



SAKATA®

Sunflower Sunbright and
Sunbright Supreme
Culture

Plug Culture Tips



- Sunflower Sunbright and Sunbright Supreme are prized for their large flowers, bright colors and long vase life.
- Often sown directly into ground beds,
- Many growers; especially for greenhouse, are using plug culture for a more uniform crop.

Stage One: Days 1-6



- Single sow seeds into a well drained media with a pH between 5.5 and 6.5.
- Cover the seed completely with coarse or medium vermiculite.
- Maintain 75°F (24°C) air temperature.

Stage Two: Days 7-10



- Reduce temperature to 65°F (18°C) and provide high light and good ventilation.
- Sunflowers produce high quality cuts with littler or no feed. If no starter charge is included in the soil mixture, apply 25- 50 ppm N from a well balanced Calcium Nitrate based fertilizer.

Stage Three: Days 11-15



- Seedlings grow rapidly and require only water to keep them from wilting. Provide high light and keep the temperature between 55 and 65°F (13-18°C).

Stage Four: Day 16



- Seedlings are now ready to transplant into cut flower beds.
- Grading the seedling will yield a more uniform crop.

Disease



- Excess moisture and poorly drained media combined with cool and low light conditions can lead to Pythium problems.

Transplanting



Day 10

- Sunflowers grow well in any type of soil that is relatively low in fertilizer.
- Choose a sunny site with good drainage.
- A dense planting of 4 x 5 inches (10 x 12 cm.) is ideal and will reduce the amount of side branching.

Temperature



Day 20

- For Sunbright maintain an air temperature of 45-55°F (8-13°C) at night and a maximum day temperature of 75°F (24°C).
- For Sunbright Supreme maintain an air temperature of 50-55°F (10-13°C) at night and a maximum day temperature of 75°F (24°C).

Irrigation



5 weeks

- Water moderately to avoid overgrowth and soft plants.

Fertilizer Strategy (before visible bud)



- Sunbright and Sunbright Supreme require only moderate E.C. levels to produce high quality cut flowers.
- Maintain the EC level at 0.7 mmhos (2:1 slurry) during growing stage (before visible flower bud).

Fertilizer Strategy (after visible bud)



- At visible bud reduce EC and moisture to as low as possible for a strong and tight cut flower stem and longer vase life.
- Some growers apply foliar applications of KNO_3 at 100 ppm N at this stage to increase flower size.

Excessive fertilizer



- Sunflowers are sensitive to high salt levels.
- Do not grow in beds following high nitrogen crops (like tomatoes).
- High salt levels cause leaf burn and deformed flowers.

Flower damage from excess Nitrogen



- High nitrogen rates toward the end of the crop can cause the disc to overgrow resulting in flower damage.
- Sunbright and Sunbright Supreme require low fertility and minimal moisture.

Outdoor production



- The majority of sunflower production is grown outdoors and direct seeded
- The use of transplants can improve uniformity and yield due to poor germination conditions.
- Birds, mice and uneven moisture can reduce germination.

Flowering: Short Day Variety



- Sunbright is a short day cool temperature variety and will flower more quickly under short day and cool temperature conditions.
- In Summer, flower production will be delayed resulting in taller stems and large discs, (especially in areas with warm night temperatures).

Sunflower Sunbright Supreme



- Less sensitive to photo period in long day conditions
- 10 days earlier than Sunbright in summer.
- Not recommended for outdoor production in Winter where night temperature drops below 50°F (10°C).

Scheduling



8 weeks

- Sunbright and Sunbright Supreme flower in response to photoperiod and temperature.

Sunbright	Sunbright Supreme
Winter: 50 days	Winter: 50 days
Summer: 70-80 days	Summer: 70 days

Cutting stage



- Cut stems when the flowers are 1/4 open with the petals perpendicular to the disc.
- To ensure the longest vase life cut flowers at the proper stage. Late harvesting will reduce the vase life.

Larger flowers



- Less dense spacing of 5-6 inches (12-15 cm) apart.
- Conditions that delay flowering.

Small flowers



- Dense spacing of 4 inches (10 cm.) apart.
- Conditions that promote rapid flower development.
- For varieties that are sensitive to short days, night interruption, (mum lighting), during short day conditions for the first 3 weeks will increase stem length and disc size but also delay harvest.

Gerbera sized flowers

Sunbright Supreme



- Sow seeds of Sunbright Supreme directly into 50 cell trays. After emergence, provide 9 hour days (blackout from 5 pm - 8 am) for three weeks.
- Black out March to September in the Northern Hemisphere. September - March in the Southern Hemisphere.

Sunflower Postharvest Care



- Stems should be cut into and held in a commercial holding solution or acidified water. Sunflowers benefit greatly from solution with a low pH (acidic). Sunflowers are prone to water stress problems so make sure stems stay hydrated.
- After cutting keep out of direct sun to prolong freshness.
- Store at 36-41°F (2-5°C) for up to a week.

Thank you for your support!



- We thank you for your support and interest in our cut flower seed genetics.
- Sakata Seed America