Five **Fun Facts** About Avocados!

- Approximately 90% of the US avocado crop is grown in California.
- San Diego County is California’s leading avocado-producing county.
- Avocados are harvested by hand, using special clippers.
- Sometimes avocados are shipped to the store when they are ripe and ready to eat. Other times, avocados are firm, and they need to ripen.
- Avocado trees can grow to be 35 to 50 feet tall.

Three **Fun Teaching Ideas**!

- Turn an avocado into a classroom plant! See the simple instructions and other activities in *What’s Growin’ On?*.
- Avocados are transported in single-layer cartons called lugs, designed to protect them. Have your students work in teams to create their own package for a single avocado. Test the packages by having students carry the packaged avocados in their backpacks for several days.
- Use the guidelines on the back of the Avocado Fact and Activity Sheet to lead experiments in expediting the ripening process!

*Explore all the great avocado resources in this section!*
Commodity Fact Sheet

Avocados

Information compiled by the California Avocado Commission

How Produced – California's coastal microclimates are ideal for growing avocados. California Avocados are grown by nearly 4,000 farmers on approximately 52,000 acres. A single California Avocado tree can produce about 500 avocados (or 200 pounds of fruit) a year. However, the average tree usually produces approximately 150 avocados. The fruit is harvested from each tree by hand using avocado clippers. On tall trees, ladders up to 30 feet high and poles up to 14 feet long are used to reach the fruit.

The fruit is then carefully placed into large picking bins, which hold 900 pounds of fruit, and transferred to a main road where large “boom” trucks pick up the fruit and haul it to a local packing house. Upon arrival, the avocados are immediately put into a large cold storage room for 24 hours to remove field heat and preserve quality. The fruit is then placed onto conveyor belts for grading and sorting. The avocados are washed, inspected for quality, and placed into single-layered cartons called flats or double-layered cartons called lugs. Lugs have a consistent weight of 25 pounds. Avocado size classifications are based on how many can fit into one lug. Avocado size classifications are based on how many can fit into one lug. The fruit is shipped in refrigerated trucks to markets across the nation, with the majority of the crop going to California and other western states. A small amount of the crop is exported. Most California Avocados are sold fresh.

Varieties – Hass avocados account for nearly 95 percent of California’s avocado crop volume. They have thick pebbly skin that generally turns purplish-black during ripening. They are available in peak volume from March through September. A relative newcomer, the Lamb Hass, is a Hass-like variety that is generally available July through October. Other commercially produced varieties include: Fuerte, Zutano, Bacon, Pinkerton, Reed, and Gwen. These “greenskin” varieties yield to gentle pressure when ripe and are available at different times throughout the year.

Commodity Value – California produces nearly 90 percent of the nation’s crop, generally growing approximately 300-400 million pounds each year. Crop value has averaged about $300 million with recent years topping $400.

Top-Producing Counties – Avocados mostly grow on the coastal strip between San Luis Obispo and the Mexican border. These areas are ideal due to the rich soils and mild climates. Approximately 35 percent of California Avocados are grown in San Diego County and 33 percent in Ventura.

History – The avocado is a Native American plant with a long, distinguished history. Today, the most popular variety is the Hass. The mother tree of all Hass avocados was born in a backyard in La Habra Heights, California.

The avocado (Persea americana) originated in south-central Mexico, sometime between 7000 and 5000 B.C. But it was several millennia before this wild variety was cultivated. Archaeologists in Peru have found domesticated avocado seeds buried with Incan mummies dating back to 750 B.C. and there is evidence that avocados were cultivated in Mexico as early as 500 B.C. Spanish conquistadors loved the fruit but couldn’t pronounce it and changed the Aztec word to a more manageable aguacate, which eventually became avocado in English. The first English-language mention of avocado was by Sir Henry Sloane in 1696.

In 1871, Judge R.B. Ord of Santa Barbara introduced avocados to the U.S. with trees from Mexico. By the early 1900s, growers were seeing the avocado’s commercial potential and ever since have been hunting for improved varieties. By the 1950s around 25 different varieties of avocados were being commercially packed and shipped in California, with Fuerte accounting for more than two-thirds of the production. Even though Hass was discovered in the early 1930s and patented by Rudolph Hass in 1935, it was not until large-scale industry expansion occurred in the late 1970s that Hass replaced Fuerte as the leading California variety.

Nutritional Value – California Avocados are a superfood that can be labeled heart-healthy. Naturally sodium and cholesterol-free, one-third of a medium avocado (50 g) has 80 calories and contributes nearly 20 vitamins, minerals, and phytonutrients, including good fats. Avocados also are a good source of fiber and folate.

For additional information:
California Avocado Commission
(949) 341-1955
Website: www.CaliforniaAvocado.com

This is one in a series of fact sheets composed by the California Foundation for Agriculture in the Classroom (CFAITC). For additional educational materials: CFAITC, 2600 River Plaza Drive, Suite 220, Sacramento, CA 95833-3293 (916) 561-5625 (800) 700-AITC Fax: (916) 561-5697 Email: info@learnaboutag.org Website: LearnAboutAg.org ©2019 California Foundation for Agriculture in the Classroom. All rights reserved.
Lesson Ideas

- Use craft materials to create individual packaging for safe avocado transport. Test your invention by transporting your avocado (via backpack) for several days. Compare your results with others.
- Research which beauty products contain avocados and develop an infomercial to promote an avocado-based product.
- On a California county map, shade in the counties which produce avocados.
- Make a picture book illustrating the harvesting of avocados.
- Cut open an avocado seed. Identify the embryo, cotyledons and seed coat. Draw a cross-sectional view.
- Record and graph the weekly/monthly prices of avocados.
- Sprout an avocado plant from a seed.
- Cut an avocado in half and remove the fruit and seed. Weigh the skin, meat and seed in grams. What percent of the avocado is edible?
- If a lug of size 48 avocados weighs 25 pounds, how much does one average avocado of this size weigh?

