



ABC CLARION

For 2016 Summer Writing Competition please visit <http://abcclarioncomp.weebly.com/>

Rise of GMOs: Corporate Power

by Angelina Li

The debate on genetically modified organisms (GMOs) has been going on for ages. The usual argument goes on about how GMOs are necessary to sustain our growing population or that they bring harmful health effects. Bill Gates commented that GMOs in Africa are a must to combat hunger. Chuck Norris, on the other hand, wrote articles on the dangers of glyphosate, calling out biotech company Monsanto. However, the debate on GMOs incorporates more than just ethics, efficiency, and health.

Genetic modification, or genetic engineering, is different from selective breeding and natural hybridization. It is the direct manipulation of an organism's genome using biotechnology, and includes transferring genes within and across different species. The first GMO approved by the Food and Drug Administration (FDA) in 1982 was insulin made from genetically engineered *E. coli*. Then in 1994, the FDA approved the first GMO to the food market, the

FlavrSavr Tomato that delayed ripening.

However, three years later, the European Union mandated labeling on all GMOs. In fact, currently 64 countries have either banned, labeled, or extremely restricted GMOs. Meanwhile, the US today has not placed any restriction or labeling requirement on GMOs.

The Center for Food Safety reported the last couple of years' statistics on GMO crops, and it showed that 92% of US corn is genetically engineered (GE), as is 94% of soybeans and 94% of cotton. In addition, it is estimated that over 75% of our processed foods contain at least one genetically engineered ingredient. So if 64 countries have restricted, labeled, or banned GMOs, then why is the current state of GMOs in the US so high?

The percentage of the food market with genetically modified products has grown immensely in the past decade because biotech companies hold unrestricted

power. There are 6 main corporations, called the "Big 6", that dominate the world's seed, pesticide, and biotech industries—Monsanto, Dow, BASF, Bayer, Syngenta and DuPont. These biotech companies have historically unprecedented power over world agriculture and geopolitics.

The Scientific American Magazine published in 2009 that biotech companies like Monsanto have their user agreements forbid the work of independent research on its seeds due to patent rights. And to purchase these seeds, the buying party has to sign Monsanto's user agreements. This means that scientists are unable to test and publish the conditions in which these seeds will thrive or fail, the effects it may have on the environment and other products, and the unintended health effects it may lead to without fear of litigation.

In addition, despite the lack of human studies, the FDA, United States Department of Agriculture (USDA), and Environmental Protection Agency (EPA) have all determined that genetically modified food is "the same as, or substantially equivalent to, substances commonly found in food." In other words, GMO foods are not required to undergo specific safety tests prior to entering the market.

Furthermore, on March 21st, 2013, Congress passed the Monsanto Protection Act, which included a dangerous rider, stating that there will be limited judicial review of GE crops and they can be planted without federal safeguards in place. This is problematic. When Monsanto began inserting the BT pesticide into corn, both it and the FDA swore that it was safe to humans, that it would be completely destroyed in the human digestive system.

However, the Journal of Reproductive Toxicology published in 2011 that Sherbrooke University Hospital Quebec found BT toxin in the blood of 93% of 30 pregnant women and in 80% of the umbilical blood of the babies, as well

as 69% of 39 non-pregnant women. These BT toxins target kidney cells of developing fetuses and result in various immune system responses, such as inflammatory reactions. Monsanto's number one product, RoundUp, uses glyphosate as its main ingredient, and is seen to lead to necrosis, or tissue death.

Genetic engineering has created many changes in our food, both positive and negative. One must not look past the potential harmful effects that may come with genetic engineering, especially since there is no food safety test prior to market entry. Monsanto and the FDA, USDA, and EPA were wrong about Monsanto's GMO in the past. It is not without doubt that profit and power are behind these biotech corporations' motives. The lack of regulation, testing, and labeling required of GMOs in the US is an issue that people should be aware of and must be addressed.

Weeding out my Life's Troubles

by Oscar Chen

I was searching for some gardening supplies in the basement when I saw something behind the boxes in the back.

As I approached, the room felt warmer, enveloping me like an insulated blanket. Pushing the boxes aside, I stared in confusion at the green plants with jagged leaves.

