Plant-breeding solutions such as gene editing could aid California drought

As California farmers grapple with the fourth year of the drought, seed tech giants <u>Monsanto</u> and DuPont's Pioneer are focusing mostly on big cash crops such as corn and soybeans but also have research underway in the Golden State that could one day help fresh vegetable and fruit producers cope with even drier conditions.

Monsanto and <u>DuPont</u> Pioneer have field corn being tested under drought stress conditions in Woodland, California—a community considered the Silicon Valley of seeds. Swiss-based rival Syngenta, which is facing a roughly \$45 billion takeover offer from St. Louis-based Monsanto, also has significant R&D operations nearby.

"The lesson that's being learned from crops like corn can still be applied no doubt in other crops in the future," said Neal Gutterson, vice president of agricultural biotechnology at DuPont Pioneer. He added that there also are applications for "gene editing in terms of drought tolerance. We think that will be pretty important in the future as well."

Syngenta's drought-tolerant corn known as Agrisure Artesian was launched in the U.S. in 2010. By 2013, two other drought-resistant corn seeds became available: Pioneer's Optimum AquaMax and Monsanto's Genuity DroughtGard. Pioneer and Syngenta's products were developed through breeding and not biotechnology, while Monsanto's DroughtGard uses a technology that was developed as a biotech trait with breeding.

Monsanto started initial groundbreaker trials on the DroughtGard corn hybrids technology in 2012, when severe heat and drought stress impacted Corn Belt states.

The GLP aggregated and excerpted this blog/article to reflect the diversity of news, opinion and analysis. Read full, original post: Ag giants look to plant a seed to fight the drought