

# SOYBEAN (EDAMAME)

Gardening tips provided by  
Jefferson Farm & Gardens

## Overview

Soybean, *Glycine max*, is a warm season vegetable of the legume family and is related to lima beans, green beans, and kidney beans. Henry Ford took an interest in the soybean and saw its potential in manufactured products as well as culinary dishes. At the Chicago World's Fair in 1934, Ford sponsored a dinner where all of the 16 dishes contained soybeans to show the crop's versatility and to publicize his experiments with soy. The soybean is a good source of potassium, dietary fiber, and protein.

## Choosing Varieties

There are a few varieties of soybeans available that differ in days till maturity, seed color, and disease resistance, as well as other traits. A few available varieties are:

- Beer Friend (heavy yielder)
- Butterbean (large seeds, heavy yielder)
- Envy (early)
- Syamusume (heavy yielder, flavorful)

It is recommended to try a few varieties to determine overall plant performance and personal preference.

## Planting Tips

The soybean is a warm season vegetable that performs poorly in cool weather.

In Missouri, edamame seeds can be sown from early May to early July. Seeds can be planted about 1 inch deep and 1-2 inches apart in the rows with 2-3 feet between rows. Sowing instructions for a particular variety can usually be found on the seed packet.

Poor or uneven germination can result from seeds being planted too deeply so that the emerging seedlings cannot break through the soil's surface. Soil crusting can occur after a heavy rain, especially if the topsoil contains clay. Soil crusting can be prevented by mulching the rows with sawdust, pine needles, or grass clippings.

## Soil Fertility and Pest Control

Legumes such as soybeans are able to produce or "fix" their own nitrogen when the right soil microorganisms are



present. If soybeans have not been grown in the garden before, an innoculum (dried *Rhizobium* organism) can be sprinkled on the seeds or seedrow, otherwise the soybeans may benefit from some nitrogen fertilizer. Soybeans benefit from watering during a dry spell, but they cannot tolerate waterlogged soil.

Pests and diseases that attack field soybeans can also plague edible soybeans. Bean leaf beetles are a pest of soybeans and can be controlled with chemicals containing the organic compound pyrethrin (be sure to follow product labels), which can also be used on stink bugs that attack the soybean pod.

To prevent diseases, plant disease-resistant varieties, improve soil drainage with raised beds, and rotate legume plantings with other crops each year.

## Harvesting

Soybean pods should be checked often because the harvesting period is short. The soybeans should be harvested once the seeds have swelled inside the pods but before the pods lose green color. To easily shell them, boil or steam the pods for several minutes first. The pods are inedible.

## Seed Sources

Seeds can be ordered from mail order companies via phone or website. Baker Creek Heirloom Seeds (1-417-924-8917, rareseeds.com) and Territorial Seed Company (1-800-626-0866, territorialseed.com) are two companies that sell soybean varieties.

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