Summer's superfruit challenged: Latin American blueberries found to be 'extreme superfruits'

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One of the treats of summer—fresh, antioxidant-rich blueberries—has new competition for the title of "superfruit."

But at least the contenders are keeping the title in the family.

Researchers have found that two species of wild blueberries native to the tropical regions of Central and South America—the New World tropics, or Neotropics—contain two to four times more antioxidants than the blueberries sold in U.S. markets.

This finding is the result of an analysis of the compounds contained in neotropical blueberries grown at The New York Botanical Garden.

The study was conducted by Professor Edward Kennelly, a biologist at Lehman College in the Bronx who is an expert in medicinal plants, and Paola Pedraza, Ph.D., a botanist at The New York Botanical Garden whose specialties include South American blueberry species.

"No one had looked at this," Dr. Pedraza said. "The results are very promising."

For their study, published in the peer-reviewed *Journal of Agricultural and Food Chemistry*, the scientists examined five species of neotropical blueberries. The two species that had the highest amounts of antioxidants

were *Cavendishia grandifolia* and *Anthopterus wardii*.

"We consider these two species of neotropical blueberries to be extreme superfruits with great potential to benefit human health," Dr. Kennelly said.

Antioxidants found in fruits and vegetables have been associated with lower incidence of some chronic diseases and may help protect against heart disease, inflammatory ailments such as chronic obstructive pulmonary disease (COPD), and even cancer.

Of the five neotropical blueberry species used in the study, four came from the Nolen Greenhouses for Living Collections and the Enid A. Haupt Conservatory at The New York Botanical Garden. One came from the Atlanta Botanical Garden.

Although these blueberries are wild species that are not currently commercially available, the scientists believe that they have the potential to become a popular food item or health supplement if their high antioxidant content becomes better known.

"I think it's just a matter of time until people start working on making them more available," Dr. Pedraza said.

More than 600 neotropical species are related to the "highbush" blueberries common to the American market. Several of them, including the two most promising species in Drs. Kennelly and Pedraza's study, are native to the high-elevation forests of the Andes Mountains, one of the most endangered ecosystems in the world.

The discovery that these blueberries have potential benefits for humans underscores the importance of preserving Earth's biodiversity, Pedraza said.

"There are so many things out there that could have an impact on our lives," she said. "That's why we should be worried about conservation in our country and in other countries because you never know when good things will come to light."

Provided by The New York Botanical Garden