



## CROP MANUAL

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# Ranunculus asiaticus

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Central Europe  
North Europe



Magic  
Machè

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# Finished Plant **Ranunculus**

Series 	Type 	Leaf colour 	Pot size 
Magic	compact	green	10.5–12 cm
Machè	vigorous	green	12–14 cm

### Remarks

Machè needs some PGR applications, depending on the temperature and light conditions

Calendar Week	39	40	41	42	43	44	45	46	47	48	49	50	51	52	1	2	3	4	5	6	7	8	9	10	11	12	13
Scheduling from young plant material XTS	P																					F					
		P																				F					
			P																				F				
				P																				F			
					P																			F	F		
						P																			F	F	
							P																		F	F	

# Cultivation Advice

For early flowering (week 4-6,) you have to increase the average temp. to 15°C from mid December till flowering. Also increase the day length with 3 hours. When flower buds are visible spray PGR to get short flower stems.



## Substrate

Most suitable are humus substrates with a coarse structure and good air flow.

A 15% clay and 5 % coconut fiber content promotes water retention. The pH should be in the range 5.5-6.5.

A stockage(1 kg / m<sup>3</sup> PG Mix.)  
With a multi-nutrient fertilizer, mixed with trace elements, is advantageous.



## Fertilization

Important to keep EC levels of the growing media in the range of 2.0-2.5. Measure the EC every week. Increase the N:K relation to 1:1.2 after 4 weeks to improve the compact habit of the crop. In the last 4 weeks, go back to N:K relation 1:1.



## Light

Ranunculus need as much as possible light



## Irrigation

the Soil moisture level need to be between 3 and 4.  
Very important is during the culture not to dry, because than stop the plant to grow.



## Pests

Aphids, Thrips, Spidermites, Leafminer, Whitefly



## PGR Applications

Mache need PGR ( Dacide) 2 -3 weeks after potting. Depending on the temperature and development till 5 - 7 times  
Magic is genetic compact - spray PGR max. 1-2 times depending on the deveopment of the plants



## Diseases

Botrytis, Powdery Mildew, Phytium






# Recommendations

Culture guideline at optimum average daily temperature 10–12°C:





Culture week	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26
Handling	P							S																		
Temperature D/N	14–16°C			10-12°C					8-10°C																	
Light	16-18 mols																									
Shading													full sun													
Humidity													40%													
Moisture													3–2													
pH													5,8–6,0													
EC growing medium	1,2 mS/cm			1,75 mS/cm																						
EC feeding in mS/cm	1,5 mS/cm			2,5 mS/cm																						
Fertilizer	N : K 1 : 1				N : K 1 : 1,3																					

## Legend







### Soil moisture level

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

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







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

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




### Temperature zones

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

### Light zones

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

### Shading

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

<b>ST</b>	sticking URC
<b>RD</b>	root development
<b>SC<sub>0</sub></b>	sowing no Vermiculite cover
<b>SC<sub>1</sub></b>	sowing plus light Vermiculite cover
<b>SC<sub>2</sub></b>	sowing plus medium Vermiculite cover
<b>SC<sub>3</sub></b>	sowing plus thick Vermiculite cover
<b>RE</b>	radicle emergence
<b>Cot</b>	cotyledon
<b>M<sub>1</sub></b>	mist day and night
<b>M<sub>2</sub></b>	mist day – dry night
<b>W</b>	end mist
<b>FC</b>	fleece cover
<b>PC</b>	plastic cover

<b>PC</b>	plastic cover
<b>L</b>	lift cover
<b>G</b>	gapping
<b>TP</b>	transplanting
<b>T</b>	ypl transplanting
<b>C</b>	cover to protect from frost
<b>PGR</b>	PGR treatment (spray)
<b>PD</b>	PGR treatment (drench) or heavy spray
<b>&gt;</b>	pinch
<b>DB</b>	disbud
<b>P</b>	potting
<b>S</b>	spacing
<b>F</b>	flowering
<b>LF</b>	leaf removal and maintenance