

Introduction

What is a grain? What grains are grown in Kansas? This lesson discusses the top four grains grown in Kansas and their uses. Students will spend time in their home finding items made from these grains while gaining an understanding of the importance of growing them in Kansas.

Objective

- Students will know the major grains produced in Kansas.
- Students will have a basic understanding of how those grains are used.

Background

Let's start this lesson by understanding what grain is. There is a lot of discussion about the difference between a seed and grain. For the sake of this lesson, we will keep it simple. Seeds are for planting to grow new plants. Grain is for eating by humans and livestock. Grains can also be used to make other products used by us.

Kansas is really good at growing grain! Many people call us the wheat state because Kansas farmers grow more wheat than any other state. Many also call us the sunflower state because that is our state flower but, Kansas farmers also grow more sunflowers than any other state. Kansas farmers also grow corn, soybeans, grain sorghum, oats, cotton, barley and more.

We are going to look at the grains that we grow the most of in Kansas: corn, wheat, soybeans and grain sorghum. Let's call them "The Big Four". Kansas farmers grow millions of acres of each one.

Wheat

The first wheat known to be planted in Kansas was in 1839. This was before Kansas was established as a state. In 1874, Russian immigrants introduced Turkey Red wheat to Kansas. This hardy variety was planted in the fall and could withstand Kansas' cold and dry winters. Now, Kansas farmers grow millions of acres of wheat that is worth billions of dollars each year. We grow different types of wheat, but the most common type is hard red winter wheat. Hard red winter wheat is mostly used to make bread. In a normal year, Kansas farmers grow enough wheat to produce 36 billion loaves of bread! Wheat creates \$1,500,000,000 for Kansas, that is \$1.5 billion!



Corn

Kansas farmers have been planting corn for as long as Kansas has existed. It was the first major crop grown here. We grow four types of corn:

Yellow dent corn or field corn



Popcorn



Sweet corn

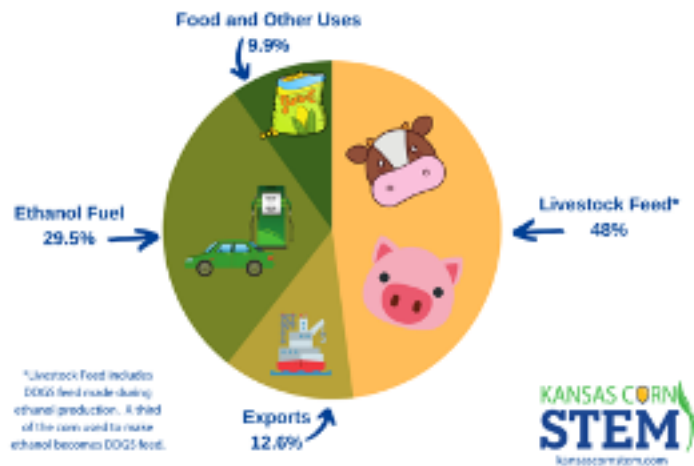


Flint or Indian corn



We grow way more yellow dent corn than any other kind. Yellow dent corn is also called field corn. It is called dent corn because of the dent that is on top of the seed. Every year, Kansas farmers grow millions of acre and billions of dollars worth of yellow dent corn. It is used for lots of things. About half of it is fed to livestock. In fact, livestock eats more corn than any other grain. A lot of it is used to make a type of fuel called ethanol. It is also used in hundreds of other foods and products. Kansas sells almost \$3 billion dollars of corn each year. The pie chart below shows you how much of the corn we grow is used to produce these products:

How Is Corn Used?



Soybeans

Soybeans ranks 3rd among the big four but Kansas farmers still grow over four million acres of it each year. It also generates billions of dollars of income for our state. Soybeans are divided into main products. It is soybean meal and soybean oil.



Soybean meal is high in protein and is used in livestock feed.

Soybean oil is the most used oil in vegetable oil.



Photo by: United Soybean Board: <https://www.flickr.com/photos/unitedsoybean/10059732523/in/photostream/>

Soybeans are also used to make tofu. Tofu is mashed soybeans that is often used in Asian dishes and as a meat substitute.



Soybean products are used in paints, plastics and hundreds of other products used around the house and in industry.

Grain sorghum

Grain sorghum is often called milo. Kansas farmers are also the leading state in growing grain sorghum. In a normal year, we will grow well over two million acres of grain sorghum. While grain sorghum can be used in many things like ethanol, syrup, and molasses, most all of the grain sorghum grown in a Kansas is used for livestock feed. It is also a common ingredient in bird feed.



Activity

Search in your house to find these items that are made using the grain listed. See if you can find at least 10. Check the item off as you find them.

Corn items:

- cereal with corn
- corn oil
- corn bread
- can of soda

Wheat items:

- cereal with wheat
- bread
- crackers
- cookies

Soybean items:

- ___ vegetable oil
- ___ tofu
- ___ enamel paint
- ___ soy milk

Grain sorghum items:

- ___ sorghum molasses
- ___ bird feed

Supplemental videos:

- Kernel of Knowledge videos at wegrowcorn.com
- Kansas Wheat Harvest provided by Kansas Wheat: <https://www.youtube.com/watch?v=9XBH9Zo3xGg>
- Types of corn - Kernels of Knowledge provided by Nebraska Corn: <https://www.youtube.com/watch?v=ynHB1zd3FmQ>
- Soybean Crop Has Many Uses provided by Minnesota Soybean: <https://www.youtube.com/watch?v=YKnSi1pq8bA>
- Ag Minute - What is Sorghum provided by This Week in Louisiana Agriculture: <https://www.youtube.com/watch?v=Ijpxa3rR0mM>

Conclusion

Kansas farmers are some of the best farmers in the world. The “big four” crops provide many jobs and billions of dollars of income to our state. Every day, you use products made from these crops around your home. Let’s find out what you learned, complete the Kansas Grains Worksheet.

Resources

- <http://kswheat.com/news/2015/01/22/why-is-kansas-called-the-wheat-state>
- https://www.nass.usda.gov/Quick_Stats/Ag_Overview/stateOverview.php?state=KANSAS

Kansas Grains Worksheet

1. List the “Big four” crops grown in Kansas:
2. List two other crops grown in Kansas:
3. Place the correct letter by the following statements relating to the crops listed below. There are two for each crop.

C = Corn

W = Wheat

S = Soybeans

G = Grain Sorghum

___ Often called milo

___ Used to make bread

___ Most used crop in vegetable oil

___ Farmers in Kansas grow a type called yellow dent

___ Used to make a food called tofu

___ Often found in bird feed

___ The most used livestock feed

___ Brought to Kansas by Russian immigrants

Kansas Grains Worksheet-Answer Key

1. List the “Big four” crops grown in Kansas:

Corn, wheat, soybeans, grain sorghum

2. List two other crops grown in Kansas:

Oats, cotton, barley and more

3. Place the correct letter by the following statements relating to the crops listed below. There are two for each crop.

C = Corn

W = Wheat

S = Soybeans

G = Grain Sorghum

G Often called milo

W Used to make bread

S Most used crop in vegetable oil

C Farmers in Kansas grow a type called yellow dent

S Used to make a food called tofu

G Often found in bird feed

C The most used livestock feed

W Brought to Kansas by Russian immigrants