



CROP MANUAL

Euphorbia pulcherrima



South Europe



Neva
Early Mars
Vega
Lyra
Mirage
Saga
Majoris

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Finished Plant *Euphorbia pulcherrima* 17 cm pot

| Series  | Leaf colour  | Flowering date natural short days Venice | PGR demand | Comment |
|--|---|--|---------------|---|
| Neva | dark green | week 50 | low - medium | high density variety upright medium size bracts |
| Early Mars | dark green | week 49 | high | mid season - bigger plants |
| Vega | dark green | week 48 | medium - high | v-shape, no PGR in short day - no late stretch |
| Lyra | dark green | week 49 | medium | no PGR in short day - no late stretch, big bracts |
| Mirage | dark green | week 48 | low | slow and easy growth, very upright |
| Saga | dark green | week 50 | medium | big bracts, very late cyathia development |
| Majoris | dark green | week 48 | high | early season - outstanding color |

| Calendar Week | 29 | 30 | 31 | 32 | 33 | 34 | 35 | 36 | 37 | 38 | 39 | 40 | 41 | 42 | 43 | 44 | 45 | 46 | 47 | 48 | 49 | 50 | |
|---|----|---|---|---|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|---|
| Scheduling from 2, 5 cm plug type for 17 cm pot with average daily temperature (ADT) of 19°C in long day and 17°C during short day (5 - 6 bracts) | P |  | | | | | | | | | | | | | | | | | | F | F | F | |
| | | P |  | | | | | | | | | | | | | | | | | | F | F | F |
| | | | P |  | | | | | | | | | | | | | | | | | F | F | F |

Remarks

Number of bracts is determined by number of leaves after pinching due to variety characteristics. Temperatures above 25°C under black clothing may give an uncontrolled delay in flower initiation

Cultivation Advice

Please note that lower temperatures will increase culture time. Shading at crop end is mainly recommended for crops with a low light level in the weeks before to avoid strong light changes. Black clothing only until week 39. Natural short-day starts in week 39 all over Europe.

PGR in short day is very much depending on light level. PGR treatments in the last 4 weeks mainly influence the bract size.

All climate related set points are optimal values. Greenhouse climate has to be adapted as good as possible to recommended values with a balance between temperature, shading and humidity to achieve the best possible conditions under the given circumstances. That means for ex. that in the beginning humidity should be higher by accepting higher temperature (and not open the ventilation too much).



Fertilization & Substrate

Poinsettias use a lot of fertilizer from the start of the crop. Please start feeding right after transplanting. Non-uniform branching can be caused by suboptimal feeding, mainly low N feeding. Reduce EC level before finishing. High EC rates and high Ammonium rates can reduce shelf life.



Spacing

Spacing of Poinsettias can be used to steer length of the plants. At the start Poinsettias should be spaced tight together to increase humidity in the crop.



Pests

Whiteflies, Thrips, Mites



Diseases

Botrytis, Pythium, Rhizoctonia



Tips & Tricks

Humidity should be at 70 to 80% for branching. Shading in that period helps to increase humidity and reduces stress in the plants. As a result branching is more even and risk of stem abortion is reduced.



PGR Applications

Use PGR already before or short after pinch to avoid stretch of the first internodes of the side shoots and to avoid apical dominance of the strongest shoot. Later PGR treatments are strong related to climate and growth conditions. A very late PGR treatment might be applied to delay cyathia maturation. Be aware of the risk of bract damages due to chemical applications. Details on request.

Recommendations

Culture guideline under Southern European climate conditions:

| Culture week | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 |
|---------------------|------------------------|---|-----|---|---|---|------|---|---|---------|----|----|---------|----|----|-----------------|-----------------------|----|----|
| Handling | PGR | ✂ | PGR | | | | | | | | | | | | | | F | F | F |
| Temperature D/N | 18–19°C | | | | | | 17°C | | | 18–20°C | | | 16–17°C | | | | | | |
| Light | no additional light | | | | | | | | | | | | | | | | | | |
| Shading | > 250 W/m ² | | | >750 W/m ² , full sun/shading to control temperature | | | | | | | | | | | | | >450 W/m ² | | |
| Humidity | 70–80% | | | 50–70% | | | | | | | | | | | | | | | |
| Moisture | 3–2 | | | | | | | | | | | | | | | | | | |
| pH | 5,5–5,8 | | | | | | | | | | | | | | | | | | |
| EC growing medium | 1,4 - 1,6 mS/cm | | | | | | | | | | | | | | | 0,4 - 0,6 mS/cm | | | |
| EC feeding in mS/cm | 1,5 mS/cm | | | | | | | | | | | | | | | stop feeding | | | |
| Fertilizer | N : K 1 : 1 | | | | | | | | | | | | | | | | | | |

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 |
| 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 |
| > | pinch |
| DB | disbud |
| P | potting |
| S | spacing |
| F | flowering |
| LF | leaf removal and maintenance |