

Crop	Sunflower
Series	Sunbright, Sunbright Supreme
Botanical name	Helianthus annuus
Plant type	Annual
Seed type	Film Coat
Seed count	20 coated seeds / gr
Germination	20-25°C - 5 days light inhibited
Growing	15-25°C
Optimum pH	5.8-6.2

Site Selection Choose a sunny site with good drainage. Sunflowers do best planted in relatively poor soil. Soil that is too rich (EC over 2.0 mS/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 (20-30cm spacing, 15-25 seeds per 1m²) and lightly cover with soil. Water the seed beds thoroughly and maintain 25°C air temperature, with a minimum soil temperature of 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. Dense growing will help to reduce the amount of side branching and yield a flower disc size of 12 cm.

Temperature: After thinning, maintain a minimum air temperature of 10°C during the night, and a maximum of 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.

Pests: 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 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 Asian conditions such as in Japan and Sakata cannot be held responsible for any crop damage related to the information given herein. Always follow manufacturer's label instructions. Testing a few plants prior to treating the entire crop is best.