

HISTORIC BLACK FIGURES IN BOTANY



This Black History Month we are highlighting some important figures in Botany + Environmental history. This document contains additional information to help you learn more about these important historical figures and their contributions.



GARFIELD PARK
CONSERVATORY
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WANGARI MAATHAI

Queen of Trees

When Wangari Maathai was a girl in Kenya, her mother taught her that the wild fig tree was a tree of God. This was an early lesson in conservation for Maathai who would grow up to become the first African woman to receive the Nobel Peace Prize for her work planting millions of trees. She later learned that there was a connection between the fig tree's root system and the underground water reservoirs. In her memoir she speaks to this connection:

"The trees also prevented soil erosion. When this traditional wisdom was no longer taught, and the idea of the holiness of trees and the biodiversity of the environment was lost, the people suffered. " The Ficus burrows its roots deep into the ground. They break through the rocks beneath the surface soil and drive it into the underground water table. The water travels up along the roots until it hits a depression or weak place in the ground. Then, it gushes out as spring. Indeed, wherever these trees stood, there were likely to be streams."

In 1977, she established the Green Belt Movement which aimed to teach rural women how to plant trees. Maathai teaches us that forgetting the holiness of trees and nature leads us to think humans are separate from nature. This error leads us to focus on short-term economic gain instead of the long-term health of the Earth and ourselves.

The Conservatory was lucky enough to receive a visit from Maathai when she visited Chicago in 2008 . There is a garden in her honor across the street at Al Raby High School called the Wangari Maathai natural garden.



RON FINLEY

The Gangsta Gardener

Ron Finley is a rebel with a green thumb. In 2010, Ron set out to fix a problem in his South-Central neighborhood. South Central L.A., like Garfield Park, is an area impacted by food apartheid. South-Central Los Angeles is a food desert: a geographic location where access to healthy food options are extremely limited or nonexistent. There are currently 23.5 million people living in food deserts in the US. And cities with high African American and Latin American populations, including Atlanta, Chicago, Detroit, New Orleans, and New York City, regularly top the list of those hit hardest by food scarcity.

He wanted to grow food in the parkways, which often neglected dirt or grass patches next to streets. He was soon met with resistance by the city of L.A., as they owned the land he was looking to restore. Ron fought back by starting a petition with green activists and won! The self-identified "Gangsta Gardener" started a project with a clear goal: to teach communities and individuals how to regenerate their lands into creative business models. They do this by envisioning and facilitating a world where gardening is gangsta! Gangsta. In Finley's perspective, a true gangsta is "having knowledge of how systems work and being able to support yourself." It is projecting strength on one's own terms, *hip, cool, innovative, revolutionary, resolute, vital, the cutting edge.*

The Ron Finley Project is dedicated to creating green spaces in Black communities that are affected by food apartheid.

Having grown up in the South Central Los Angeles in what he calls a 'food prison', Ron is familiar with the area's lack of fresh produce. He knew what it was like to drive 45 minutes just to get a fresh tomato. Boldly and tenderly, Ron's vision to rejuvenate communities around the world through gardening, knowledge, and togetherness has taken root. By learning about growing in an urban environment you too can be a resource for your community! Here at the conservatory we offer a variety of gardening classes. In the Spring and Summer you can view our demo garden outside to get ideas about how to grow produce in small spaces!



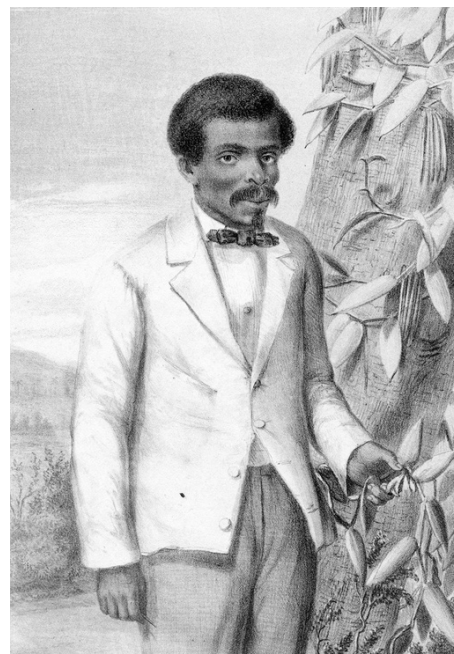
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EDMUND ALBIUS

