

## ***Helianthus annuus*** **Bert®**

### ***Culture guide***

**Uses:**

Pots, Mixed Containers and Landscape

**Exposure:**

Sun

**Garden height:**

15" / 38 cm

**Crop time:**

8-10 weeks

**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 re-saturating 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

Growing On:

Helianthus require high fertilization levels.

Fertilize the crop weekly at 200-250 ppm nitrogen, using a potassium balanced fertilizer (N:K<sub>2</sub>O – 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.