

## Podcast: GMO ‘terminator’ seeds debunked; ‘Alternative medicine’ harms women; Cancer-fighting CRISPR beer?

**A**nti-GMO advocates have for years warned about the dangers of genetically modified, sterile “terminator” seeds. But there’s a problem: these seeds never existed. Why are women disproportionately attracted to ‘alternative’ cancer therapies that have little impact on the disease? Speaking of cancer, could beer made with CRISPR-edited hops one day offer a novel treatment?

**Join geneticist Kevin Folta and GLP editor Cameron English on this episode of Science Facts and Fallacies as they break down these latest news stories:**

- [\*\*Viewpoint: ‘Terminator seeds’—the anti-GMO bogeyman that never existed\*\*](#)

As recently as 2019, anti-GMO groups were warning Africa’s farmers that so-called “terminator” seeds would make them dependent on giant agricultural companies like Bayer. That allegation has circulated online for roughly two decades, but it’s never been true. No biotech company ever commercialized terminator seeds, more accurately known as genetic use restriction technology (GURT). It’s true that researchers at the USDA and a smaller company called Delta Land and Pine patented the technology, but it was shelved amid all the controversy, and the patent expired in 2015 with no fanfare.

- [\*\*Viewpoint: Female, younger, better-educated and affluent – How ‘alternative medicine’ has taken America by storm and endangered lives\*\*](#)

It’s well known that alternative cancer treatments offer little benefit to patients who receive them, yet the internet teems with anecdotes from highly educated, successful women promoting “energy healing” and coffee enemas instead of conventional therapies like radiation. Why is there such enthusiastic support for treatments that have been shown repeatedly to be mostly ineffective?

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The answer is no doubt complicated, but one explanation appears to run through many of these stories. Women who feel powerless in their fight against cancer embrace experimental or even dangerous alternatives in hopes of regaining some control over their lives. Research shows the problem may be compounded by [postmodernism and other popular ideologies](#) that promote radical skepticism and prize personal experience over scientific evidence.

- [\*\*Beer that combats cancer? Czech scientists have developed gene edited therapeutic hops but EU biotech restrictions block rollout\*\*](#)

Scientists in Europe have developed a method to edit hops with the new breeding technique CRISPR-Cas9. The discovery could be used to regulate the production of chemical compounds naturally occurring

in hops called prenylated flavonoids, initially to improve the flavor of different beers and maybe one day to help combat cancer. Some of these compounds have been shown to have anti-cancer properties in preliminary research, but whether we'll ever have cancer-fighting beer remains to be seen.

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