



CROP MANUAL

Aquilegia caerulea







Central Europe



Kirigami

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Finished Plant *Aquilegia caerulea*

Series 	Leaf colour 	Pot size 	Plants/m ² finished 
Kirigami: uniform in all 5 colors	green	12 cm	25 plants/m ²
	green	13 cm	20 plants/m ²
	green	15 cm	16 plants/m ²
	green	19 cm	10 plants/m ²

Remarks

Kirigami is a brand new *Aquilegia* which requires minimal vernalization to flower. Combination of high temperature with assimilation light gives a very short crop time (8-11 weeks)!

Calendar Week	45	46	47	48	49	50	51	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	
Scheduling from X-tray 264 for 13 cm pot, 17°C always in combination with 16 h assimilation light! type for 10.5 cm pot without pinch at an average daily temperature (ADT) of 17°C, adjusted to light levels	P 13°C							17°C				F	F													
	P 10°C							17°C					F	F												
	P 13°C									17°C			F	F												
	P 10°C									17°C				F	F											
	P 13°C																F	F								
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									P 10°C															F	F	
														P 13°C						17°C		F	F			
														P 10°C						17°C			F	F		

Cultivation Advice

Plants require a minimum vernalization phase with 10-13 C for 4 - 6 weeks to produce flowers. Plants do not lose leaves in this culture, which means no need for cleaning before shipping. Always use assimilation lights during the 17C period in the early season. This culture guideline only works for Kirigami, as other Aquilegia series require a much longer vernalization period with lower temperatures.

Collect own experiences in testing further growing methods (f.e. shorter vernalization phase).



Pests

Thrips, aphids, spider mites



Diseases

Botrytis, Pythium, Powdery mildew



Light

new variety where different strategies are possible (see above). New strategies will be tested in near future.



Irrigation

Alternate between 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).



PGR Applications

only when necessary in smaller pots






Recommendations

Culture guideline:





Culture week	1	2	3	4	5	6	7	8	9	10	11	12
Handling												
Temperature D/N	different strategies, see above											
Light	optional: assimilation light 16 hour, timing see above!											
Shading	☀											
Humidity	50–70%											
Moisture	2-4 (alternating)											
pH	5,5-6,2											
EC growing medium	1,5 - 2,0 mS/cm											
EC feeding in mS/cm	1,0 - 1,5 mS/cm											
Fertilizer	N : K 1 : 1						N : K 1 : 1,5					

Legend







Soil moisture level

	5 saturated: water is easily observed. When the substrate is touched, water moves out freely from top to bottom.
	4 wet: water is not easily observed. When the substrate is touched, there is very little movement of water from top to bottom.
	3 moist: the substrate is black but not glistening. When the substrate is touched, there is water, but virtually no water movement.
	2 medium: the substrate turns from dark to medium brown. There is no water movement when touched.
	1 dry: the substrate changed color to very light brown.








Culture stages Cuttings / Seeds

	callus development / germ1, radicle emergence
	root development / germ2, cotyledon expansion
	leaf development / plug bulking
	plug finishing / plug finishing










EC zones feeding mS/cm

	1 0,5–1,0 mS/cm
	2 1,0–1,5 mS/cm
	3 1,5–2,0 mS/cm
	4 2,0–2,5 mS/cm
	5 2,5–3,0 mS/cm
	6 3,0–3,5 mS/cm







EC zones growing medium mS/cm (Sonneveld 1:1,5)

	1 0,5–0,75 mS/cm
	2 0,75–1,0 mS/cm
	3 1,0–1,25 mS/cm
	4 1,25–1,5 mS/cm
	5 1,5–1,75 mS/cm
	6 1,75–2,0 mS/cm
	7 2,0–2,25 mS/cm




Temperature zones

	1 0–5°C
	2 5–8°C
	3 8–12°C
	4 12–14°C
	5 14–16°C
	6 16–18°C
	7 18–20°C
	8 20–22°C
	9 >22°C

Light zones

	1 total darkness
	2 short day <12 h/short day treatment
	3 shaded
	4 no-shading / natural light
	5 supplemental light > 14 h/long day treatment
	6 night interruption

Shading

	1 shading > 250 W/m2
	2 shading > 450 W/m2
	3 shading > 750 W/m2

ST	sticking URC	PC	plastic cover
RD	root development	L	lift cover
SC₀	sowing no Vermiculite cover	G	gapping
SC₁	sowing plus light Vermiculite cover	TP	transplanting
SC₂	sowing plus medium Vermiculite cover	T	ypl transplanting
SC₃	sowing plus thick Vermiculite cover	C	cover to protect from frost
RE	radicle emergence	PGR	PGR treatment (spray)
Cot	cotyledon	PD	PGR treatment (drench) or heavy spray
M₁	mist day and night	>C	pinch
M₂	mist day – dry night	DB	disbud
W	end mist	P	potting
FC	fleece cover	S	spacing
PC	plastic cover	F	flowering
		LF	leaf removal and maintenance