



CROP MANUAL

Calendula maritima






South Europe
Central Europe
North Europe



Caleo

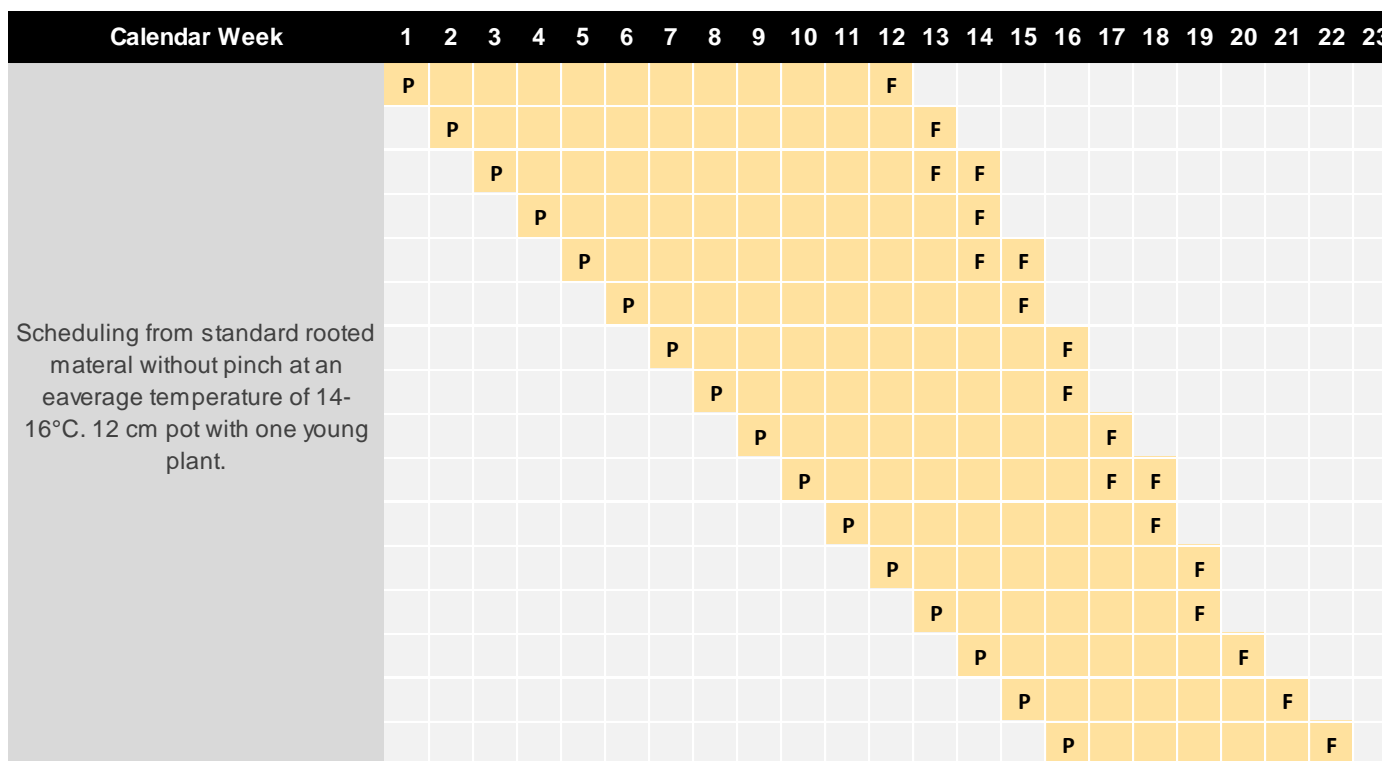
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Finished Plant Calendula

Series 	Type 	Leaf colour 	Pot size 	Plants/m ² finished 
Caleo	compact	green	10.5–12 cm-14 cm	50-25 plants/m ²

Remarks

Calendula maritima can be grown also with lower temperature (min. temperature >2°C), Production time will be longer but growing with Primula is possible. Pinching is optional (latest 6 weeks before scheduled flowering). Drying out will negatively impact flower quality. pH should not go below 6,0 to avoid iron toxicity,



Cultivation Advice

Caleo is a variety that can fit 10.5 to 12 cm pot and even hanging baskets with 3 plants. It is recommended to use Caleo for the beginning of the season. You can also grow it as a biennial in a cold tunnel. Pinching is not needed unless the branches are growing over the side of the basket.



Fertilization & Substrate

Calendula prefers a well drained porous media. Assure a constant fertilization from potting till flowering, starting at an EC of 1.5 in the water to 2.0 during flowering period. pH 6-6.2. pH should not go over 6.0 otherwise iron toxicity on the lower leaves might develop.



Light

Calendula prefers full light



Diseases

Botrytis, Powdery Mildew



Pests

Aphids, Whiteflies



PGR Applications

Daminozide (B9/Alar), Bonzi, Sumagic or cool morning, negative Dif






Recommendations

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





Culture week	1	2	3	4	5	6	7	8	9
Handling					S				
Temperature D/N	16-18°C		14–16°C						
Light	>12 hours light supports early flowering								
Shading	full sun								
Humidity	50–70%								
Moisture	3–2								
pH	6,0-6,3								
EC growing medium	1,0-1,2 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

	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
RD	root development
SC₀	sowing no Vermiculite cover
SC₁	sowing plus light Vermiculite cover
SC₂	sowing plus medium Vermiculite cover
SC₃	sowing plus thick Vermiculite cover
RE	radicle emergence
Cot	cotyledon
M₁	mist day and night
M₂	mist day – dry night
W	end mist
FC	fleece cover
PC	plastic cover

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