



Sugarcane: A Sweet Grass

Most plants grown in the 5th grade garden are fruits or vegetables just like you can grow at home. Sugarcane is not normally grown in a backyard garden but we do grow some in the school garden. It has great historical significance to our area.

Sugarcane is a tall **grass** plant with stout stalks rich in sugar. Sugarcane is native to southern Asia and has been grown in India and China for more than 3,000 years. Columbus is believed to have carried it from the Canary Islands to the West Indies. Louisiana colonists were raising the plant by the middle of the 18th century.

Sugarcane needs warm weather and lots of moisture to grow. It is a plant of the tropics and sub tropics. Sugarcane is planted by laying sections of stalk lengthwise in furrows. New plants spring from the buds or nodes found on the stalks. In the USA it is mostly grown in Louisiana, Texas, Florida and Hawaii. In Texas it takes about nine months for the cane to be ready for harvest. In many fields fires are set to burn the leaves off the stalks before they are harvested. If you drive through sugarcane fields in the fall you might smell the sweet-smelling smoke.



Have you ever been to Sugarland, Texas? This city just southwest of Houston was the sugar capital of the US in the early 1900s. As the home of Imperial Sugar Company which had a sugarcane refinery and large fields of sugarcane, the city became a very important part of the economy in South Texas.

The US produces about 28 million tons of sugarcane a year.

How is sugar made from sugarcane? Sugarcane is harvested by chopping down the stems but leaving the roots so that it re-grows in time for the next crop. The cane is sent to factories where it is crushed in a series of large roller mills. The sweet juice comes gushing out and the remaining fiber, **bagasse**, is carried away for other uses. This impure juice is cleaned by another process. Then the purified juice is thickened into syrup by boiling off the water. In the last stage, the syrup is placed into a very large pan for boiling. In the pan even more water is boiled off until conditions are right for sugar crystals to grow. Once the crystals have grown the resulting mixture of crystals and remaining liquid is spun in centrifuges to separate the two. The crystals are then given a final dry with hot air before being stored for packaging.

Sugarcane is the source of a number of products other than sugar. Among these products are molasses, which is made by boiling sugarcane juice, and rum, which is distilled from fermented molasses or sugarcane juice. The bagasse is used in many ways.

What can you do with your node of sugarcane? Each stalk has many sections that have buds or **nodes** where leaves and roots will grow. Each node, if planted in damp warm soil, may sprout a new sugarcane plant. It can be started in a large pot or in a sunny spot in your yard. If you have a sweet tooth, simply cut off a bite-size chunk of the stalk and peel it. Cut that into sections and chew it like chewing gum. In many countries peeled sugarcane a type of candy. The peeled stalks can be used in fruit punches somewhat like swizzle sticks. A delicious punch called Ponche Navideno is served in Mexican homes at Christmas time.

How do you plant a sugarcane node? _____

When would you transplant your sugarcane seedling into the ground? _____

Bonus Question: What plant is another source of sugar? _____