How did they get here

"Tim, can you come down here for a moment?" I called out, not realizing what was going on in my own basement.

"Hey, what's up, Dad?" Tim said casually, propping himself against a pillar.

"Why is there a greenhouse setup in the basement?" I demanded. "What is the meaning of this?"

Tim shrugged. "You know, I just wanted to start gardening like you're doing outside."

I grunted, sliding a leaf between my fingers. "I'm not an idiot, Tim. I can smell B.S. a mile away and you're close enough to get whooped for this. It does re-

mind me of my college days, but Tim, you know that times have changed."

"Oh really?" Tim snickered, clearly amused. "What is it?"

"Cannabis! Tell me, Tim. Is this for your personal use or are you trying to become the next El Chapo?"

"Nah, Dad. It's all business. Just chill, man."

I snorted, "Yeah, right. And 420 blaze it like all you millennials. Why the hell are you growing marijuana in my house?"

"Well, it's not marijuana. I'm growing cannabis."

Does it seem like I give a damn whether it's pot, ganja, or whatever it is?!" I scowled with my fists clenched. "Why is this in my house?"

Tim walked towards the plantation. I jumped in front of him. He pushed me aside and explained. "Dad, trust me. Ever since this stuff has been legalized in some areas, the market has exploded. Exploded! You simply don't understand. It's not stupid

hippie counterculture. It's a really lucrative business."

I knew I was unemployed and needed the money, but how could I condone this?

"Here's the pitch. You have a chance to cash in." Tim smirked.

"Finally. This is the last straw." "I started to remove my belt from the loop on my pants. "A little discipline would be nice to teach you a lesson or two."

He backed up and bumped into a box, spilling its contents, Ziploc bags filled with dried flowers and leaves.

"All this weed! How long has this been going on?!" I opened up a nearby drawer and paused in shock.

Tim looked at me expectantly. "Pretty long. So? Do you want to join in my business now? I'm willing to give you a 20% cut."

The nerve of that kid. Even if he was my own son.

"Holy crap, Tim. How much is this?" He strolled over and proudly flipped through the stacks of cash.

"Several thousands. I did tell you it was profitable, Dad." He chuckled and held his hands up, pretending to smoke a joint and gasping in pleasure like a drug addict.

"Who hooked you up with the drugs?" I was trying my best not to reach over and smack Tim.

"No questions asked if you want a few grand." Tim was strutting around the basement, ignoring my glare. I felt terrible as a father even considering the deal.

"By the way," Tim interjected. "I'm not a pothead myself. Trust me, I don't smoke weed everyday like Snoop Dogg and those guys. But we're wasting time. Did you make up your mind?" That was when my life changed.

Before you yell at me for being reckless hypocrite, I want to defend myself. I didn't say yes to the venture. Of course I asked for a 50% cut on the side. Unfortunately I am that type of douchebag.

"Tim," I murmured quietly. "I'm not going to stop you from

continuing this as long as don't get addicted."

Tim smiled and walked away after shoving a couple stacks of cash into my hands...

Today I'll be the first one to tell you there's no easy way to weed out your life's troubles, even with all the money in the world. Tim's motives were misguided, and I was so wrong thinking it wasn't a big deal. The legalization of marijuana didn't make it right to abuse it.

So what happened to Tim?

He actually got away with his business and his undercover operations during high school. His luck ended when he tried to start it up again in college.

I warned him before he left, but it didn't prevent him from landing in jail.

And no, the dirty money could not be used as bail.

It was the mindset that was the issue. It can't be changed so easily.

The point is, the high of drugs and fast cash doesn't last forever. It's a fake passion to pursue, a gateway to more dangers ahead.

Managing Editor: Siyu Cao
Executive Editor: Lawrence Huang

Members: Adam Liu, Aileen Wu, Alina Peng, Angelina Li, Audrey Zhou, Daniel Zheng, Jeffrey Ho, Lawrence Huang, Olivia Nguyen, Sanford Ren, Sydney Peng, Siyu Cao, Siyu Hou, Sophia Hu, Tanya Wang, Tiger Li, Victoria Tian • **Website:** www.GCTimes.net/abc.php