



CROP MANUAL

Begonia semperflorens







Central Europe
North Europe



Ascot
Ascot Bronze
Eureka
Eureka Bronze
Volumia
Topspin

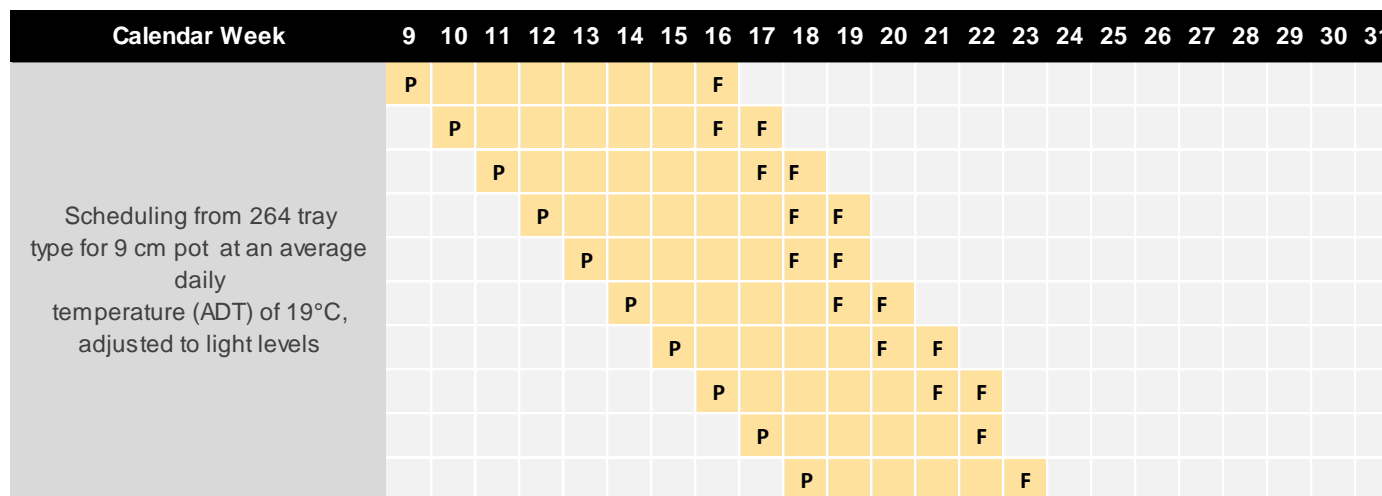
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Finished Plant Begonia

| 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 | >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 |