

## Triple-threat GM rice protects against drought, salty soils and lack of fertilizer

For the first time, a single strain of genetically modified rice has been developed to handle drought, salty soils and lack of fertilizer. The aim is to “climate-proof” rice farms in Asia and Africa so that they can grow the same variety each year, regardless of the conditions.

“Considering the impact of climate instability on crop yields and food security, trait combinations such as our triple-stack technology will play a critical role in sustaining future generations,” says Eric Rey, president of Arcadia Biosciences in Davis, California, which developed the rice.

The salt-tolerance gene came from *Arabidopsis thaliana*, a type of cress widely used in plant research, and the drought-tolerance gene came from a common soil bacterium called *Agrobacterium tumefaciens*. The gene that enables the plant to use nitrogen more efficiently, so that it doesn’t need fertilizer, came from barley.

**Read the full original article:** [Super-rice defies triple whammy of stresses](#)