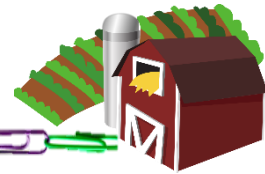




## Links to Agriculture Super Useful Soybeans



Soybeans are amazing, versatile legumes! What is a legume? A legume is the seed of a plant from the **legume** family. Legumes can be a vegetable like peas or beans, but not all vegetables are legumes.

Soybeans grow in **Pods**. Each pod contains between 2 and 4 individual beans. Soybeans require **nitrogen** to grow. The legumes have **bacteria** in nodules (small bumps) on their roots that take nitrogen from the atmosphere and put it into the soil. After the crop is harvested and the plant material decays, the nitrogen is released into the soil for the next crop to use and grow.



Soybeans are grown for food for humans and animals. Some foods made from soybeans include baby formula, tofu, crackers, ice cream and bread. Cooks use soybean oil in recipes for many different things, like salad dressings, cakes and bread. Sometimes soybean oil is used to fry foods like french fries and doughnuts.

Children can draw or color with crayons made from soybeans. The crayons color well, they do not flake and by using a **renewable resource**, nonrenewable petroleum is saved. A renewable resource is one that can be used over and over because it is naturally replaced.



Many products we use every day are made from soybeans. It is possible to bathe, shampoo your hair and soften your skin with soy-based products. Soy ink is even used to print newspapers, magazines, event tickets and programs.

Soybean plastic has been used since the 1930's. Just before the start of World War II, Henry Ford was using soybean plastic in cars. The plastic cut down on the amount of steel needed for the automobiles.

Soy plastic is used to make containers for many products, foam cushions for vehicles, children's toys and farm tools. A farmer may plant his soybean crop using a planter made from soybean plastic! Soybeans are truly amazing!



### What Did You Learn?

Answer the following questions after reading about soybeans on the front. Use complete sentences.

1. Name three uses for soybeans.

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2. What is a legume?

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3. What is a renewable resource? Why are they important?

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4. Why might we want to use a soybean plastic over a petroleum-based plastic?

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5. How does growing soybeans help the environment?

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## **Yummy Soybean Pancakes**

(Get adult supervision before cooking!)

### **Ingredients:**

- |                             |                             |
|-----------------------------|-----------------------------|
| 1 ½ cups all-purpose flour  | ½ cup quick cooking oatmeal |
| 2 Tablespoons Baking Powder | 1 ½ cups soymilk            |
| 2 Tablespoons soybean oil   | 2 Tablespoons brown sugar   |
| 2 large eggs                | 1 cup fresh blueberries     |

Combine flour, oatmeal, sugar and baking powder in a bowl. Add eggs, milk and oil to dry ingredients mix until blended. Add the blueberries.

With an adult helping you, heat a skillet over medium heat, brush with soybean oil. Pour about 1/4 cup of batter on skillet, cook until bubbles begin to burst all over surface. Turn and continue to cook for one to two minutes. Repeat with remaining batter. Serve with butter and maple syrup.

In addition to soybeans, what other farm products are included in the recipe?

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### **Have you ever eaten these?**

These are “**edamame**” (ed-uh-'mah-may), or **immature soybeans**. They are native to East Asia and were introduced to Japan by China in the 8<sup>th</sup> century. The Japanese then used soybeans to develop soy sauce. Now, both **edamame** and soy sauce are enjoyed by people all over the world!

## Soybean Trivia

- One acre of soybeans can produce 82,368 crayons!
- During the Civil War, soybeans were ground and used like coffee.
- Every part of the soybean plant is used in some way.
- The hydraulic fluid used to run the elevator at the Statue of Liberty is made from soybeans.
- Soybean oil is used to make biodiesel, an environmentally friendly fuel.
- Henry Ford used soy plastic in cars in the 1930's and 1940's.



## Joke Time!

Why did the soy-based meat substitute cross the road?



**Joke Answer:**

To prove it  
wasn't chicken!

## Did You Know...?

- In the US, the top soybean producing states are Illinois, Iowa, Indiana, Minnesota, Nebraska, Missouri, and Ohio
- Soybeans are an annual crop. They are planted, grown, and harvested in a single season.
- There are over 2500 different varieties of soybeans.



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