective if applied early in the crop cycle.

**Pests:** Leafminer larvae, foliar nematode, aphids, thrips

**Diseases:** Powdery mildew, Alternaria leaf spot, *Pythium*, *Rhizoctonia*, *Thielaviopsis*, Cucumber mosaic virus (CMV, spread by aphids), Impatiens necrotic spot virus (INSV, vectored by thrips)



Kirigami™ Mix Aquilegia

## Scheduling

Container size	Crop time after transplant (wks)	Plants per pot
1.0 quart	8–10	1
1.25 to 2.5 quart	8–10	2–3
3.0 quart to 2.0 gallon	8–10	4–5

Estimated finish crop time is from transplant of a 288-cell tray and finished at an average daily temperature (ADT) of 65 °F (18 °C) and includes four weeks vernalization at 50–55 °F (10–13 °C) in the finished container.

### EXAMPLE CROP SCHEDULE FOR 1-QUART POTS

**Day 1:** Sow one seed (3–4 seeds per cell for more flower stems) per cell into a 288-cell tray; light covering; germinate at 70–72 °F (21–22 °C).

**Week 2:** Reduce temperatures to 64–68 °F (18–20 °C) once cotyledons have expanded.

**Week 6:** PGR spray of B-Nine (daminozide) at 1,500–3,000 ppm to tone plugs.

**Week 10:** Transplant one plug (3–5 plugs for 1.4-quart pots and larger) into finished container.

**Week 11:** Vernalize and bulk at 50–55 °F (10–13 °C) for approximately four weeks.

**Week 15:** Increase temperature to 60–65 °F (16–18 °C) ADT to force flowering.

**Week 17:** PGR spray of B-Nine or Bonzi if needed.

**Week 18–20:** Finish

**syngenta flowers**

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