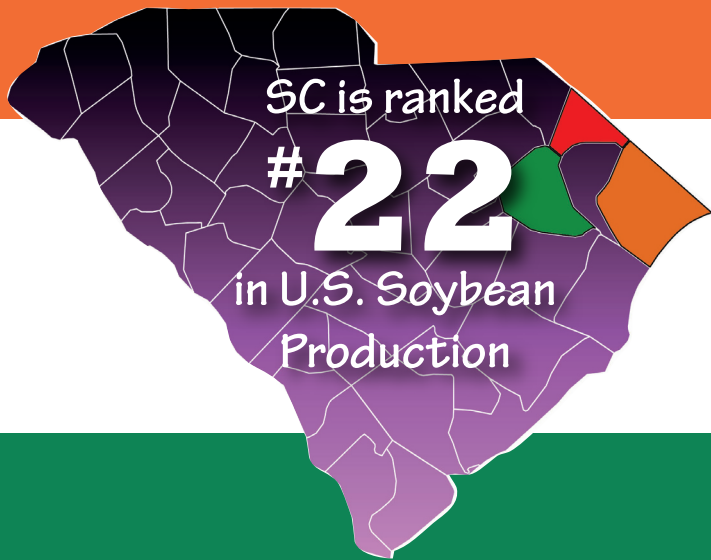


There are over **3,000** soybean farmers in South Carolina.



The **TOP 3** soybean producing counties in South Carolina are

1. Dillon
2. Florence
3. Horry



Candles made with soybean oil burn longer and have less smoke and soot.

**390,000** acres of soybeans are planted each year in South Carolina.



Farmers use a **combine**, a large machine that is used to cut, sort, and clean grain, to harvest the soybeans.

The soybeans will be cut and stored in the machine's holding tank until it is full. Then, the farmer must empty the tank into a grain truck or grain wagon. Next, the farmer will either store the soybeans until they are ready to be sold, or take them directly to the market where they will be sold and transported to a processing facility. When at the processing facility, soybean meal will be separated from the soybean oil components. Soybean meal is mainly used for livestock feed, while soybean oil can be used for cooking, or even for making biodiesel!



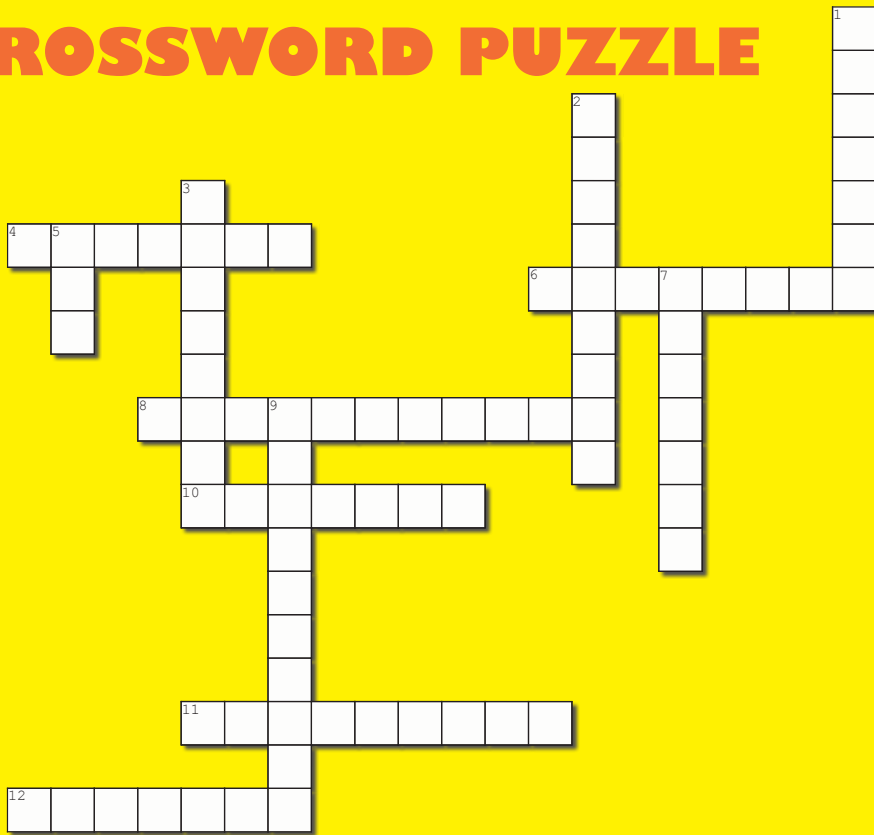
One acre of soybeans can produce **82,368** crayons.

