

Sunflower History

The story of sunflower (*Helianthus Annuus*) is indeed amazing. The wild sunflower is native to North America but commercialization of the plant took place in Russia. It was only recently that the sunflower plant returned to North America to become a cultivated crop. But it was the American Indian who first domesticated the plant into a single headed plant with a variety of seed colors including black, white, red, and black/white striped.

American Indian Uses

Sunflower was a common crop among American Indian tribes throughout North America. Evidence suggests that the plant was cultivated by American Indians in present-day Arizona and New Mexico about 3000 BC. Some archaeologists suggest that sunflower may have been domesticated before corn.

Sunflower was used in many ways throughout the various American Indian tribes. Seed was ground or pounded into flour for cakes, mush or bread. Some tribes mixed the meal with other vegetables such as beans, squash, and corn. The seed was also cracked and eaten for a snack. There are references of squeezing the oil from the seed and using the oil in making bread.

Non-food uses include purple dye for textiles, body painting and other decorations. Parts of the plant were used medicinally ranging from snakebite to other body ointments. The oil of the seed was used on the skin and hair. The dried stalk was used as a building material. The plant and the seeds were widely used in ceremonies.

European Developments

This exotic North American plant was taken to Europe by Spanish explorers some time around 1500. The plant became widespread throughout present-day Western Europe mainly as an ornamental, but some medicinal uses were developed. By 1716, an English patent was granted for squeezing oil from sunflower seed.

Sunflower became very popular as a cultivated plant in the 18th century. Most of the credit is given to Peter the Great. The plant was initially used as an ornamental, but by 1769 literature mentions sunflower cultivated by oil production. By 1830, the manufacture of sunflower oil was done on a commercial scale. The Russian Orthodox Church increased its popularity by forbidding most oil foods from being consumed during Lent. However, sunflower was not on the prohibited list and therefore gained in immediate popularity as a food.

By the early 19th century, Russian farmers were growing over 2 million acres of sunflower. During that time, two specific types had been identified: oil-type for oil production and a large variety for direct human consumption. Government research programs were implemented. V. S. Pustovoi developed a very successful breeding program at Krasnodar. Oil contents and yields were increased significantly. Today, the world's most prestigious sunflower scientific award is known as The Pustovoi Award.

Sunflower Back to North America

By the late 19th century, Russian sunflower seed found its way into the US. By 1880, seed companies were advertising the 'Mammoth Russian' sunflower seed in catalogues. This particular seed name was still being offered in the US in 1970, nearly 100 years later. A likely source of this seed movement to North America may have been Russian immigrants. The first commercial use of the sunflower crop in the US was silage feed for poultry. In 1926, the Missouri Sunflower Growers' Association participated in what is likely the first processing of sunflower seed into oil.

Canada started the first official government sunflower breeding program in 1930. The basic plant breeding material utilized came from Mennonite (immigrants from Russia) gardens. Acreage spread because of oil demand. By 1946, Canadian farmers built a small crushing plant. Acreage spread into Minnesota and North Dakota. In 1964, the Government of Canada licensed the Russian cultivar called Peredovik. This seed produced high yields and high oil content. Acreage increased in the US with commercial interest in the production of sunflower oil. Sunflower was hybridized in the middle seventies providing additional yield and oil enhancement as well as disease resistance.

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Back to Europe

U.S. acreage escalated in the late 70's to over 5 million because of strong European demand for sunflower oil. This European demand had been stimulated by Russian exports of sunflower oil in the previous decades. During this time, animal fats such as beef tallow for cooking were negatively impacted by cholesterol concerns. However, the Russians could no longer supply the growing demand, and European companies looked to the fledging U.S. industry. Europeans imported sunflower seed that was then crushed in European mills. Western Europe continues to be a large consumer of sunflower oil today, but depends on its own production. U.S. exports to Europe of sunflower oil or seed for crushing is quite small.

Summary

The native North American sunflower plant has finally come back home after a very circuitous route. It is the Native Americans and the Russians who completed the early plant genetics and the North Americans who put the finishing touches on it in the form of hybridization. Those early ancestors would quickly recognize their contributions to today's commercial sunflower if they were here.

The reference for this summary was taken from: Albert A. Schneiter, ed. Sunflower Technology and Production, (The American Society of Agronomy No. 35, 1997) 1-19.

Farm Wisconsin source: sunflowernsa.com