

Helianthus Solano® collection

Helianthus annuus F1

-
- Well-filled, pollenfree flowers with a great vase life
 - Tall, sturdy stems and a short cultivation time
 - Plenty of options for constant high quality and supply



Please contact us for more information: [evanthia.nl](https://www.evanthia.nl) | sales@evanthia.nl

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Solano® is a collection of uniform *Helianthus annuus* F1 varieties with great flowering power. Thanks to the robust, tall stems and the small top leaves, Solano® is easy to harvest and process. As the flowers of *Helianthus Solano®* are pollen-free, the flower hearts and petals remain clean, resulting in a longer vase life. With its sturdiness, intense colours and well-filled flowers, Solano® attracts the attention of traders and florists. Due to the short cultivation time and varieties covering different harvest periods, Solano® quality can be offered from the first rays of sunshine in early spring until autumn. This collection assures the market of constant quality and availability.

Flower profile:

| | | | |
|-----------------------------|-----------------------------|---------------------------|-----------------------------------|
| Collection: | Solano® | Usage: | Ornamental; commercial cut flower |
| Genus & species: | <i>Helianthus annuus</i> F1 | Stem length: | 100 to 180 cm |
| Family: | Asteraceae | Starting material: | Raw seed |
| Common name: | Sunflower | | |



Solano® Orange Early

- Performs best under short day conditions
- Flowering on average 7 to 10 days faster than the other Solano® varieties
- Outdoor sowing from late winter to early spring
- Harvest from mid spring to early summer



Solano® Deep Orange

- Less sensitive to day length variations and is therefore more plannable
- Outdoor sowing from early spring to midsummer
- Harvest from early summer to late autumn



Solano® Orange nr 12

- Mid-early, uniform variety
- Less sensitive to daylength variations, and easy to schedule
- Outdoor sowing from early spring to midsummer
- Harvest from early summer to late autumn



Solano® Orange nr 14

- Mid-early variety, well-suited for warmer climates conditions and periods
- Outdoor sowing early spring and early autumn
- Harvest from early summer to late autumn



Solano® Gold

- Short harvest window
- Ideal for large sales actions
- Outdoor sowing from early spring to midsummer
- Harvest from early summer to late autumn



Solano® Double

- Fully double, pompon-like flowers.
- Thanks to its short crop time, you can easily grow this specialty alongside regular varieties.



Solano® Flame

- This strong, dark bicolor
- Grow in spring and summer for a heated summer and colourful autumn harvest.

Helianthus annuus F1 — Cultivation manual

Cut flower culture

Culture location: greenhouse / open field

Sowing method DS / TP

Sowing season yearround possible, depending on location

Germ temp. 21-24°C (70-75°F)

Growing temp. 18-25°C (64-77°F)

Plug crop time

10-14 days

Crop duration

8 - 11 weeks from sowing, depending on time of year

Seed requirement

8 - 10 kg/ha (if 17 sds/gram)

Average 50 seeds per m²

Pests/diseases

Mice, pigeons, doves, rabbits. Thrips, aphids, snails. Botrytis, sclerotinia and downy mildew.

Preventative treatment is advised.

Fertilization (f)

No or little fertilizer during growth.

Before sowing or planting, use a well-balanced fertilizer, low on N, with potassium, magnesium and phosphates. During the culture it is advisable to minimize irrigation. See also cultivation tip.

Sowing details

Direct sowing (DS):

Sow when frost danger has past.

Early season: cover with agro or fleece tissue, also to protect against birds.

In rows : 40 cm apart/see density

Cover : cover with 3-4 cm soil

(m) : moist

(t) : soil temp. > 12°C (54°F)

(f) : see cultivation tip

Germination time 10-15 days

Pre-sow and transplant (TP):

Soil : sterile sowing mix, pH 5,5-6,2 and 0,7 EC

Sow : 1 seed per plug (288 tray)

Cover: lightly cover with sand

Days 1 - 4

(m) moist

(t) 21-24°C (70-75°F)

(f) < 100 ppm N, < 0.7 EC

Days 5 - 6

(m) normal to moist

(t) 20-21°C (68-70°F)

(l) 27.000 lux (2500 fc)

Days 7 - 10

(m) normal

(l) 54.000 lux (5000 fc)

(f) 100 - 175 ppm N, 0,7-1.2 EC

Transplant at 2 true leaf stage.

Growing on

Soil/media

See cultivation tip.

pH 5,5-6,2 and 0,7 EC

Netting

Netting is optional in windy areas.

Pinching

Optional for branching types only. See note

Plants density

Single-stems: 32-40 pl/m² (6-8 pl/ft²)

Branching types: 10-20 plants/m² (2-4 pl/ft²).

Moisture (m)

Minimize irrigation after germination in order to reduce disease pressure, overgrowth and weak plants.

Temperature (t)

Helianthus does not stand frost.

Optimum growing temperature prior to flower development:

day : 18-25°C (64-77°F)

night: 10-18°C (50-64°F)

Light (l)

Helianthus reaches its full potential at high light levels. Ideal is to grow them in full sun. Longer day lengths mean later flowering, larger flowers, taller stems. Short days will make for quick flowering, yet smaller flowers and shorter stem length.

Cultivation tips

- When lower leaves turn yellow, extra potassium (K) can be applied, but do not to overfeed.
- Dense growing will help to restrain the plant size (and reduce the amount of side branching).
- Aphids during bud formation are a cause of malformed flowers.

Notes

- Pinching: not recommended for single-stemmed types. For branching types pinching is optional. Test on a small part of the crop. Method: carefully take out growing point when there are 4-5 pairs of true leaves while not damaging the foliage.

Harvest

- Harvest when outer petals open. Place in water immediately. Avoid large temp. differences. H. annuus is not sensitive to Ethylene.

For post harvest treatments, see:

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.