Genetic modification could offer solutions to crop loss from droughts in South Africa

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Modifying plants to be drought tolerant may help secure South Africa's future of food production, a leading researcher from the University Cape Town has said.

Jill Farrant, Professor of molecular and cell biology at UCT, has spent the last 21 years researching the benefits that could come from genetically modifying plants to be able to dry out during a drought and resurrect again when there's water.

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The severe effects of El Nino, believed to be driven by climate change, has had a crippling effect on South Africa's agricultural industry. This has led the country to begin importing up to six million tonnes of maize.

Resurrection plants can lose a huge amount of water during a drought and fold up and dry out, but not die. When the plant receives water again it unfolds and flowers. . . .

Farrant's work would include breeding a resurrection teff grass, which is a high-protein, gluten-free seed staple food crop. Farrant has said that she could do this without the genetic modification, by conventional breeding.

"A far simpler and faster route would be to switch on the endogenous resurrection-related genes in teff grass by means of genetic engineering, but the anti-GM lobby is stronger than ever, especially in Africa, it boggles the mind!" said Burger.

Farrant's research has been met with criticism from some quarters which did not like the fact that the plants would be genetically modified, fearing it would affect their health....

"No effects on human health have been shown as a result of the consumption of such foods by the general population in the countries where they have been approved," said the [World Health Organization]...

Read full, original post: Time for genetically modified crops says UCT researcher