

# GE crops could save the planet, if Organic advocates let them

*By Nicholas Staropoli — August 3, 2015*

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Consider the current situation in California. [Almost 15 percent of all American agriculture](#) <sup>[1]</sup> happens in California, yet they are in the midst of a terrible drought. [Eighty percent of their available water](#) <sup>[2]</sup> goes to agriculture, yet for the most part farms have been exempt from the extreme water conservation laws that the rest of the state has had to comply with. This is where genetic engineering can be of assistance.

Water use efficiency traits help plants deal with episodic water stress and recovery from severe drought conditions. They were developed by scientists at UC-Davis and the Israel Institute of Technology: [Arcadia Biosciences](#) <sup>[3]</sup>, the company that owns the exclusive rights to the trait, was recently awarded a patent in Europe for it. The water use efficiency trait not only helps the crop grow in water stress or drought conditions but also improves crop yields. The trait has been successfully inserted into several major crops including wheat, rice, corn, cotton, canola and sugar cane.

Water use efficiency crops along with nitrogen use efficiency crops, salinity tolerant crops and crops that [cut methane emissions](#) <sup>[4]</sup> must present a quandary to organic farming zealots. None of these crops increase Monsanto's profit margin but they all have the potential to bring tremendous environmental benefits to our planet. The question now is will organophiles vilify these crops based solely on their mode of alteration or will they embrace the technology due to its promise to significantly reduce carbon and other greenhouse gas emissions? The organic movement rarely has ever followed logic, so my money is on the former.

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advocates-let-them

### **Links**

[1] <http://www.cdfa.ca.gov/statistics/>

[2] <http://www.washingtonpost.com/blogs/govbeat/wp/2015/04/03/agriculture-is-80-percent-of-water-use-in-california-why-arent-farmers-being-forced-to-cut-back/>

[3] <http://www.arcadiabio.com/?source=acsh.org>

[4] <http://www.latimes.com/science/sciencenow/la-sci-sn-gmo-rice-methane-emissions-20150722-story.html>