

 ${\it Helianthus annuus} \; {\it F}_{1}$



Item no.: HA1201R/C



Bert® - the Perfect Gift Plant

- Perfect, compact pot sunflower
- Large flowered, pollenless hybrid
- "One of the best varieties" according to an official institution

| Crop Time | Spring: 8 - 10 weeks |
|--------------------|-----------------------------------|
| Height ∅ | 15 " / 38 cm |
| Width Ø | 9 " / 23 cm |
| Exposure | Sun |
| Seed Form | Raw Seed, BeGreen Coating |
| Product Use | Pots, Mixed Containers, Landscape |
| Family, Origin | Asteraceae, North + Central |
| Minimum Germ. Rate | 85% |



TECHNICAL GUIDE

Helianthus annuus F₁ Bert®

Usage

Pots, Mixed Containers and Landscape

Sowing method

1-2 seeds per plug. Can be sown directly into the finished container

Germination

Plug Culture:

Optimum conditions for seedling development, beginning on the day of sowing until radicle emergence. Expect radicle emergence in 3-5 days.

Media

Plug Culture:

Saturate (5) for the first 2-3 days and then reduce the moisture level to moist (3) on day 4. On day 10 reduce the media moisture further to a medium (2). Alternate between wet (4) and medium (2), allowing the media to approach a medium (2) before re-saturating to wet (4).

Growing On:

Alternate between moisture levels wet (4) and medium (2). Allow the media to reach a moisture level medium (2) before resaturating to a wet (4). Never allow the media to dry out completely since yellowing of the lower leaves can occur.

Temperature

Plug Culture:

70-75 °F (21-24 °C) until day 5 and then reduce to 68-70 °F (18-20 °C). Temperatures below 54 °F (12 °C) will result in slow and uneven germination.

Growing On:

59-64 °F (15-18 °C) nights, 64-70 °F (18-21 °C) days. An ADT (average daily temperature) of 67 °F (19 °C) will give the fastest finished crop.

Fertilization

Plug Culture:

Maintain an EC < 1.0. Fertilized water should not exceed an EC of 0.5

Growing On:

Helianthus require high fertilization levels. Fertilize the crop weekly at 200-250 ppm nitrogen, using a potassium balanced fertilizer (N:K₂O – ratio 1:1.5). Blended fertilizers that are used for flowering can be used (11-7-23). If fertilizers with high potassium are not available then a complete calcium- based fertilizer can be used (14-4-14 or 15-5-15). Under high light levels a 17-5-17 fertilizer can be used. Application of magnesium sulfate (0.05%) can be made 1-2 times at 100 ppm to prevent magnesium deficiency. In case of iron deficiency apply iron-chelate 1-2 times.

Expert Tip

Providing short day conditions in the early stages of production will result in a shorter finished plant. Application of growth regulators, B-Nine (daminozide) sprays can delay flowering by up to one week.

Stage I Starts with the radicle breaking through the testa. The roots are touching the medium. Ends with fully developed cotyledons. Stage II Starts from fully developed cotyledons. Ends with the fully developed true leaf or true leaf pair.

Stage III Starts from the fully developed true leaf or true leaf pair and ends with 80% of the young plants being marketable.

 $Stage\ IV\ All\ young\ plants\ are\ ready\ for\ sale\ and\ in\ the\ process\ of\ being\ hardened\ off.\ This\ stage\ lasts\ about\ 7\ days.$

The cultural recommendations are based on results from trials conducted under Central European conditions. Different conditions in other parts of the world may lead to deviations in results achieved.



COLORS OF THE SERIES

Helianthus annuus F₁ Bert®

