UC Davis Scientists Develop Flood-Resistant Rice

DAVIS (CBS13) — Researchers from UC Davis are developing a new and improved kind of rice, one that can hopefully feed millions of families around the world.

Normally, rice plants can survive severe flooding for three days, but the new type can withstand flooding for up to two weeks.

Pamela Ronald, a plant pathology researcher from UC Davis, is part of an international team that has developed flood-tolerant rice that's worth growing now.

"There was flood-tolerant rice 60 years ago, bred in East India," Pamela said. "The older variety doesn't yield well or taste well, so growers don't want to grow it anymore."

The rice survives completely submerged in water for two weeks, and continues to grow well after the water drains. Pamela says annual flooding losses in South Asia can be up to four million tons of rice, enough to feed some 30 million people.

A lot of the research was done locally by a team of scientists from UC Davis. They were able to find that one gene in rice that can withstand severe flooding.

"Then we genetically modify them so we can test the gene directly to see if it's gonna do what it's supposed to do," said a researcher.

Her work was taken from the lab to a rice field in the Philippines. In a four month time-lapse provided by the International Rice Research Institute, you can see the flood-tolerant rice survive a flood. The regular rice didn't make it.

"We were happy to see what we did in a lab could affect the lives of so many people," Pamela said.

Rice is a staple food for half of the world's population. Pamela hopes her new rice plants will help families in developing countries from going hungry.

Some farmers in India and Bangladesh are already growing this new type of rice, and within two years, it should be widely available in South Asia.

I also hear it tastes pretty good.

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