



CROP MANUAL

Begonia semperflorens







Central Europe
North Europe



Ascot
Ascot Bronze
Eureka
Eureka Bronze
Volumia
Topspin

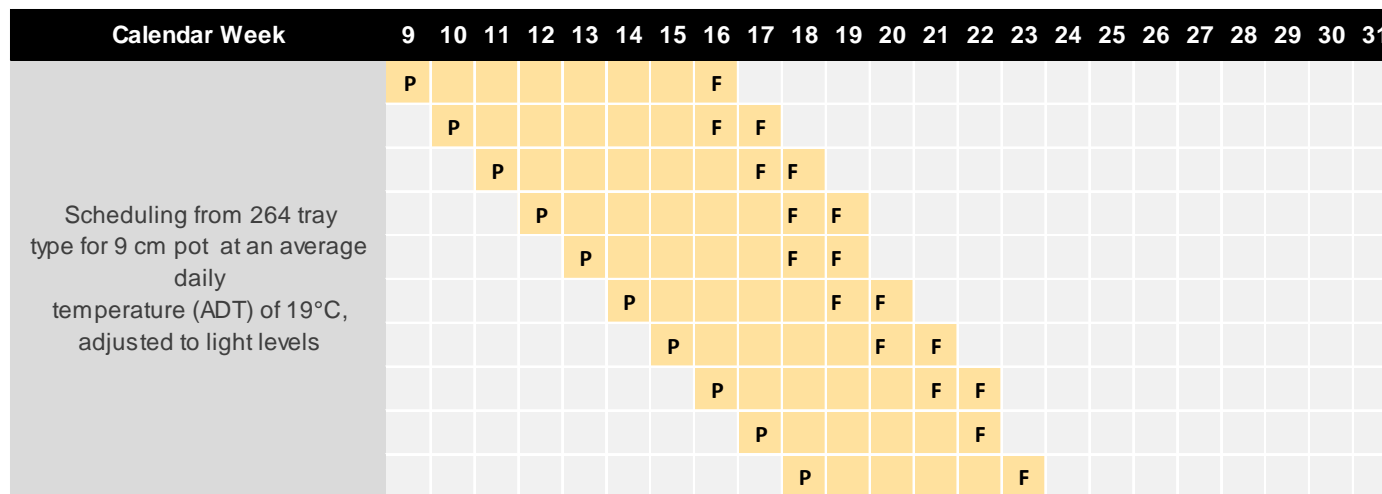
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Finished Plant Begonia

Series 	Type 	Leaf colour 	Pot size 
Ascot	compact	green	9–10.5 cm
Ascot Bronze	compact	bronze	9–10.5 cm
Eureka	medium	green	9–10.5 cm
Eureka Bronze	medium	bronze	9–10.5 cm
Volumia	vigorous	green	9–11 cm
Topspin	medium	green	9–10.5 cm

Remarks

Day neutral plant. Light intensity will trigger flowering. Warm temperatures encourage flower development.



Cultivation Advice

After transplant maintain temperature 20°C nights and 19°C days. After roots are established temperatures may be lowered to 16°C day and night. Topspin series requires high temperatures on the beginning for root development; after that crop can be finished at 12 °C.



Fertilization & Substrate

Under high light and long days conditions ammonium –based fertilizers are preferred. Under low light conditions use calcium –based feed. Watch for low Ca and Mg levels since this can result in stunted plants with marginal leaf edge burn.



Tips & Tricks

Control pH level. Too high (above 6) can cause iron deficiency.



Diseases

Botrytis (apply preventive fungicides when long periods of low light levels and high humidity occur)



Pests

Aphids, Thrips



PGR Applications

If necessary apply CCC (chlormequat chloride) might be useful. One to two weeks after transplant as spray at 0,03 to 0,05%. Also responds to B-Nine (daminozide) or B-Nine/ CCC tank mix.






Recommendations

Culture guideline at optimum average daily temperature 19°C:





Culture week	1	2	3	4	5	6
Handling	P				F	F
Temperature D/N	18–20°C					
Light	If light level is < 10 mol/cm ² /day					
Shading	> 750 W/m ²					
Humidity	50-70%					
Moisture	alternate between 2-4					
pH	5,5–5,8					
EC growing medium	1,2 mS/cm					
EC feeding in mS/cm	1,5 mS/cm			2,0 mS/cm		
Fertilizer	N : K 1 : 2					

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/m ²
	2 shading > 450 W/m ²
	3 shading > 750 W/m ²

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	<	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