Of interest this week at Beal...

**Wild Sunflower**

*Helianthus annuus*

Family: the Sunflower family, Asteraceae  
Also called Hairy-leaved sunflower, common sunflower

The genus name *Helianthus* is derived from two Greek words that translate to, respectively, sun-flower. Certainly the habit of sunflowers to track the azimuth of the sun’s progress across the sky by the position of the open flowers is recognized here. Many researchers have followed Dr. Charles Heiser’s assertion that the domesticated sunflower was a product of the agronomy of the Eastern Agricultural Complex of indigenous agriculture; the same complex that domesticated marsh elder before maize reached the interior of North America as a temperate zone crop. Others, especially Lentz, *et al.* (July 2008, PNAS) have become convinced that it was a product of the Mesoamerican center of agriculture, like maize, although for reasons including cultural interpretations. It is clear that modern cultivated sunflower is the same species as the wild sunflower of interior North America. This controversy continues.

The value of sunflower seed is its significant nutritional components, namely protein content in the range of 25-30 percent, and its oil content in the 35-40 percent range. Certainly food of this quality would have been noticed by cultures that were starvation survival specialists.

Besides its use as food, sunflower has also provided dyes and medicinal products. For the indigenous Americans, sunflowers provided at least two dye materials. The use of the flower petals to make a golden yellow dye is well documented in many parts of the U.S. The Hopi culture developed a variety that was kept for the extraction of a purple dye from its uniquely colored seed hulls.

The leaves of sunflower have been made into tea and used as a diuretic. In the First Nations context, sunflower leaves were applied as a poultice to snakebites or dried and ground for application to sores and skin disorders. In the Dakota cultures (Moerman 1998) an infusion from the flowers was used to treat chest pains and a variety of pulmonary complaints. Numerous groups have used the ground seeds to treat a variety of complications of pregnancy. In the Pima culture, an infusion of leaves was used to
The highly nutritious seeds of sunflower are rich in both oil and protein. Wild sunflower seeds although much smaller than today’s commercial product, were of sufficient size to attract the interest of the indigenous First Nation’s agronomists in pre-maize agriculture.

For about two decades, the world leader in sunflower production has been the Russian Federation (and formerly the USSR), with Argentina, Eastern Europe, and the United States filling out the top four positions. Russian agronomists have been instrumental in developing the highest oil bearing varieties, approaching 50 percent oil yield by weight. More than 80 percent of the U.S. production is in Minnesota and the Dakotas.