

Hello, and welcome once again to “As It Is” our daily show for people learning everyday American English.

I’m Christopher Cruise in Washington.

Today on the program, we tell about the moringa oleifera plant -- it feeds millions, but many people have never heard of it.

“It’s sometimes viewed as one of the most nutritious plants in the world.”

Protecting Cassava

But first, we tell about efforts to fight a disease that is spreading and attacking a plant that is important for Africa.

Scientists and agricultural experts recently met in Italy to talk about how to fight cassava disease. A virus that has been killing this important crop in East Africa was recently discovered to have spread to West Africa. Experts are now concerned that it could spread rapidly throughout West Africa, including Nigeria. Nigeria is the world’s largest producer and consumer of cassava.

Cassava is a tropical root vegetable that requires little work. It grows well in poor-quality soil and high temperatures. The roots are full of carbohydrates, vitamins and minerals.

Cassava can also be used as an industrial starch to produce plywood, textiles and paper.

Cassava is sometimes called a miracle crop for Africa. But diseases have been a problem for a century.

One particularly deadly virus is cassava brown streak disease. It began infecting cassava fields in East Africa 10 years ago. Now it has spread as far west as the Democratic Republic of Congo.

Brown streak disease is spread in two ways: by white flies and by infected stem cuttings. Farmers use these cuttings instead of seeds to plant their fields.

Claude Fauquet is a plant virus expert. He heads the Global Cassava Partnership for the 21st Century.

“The disease is not very obvious on the plant itself. The plants are, are growing fairly well, but the disease is obvious on the roots when they harvest -- but when they harvest, it’s too late. So, in short, there is really nothing that farmers can do, and therefore solutions have to come from scientists and from different organizations that would be capable of offering farmers, you know, virus-free material.”

Mr. Fauquet says scientists are experimenting with a virus-resistant cassava plant in Tanzania. They either combine it with other virus-resistant strains of the plant or genetically-engineer new ones in the laboratory. They then must go village by village to get farmers to plant it.

Mr. Fauquet says this kind of effort has been successful against cassava mosaic disease. That is the most common cassava disease in Africa. It has spread throughout the continent. But it mainly damages the plant, not the root. Farmers can usually save some of the plant. Mr. Fauquet says that is not the case with brown streak disease, which kills the root.

Experts say brown streak disease could reduce cassava production in Africa by 50 percent. As many as 300 million Africans could be affected.

“You would have explosion of the disease, and, and maybe we would need a decade before we could respond and offer farmers, and to millions of farmers, to offer solutions, so, the magnitude of the problem would be gigantic.

Claude Fauquet says if even one farmer shares infected stem cuttings, the disease will continue to spread.

The Most Important Plant You May Never Have Heard Of...

A listener in Nigeria, Gaddafi Adamu, has asked us to talk about the moringa oleifera plant. This kind of shrub or tree is grown for food and other uses. We spoke with Gerry Moore, a plant expert at the Natural Resources Conservation Service, part of the United States Department of Agriculture. He told us the plant is high in protein and rich in vitamins and minerals.

“It’s sometimes viewed as one of the most nutritious plants in the world. It has a lot of nutritional values, and much of the plant can be used for food. So it’s not just the fruit that can be taken, but it is an unusual plant in that the leaves, the fruits, the roots and the seeds are all used in one way or another for food.”

The plant is known by different names around the world. *Moringa oleifera* is native to the foothills of the Himalayas, from Pakistan to eastern India. Because it is native to that area, much of the research on the plant has been done by scientists in Pakistan and India.

Its native range is narrow, but the plant is grown throughout the world, so its introduced range is broad. In the United States, it has been introduced in Hawaii, Florida and Puerto Rico.

Gerry Moore from the Agriculture Department says the plant doesn’t like the cold, but it can grow in many areas.

“It cannot tolerate freezing, and it has pretty high temperature tolerances, maybe up to about 120 degrees Fahrenheit, 49 degrees Celsius. And so it can grow, you know, in areas where you do not get any excessive freezing. And it also has significant drought tolerance, so it can be grown in quite dry areas. It can also grow in higher moisture areas, where you get rainfall of over 85 inches a year. So it has a lot of tolerances that are quite good for growing it in a large part of the world, but you’re not going to find it where there’s excessive freezing.”

He says the plant can be used for different kinds of food.

“The leaves can be boiled and can be eaten in curry dishes. The fruit is usually skinned so you take the skin or the peel off and it can be sliced and eaten, either cooked or pickled, and it has a taste very similar to asparagus.”

The roots of the plant can be dug up, peeled and used as a seasoning in the same way as horseradish. *Moringa oleifera* is related to mustard, so it can give a sharp taste. The seeds in the fruit can be fried and taste like peanuts. The seeds are rich in oil that can be used for salad oil. But the bark of the *moringa oleifera* tree can be poisonous, so be sure to remove it.

Versatile Songstress

Finally, Linda Ronstadt, a pop superstar of the 1970s and 80s is celebrating a birthday this week.

She was born July 15th, 1946.

She is known for such hits as “You’re No Good.”

She has recorded in almost every musical style, including rock, folk, country, jazz and big band.

Linda Marie Ronstadt is now 67 years old.



We hope you enjoyed our program today.

I'm Christopher Cruise, and that's "As It Is" on The Voice of America.

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