

# Dianthus caryophyllus

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Central Europe  
North Europe



Suncharm – spring and over-wintered









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# Finished Plant Dianthus - Spring

Variety 	Type 	Leaf colour 	Pot size 	Plants/m <sup>2</sup> finished 
Suncharm	compact	green	9-12 cm	50-25 plants/m <sup>2</sup>

## Remarks

Flowering time is depending on temperature and light sum.

Calendar Week	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	
Scheduling from standard rooted material with pinching	P											F	F								
		P											F	F							
			P											F	F						
				P											F	F					
					P											F	F				
						P												F	F		
							P												F	F	
								P												F	F






# Recommendations – Spring

Culture guideline at optimum average daily temperature 14–16°C:





Culture week	1	2	3	4	5	6	7	8	9	10	11	12	13	14
Handling														
Temperature D/N	16-18°C			12-14°C			10-12°C							
Light	needs additional light from middle February for early flowering													
Shading	full sun													
Humidity	50–70%													
Moisture	3–2													
pH	6,2–6,5													
EC growing medium	1,2 mS/cm			1,5 mS/cm										
EC feeding in mS/cm	1,5 mS/cm			2,0 mS/cm										
Fertilizer	N : K 1 : 1			N : K 1 : 1,5										

## 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>PC</b>	plastic cover
<b>RD</b>	root development	<b>L</b>	lift cover
<b>SC<sub>0</sub></b>	sowing no Vermiculite cover	<b>G</b>	gapping
<b>SC<sub>1</sub></b>	sowing plus light Vermiculite cover	<b>TP</b>	transplanting
<b>SC<sub>2</sub></b>	sowing plus medium Vermiculite cover	<b>T</b>	ypl transplanting
<b>SC<sub>3</sub></b>	sowing plus thick Vermiculite cover	<b>C</b>	cover to protect from frost
<b>RE</b>	radicle emergence	<b>PGR</b>	PGR treatment (spray)
<b>Cot</b>	cotyledon	<b>PD</b>	PGR treatment (drench) or heavy spray
<b>M<sub>1</sub></b>	mist day and night	<b>&gt;C</b>	pinch
<b>M<sub>2</sub></b>	mist day – dry night	<b>DB</b>	disbud
<b>W</b>	end mist	<b>P</b>	potting
<b>FC</b>	fleece cover	<b>S</b>	spacing
<b>PC</b>	plastic cover	<b>F</b>	flowering
		<b>LF</b>	leaf removal and maintenance

# Finished Plant Dianthus – Over-wintered

Variety 	Type 	Leaf colour 	Pot size 	Plants/m <sup>2</sup> finished 
Suncharm	compact	green	12 cm	30 plants/m <sup>2</sup>

## Remarks

During the winter can be grown only frost free.

Calendar Week	38	39	40	41	42	43	44	45	46	47	48	49	50	1	2	3	4	5	6	7	8	9	10	11	12	13	14	
Scheduling from standard rooted material with pinching	P																								F	F	F	
		P																								F	F	F
			P																							F	F	F
				P																						F	F	F
					P																					F	F	F

# Recommendations – Over-wintered

Culture guideline at optimum average daily temperature 14–16°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	
Handling				✂																					
Temperature D/N	16-18°C				12-14°C				4-6°C						14-16°C										
Light	needs additional light from middle February for early flowering																								
Shading	full sun																								
Humidity	50–70%																								
Moisture	3–2																								
pH	6,2–6,5																								
EC growing medium	1,2 mS/cm				1,4 mS/cm																				
EC feeding in mS/cm	1,5 mS/cm				2,0 mS/cm																				
Fertilizer	N : K 1 : 1,2				N : K 1 : 1,5																				

## 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.
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	<b>3 moist:</b> the substrate is black but not glistening. When the substrate is touched, there is water, but virtually no water movement.
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### Culture stages Cuttings / Seeds

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### EC zones feeding mS/cm

	<b>1</b> 0,5–1,0 mS/cm
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	<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)

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	<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

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<b>TP</b>	transplanting
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<b>&lt;</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

# Cultivation Advice

During the first weeks after potting frequent watering is required to avoid stressful circumstances. The plants do not like an uneven or overwatering while this increases the plants susceptibility to foot rot diseases ( Fusarium). Avoid wet feed.



## Fertilization & Substrate

Use a complete fertilizer containing higher potassium levels, with applications beginning as soon as roots reach the sides and bottom of pots. Maintain a growing medium EC of 1.4 and a pH of 6.2 – 6.5. Use standardised growing medium T, 10% clay, 10% perlite/styromull.



## Spacing

Spacing on time during the culture period is crucial to avoid stretched and uncontrollable growth.



## Light

Needs additional light from middle of February **for early flowering**.



## Irrigation

During the first weeks after transplanting frequent showering is required to avoid stressful circumstances. The plants do not like an uneven or over watering while this increases the plants susceptibility to foot rot diseases (Fusarium!). Avoid wet feet!



## PGR Applications

Daminozide (B9/ Alar);  
Paclobutrazol ( Bonzi)