

# Campanula carpatica

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Central Europe



Pristar

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# Finished Plant Campanula

| Series  | Type  | Leaf colour  | Pot size  | Plants/pot | Potting week | Flowering weeks |
|--|--|---|--|------------|--------------|-----------------|
| Pristar  | seed   | green   | 11–17 cm   | 1-3        | 9-23         | May-August      |

## Remarks

Pristar is the earliest Campanula carpatica on the market.

| Calendar Week | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | 25 | 26 | 27 | 28 |
|---------------|---|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|
|               | P |    |    |    |    |    |    | S  |    |    | F  |    |    |    |    |    |    |    |    |    |
|               |   | P  |    |    |    |    |    | S  |    |    |    | F  |    |    |    |    |    |    |    |    |
|               | P |    |    |    |    |    | S  |    |    |    |    |    | F  |    |    |    |    |    |    |    |
|               |   | P  |    |    |    |    | S  |    |    |    |    |    |    | F  |    |    |    |    |    |    |
|               |   |    | P  |    |    |    |    |    |    | S  |    |    |    |    | F  |    |    |    |    |    |
|               |   |    |    | P  |    |    |    |    |    |    | S  |    |    |    |    | F  |    |    |    |    |
|               |   |    |    |    | P  |    |    |    |    |    |    | S  |    |    |    |    | F  |    |    |    |
|               |   |    |    |    |    | P  |    |    |    |    |    |    | S  |    |    |    |    | F  |    |    |
|               |   |    |    |    |    |    | P  |    |    |    |    |    |    | S  |    |    |    |    | F  |    |

-  Inside
-  Outside
-  Longday treatment (inside) 3-4 weeks after potting

# Cultivation Advice

Grow under short days first 3 - 4 weeks to bulk plants prior to flowering. Flowering occurs approximately 6-8 weeks after long day treatments begin. Natural flower timing is June through July. Outdoor production from week 15-16 onwards gives much more compact, "strong" quality than finishing indoor.



## Fertilization & Substrate

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Use 2.5 – 3.0 kg/m<sup>3</sup> of slow release fertilizer as a base level. Feeding with extra levels of nitrogen and calcium will speed up the culture.



## Pests

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Aphids, Thrips, Whiteflies



## Diseases

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Botrytis, Pythium, Fungal leaf spots



## Light

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Grow outdoors in full sun never allowing the soil to dry out.



## PGR Applications

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Finishing indoor needs more PGR. Complete outdoor production works well without PGR.






# Recommendations

## Culture guideline subject to temperature





| Culture week  | 1  | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 |
|---|--|---|---|---|---|---|---|---|---|----|----|----|----|----|
| Handling  | P  |   |   |   |   | S |   |   |   | F  | F  | F  | F  | F  |
| Temperature D/N   | 14–18°C, protect against frost                                 |   |   |   |   |   |   |   |   |    |    |    |    |    |
| Light   | flowering 6 -7 weeks after long day treatment                  |   |   |   |   |   |   |   |   |    |    |    |    |    |
| Shading   | full sun, after hardening off, plants can handle full sunlight |   |   |   |   |   |   |   |   |    |    |    |    |    |
| Humidity  | <80%   |   |   |   |   |   |   |   |   |    |    |    |    |    |
| Moisture  | 4-2  |   |   |   |   |   |   |   |   |    |    |    |    |    |
| pH  | 5,8–6,2  |   |   |   |   |   |   |   |   |    |    |    |    |    |
| EC growing medium 1:<br>1.5 volume extraction<br>in water | 0.5 -1.0 mS/cm   |   |   |   |   |   |   |   |   |    |    |    |    |    |
| EC feeding in mS/cm                                       | 1,5-2,0 mS/cm  |   |   |   |   |   |   |   |   |    |    |    |    |    |
| Fertilizer  | N : K 1 : 2  |   |   |   |   |   |   |   |   |    |    |    |    |    |

## 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          |