

## Sunflower - *Helianthus*

It is the nature of God to reside in mystery- ineluctable, inexhaustible mystery.  
We do not need to understand the cabala of mathematical physics to apprehend the *mysterium  
tremendum*. We need only to look out the window.  
~ Chet Raymo



What's in a name:  
*Helianthus annuus*  
Sunflower, Soleil, tourney

All in the Family: Aster

### Common names in México:

Maíz de Texas; acahual; flor de sol, flor de gigantón, girasol, Mirasol lampote, Flor de Añil, Doradilla, Siempre viva, Náhuatl: Tupinambochimal-acatl, chimalte ; Otomi: yendri

Talk about all-purpose flowers!: In addition to sunflowers providing a sizable amount of nectar and pollen for wild critters summer through fall, its other parts are finding valued uses in the economy.

Seed money: The two chief products from sunflowers in financial markets are the *oil* (second only to soybeans) and the *seeds* as snacks (40% protein and no cholesterol), bird feed and as protein supplements for livestock. There is some potential as a bio-diesel fuel.

Don't silage me, Argentina: The top three world sunflower producers are Argentina, Russia and the US (primarily North Dakota) for whole plant silage. It is almost as high in nutrition as corn.

The incredible bulk: Fiberboard is made from sunflower stalks; dye from the ray flowers.

Stalks are burned as fuel and ashes used as fertilizer. Discarded sunflower shells are used for bedding in turkey production facilities. Thus it is grown for economy and beauty.



In 1514, they took a little trip  
☺: Giant sunflowers were being cultivated by North and South American indigenous peoples three thousand years before the sunflowers were introduced to Spain in 1514.

Ra, ra, ra: The Incas of Peru worshipped the sunflower as a symbol of their Sun God. Things aren't so different now, as Sharman Apt Russell relates in her wonderful book *Obsession with Butterflies*: “In gardens, right now people grow sunflowers and fall down before them. These people are stunned, compelled to worship again.”

Eternal sunflower of the spotless kind: Phototropism (oriented toward sunlight) occurs only until the flower head opens. Many sources say they are solar trackers throughout the day, but others report it turns with the sun only before it blooms.

You'll never put down roots in this town again: Like many other species in its genus, the sunflower exudes chemicals from its roots that make the soil unfriendly for other vegetation. This is another reason it tends to form colonies.

How great is thou art: Vincent van Gogh's painting *Sunflowers* sold at auction in 1987 for \$39.9 million. He died alone and penniless in 1890.

Let all the dreamers be aurelians, come the new Girasol: According to *Wikipedia*, in 1996, “the US Secretary of Defense and the Ukrainian defense minister ceremoniously sprinkled sunflower seeds over a former missile silo. Sunflowers absorb and store radioactive material. A New Jersey company used sunflowers to decontaminate a uranium factory. In their hydroponic tanks, the roots of the sunflowers created a bio-filter for waste water. In experiments in Chernobyl, sunflowers absorbed 95% of radioactive strontium in a pool near the leaky reactor.”

Sighs matter: Sunflower seeds are arranged in concentric, hyperbolic spirals, in both clockwise and counter clockwise arrangements. In the large Russian hybrid sunflowers, the flowers number in the thousands. Sunflowers are often cited in discussion of the Fibonacci number sequence: 1, 2, 3, 5, 8, 13, 21, 34, 55, 89...

Caterpillar Café:  
Silvery Checkerspot, Common Pug, Common Looper, Giant Leopard Moth, Painted Lady