Fantastic Facts

1. Avocados are a fruit.
2. The Hass variety accounts for 95 percent of California’s crop.
3. California produces approximately 90 percent of the nation’s avocado crop.
4. San Diego and Ventura county are the top producing counties.
5. Fuerte, Zutano, Bacon, Pinkerton, Reed, and Gwen varieties all have green skin.
6. Avocados are harvested by hand using special shears called clippers.
7. Avocados are sodium and cholesterol-free.
8. The Hass avocado is named after Rudolf Hass, who discovered it.

Around the World with Avocados

- Americans use avocados in salads, sandwiches and burgers, and blend them to create a dip called guacamole.
- Mexicans add them to soft tacos and call them ‘butterfruit’ because they are used like butter.
- Nicaraguans stuff them with cheese, cover them with batter and bake them.
- Colombians and Ecuadorians slice them into soups.
- Chileans top hot dogs with them.
- Brazilians add avocados to ice cream.
- French fill halves with shrimp and vinaigrette dressing and eat them as appetizers.
- Cubans fill them with diced vegetable salad.
- Jamaicans flavor them with lime juice and Scotch bonnet chilies to make cold avocado soup.
- Filipinos puree them with sugar and milk to make a dessert drink.
- Japanese eat them in sushi rolls.
- Taiwanese eat them with milk and sugar.
- Koreans mix them with milk to use for facials or body massages.
- Japanese eat them in sushi rolls.
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A is for Avocado

Growing your own ornamental houseplant from an avocado seed is fun and easy. Just follow the six steps below.

Wash the seed.
Suspend the seed (broad end down) over a water-filled glass using three toothpicks. The water should cover about an inch of the seed.

Place the glass in a warm location, out of direct sunlight. A mature seed will crack as roots and stem sprout in about two to six weeks.

When the stem grows to six or seven inches, cut it back to about three inches.

When the roots are thick and the stem has leafed again, plant it in a rich humus soil, leaving the seed half exposed.

Water your avocado houseplant generously, allowing it to dry out somewhat between waterings.

*Avocado trees require grafting to produce fruit. It is rare for an avocado houseplant, grown from a seed, to bear fruit.

Recipe
California Avocado Power-up Smoothie

1 cup orange juice
1 ripe avocado, peeled and seeded
1 ripe banana
1 tablespoon honey
1 cup non-fat vanilla frozen yogurt

Combine orange juice, avocado, banana, and honey in a blender. Cover and blend until mixture is smooth. Add frozen yogurt; process again until thick and smooth. Serves 3.

Conservation Connection
The roots of avocado trees help reduce storm runoff and the possibility of flooding. By slowing runoff and filtering rain water, orchards can improve water quality.
For the past couple of minutes Mama has been calling my name. It’s my birthday tomorrow. I should be resting. I finally decide to go to her because it’s avocado season, the peak of spring. The first thing I see is Abuelo’s old, rusty pickup truck. The door is open and Abuelo looks annoyed. I quickly run out the door and hop into his truck before he gets too impatient.

He takes me down to our Hass avocado orchard, but there is nothing to see. As we progressively get farther down, I start to notice many people picking avocados. Abuelo says they are using avocado clippers to pick the five hundred avocados off one tree. Then, they carefully place the avocados in their harvest bag until full and then put that fruit into field bins that can hold about nine hundred pounds. Field trucks pick up the bins. Abuelo and I get out of his truck and switch to one of the many others filled with the avocados.

“Where are we headed to now, Abuelo?”

“To the packing houses. I’ll explain the process of what will happen to the avocados when we get there.”

Once we’re at the packing houses, waiting for our truck to unload, Abuelo points at a big building and says, “The avocados are washed in a hydro cooler to remove field dust and heat. Then, they are stored in a cold storage room. Finally, they are placed on the packing line, weighed, sorted by fruit size, and immediately sent to the markets.”

We are on our way back home and Abuelo says that he enjoyed teaching me all about his job. I turn to him and tell him that I really love his job.

With a grin, he says, “Very well. Now get your sleep. There is a big celebration tomorrow!”
When I awoke the next day, Abuelo was there to congratulate me and wish me a feliz cumpleaños. With a gift in his hands, he told me to open the gift early. As he handed me the gift, he said, “You are ready!”

Inside the package was my own beautiful apron and my own avocado clippers! I knew this was my best birthday yet! Mama sent me out to the orchard with my new apron and clippers as she prepared a special surprise.

I followed Abuelo’s instructions and clipped a couple of avocados from a tree and brought them back to the house. After several days, I washed the avocados and gave them to Mama. Several minutes later, I smelled something wonderful coming from the cocina. As a special birthday surprise, Mama used the avocados I had clipped to prepare fresh guacamole and homemade tortillas. She said the avocados would start my thirteenth year off on a healthy path, since avocados are sodium and cholesterol free, and heart healthy. Abuelo and Mama had made my thirteenth birthday one that I would never forget.

Learn more about the “Imagine this.. Story Writing Contest” by visiting LearnAboutAg.org/imaginethis!