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## Sunflower Important Weed Crop

**A** RECENT news story told about a couple of Arizona scientists who are trying to discover useful qualities of the much-maligned, blown-about and sung-about tumbleweed, or Russian Thistle.

To most people, the tumbleweed probably doesn't look promising, but it converts solar energy to other forms, just as cultivated plants do. They were converted from the wild, too.

The first cultivated plant developed in what is now the United States still is widely regarded as a weed, even though it has become the second-largest oil crop in the world.

This plant is the sunflower, which grows wild in all parts of Oklahoma. It is the state flower of Kansas, grows on the best beaches in Florida and is cultivated worldwide.

So says Charles B. Heiser Jr., in a book titled "The Sunflower" published by the University of Oklahoma Press. Now professor of botany at Indiana University, Heiser has been studying the sunflower for 25

He says there are 67 kinds or species of sunflowers, plus hybrids, growing in habitats ranging from sea level to over 7,000 feet. Varieties are tall and short, with large or small flowers, ranging from shades of yellow to red. They make good cut flowers and are often grown as ornamentals.

American Indians found the sunflower was a source of food, domesticated the plants and probably scattered seeds as tribes moved about. Among the Choctaw Indians, Heiser says, sunflower meal was mixed with maize flour to make bread.

In the 1930s, the sunflower ranked tenth among the world's source of vegetable oils. By 1950, it had risen to fourth place, behind the soybean, the peanut and the cottonseed. By 1970, it ranked second only to the soybean.

Sunflowers are grown as a crop in many countries, but more than two-thirds of the world's cultivated sunflowers are grown in the Soviet Union. They supply more than 90 per cent of that country's vegetable

oil.

Sunflower oil may be used for a variety of human foods, including oleomargarine. The seed cake, left after oil is extracted, may be used for livestock feed.

Heiser says that although there have been reports of the sunflower as an important "new crop" for the United States for over 50 years, "sunflowers have never lived up to expectations."

The sunflower's trait of turning its blossoms to face the sun all day long has interested poets for centuries and Heiser quotes sunflower verses dating back to the 16th century.

There may be a lot of other "weeds" out there some place that we could use to advantage. Authorities say that only about 250 kinds of plants out of more than 250,000 species growing on the earth have been cultivated to commercial extent.

Heiser observes that "the sunflower, like oats, rye, and some of our other food plants, is a weed that made good."