Approximately **97%** of soybeans grown are used for livestock feed.

One bushel of soybeans weighs about **60 pounds**



# CROSSWORD PUZZLE



### Across

- 4. A crunchy, delicious snack made from dried soybeans (2 words)
- 6. A liquid condiment, traditionally made from fermented soybeans
- 8. A lotion derived from soy
- 10. Plant-based drink produced by soaking and grinding soybeans (2 words)
- 11. Form of diesel derived from plants, including soybeans
- 12. Made of soy wax and essential oils

### Down

- 1. Immature soybeans, normally served boiled or steamed
- 2. Artificial grass used for playing surfaces in sports
- 3. Soy-based foam used on sofas and chairs
- 5. Extracted from the seeds of soybeans; can be used for cooking or frying foods
- 7. A type of legume known for providing oil and protein
- 9. Coloring tools made from soybean oil instead of petroleum-based paraffin wax (2 words)

Created using the Crossword Maker on TheTeachersCorner.net

## DID YOU KNOW?

Soybeans can be used to make crayons, candles, paints, upholstery, biodiesel, and tires!

Soybean oil is the most common vegetable oil in the US.

Poultry is the largest domestic user of soybean meal, followed by swine.

The United States is only second to Brazil in worldwide soybean production.

Soybeans are closely related to peas, clover and alfalfa!

A small percentage of soybeans are processed for human consumption and made into products such as tofu, soy flour, and other retail food products.

*We use products made with soybeans every day. Look at the photos below and see how many items you can name that are made from soybeans.*

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# SOYBEAN LIFE CYCLE

## From Seed to Harvest

### STAGE 6 HARVEST

When the soybean plant begins to lose its green color, the soybeans are fully grown, or mature. Farmers then harvest the soybeans using a combine harvester.



### STAGE 5 POD FILL

After the soybean pods have achieved full size, they will begin to form beans. Most pods grow three to four soybeans.



### STAGE 4 POD SETTING

During the pod-setting stage, soybean plants reach their maximum height. Each plant produces 60 to 80 soybean pods.



*All living things go through different stages of development in their life span. These are the life cycle stages for the soybean plant.*



### STAGE 1 GERMINATION

Soybean seeds are planted in the spring from April to June. Underground, the soybean seed soaks up half its weight in water and begins to form roots.



### STAGE 2 EMERGENCE

Roots and root hairs absorb nutrients and water. After five to 10 days, a hook-shaped seedling breaks through the ground's surface.



### STAGE 3 FLOWERING

At eight to 10 weeks, plants begin to flower. About 50% to 80% of these flowers will later form pods.



*Harvested soybeans can be used for feed and soy byproducts or planted next spring to begin the cycle again.*



This publication is made possible in part by soybean farmers and their checkoff.





MARY JO WANNAMAKER, PhD, is the owner of Wannamaker Seeds in Galuda, NC.

**Q: What do you do in your job?**

A: I own a small wholesale seed company in western North Carolina that sells organic edamame soybean seed, Vidalia onion seed, and wildflower and flower seed. My customers range from home gardeners to mail order companies and large farmers in the USA. I also sell internationally to Europe, Central America, Mexico and South America.

