

Home Sunflower Production

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Sunflowers (Helianthus)

- Helianthus is a genus that makes up nearly 70 species of annual and perennial flowering plants
- Sunflowers are a part of the Daisy Family

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American Indian Uses

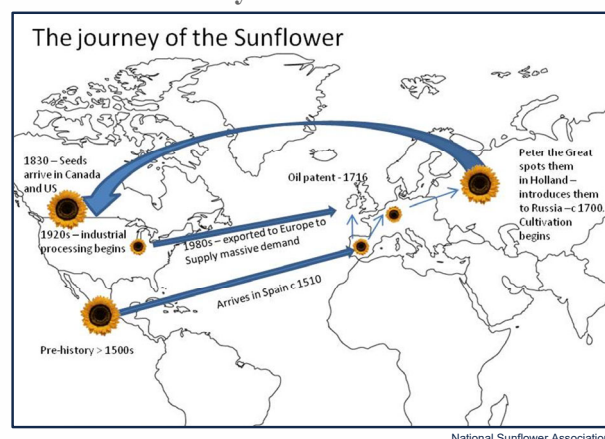
- Has been a food crop for thousands of years (Flour and Oil)
- Originally cultivated near Arizona and New Mexico 5,000 years ago and grown in the Midwest for 2,000 years.
- Sunflower may have been domesticated before corn
- Flour was mixed with other foods like beans, squash, and corn to make cakes, and oil was squeezed from seeds for baking bread.
- Non-food uses include dyes for textiles, medicines (for snake bites or rash), as well as building materials and skin and hair care.

National Sunflower Association

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Sunflowers in History



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European Uses

- Taken from the Americas to Spain around 1500
- Spread throughout western Europe mainly as an ornamental
- By 1716 an English patent was granted for squeezing oil from sunflower seeds
- Sunflowers became commercially grown in Russia by the 1830's
- Other oil foods were outlawed during Lent, apart from Sunflower oil
- By the late 19th century, the Russians began to breed sunflowers for specific traits
- Two varieties were created, one for oil production, and a larger seed for direct human consumption (confection sunflowers)

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Back to North America

By 1880 seed companies were advertising the "Mammoth Russian" sunflower seed in catalogues, this same variety could be found in the U.S 1970's, nearly 100 years later.

Sunflowers were primarily used in the U.S for poultry feed, in the 1920's the Missouri Sunflower Growers Association participated in what is likely the first processing of sunflower seed into oil.

By the 1940's Sunflower acreage spread to Minnesota and the Dakota's where most of the Sunflowers both oil and confection are grown today in the U.S. The leading state in Sunflower production is North Dakota.

By the 1970's Europe depends on U.S imports of Sunflower seed as Russia cannot supply the demand for Western Europe. This is still the case today.

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Tolna, North Dakota



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2021 Sunflower Survey



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What is the fields limiting factor?



It was Anitha!!

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Planting Sunflowers

- Fast growing annual
- Perennials exist
- Does best in full sun
- Thrives in a variety of soils, well drained
- Early to mid-May seeding
- Can be started indoors and transplanted



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Seeding

- For indoor seeding, seed into biodegradable containers
- Direct seed after any chance of frost
- Plant seeds one inch deep
- Different varieties require different row spacings
- Germination in 7-10 days

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Fertilization

- Get a soil test done!
- Optimal soil pH is between 6.0 and 6.8
- A side dressing of an all-purpose slow-release fertilizer application will speed growth and produce larger flowers.

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Succession Planting

- Plant multiple varieties that have different days to maturity all at one time
- Plant the same variety at one- to two – week intervals
- Plant multiple varieties with varying days to maturity at three – to four- week intervals

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Jerusalem Artichoke (Sunchokes)



Michigan State University Extension

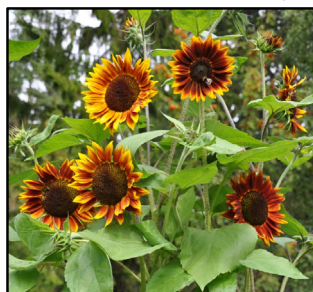
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Branching Cultivars

- Branching cultivars get quite large and produce many blooms over a long period
- Space these 18 to 24 inches apart



Teddy Bear



Shock O Lat

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Pollenless Cultivars

- Used primarily as a cut flower, doesn't contain the bright yellow pollen that stains clothing or table clothes.
- Highs range from two to eight feet with many different colors and forms.



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Dwarf Cultivars

- Three feet tall or less
- Works best in front of flower beds or borders or in limited spaces or containers



Semi-dwarf Cultivars



Firecatcher



Florenza

Giant Cultivars

- Eight or more feet in Hight
- Sometimes require staking



Mammoth Russian

Lemon Queen

Maintenance

- Sunflowers can withstand some drought.
- Weed control by tilling, hoeing, or mulching

Harvesting

- Cut at the right time of development
- Cut at right time of day
- Cut at a 45-degree angle and 24 inches long
- Hot water is best
- Keep bouquets out of the sun
- Change water daily

Pest control

- Stink bugs, Aphids, and Caterpillars can all be devastating in sunflowers
- Birds can eat nearly all sunflower seeds while in the garden or field.
- Deer can destroy young and developing plants quickly

Pest Control Through companion plants

- Garlic
- Shallots
- Chives
- Mint
- Rosemary
- Basil
- Nasturtiums

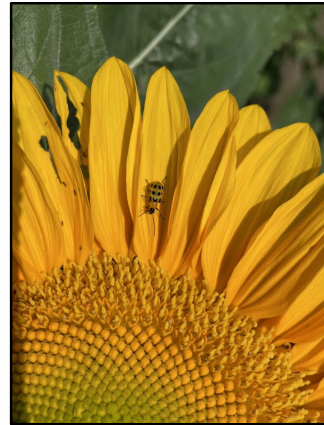


University of Maryland Extension

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Pest Control



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Fungus

- Blight and Leaf Spot
- Downy mildew
- White mold



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Environmental Impact of Sunflowers

- Food for wildlife and pollinators
- Removal of heavy metals from the ground
- Biomass producer
- Livestock feed



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Final Thoughts

- Sunflowers thrive when given optimal growing conditions
- There are many different varieties that can be used around your home and farm
- Pests can be controlled through proper management
- Sunflowers can have a beneficial environmental impact

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Resources on Sunflowers

- [How to grow sunflowers at home - A great addition to any garden: University of Illinois Extension](#)
- [Pollinator Quick Guide: What You Can Do to Help Honey Bees | Ohioline \(osu.edu\)](#)
- [Sunflowers | UMN Extension](#)
- [NDSU Sunflower Information — Broadleaf Crops](#)

Questions?

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