

FOR IMMEDIATE RELEASE

For more information, contact James Coover
Crop Production Agent, Wildcat Extension District
jcoover@ksu.edu, (620) 724-8233

Sunflowers: In the Garden, Prairie, and Field

No flower says Kansas like the sunflower. It is, after all, our state's flower. Though there is a reason those beautiful beams of yellow and red petals surrounded by coal black to pumpkin orange centers belong in this state, they grow well here and we have all different types. We plant sunflowers in gardens and flower beds, we see sunflowers that grow wild in our road ditches, and we have sunflowers as a valuable agricultural crop too.

One thing to understand about why Kansas, like much of the mid-west, has so many sunflowers is because there are all different types of sunflowers. In terms of terminology, sunflowers are in the Asteraceae family, which is a huge family containing tens of thousands of flowering plants. What we think of as sunflowers mostly fit into the *Helianthus* genus, which has dozens of species and many of them, can grow here in Kansas. The genus name comes from how some sunflowers have the odd ability to 'track the sun' with their flowers.

Sunflowers in the Garden

In the garden, you can have sunflowers to eat or to enjoy looking at. Nearly all are sub-varieties of the common annual sunflower, but the two types are very different. Edible sunflowers are similar to field sunflowers that grow tall, have huge heads, and large seeds, normally with only one flower per plant. Ornamental sunflowers come in all sizes and colors, often with smaller flowers and numerous flowers per plant. Because ornamental sunflowers aren't as big, they work better as cut flowers for arrangements. Big edible sunflowers will often have just one 'bloom', while many ornamental sunflowers will have a continuous bloom over a month or two. Some ornamentals also have little to no pollen, which is preferable for flower arrangements. If planting sunflowers for the birds, get varieties that have medium to large sized seeds. Keep in mind that many sunflower varieties can grow taller than the corn and just as fast.

Sunflowers in the Ditch

Last year the drought was severe enough that we only got a few wild sunflowers, but most years our ditches are filled with all types, given they weren't mowed at the wrong time. From what I have seen, most belong to three main sunflower varieties that grow wild around here, the Common sunflower (*Helianthus annuus*), Maximillian sunflowers, and the Jerusalem artichoke. Some others that frequent other parts of the state include the Willow-leaf, Plains, and the Sawtooth sunflowers. Maximillians are easy to tell apart because they have a bunch of flowers that grow in a single, straight stem. Jerusalem artichoke are so named because of their large

edible tuber that is grown commercially in some parts of the world. (Apparently, some French explorer thought they tasted like artichokes but they don't really.)

Sunflowers in the Field

How many senior photos and Instagram posts wouldn't have the same beautiful backdrop if it wasn't for the field of bright yellow sunflowers. Field sunflowers were originally cultivated from the wild common sunflower into the large seeded crop that we have today. They are grown worldwide, including in Ukraine that has the sunflower as their national flower. Field sunflowers come in two categories; oilseed or confectionary.

Oilseed sunflowers, as the name suggest, are hulled and crushed to remove the oil. Sunflower oil is primarily for human consumption, used in baking, cooking, and as a mixed oil for frying. Black-oil sunflower seeds you see used in bird feed bags are this type. The terms 'high oleic and NuSun' is associated with oilseed sunflowers. This refers to oleic acid, which is monounsaturated and helps keep the oil stable without hydrogenation.

Confectionary sunflowers are what you see in the store as salted, hulled or whole, sunflower seeds. They have less oil, thicker shells, and usually have the notable white stripe on the shell. The aptly named conoil sunflowers are a hybrid between the confectionary and oilseed types. Variety performance trials for sunflowers have consistently been held at the K-State Southeast Research and Extension Center located in Parsons. Yields average 1,200 to 1,800 lbs per acre most years. On another note, there are no commercial GMO varieties of sunflowers. All are conventionally bred.

Sunflowers are fairly easy to grow. They are a little finicky during germination, but become drought and heat resistant later in their growth stages. Sunflowers are well adapted to the heavy rain then no-rain cycles of the Great Plains. They have an extensive root system that can grow deep during dry periods, allowing them to use more water deeper in the soil profile than corn or soybeans. Like pretty much every crop, yield is dependent on having soil moisture during pollination and early grain fill. This extension root system helps sunflowers use fertilizer more efficiently as well. Nitrogen rates are commonly around 70 to 80 lbs or nitrogen per acre and sunflowers can perform well in lower phosphorus fields. After all, field sunflowers started as the wild common sunflower that are native to the plains.

If you have any questions about one of our most beautiful crops and flowers, please give me a call at 620-724-8233 or email jcoover@ksu.edu.

For more information, please contact James Coover, Crop Production Agent, at jcoover@ksu.edu or (620) 724-8233.

###

Kansas State University Agricultural Experiment Station and Cooperative Extension Service
K-State Research and Extension is an equal opportunity provider and employer. Issued in furtherance of Cooperative Extension work, acts of May 8 and June 30, 1914, in cooperation with the U.S. Department of

Agriculture, Director of K-State Research and Extension, Kansas State University, County Extension Councils,
Extension Districts