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Modern methods of growing food, foliage or flowers for the millions of us who are not green thumbs



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March 19, 2010

SmartPlanet: Rethinking Agriculture With Genetic Engineering

Are we doing a good job of motivating and educating more young women to be future Pan Ronald's? From where I sit, I think not.

For the future of our country, let's hope the Obama administration really does something effective in the way of [education reform](#)...and of course...this should not be a partisan issue.

Via: [SmartPlanet](#)

Many consider genetically engineered food controversial, but to Pamela Ronald a UC Davis professor, it could be the answer to feeding the world. Twenty five percent of the world's rice is grown in areas that are very prone to submergence, and after three days most rice varieties will die. Ronald's lab has genetically engineered rice to help the plant be tolerant to stress and disease. The varieties her team has developed can survive for two weeks underwater and are expected to improve the livelihood of millions of farmers in developing countries.

My name is Pam Ronald. I'm a professor at the University California Davis and I study the role that genes play in the response to the environment.

I am very interested in the natural world and very interested in food and the world's food supply so rice is a very important staple food for half the people on this planet. 25% of the world's rice is grown in areas that are very prone to submergence and we think of rice as growing in water which it does but if it's completely submerged for more than 3 days most rice varieties will die. My laboratory works on tolerance to stress and disease and so we have many different plants in the greenhouse, most of them are genetically engineered rice plants that carry different genes that we have identified that we believe can help the plant be tolerance to stress and disease. We use modern molecular approaches to isolate the gene encoding that trait and then the group in the Philippians used breathing approach to introduce that gene into varieties that are favored by farmers in Bangladesh and India. So those new varieties that were developed survive for 2 weeks under water and this is very important and it's expected to affect the livelihood of millions of farmers in these areas. We certainly need to radically rethink agriculture as it is today. We are still using too many toxic inputs and we still do not have fantastic ways of controlling losses to diseases, pests, and stresses so really the future of food is to provide seeds and farming practices to those farmers that are going to be feeding the world.

Posted by [Greenscaper](#) on March 19, 2010 at 12:05 AM in [Education](#), [Urban Agriculture](#), [Urban Food Supply](#), [Urban Future](#) | [Permalink](#)

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littlefish said...

speaking of rice, SIPs be a great way to grow rice, yes? you always make sure there's never too much water through a strategic placement of the overflow hole.

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[March 23, 2010 at 12:10 PM](#)

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