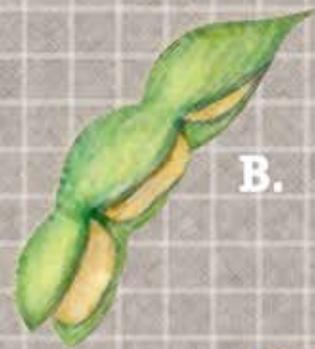




A.



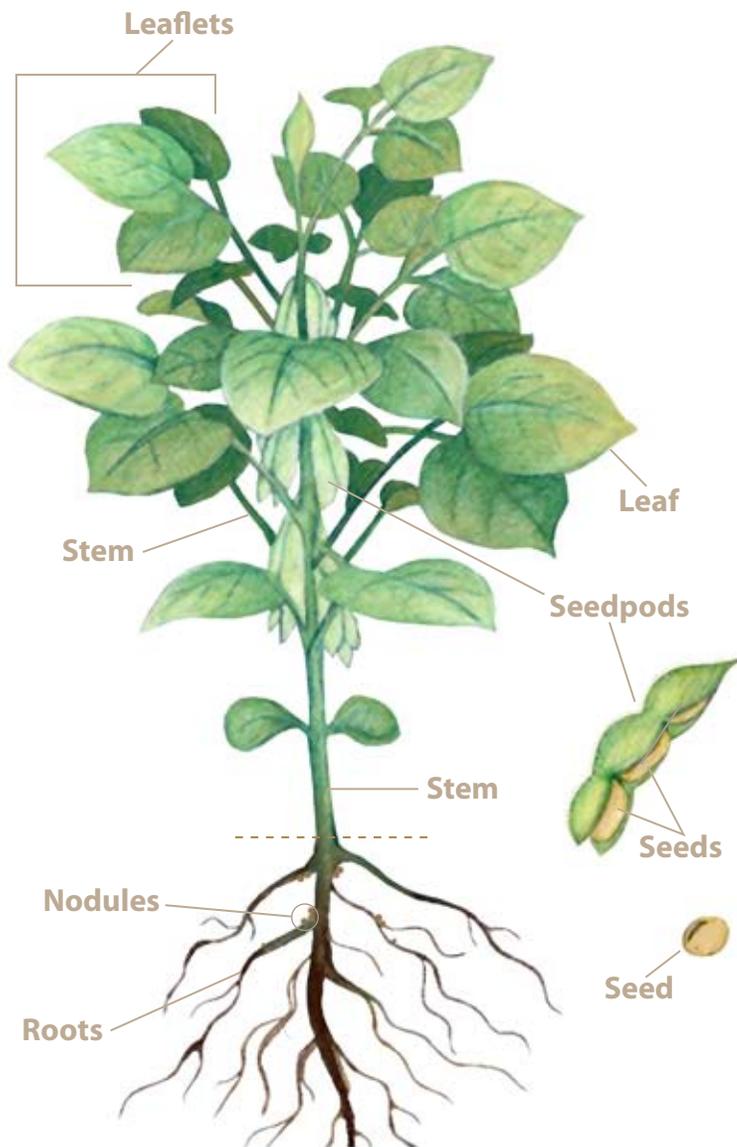
B.



C.

# SOYBEANS

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## Soybeans

More soybeans are grown in the United States than anywhere else in the world. Soybeans were used primarily to feed livestock until the early 1900s, when scientist George Washington Carver discovered that soybeans provided valuable protein and oil.

The soybean provides many nutrients to both people and animals. It is especially high in protein. Many countries use soybeans as their main source of protein instead of meat, eggs or cheese.

## Planting

Farmers plant soybeans in the spring when the soil temperature is above 55°. The soybean plant has nodules that are attached to the root system and contain nitrogen for the next crop. This makes the soybean a valuable plant in crop rotation.

As the soybean plant grows, it branches out in all directions and produces many leaves. The bushy plant grows from two to three-and-a-half feet high. The stems, leaves and pods are covered with short, fine hairs. Small white or purple flowers grow where the leaf joins the stem. At the end of the growing season, the leaves will turn yellow and drop to the ground. Soybeans are harvested in the fall with a combine.

## Processing

Soybean oil is a popular vegetable oil in the United States. When crushed and pressed, soybeans produce an oil that is used in margarine, cooking oils, salad dressings, mayonnaise and many prepared foods. Soybean oil contains no cholesterol and is low in saturated fat so it is popular with health-conscious people.

Soybean oil also is used to make paints, varnishes, soaps, cosmetics, plastics and crayons. Soybean oil is even used to make ink for printing newspapers and magazines. Soy biodiesel is another product made from soybean oil. This fuel is used in cars, trucks and buses, which reduces pollution and increases engine performance. Soy biodiesel is a renewable resource and lessens U.S. dependence on foreign oil which is not a renewable resource.

After soybean oil is removed in processing, the remaining flakes are processed into food products or protein meal for animal feed. Soybean meal is an important protein source for livestock and poultry.

## On The Front

### A. Soybean Plant

The soybean plant is called a legume. Legume plants have the ability to use soil bacteria to pull nitrogen from the air and use it for its growth. This is important for growing healthy crops and maintaining soil quality.

### B. Soybean Seedpod

Soybeans grow in pods similar to peas. During the summer, the soybean plant flowers and produces 60 to 80 pods. Soybean pods range in color from very light yellow to shades of gray, brown or black.

### C. Soybean Seed

Two to four pea-sized beans grow in each soybean pod. The seeds may be yellow, green, brown, black or speckled.