



## Student Resource Page : Growing Bananas in Honduras e

You probably knew that bananas are popular lunch items at your school, but did you know that they are the number one fruit all over the world? Over 55 million tons of bananas are eaten worldwide each year!

Bananas grow in humid, tropical regions of the world. They thrive in Honduras, as well as in other Central and South American rainforests and in Africa and Southeast Asia. They require very warm climates and need lots of water. They grow best where it rains a lot.

The word "banana" comes from the Arabic word for "finger." Bananas got this name because they resemble fingers that grow together in long rows, which are called "hands."

Although there are about 400 different types of bananas, most of the bananas we eat in the United States are just one type – the Cavendish banana. This banana is a sweet dessert banana and is generally eaten raw or mixed into a recipe. Other types of bananas must be cooked to be edible, and people over the world bake, roast, barbecue, or fry them.

In addition to food, banana plants also provide materials for many other uses. The plant fiber makes a very strong paper that is used in tea bags and paper money. People also use banana leaves for making umbrellas, for roofing material, for wrapping food during cooking, and for making trays, plates, baskets and carpets.

### How Bananas Grow

Although banana plants grow as tall as trees, they are not actually trees. They are giant herbs, related to the lily and orchid families.

Bananas need a lot of water, but they don't like having their "feet" wet. That's why they are grown in fields that look like corrugated cardboard, with the plants growing on the tops of the ridges. The farmers can fill the trenches with water, but then drain them after the plants have had a good long drink.

A banana plant grows from a root clump (or rhizome) sort of like a tulip bulb. The plant grows rapidly and can reach its full height of 20 to 40 feet in about 9 months.

The "trunk" of the plant is actually made up of closely packed leaves wrapped around each other. After growing for about 6 to 8 months, the plant will have a nice crown of leaves. At this point, a flowering stem emerges from the top and a large bud begins to develop.

Because the stalk is approximately 93% water, and not woody, even modest winds can potentially knock down a banana plant and ruin the crop. Plantations use a system of guy wires to tie the plants together and support them in case of wind. However, a powerful storm can devastate a banana crop. When Hurricane Mitch swept through Honduras in 1998, nearly all of the country's banana plantations were destroyed.

As the bud unfolds, it reveals double rows of tiny flowers. Each of these flowers will become an individual banana, or a “finger.” Each row of bananas is called a “hand” and is made up of 14 to 20 fingers. Because the stem will grow about 9 to 12 hands that means up to 240 bananas per plant!

About 14 days after the stem has emerged, the weight of the bananas causes the stem to hang upside. At this stage, the fruit is covered with a bag to protect it from insects and sun damage. The plant is also supported with twine tying it at different angles to neighboring plants. This will help keep the plant from toppling over with the weight of the bananas.

### **Harvesting the Bananas**

About 12 weeks after bagging, the green-colored fruit is ready to harvest. To harvest the bananas, one worker cuts the stem from the plant, while another stands underneath to catch the falling stem on his shoulder. The cutter then cuts down the plant, allowing another stalk to grow from the root clump.

Once the stem is cut, the starch in the banana begins to change into sugar, which will make the banana sweet by the time it reaches your home.

### **Packing the Bananas**

After being harvested, the bananas are taken to packing stations, where they are prepared for shipping. The hands are cut off of the stems and then cut into clusters of 4 to 10 bananas. The workers must be careful to cut neatly and accurately to prevent rotting. After being washed in a final shower, the bananas get stickers and are packed into boxes.

### **Shipping**

Within 24-48 hours after harvesting, the boxes of bananas are trucked and loaded on a refrigerated ship. The cool temperature of the ship keeps the bananas from ripening any further until they get to their final destination. At their destination, the bananas go from the ship into a dockside warehouse. From there they are trucked or trained to neighborhood stores.

Approximately 3,700 people work for Chiquita in Honduras, where the company exports more than 9 million 40-pound boxes of bananas annually.

As soon as the bananas are removed from the cool air of the refrigerated ship, they start ripening again. As they ripen, their peels lighten from shades of green to the bright yellow color you see in the store to a darker yellow with flecks of brown.

Sources: International Network for the Improvement of Banana and Plantain. Accessed December 12, 2004 at [www.inibap.org](http://www.inibap.org).