



# The Disappearing Banana

by Gary Lochte

Except for texture, bananas might be the perfect fruit...sweet, nutritious, and wrapped in thick skin that shields pesticides. Seems they were engineered specifically for humans to carry around in snack bags! Presently, the Cavendish banana accounts for 99 percent of the \$13 billion worth of bananas exported annually around the world, but is every one of them a sterile mutant?

According to SciShow's Hank,

*"We weren't always under the thrall of the Cavendish. They might be the most popular fruit in America right now, and Australians eat more than 1 billion of them, but they've only been around since the 1950s."*

Before then, the most popular banana was the Gros Michel – a bigger, sweeter fruit with thicker skin. It was banana heaven for everybody, because not only did the Gros Michel taste better, it didn't have to be artificially ripened like the Cavendish.

Then the Panama disease happened. A fungicide-resistant pathogen that originated in Central America managed to spread through most of the world's banana crops in a matter of years, wiping them out everywhere except certain parts of Thailand. Hank says *"By the time growers understood how vulnerable their crops were, the Gros Michel variety was all but extinct"*.

Banana farmers abandoned the Gros Michel and focused on another alternative – the seedless Cavendish, which could only be reproduced by transplanting part of the plant's stem to produce a whole bunch of genetically identical clones. While these bananas are more resistant to the strain of Panama disease that killed off the Gros Michel, the fact there's zero genetic diversity in the entire global population means they're still incredibly vulnerable.

Since the 1980s, banana growers have been concerned about another strain

of Panama disease that originated in Malaysia, known as Tropical Race 4 (TP4). "It's caused by a very common type of fungus called *Fusarium*, which was probably already in the soil there. A single clump of contaminated dirt is enough to spread it like wildfire, and it can be transported by wind, cars, water, creating an infection wherever it goes," Dan Koeppel, author of the book **Banana: The Fate of the Fruit that Changed the World**, who told CNN last month..."*Everyone who's ever had athlete's foot knows how hard it is to get rid of a fungus."*

TP4 already spread throughout Southeast Asia, made it across to Australia, and by 2013 had reached Africa and the Middle East. It's already having devastating effects in places like Mozambique, George Mahuku, senior plant pathologist for the International Institute of Tropical Agriculture, told CNN.

*"The disease has already cost Matanuska, the company that owns the plantations, about \$7.5 million. A total of 230,000 plants have been affected and destroyed. At the current rate of infection, the farm is losing 15,000 plants per week, translating to \$236,000 per week"* he said.

Banana growers are scrambling to genetically engineer a more resistant form of Cavendish. Of course, this will fail long term. If you love bananas, don't take them for granted. I suggest you plant and grow your own.....Purchase them here: <http://www.floridahillnursery.com/banana-tree-plants-c-3/musa-gros-michel-heirloom-banana-tree-live-tree-p-455>

\*sourced from [www.sciencealert.com](http://www.sciencealert.com).