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## Commercial Horticulture – Bananas

The fourth largest staple crop in the world doesn't come from a large country, but from a very small country south of the United States. Although, many people associate this crop with Central America and the Caribbean, its origin is in Asia. It's the banana.

In terms of an export horticulture commodity, in 2006, the banana is ranked #1 in world-wide export volume with a credited 16.8 million tons and #2 in terms of world-wide export value, behind citrus, with an equivalent to 5.8 billion U.S. dollars. For this fact, the banana is one of the leading stapled crops of the world.

Bananas are produced in over 130 countries world-wide with 98 percent of the total world production in developing countries. Of this, 60 percent of the total world production comes from India, China, the Philippines, Brazil, and Ecuador where the United States imports the majority of its bananas from our close neighbor Costa Rica.

As a major supplier of bananas to the United States, it is interesting to know facts about Costa Rica and its' banana production and cultural practices. From the first fruit shipped to New Orleans, Louisiana from Costa Rica in 1899 by an entrepreneur named Minor Keith with United Fruit Co, to the present day popular Cavendish variety, once again, the banana is now the fourth largest staple crop in the world and comes from Costa Rica, Central America.<sup>1</sup>

The banana is now Costa Rica's leading and most significant agricultural export and commodity, and as a result, the banana industry plays a major role in the countries agricultural and economical sector. The success of Costa Rica's banana industry has

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<sup>1</sup> Alesch, A. et. al. (5/18/05). Banana Cultivation in Costa Rica.  
<http://jrscience.wcp.muohio.edu/fieldcourses05/PapersCostaRicaArticles/BananaCultivationinCostaR.html>

enabled them to claim as one of the top ten exporters of bananas world wide. In terms of volume, they are the first exported fruit, while they rank second after citrus fruit in terms of value.

Historically, Costa Rica had a significant increase in area production. The area of production has increased from 25,000 hectares in 1987 to 50,000 hectares in 1994. This area produces an average of 103 million boxes of bananas per year since and employs a workforce of 40,000 men and women.<sup>2</sup>

In Costa Rica, location for banana production is vital for success. An area with a flat terrain and deep, well-drained nutrient rich soil that has a pH range of 6 - 7.5 is ideal. These soils can be found in Costa Rica on rich alluvial volcanic ash deposits. This environment can be found on the Caribbean side of this country where there is 10 - 15 months of frost free conditions. Also, the optimal range of temperature for banana growth is 54 - 79°F. If temperatures drop below 53°F, the growth stops, and when the temperature reaches 80°, it slows down and the plant stops growing at 100°F. Costa Rica is suited for this temperature requirement.

The harvesting method of bananas is quite unique. The production process consists of four steps: plant growth, fruit protection, harvest the cleaning and packing, and shipping. In terms of fruit growth, the fruit matures in six to eight months from flower initiation. At this time, fruit protection begins. Leaves are removed to prevent damaging the fruit and the fruit is then bagged to shield it from the sun exposure and insect damage. A method of using colored ribbons is used to distinguish the estimated or ideal harvest week. To prevent the plants from falling over due to the heavy fruit and wind, the plants are supported by twine. Once the bananas are matured and ready for harvest, they are cut from the stem and placed in water tanks for cleaning. The bananas are then packed and loaded on pallets for shipping. From 24 hours of harvest, the bananas are then taken to market by the primary use of refrigerated trucks and trains and are on the shelves of stores within three to eleven days depending on the destination.

In 1925, the banana industry took a dive in production due to the infestation of the Panama Disease that infected banana plants. This disease was the cause in the decline

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<sup>2</sup> Minimum Social and Environmental Standards for Banana Production in Costa Rica. (February 2000). The Emaus Forum: a solidarity network for human rights and the environment in Costa Rica's region of banana production. [http://members.tripod.com/foro\\_emaus/ni5.html](http://members.tripod.com/foro_emaus/ni5.html)

of the industry and drop in market price.<sup>3</sup> Later, in 2006, the four leading banana exporting countries were Costa Rica, Ecuador, the Philippines, and Columbia.<sup>4</sup> Costa Rica is now agriculture dependent, where exporting of bananas are a vital component in the economic growth, stability, and development of the country.

The industry has proven to not only successfully grow bananas, but profit quite well from it. The three leading companies of banana production presently are Chiquita, Dole, and Del Monte. The combined banana exports from these three companies result in over 65 percent of the world's banana exports. The majority of the banana exports go to three of the most industrialized and heavily populated countries. These countries are the United States, Europe, and Japan. As a result, there were significant earnings in the Costa Rican banana industry from 1992 to 1993, with the banana export earnings of \$48.1 million.

The horticulture trade relationship between the United States and Costa Rica is strong where Costa Rica remains a vital link as a partner in providing the consumers of the United States with quality and delicious horticulture produce on a year-round basis.

Brent Jeansonne  
Commercial Horticulture Extension Agent  
University of Florida/IFAS  
Volusia County Extension

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<sup>3</sup> Anywhere Costa Rica. Conditions within the Banana Industry. <http://www.anywherecostarica.com/articles/costa-rica-history/banana-conditions-industry>

<sup>4</sup> Info Comm. Banana. Market. <http://www.unctad.org/infocomm/anglais/banana/market.htm>