**Q: How did you get started in the seed business?**

A: I grew up in the seed business that my grandfather, and now my father owns in St. Matthews, SC. My father, now 91 years old, still actively runs his wildlife seed business. After getting my Ph.D. in plant breeding from NCSU in 1986 and a short stint as a potato breeder, I returned to my father's seed business in 1991 and worked for him for 8 years before starting my own seed business. I am indebted to him for all that he taught me.

**Q: What do you love most about your job?**

A: There are so many things that I love about my job. I love being my own boss. I love the creativity and motivation that is necessary to keep it going year after year. I love combining my interests in specialty crops, travel and seeds in a profitable business. And finally I love the challenge of exporting seed to various countries.

**Q: How does your job impact agriculture?**

A: My job impacts agriculture on the front end, from the beginning of each season when farmers or home gardeners plant their seeds into freshly prepared earth. I want them to have confidence that when they buy seed from my company, they are receiving quality seed that will get them started right.

**Q: What does a typical day on the job look like for you?**

A: I really do not have a typical day and I like that aspect too. My business is very seasonal with certain times of the year being very busy and others not. I explore other interests during the down times.



MICHAEL PLUMBLEE, PhD, is the Corn & Soybean Extension Specialist for the state of South Carolina.

**Q: What do you do in your job?**

A: I work with corn and soybean farmers around the state through the Clemson Extension Service to assist them with all aspects related to corn and soybean production. This includes developing recommendations, diagnosing crop issues, extending information and educating stakeholders, and conducting research. The goal of my program is to make SC corn and soybean farmers sustainable and profitable now and in the future.

**Q: What do you love most about your job?**

A: The thing I love most about my job is that every day is something new. I like being able to get out and visit with farmers around the state, as well as conduct applied research on corn and soybeans. Anytime we can help a farmer do their job better and allow them to meet their expectations, it has been a good day.

**Q: How does your job impact agriculture?**

A: My job impacts agriculture by helping farmers in South Carolina maximize their profitability and to promote agriculture as well as corn and soybean production on local, state, and national levels.

**Q: What does a typical day on the job look like for you?**

A: A typical day for me usually starts early. I typically meet with my graduate students and student workers to discuss our daily or weekly objectives. Depending on the time of year we may be planting or harvesting research plots at the research station or on-farm with farmers, collecting data, managing our research trials in the field or lab, giving presentations at Extension or academic meetings, meeting with farmers at their farms to discuss their operation, or teaching students and stakeholders about corn and soybean production.



JAYME SINGLETON works as a Commodity Merchandiser at The Scoular Company.

**Q: What do you do in your job?**

A: I trade soybeans; it is my job to find the best market for South Carolina soybeans so that farmers have an alternative to local outlets and have the opportunity to capture the best price possible. Frequently soybeans will be loaded into 40-foot containers and shipped to destinations in Asia. I use local relationships, along with the global network of Scoular Grain, to create opportunities for farmers.

**Q: What do you love most about your job?**

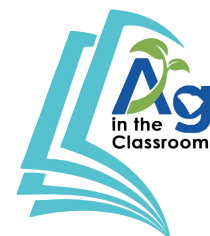
A: I love working with farmers. They are some of the most salt-of-the-earth people that you will encounter. I also get a sense of pride in having a hand in taking a product that is grown locally in South Carolina and selling that product to destinations worldwide.

**Q: How does your job impact agriculture?**

A: By identifying the best markets for local grains, it allows farmers to get the best price for their crops. As a result, I hope that the farmers that I work with have the financial means for their businesses to be around for many generations to come.

**Q: What does a typical day on the job look like for you?**

A: It's my responsibility to buy and sell soybeans. In addition to this, I handle much of the logistics of getting soybeans from the farm to the port, transloaded from farm trucks to containers and then loaded onto vessels destined to foreign ports. I also help provide market information to farmers in regards to when is the best time to sell grain as well as the micro/macroeconomic factors that influence the market.



South Carolina's Ag in the Classroom program is a non-profit 501 (C)3 education foundation created to promote awareness and recognition of the importance of the sources of our food and fiber.  
www.SCFB.org/aitc