

annual  
600 s/gr  
Seed form

## Matthiola incana

### CUT FLOWER CULTURE

**culture** greenhouse/open field

**sowing method** TP

**sowing season**

September to June

**germ temp.** 15-18°C (59-64°F)

**growing temp.** 15-18°C (59-64°F)

**plug crop time**

3-4 wks (winter 5-6 wks)

**crop duration**

8-12 weeks with supplemental light,  
otherwise 12-20 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

### 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) level 4  
(t) 15-18°C (59-64°F)  
(l) -  
(f) < 100 ppm N, < 0.7 EC

days 4-7 (for selectable series):  
Once germinated, keep at 4-5°C  
(41°F) for 4 to 7 days in order to  
select the double-flowering  
light-green plants.

days 7 - 14  
(m) level 3  
(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) level 1 - 2  
(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

### GROWING ON

**soil/media**

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

**netting**

Netting is advised.

**pinching**

No pinching needed.

**plant 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  
slant. Moisture level 2-3. Keep dryer  
towards cutting stage.

**temperature (t)**

10-12°C (50-54°F) for 2-3 weeks. Then  
15-18°C (59-64°F). High heat (> 18°C)  
can stunt plants or prevent flower  
development. Too low temperatures will  
influence stemlength.

**light (l)**

Not daylight sensitive, but  
supplemental lighting - 3000-6000 lux  
(280-560 fc) for 14-16 hours), enables  
late summer planting (NL week 40  
onwards) and harvest in 11-12 weeks.

### 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.

### NOTE

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

### HARVEST

Harvest when 4 to 5 flowers per stem  
are open. The entire plant is pulled out.  
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.