

# Matthiola Centum series

Matthiola incana

- Well-filled flower spikes
- High stem quality
- Range of brilliant soft colours
- European type stock with 100% selectability



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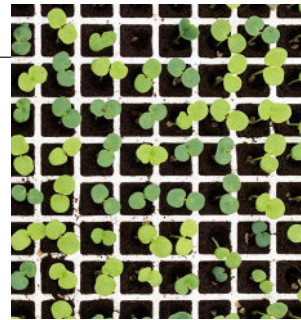
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**Matthiola Centum** series delivers top performance and rich flowering from spring to midsummer. Plant the Centum series from winter to late spring. Centum is loved for its well-filled flower spikes, high stem quality and a range of brilliantly bright colours. No fuss or extra work. The Matthiola Centum series is easy to select for doubleness after a cold treatment, so you will start with an excellent series with 100% double flowers.

## Flower profile:

<b>Series:</b>	Centum
<b>Genus &amp; species:</b>	Matthiola incana
<b>Family:</b>	Brassicaceae
<b>Common name:</b>	Stock
<b>Usage:</b>	Ornamental; commercial cut flower
<b>Stem length:</b>	65 to 70 cm
<b>Breeder:</b>	Evanthia Genetics
<b>Starting material:</b>	Raw seed



**European type stock with 100% selectability**



**Centum Carmine**



**Centum Cream**



**Centum Deep Blue**



**Centum Lavender**



**Centum Pink**



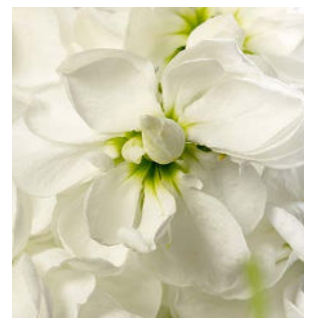
**Centum Red**



**Centum Rose**



**Centum Soft Pink**



**Centum White**

# Matthiola incana — Cultivation manual

## Cut flower culture

**Culture location:** greenhouse

**Sowing method** TP

**Sowing season** Early winter until late spring

**Germ temp.** 15-18°C (59-64°F)

**Growing temp.** 16-18°C (60-65°F) day  
13-16°C (55-60°F) night

### Plug crop time

3-5 weeks

### Crop duration

8-12 weeks with supplemental light,  
otherwise 9 to 16 weeks from planting

### Seed requirement

5 gr for 1000 plants

1 seed per plug

### Pests/diseases

Cabbage butterflies, caterpillars, thrips,  
aphids, clubroot, Sclerotinia, downy  
mildew, powdery mildew.

### Fertilization (f)

Nitrate-based fertilizer, low on N, low  
on P. Fertilize twice a week until  
harvest (175 to 225 ppm N/1.2-1.5 EC).  
Keep EC at 1.5-2.0 mmhos/cm and pH  
at 5,8 to 6,5. High pH (> 6,8) causes chlo-  
rosis.

## Cultivation tips

- Selectable types need a cold treatment: keep the double-flowering plants with pale green cotyledons (see sowing details).
- Matthiola is sensitive to Fusarium. When successively planted in the same year, sterilize (steam) the soil after the crop.

## Sowing details

### Pre-sow and transplant (TP):

Soil : sterile sowing mix

pH 5,5-6, EC 0.5

sow : 1 seed per plug (tray 288)

cover: yes

### Days 0 - 4

(m) moist

(t) 15-18°C (59-64°F)

(f) < 100 ppm N, < 0.7 EC

### Days 4 - 7 (for selectable series)

Use a cold treatment or short-day treat-  
ment to select for doubleness:

#### OPTION 1: Cold treatment:

Once germinated, keep at 4-5°C (41°F) for 4  
to 7 days, followed by 1 to 2 days at 16-18°C  
(60-65°F) in order to select the double-  
flowering light-green plants.

#### OPTION 2: Short-day treatment:

Create a short day environment. For Mat-  
thiola this means 11 hours of light and 13  
hours of darkness. Please note: when the  
night falls, open the screening to prevent  
heat accumulation. Make sure to close the  
screen before dawn.

Adjust the initiation of short days to the  
heat levels in the greenhouse.

### Days 7 - 14

(m) normal

(t) 15-18°C (59-64°F)

(l) 16.000-27.000 lux (1500-2500 fc)

(f) < 100 ppm N, < 0.7 EC

### Days 15 - 21

(m) dry - normal to dry

(t) 15-18°C (59-64°F)

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

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

## Notes

- For best performing series in your climatic conditions, check the description with the series. In cooler climates Matthiola is only cultivated in the greenhouse.

## Growing on

### Soil/media

(deep) well-drained fertile soil, pH 5,5-  
6, 0,5 EC

### Netting

Netting is advised

### Pinching

No pinching needed

### Plants density

Summer 65-75 plants/m<sup>2</sup> (6-7 plants/ft<sup>2</sup>).

Winter: 65 plants/m<sup>2</sup> (6 plants/ft<sup>2</sup>).

### Moisture (m)

Plant in moist soil. Do not start (drip)  
irrigation too soon or the seedlings may  
get leggy. Moisture level 2-3. Keep dryer  
towards cutting stage.

### Temperature (t)

16-18°C (60-65°F) during the day, 13-16°C  
(55-60°F) at night. High heat (> 18°C)  
can stunt plants or prevent flower  
development. Too low temperatures will  
influence stem length.

### Light (l)

Not daylight sensitive, but supplemental  
lighting - 3000-6000 lux (280-560 fc) for 14-  
16 hours) enables late summer planting.

## Harvest

- Harvest when 4 to 5 flowers per stem are open.

For post harvest treatments, see:  
[www.vbn.nl/en/list-pre-treatments/](http://www.vbn.nl/en/list-pre-treatments/)

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