

## CUT FLOWER CULTURE

**culture** greenhouse/open field

**sowing method** TP/DS

**sowing season**

Spring for flowering late

**germ temp.** 20-21°C (68-70°F)

**growing temp.** 14-16°C (58-60°F)

**plug crop time**

3 - 4 weeks

**total crop duration**

14-15 (summer) to 18 weeks

**seed requirement**

DS: 50 gr/m<sup>2</sup> (0,7 oz/ft<sup>2</sup>)

TP: 5 grams (0,18 oz) for 1000 plants

**pests/diseases**

Aphids, leafhoppers, Fusarium, Verticillium. Preventative treatment is advised.

**fertilization (f)**

Moderate to high requirement. Fertilize the crop weekly with 100-150 ppm nitrogen (at 2 kg/m<sup>3</sup> slow release fertilizer in substrate), using a potassium balanced fertilizer (N: K2O-ratio: 1:1,5). Avoid high ammonium and high nitrogen levels. Prevent magnesium and iron deficiency.

## SOWING DETAILS

• Direct sowing (DS)

Sow : 65 seeds (0,1 gr) per m<sup>2</sup>

Row distance: 25-30 cm

• Pre-sow and transplant (TP):

Initial sowing media:

sterile fertile soil, pH 6.0-6.5

Sow: 1 seed/plug (tray 288)

cover: light cover with vermiculite

days 0-10

(m) level 4

(t) 20-21°C (68-70°F)

(f) < 100 ppm N < 0.7 EC

days 11 - 17

(m) level 3 - 4

(t) 16-18°C (61-64°F)

(l) 11.000-27.000 lux (1000-2500 fc)

(f) 100-175 ppm N, 0.7-1.2 EC

NB: supplemental lighting may be necessary when light conditions are low.

days 18 - finish

(m) level 3 - 4

(t) 12-15°C (54-59°F)

(l) 27.000-54.000 lux (2500-5000 fc)

(f) 100-175 ppm N, 0.7-1.2 EC

## GROWING ON

**soil/media**

well-drained fertile soil with 20-30% clay, pH 6.0-6.5

**netting**

Netting is recommended.

**pinching**

Pinching reduces height rather strongly, so this is not advised.

**plant density**

Row distance: 25-30 cm

78 plants/m<sup>2</sup> (7 pl/ft<sup>2</sup>)

**moisture (m)**

Dry slightly between water supply, level 3 - 4. Drip irrigation is advised towards flowering.

**temperature (t)**

Cool temperatures (12-15°C (54-59°F)) promote a good plant habit, but may delay flowering. Temperature should not be under 8°C (45°F). Callistephus does not stand frost.

**light (l)**

Optimum: 75.000 lux (7000 fc). Supplemental lighting is required in early and late season greenhouse plantings when light conditions are low. This will prevent premature flowering.

## CULTIVATION TIPS

- Disinfect the soil and seed trays in the greenhouse before planting as preventative measures against Fusarium and Verticillium.
- Crop rotation (min. 7 years) is advised to avoid soil diseases.

## NOTE

- The centre flower can be removed for a better presentation per stem with several colouring flowers.
- Successive sowings are advised to spread the harvest.

## HARVEST

Harvest when first flowers start colouring.

For post harvest treatments, see: [www.vbn.nl/en/longevity](http://www.vbn.nl/en/longevity) or [www.vbn.nl/houdbaarheid](http://www.vbn.nl/houdbaarheid)

moisture levels (m): 1 = dry 2 = normal to dry 3 = normal 4 = moist 5 = wet

This information is for general guidance only, and is in some cases specific for West European conditions. No guarantee is given for the result of the crop, nor is liability accepted for the consequences of applying the indications given.