



Growing Sunflowers as Cut Flowers

CULTURE

Soil temperature: 65 – 80 degrees optimum range

Germination days: 3 – 8 days

Plant height: 48 – 84 inches

Plant type: Annual

Maturity days: 60 – 75 days



SITE SELECTION

Sunflowers do best in areas that receive full sun and when planted in well-drained soil. They prefer a pH of 6.0–6.8 but can tolerate soils slightly out of this range. Grow them as an annual in gardens or field settings. Container grown is not recommended for most sunflowers.

SUNFLOWERS CAN BE GROWN FROM A TRANSPLANT OR DIRECT SOWN

From Transplant

Sow 2 seeds per cell in a 50 or 72 cell tray about 3 weeks before the last frost of spring in greenhouse. Soil temperature range for plug trays is best between 70-80° Fahrenheit . Once seeds emerge reduce temperature to 55-65°F to aid in stocky growth. Sunflowers perform best when hardened off slightly and acclimated to outdoor conditions at least 7 days before setting to the field/garden. Transplant seedlings to garden / field after all signs of frost have passed. Try not to allow plants to become root bound in the cells and limit root disturbance when transplanting; transplant shock can cause delayed flowering and stunted growth. Trial results have shown that transplanted sunflowers will get a jump start over direct seeded but will tend to be a bit shorter and have a slightly smaller head size.

Direct Sown

The most common way to sow sunflowers is to direct seed in a field or garden. Seeds generally germinate and emerge within 5-7 days and the growth rate is similar to corn. Prepare a seed bed at least 2 weeks before sowing. Amend the soil with compost or nutrients as you would for any typical vegetable crop. Using the stale seedbed technique, work soil one additional time immediately before planting to limit emerged seedlings and have a fresh seedbed. Sow seeds in rows 1" deep with 4-6" between seeds. Space your rows 12" to 36" apart. Cover with fine soil and firm soil lightly to have good contact with seed & soil. Water lightly if needed to aid in germination.

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Direct Sown *continued*

Mechanical seeders can be used to direct sow sunflower seeds. Planters ranging from a single row push seeder to a 12-row air planter are being used successfully. When using mechanical seeders, check and adjust the seeder so seeding depth is 1" deep and seed is placed firmly in the seed trench for placement.

SEEDING RATE

500 seeds planted at a 5" in row spacing will plant approximately 200 feet of row. Seeds per Acre: Planting at 5-6" between seeds and 30-38" between rows will require 35,000 seeds per acre.

SUCCESSION PLANTING: CUT FLOWERS ALL SEASON LONG

Planting sunflowers every 7-10 days will help ensure a steady supply of excellent quality fresh cut flowers for your customers. Once flower petals open the peak flower quality will only last about of 5-7 days depending on temperatures. Manage a consistent availability of cut flowers for your customers by developing a planting schedule based on maturity dates and average daily temperatures.

MASS PLANTINGS / SUNFLOWER MAZES

Sunflowers are becoming very popular with agritourism farms and operations utilizing them for weekend festivals and wagon rides through the flower fields with different photo opportunity areas. For larger plantings, NuSun varieties are the most economical when planting large acreage while utilizing some cut types around entrances, and parking areas. Succession planting will assure you can hit multiple weekends and keep your customers and guests coming back. (Note: NuSun maturity dates posted in our catalog (95 day) are for seed maturity not first flower. First flower is around 57 days.)

WEED CONTROL

There are limited weed control options for sunflowers. Please consult with your crop protectant supplier for options for preplant incorporate or pre-emergence herbicides. The variety NuSun 545CL is a mid-maturity black oil sunflower that is part of the Clearfield Production System. The term "Clearfield" refers to a plant that has been selected and bred for tolerance to the imadazolinone family of herbicides. **Beyond® herbicide is currently the only imadazolinone herbicide registered for use on Clearfield sunflowers.** Stale seedbed technique is also an option for weed control with use of mechanical cultivation.

HARVEST & MATURITY

Single-stem cutting types are fairly uniform and have predictable bloom times during the main season. They can take a week longer to bloom in early spring and fall due to cooler temperatures and decreased daylength. ProCut series generally average 50-60 days from seed to flower, while the Sunrich series average 55-70 days from seeding to flower.

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Harvest blooms either mid-morning or late evening. Use a sharp shear to cut stems to desired length. Remove excess foliage and place stems in cool water. Store / display sunflowers out of the direct sunlight to extend vase life. Sunflower stems will generally last for 5-7 days. It is recommended to use a flower food to prolong life. Sanitize cutting tools and flower buckets to keep fungi & bacteria at a minimum which will help extend cut flowers vase life.

Harvesting heads for seed

Selling individual dried heads for bird seed is a growing option for retail and roadside stands. When heads have tipped over and seeds are mature cut heads about a foot to 18" of stem. Clean off left over flower residue by rubbing hand gently across the head to expose seeds. Tie a string around stem to display for sale.

For larger scale seed production see link below for Drying & Storage by Kansas State.

AF158 Drying and Storing Sunflowers

http://agrillife.org/lubbock/files/2011/10/dryingstoring_sunfl01_17.pdf

