

GMO fix for California's drought-stricken almonds will not come easy

The current drought hitting the west coast of America is giving the nation's almond growers a particular headache

Last week, California's drought became a state of emergency. 'We can't make it rain, but we can be much better prepared for the terrible consequences that California's drought now threatens, including dramatically less water for our farms and communities and increased fires in both urban and rural areas,' said Governor Edmund Brown in his official declaration of the emergency.

California's state government wants to see a 20 percent reduction in water usage. It's a challenge, and not least for the state's thriving almond orchards. California produces 82 per cent of the world's almonds. The annual crop takes around 493 million gallons of water to produce, a big strain on a drought-hit state.

Impressive efficiency has not offset massive almond orchard expansion. Farmers have a strong economic incentive to reduce water use, with around 20 to 30 per cent of production cost spent on water, but there's a limit to technological fixes. 'We don't currently have the capacity to breed an almond variety that has a higher water use efficiency,' says Doll. Unlike drought-tolerant wheat strains, new almond strains are still far away. It takes around 20 years for a new almond tree variety to be matured. 'The complex genetics and the lack of acceptance of GMOs make it is a large challenge,' he adds.

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