The Brilliant Boy Who Unlocked Vanilla

Vanilla may well be the world's most popular flavor. We wouldn't be able to enjoy vanilla today without the discovery of a boy named Edmond Albius. Edmond was only 12 when he solved a problem that had stumped Europeans for centuries. Vanilla, which is native to Mexico, needs a specific bee to pollinate and create the vanilla pods so it did not pollinate well without that bee. At the time of his discovery, he was enslaved on a plantation in Réunion, an island in the Indian Ocean. Albius revolutionized vanilla cultivation by inventing a hand-pollination technique. This innovation changed the vanilla industry forever and saved the island from agricultural collapse.

His technique is still used today but he was never given credit or compensation for his discovery. Which is why it is important for us to recognize him for this important accomplishment now.



Albius' hand pollination
in action at VanillaPoint in Uganda .
Using a toothpick the pollen can be
moved pistil to stamen.



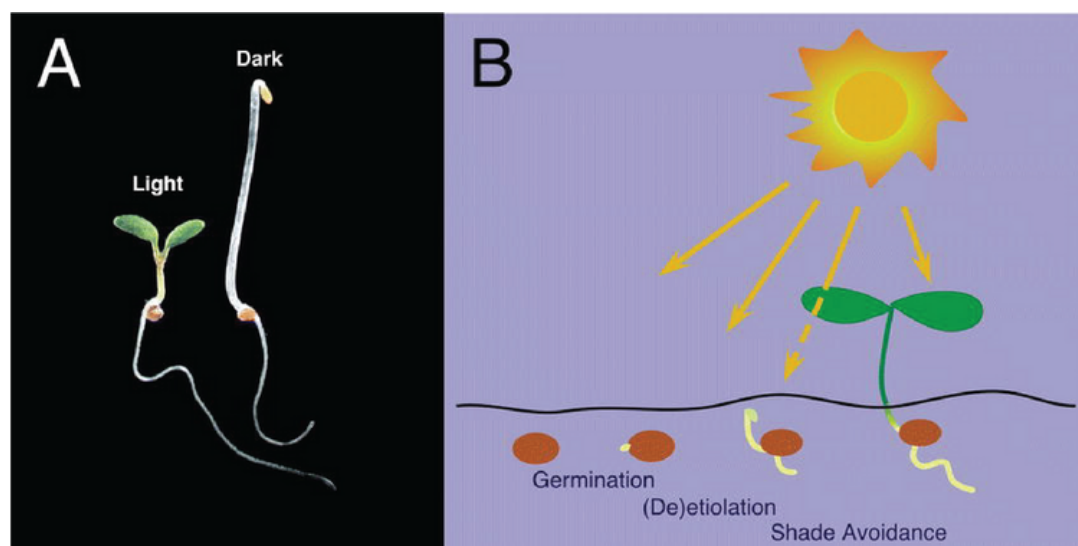
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MARIE CLARK TAYLOR

A Leader in Stem

Marie Clark Taylor (1911-1990) was the first African American woman to earn a PhD in botany. She was also the first woman of any race to earn a Ph.D. in science. Later, she became Head of the Botany Department at Howard University.

Her doctoral research and dissertation explored photomorphogenesis. This long word describes the effect of light on a plant's structure and life processes, outside of photosynthesis. Understanding this relationship has allowed gardeners to select plants that will prosper in their garden's conditions. It also underpins the very idea of keeping plants in a conservatory or home. It creates the best possible growing environment in an artificially created habitat.



A. Arabidopsis seedlings grown in light (deetiolated) or dark (etiolated). B. Different aspects of light detection are experienced by seedlings in their initial phase of growth

