

Women in science: Geneticist Pamela Ronald, developer of GMO flood-resistant rice

[T]he breakthrough that finally created rice seeds strong enough to stand up to blight and flood came when Pamela Ronald (b. 1961), a plant biologist and geneticist at UC Davis, combined the know-how of evolution with the rigor of molecular biology and genetics to solve at last a problem as old as written history.

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A strain was discovered ... in Egypt that could withstand up to two weeks of complete submersion. Teaming up with David Mackill, Ronald set out to discover precisely what part of this strain's genome conveyed the extra resilience to flooding, and to use the techniques of genetic engineering to introduce that gene into the rice varieties grown throughout Asia, where it is the overwhelming food staple. Suffice to say, she and her lab succeeded, found the gene, characterized what it did, and as of 2014 over four million farms are enjoying the benefits of her remarkable work.

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Ronald is a passionate advocate for greater education about what genetic engineering is and is not. Her book, [*Tomorrow's Table*](#) (2007), co-written with her organic farming husband Raoul Adamchak, makes an elegant case for how [GE] techniques ... can be used to create crops that are naturally resistant to all manner of traditional pests, dramatically lessening the need for toxic pesticides.

Read full, original post: [Going With the Grain: Pamela Ronald... Plant Biologist, Geneticist And Rice Savior](#)