

<b>Cultural Information for:</b>	Sunflower Sunbright	Annual
<b>Common Name:</b>	Sunflower	
<b>Botanical Name:</b>	Helianthus annuus	
<b>Seed Count:</b>	570/ounce	20/gram
<b>Optimum Germination Temperature:</b>	75°F / 24°C	
<b>Optimum Growing Temperature:</b>	55-65°F / 13-18°C	
<b>Optimum pH:</b>	5.8 – 6.2	
<b>EC – Plug:</b>	0 – 0.3 mmhos/cm (1:2) / 0 – 0.8 (SME) / 0 – 1.0 (Pour Thru)	
<b>EC – Finished:</b>	0.4 – 0.8 mmhos/cm (1:2) / 0.9 – 2.0 (SME) / 1.1 – 2.6 (Pour Thru)	

F1 Hybrid pollenless Sunbright is the gold standard for sunflowers and very popular with growers and consumers due to its great shipping ability and bright golden petals. Being pollenless, Sunbright is excellent as a cut flower. F1 Hybrid Sunbright is very uniform and vigorous in growth even under low temperature and short day conditions. Sunbright is an economical and profitable series.

**Site Selection:** Choose a sunny site with good drainage.

**Soil Preparation:** Sunflowers do best planted in relatively poor soil. Soil that is too rich (E.C. over 2.0 mmhos/cm SME) will cause the plants to grow too tall.

**Note:** *Excessive Nitrogen, especially in the summer, will cause plants to grow too vigorously with abnormal flower shapes.*

**Seed Sowing:** Sow seeds directly into beds and lightly cover with soil. Water the seed beds thoroughly and maintain 75°F/25°C air temperature, with a minimum soil temperature of 50°F/10°C. Seeds germinate in about 7 days. 7 to 10 days after seedlings emerge, thin out leaving only the strongest and most sturdy seedlings. A final spacing of 4 x 5 inches/ 10 x 12 cm is ideal. Dense growing will help to reduce the amount of side branching and yield a flower disc size of 5 inches/12 cm.

**Temperature:** After thinning, maintain a minimum air temperature of 50°F/11°C during the night, and a maximum of 75°F/25°C during the day.

**Fertilizer:** Sunflowers require little or no fertilizer to produce flower stems of high quality. Also, water the plants only moderately to avoid overgrowth and soft plants.

**Note:** *Excessive application of nitrogen fertilizer may result in overgrowth of plants, especially when grown as a summer crop.*

**Timing:** Flowering time will be about 70-80 days in the summer and 50 days in the winter and is related to day length and temperature. During short days, plants will flower more quickly with smaller discs on shorter stems. Under long day conditions, plants will flower later with larger discs and taller stems.

**Insects:** Aphids, lygus bugs and whiteflies are the principal pests. Spray as needed.

**Harvesting:** Cut stems when the flowers are 1/4 open with the petals perpendicular to the center disc. To ensure the longest vase life, cut the stems at the proper stage. Late harvesting will result in reduced vase life.

**Post-Harvest Care:** Stems should be cut into and held in a commercial holding solution with a biocide 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.

*“All information given is intended for general guidance only and may have to be adjusted to meet individual needs. Cultural details are based on North America conditions and Sakata cannot be held responsible for any crop damage related to the information given herein. Application of recommended growth regulators and chemicals are subject to local and state regulations. Always follow manufacturer's label instructions.”*