

Strawberries Strategies

Californians love their berries. Strawberries grow especially well in our state because of the **temperate** climate from the coast. Here is a story of the many strategies people use to take extra care to grow scrumptious strawberries.



Photo by Neil Palmer (CIAT)

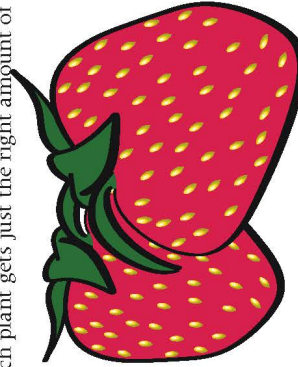
Breeding

Growing strawberries starts even before they are planted. Scientists look for ways to make healthy strawberry plants by making them more **resistant** to pests and diseases.



Growing

Strawberries grow in rows of raised beds, which makes them easier to harvest. The beds are covered in colored or clear plastic to help retain moisture, keep berries from the dirt, and maintain the shape of the bed for the long season. Drip irrigation is used to make sure each plant gets just the right amount of water.



CA Standards: ELA CC: RI.3-6.7, RI.3-5.8, SL.3-8.1, NGSS: MS-LS1-1, 2, 5-PS1-1, 4. **Sources:** California Strawberry Commission, www.californiastrawberries.com; National Human Genome Research Institute, www.genome.gov ©2016 California Foundation for Agriculture in the Classroom. All Rights Reserved.



Photo courtesy Drecollis

Planting

Virtually all strawberry plants in California start as runners trimmed from mother plants, grown at high-elevation nurseries in Northern California. Once strong and healthy, they are shipped to farms across the state, where they are planted by hand.



Photo by Holger Hubbs

Harvesting

All strawberries are picked by hand. Strawberry harvesting teams work hard to pick each berry and pack it inside a **clamshell** container. The containers are placed inside trays that are quickly transported to shipping facilities where they are cooled.



Photo by Rusty Clark

Selling and Shipping

Within 24 hours of being picked, the berries are loaded into refrigerated trucks and transported across the country and the world. 88% of the berries grown in the United States come from California. Berries are sold as fresh or frozen, or they are used as ingredients in other products.

CAREER: Plant Pathologist



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What do you do in your job? I run tests on plants to see how I can help them fight against pests and disease.

What training did you need for your job? I needed a bachelor's degree and lab experience. Much of my training was on the job.

What is an interesting thing that you've learned in your job? I've learned that plants can be plagued by multiple diseases at the same time.

Anything else you'd like to add? Everything looks so different at the microscopic level! I love that being a scientist can help farmers grow food to feed the world!

Activity

True/False

1. Strawberries have lots of Vitamin C. T/F
2. Strawberries each have about 50 seeds. T/F
3. California produces about 88% of our country's strawberries. T/F
4. Strawberries grow on trees. T/F
5. The country of Belgium has a strawberry museum. T/F

Class Connection

Go to a grocery store produce section. Check strawberry labels or ask where the strawberries were grown. Mark the location on a map. Compare locations with other students' findings.

STEM Activity: Strawberry DNA

Using common household items, you can separate and observe strawberry DNA. This experiment can be done in class, for a science fair, or even just for fun! Go to the website: www.genome.gov/Pages/Education/Modules/StrawberryExtractionInstructions.pdf

Or visit LearnAboutAg.org for another version in *Extra! Extra! Classroom Extensions*.

Answers: 1. True 2. False, strawberries have 200 seeds. 3. True, 4. False, strawberries grow on plants in fields. 5. True