Commodity Fact Sheet **Bell Peppers**Information compiled by California Foundation for Agriculture in the Classroom

How Produced – The pepper plant is a member of the *Solanaceae* or nightshade family, which also includes tomatoes and potatoes. Pepper plants are planted in the field

as seeds or as young plants, called transplants. Bell peppers are warmseason crops, sensitive to freezing temperatures at any growth stage. The ideal growing temperature is between 75° and 85°F, with night temperatures between 55° to 65°F. If planting seeds directly into the ground, the producer typically sows seeds March through May. If planting by transplant, plants are grown in greenhouses for two months before being transplanted out in the field from March through July.

Bell peppers are a slow-growing crop, with up to 180 days until the final harvest. Due to their slow-growing nature, they face greater exposure

to elements such as inclement weather, pests, and weeds. Therefore, bell pepper fields require significant input costs such as water, labor, and crop protection. Bell peppers are also susceptible to sunscald, which occurs when ripening fruit is not adequately shaded by leaf cover. Adequate fertilization to increase canopy coverage helps control this problem. The color of bell peppers change as they ripen on the plant. Most bell peppers are primarily sold as green peppers, but red, yellow, orange, purple, and black colors will show as the plants ripen. Peppers are ready for harvest between early July and October. Fresh market peppers are harvested by hand, with multiple harvests occurring within a single season. Peppers intended for processing are often harvested mechanically. In this process, each plant is cut at the base and peppers are shaken from the plants. The shaken peppers are hand-sorted on the machine. Conveyor belts transfer the peppers into produce bins pulled by a tractor following alongside.

The bins are transferred onto flatbed trucks using a forklift. Trucks haul processing peppers to a facility where they are peeled, sliced, or diced into the familiar frozen, canned, or dehydrated pepper products seen on store shelves. Fresh market peppers are graded and packed in sheds located near the fields to assure maximum freshness.

History – About 9,000 years ago, the wild pepper plant originated near Bolivia and Peru. It was later cultivated for its fruits by the Olmecs, Toltecs, and Aztecs. The seeds spread throughout Central America by both nature (wind, animals) and human activity (migration, exploration).



Bell peppers were carried throughout the world by Spanish and Portuguese explorers. The misleading name "pepper" was given by Europeans when Christopher Columbus brought

> the plant back to Europe. Due to the versatility of the bell pepper, it quickly became a staple in diets throughout the world including Central Europe where they were dried and ground to make paprika. Commercial bell peppers were first grown in the United States in the early 1920s.

> **Varieties –** Varieties are selected on the basis of yield potential, quality, market acceptability, and disease resistance or tolerance. There are nearly 200 different varieties of bell peppers grown throughout California for both fresh market and processing. These include varieties with the traditional multi-lobe shape as well as longer more pointed

varieties. Common bell pepper varieties used for commercial production include: Huntington, Classic, and Baron.

Commodity Value – California leads the nation in pepper production, accounting for 34% of the nation's total. In 2020, California's pepper growers grew approximately 16,500 acres, producing 341,000 tons of peppers valued more than \$194 million. Canada is the top export market, valued at \$26 million.

Top Producing Counties – Riverside is the top producing county in California generating nearly \$79 million. The second highest producing counties are Ventura and Kern, both generating \$42 million.

Nutritional Value – One serving of red bell peppers is an excellent source of vitamin A and vitamin C and a good source of vitamin B6. Vitamin B6 helps the body break down or metabolize protein, aids in the formation of red blood cells, and helps maintain normal brain function. Bell peppers are also an excellent source of dietary fiber and provide small amounts of several other vitamins and minerals.

For additional information:

California Pepper Commission (559) 591-3925 Website: www.calpeppers.com





- Procedure:
- 1. Before the lesson, use the cheesecloth to drain as much liquid as possible from the salsa.
- 2. Ask students to raise their hand if they have salsa in their home right now. Discuss the different styles of salsa. Have students raise their hands to vote for their favorite style.

This Fact and Activity Sheet was developed by California Foundation for Agriculture in the Classroom in conjunction with California educators and meets the required education standards of the California Department of Education.

flavor, and texture of salsa.

8. Compare results and discuss how peppers change the color,