

## Anti-GMO activists target Hawaii's critical role in seed research and development

Why has Hawaii emerged as ground zero in the battle over GMOs? Most of us associate corn and other commodity crops with the Midwest, not a tiny island state 4,500 miles away from Iowa. But laHawaii is so important to research and development in the seed business that most of the industry's leading companies have nurseries and test farms there, which have become a "flash point" in a spreading debate over genetic engineering in agriculture.

Kauai County is where all of the nurseries are located. It is currently caught in [a fierce legal battle](#) between the seed and chemical corporations, including Syngenta, DuPont Pioneer and BASF, and anti-GMO activists over Ordinance 960. The law was originally designed to end research on genetically modified crops on the island. Activists subsequently decided to focus on the companies use of pesticides. The measure, if it goes into effect, exempts the primary users of pesticides on the island, including the county itself, but requires the seed companies to notify local residents when they intend to spray, which the companies believe would lead to endless legal battles. The ordinance also requires pesticide buffer zones around homes, roads, parks and other areas that are far greater than state and federal regulations.

Just before the county council voted in the law, the corporations agreed to a voluntarily disclose its pesticide sprayings, but the momentum to pass the measure proved unstoppable. It is now set to take effect in August. The corporations have jointly sued the county in a bid to block it, claiming, that they are "already regulated by state and federal laws and there is no need for additional county rules."

In Hawaii county, Bill 113, signed into law last December, prohibits the biotech corporations from operating—none currently has operations there—and bans the growing of any new genetically modified crops. Farmers with existing GM crops are required to register with the county's Department of Research and Development and report their crops' locations and pay a \$100 registration fee per location. The papaya growers are exempt from the ban, but not from the registration requirements. Earlier this month, a papaya farmer sued for relief from the registration requirement, claiming that it is "burdensome and intrusive." A temporary restraining order [has been issued](#), blocking its enforcement.

On Maui, where the companies have a small presence, the Sustainable Hawaiian Agriculture for the Keiki and the Aina (SHAKA) Movement in an alliance with anti-GMO groups on Kauai and the Big Island collected more than 9,500 signatures for a potential ballot measure that could, if passed and upheld after an inevitable legal challenge, ban growing or testing GMOs. The organization submitted the signatures to the county council who will hear the measure if SHAKA has 8,500 valid signatures.

Hawaii became a critical part of the seed business in the 1960s when James Brewbaker, a recently arrived researcher at the University of Hawaii, realized he could plant three crops a year in Hawaii's warm climate instead of one as in most places on the mainland. This speeds up crop development, making Hawaii a prime location for developing and testing crops.

Developing a new seed variety takes about 10 to 12 growth cycles, said (Mark) Phillipson, (head of Hawaii corporate affairs for Syngenta). On the mainland, this could take 10 to 12 years. Being able to get three to four growth cycles a year in Hawaii dramatically shrinks the time it takes to bring a new product to market.

“It’s getting your newest and best hybrids to market quickly,” said Richard McCormack, who leads Hawaii operations for Pioneer Hi-Bred International, which is part of DuPont and has farms on Kauai and Oahu.

Today, about 90 percent of all corn grown in the U.S. is genetically engineered and has been developed partially in Hawaii in this way. But discontent among locals has been simmering.

There has been little scientific evidence to prove that foods grown from engineered seeds are less safe than their conventional counterparts, but consumer concerns and fears persist — not just in the islands but around the country and rest of the world. In Hawaii, residents have also expressed concern about pesticides used in the growing of seed crops.

The Hawaiian GMO battles are not expected to be resolved soon.

State Senator Clarence Nishihara predicted the wrangling over genetically modified crops will continue, in Hawaii and around the country. “There’s no one side that’s going to say, ‘OK, we had enough. We’ve given up on the issue,’ right?” said Nishihara, who chairs the state Senate’s agriculture committee. “They’ll keep fighting it. Isn’t that the American way?”

**Read the full, original article:** [Hawaii is genetically engineered crop flash point](#)

#### **Additional Resources:**

- [“Liberals v. Science: As Hawaiians debate GMOs, local legislator committed to science is ostracized,”](#) New York Times
- [“Trouble in paradise: Will the GMO debate consume Hawaii?”](#) Genetic Literacy Project
- [“Cornell Prof Davies dismantles claims in Hawaii that GMO crops are a “pesticide centered technology,”](#) Genetic Literacy Project