

Table Grapes

Information compiled by the California Table Grape Commission

How Produced – Growing fresh market grapes is a year round job. Growers vigorously prune the vines in the winter. In the spring, buds appear, shoots emerge and grow, cluster florets develop, and flowers begin to bloom when daytime temperatures reach approximately 68°F. As the flowers die, fruit set follicles and tiny green berries appear. These will eventually grow and ripen into mature clusters of grapes. In late spring, the farmers girdle the vines of many varieties, stripping a small ring of bark from the shoots, canes, or trunks. This forces nutrients from the vines and roots into the fruit, resulting in larger berries.

When grape berries achieve the correct size, sugar content, and color, clusters are harvested by hand with special clippers. Harvest usually occurs in late spring to mid-July in the warm desert area of the Coachella Valley. In the San Joaquin Valley, harvest begins in late June and continues through late fall. At harvest, the clusters are trimmed and inspected, packed into shipping boxes, palletized, and transported to a cold storage facility to quickly cool the grapes. Grapes that are not immediately shipped to market are maintained in a controlled climate storage facility between 30°F to 32°F with 90 to 95% relative humidity. This storage process allows consumers to enjoy California table grapes through January.

History – Viticulture, or the science, production and study of grapes, first began in California in the late 1700s when Spanish friars arrived to establish Catholic missions. Because the native grapes were sour and made poor wine, the friars brought over grapes from Europe and planted their own vineyards to make sacramental wine.

In the mid-1800s, prospectors poured into California. They came looking for gold until some discovered that there might be more money in grapes. Shortly after the Gold Rush, California's fledgling agricultural society declared, "Capital put into vineyards would bring greater rewards than... fluming rivers for golden treasures." Their instincts were good. California's warm, dry climate turned out to be ideal for growing grapes. Today, more than 689,000 acres across California are planted with fresh grape, wine, and raisin vineyards.

Varieties – California produced 1.8 billion pounds of table grapes in 2021. To give an idea of the total crop production, the 2021 season of California table grapes supplied an average of 4.2 pounds per person. There are 80 varieties of table grapes grouped into three color classifications: green, black and red. The numerous varieties enable consumers to have fresh California table grapes from May through January.



Commodity Value – In 2021, the total crop value of fresh grapes in California was 2.14 billion dollars. Typically, 20 to 30% of California's table grapes are exported to countries around the world. The top five export markets by volume include Canada, Mexico, Japan, South Korea, and Taiwan.

Top Producing Counties – California produces 99% of the nation's commercially grown table grapes.

California's table grapes are produced in the Coachella and San Joaquin Valleys, which include Fresno, Kern, Kings, Madera, Riverside, and Tulare counties.

Nutritional Value – Grapes of all colors make a healthy snack. A serving of grapes ($\frac{3}{4}$ cup) is just 90 calories, has no fat or cholesterol and virtually no sodium. Grapes are an excellent source of vitamin K, and contain 7% of the recommended daily intake for potassium. Fresh grapes are also a natural source of beneficial antioxidants and other polyphenols. Research shows that grape polyphenols may help maintain a healthy heart. It is recommended that people consume a "rainbow" of naturally colorful, whole fruits and vegetables; eating a variety of fresh grapes helps achieve this goal and is a great start to a healthy lifestyle. Eat them fresh by the bunch, tossed into salads, yogurt, and more. Frozen grapes also make a refreshing snack on a hot day.

For additional information:

California Table Grape Commission
(559) 447-8350

Website: www.grapesfromcalifornia.com



Table Grape Activity Sheet

A Little Bit of History

William Wolfskill, a former trapper from Kentucky, planted the first table grape vineyard in 1839. It was located in a Mexican colonial pueblo now known as Los Angeles.



In the 1860s, William Thompson, an English settler, first planted a popular Eastern Mediterranean grape in Yuba City. It is now known as the Thompson Seedless grape.

In the mid-1800s, Colonel Agoston Haraszthy personally brought 100,000 table grape cuttings to California and planted them to provide fruit to the miners of the California Gold Rush.

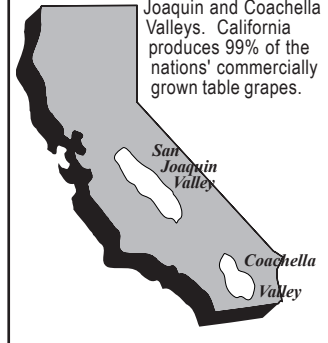


In 1869, R.B. Blowers pioneered the transport of fresh table grapes to eastern markets. The first load was shipped by freight train to



Chicago. Each grape cluster was wrapped in paper bags, in 22-pound boxes.

Today, the major California table grape growing regions are the San Joaquin and Coachella Valleys. California produces 99% of the nation's commercially grown table grapes.



Lesson Ideas

- Make a mural depicting the life cycle of a grapevine.
- Research the role of phloem, xylem, and cambium in plants and relate it to the girdling process done on grapevines.
- Use a world map to trace the distribution of grapes over time.
- Compare the latitudes and longitudes of major grape-growing countries and grape-importing countries.
- Compare and sort various grape varieties by color, shape, or size.
- Research the Phoenicians and their importance in the ancient world.
- Use frozen grapes as ice cubes in a favorite drink.
- Compare the etymology of the French word "grape" and the English word "grapple."

Fantastic Facts

1. Growers harvest grapes when they are fully ripe.
2. The two valleys in California that produce the most fresh market grapes are Coachella and San Joaquin.
3. California produces 99% of the nation's commercially grown table grapes.
4. There are over 80 varieties of table grapes grown in California.
5. Fresh California table grapes are available from May through January.
6. The three colors of table grapes are green, black, and red.
7. A serving size of grapes is $\frac{3}{4}$ cup.

Lesson Plan: To Market! To Market!

Introduction: Since 1970, the United States per capita consumption of table grapes has grown from two pounds to close to nine pounds per year. Many factors contributed to this rise, including improved marketing techniques. Developing new marketing techniques relies heavily on research such as surveys and taste tests. In this activity, your students will conduct a survey, analyze the results, and produce a magazine advertisement to sell table grapes.

Objective: Students will conduct a survey, analyze the results, and create an advertisement.

California Standards: CC ELA: W.3-12.4, 7; WHST.6-12.4, 7; SL.3-12.1, 3-12 Visual Arts Content 5.0

Materials: *Table Grape Fact Sheet*, supermarket advertisements for grapes, magazine food advertisements, and red, green and black grapes.

Procedure:

1. Discuss how advertising and product presentation affect the sale of foods. Have students bring in samples of food advertisements from magazine and grocery ads.

2. Discuss the various marketing strategies used to persuade a consumer to purchase a product. Examples may include low prices, convenience, healthy eating, or appealing to the senses. Have the students analyze what strategies are used in the ads brought to class.
3. Have students gather information on grapes by examining and tasting fresh grapes, writing down words that describe the grapes, looking at the cash register receipt from the grape purchase, and reading the *Table Grape Fact Sheet* and other literature you have on grapes.
4. Have the students develop and administer a survey designed to find out what consumers are looking for when buying fresh fruit, in particular, fresh grapes. Possible questions may include: "Who eats grapes in your home?," "Does price matter in your fruit choice?," and "What color of grapes do you prefer?"
5. After conducting their survey and analyzing results, have students write magazine or grocery ads to promote their products.