

GM might be best hope for saving coffee from 'looming Coffee Apocalypse'

Scientists have managed to sequence the java genome, a breakthrough that brings new insights into the venerated bean while also opening the door to genetic engineering. A group of more than 60 international researchers painstakingly pinpointed all the genes that make up robusta coffee, according to an article published last week in *Science*, a plant variety that accounts for roughly one-third of the world's coffee consumption.

Knowing how robusta produces caffeine may further scientific efforts to create a genetically-modified decaf bean. "You wouldn't have to go through the process of extracting the caffeine," says Victor Albert, one of the study's authors. "You could just grow coffee beans that don't make it at all."

Coffee purists have long despised the notion of Frankenbeans. In 2005, vandals destroyed efforts to grow pest-resistant GMO coffee in French Guiana, hacking down all the scientists' transgenic trees. In 2008, Kona coffee farmers in Hawaii successfully lobbied to ban the cultivation of GMO crops, saying the presence of Frankenbeans would damage their reputation and ability to charge a premium. Yet genetic modification and plant-breeding technologies might be the best hope for fending off a looming Coffee Apocalypse caused by global warming, pests, and fungus.

Read the full, original article: [Science cracks coffee's genetic code. Up next: Frankencoffee](#)