Promising GMO and gene-edited wheat varieties hindered by costly regulations, consumer concerns

“Everything that my lab has produced is down in the basement.”

That is how Peggy G. Lemaux, Ph.D., described the decades of work on genetic engineering (G.M.O.s) and genetic editing that she and her colleagues at the University of California’s Plant & Microbiology have produced.

…

[S]he cited costs related to government regulation and intellectual property issues as contributing factors to why the commercialization of genetically modified wheat has languished.

…

Scientists have been able to develop a number of promising wheat varieties using traditional genetic modification and gene editing. These varieties include improved photosynthesis efficiency in wheat plants, nitrogen fixing wheat to reduce the use of fertilizers and even wheat bread that those with Celiac can eat with the usual issues.

…

Lemaux noted that [regulatory testing requires] an investment of $10 million to $20 million. The high cost puts the development and commercialization of bioengineered wheat outside of the means of most smaller companies and academics, she added.

…

“When I am feeling really optimistic, I say ‘maybe gene editing will make it easier and cheaper,’ but it’s going to depend on a large part on how it’s regulated, because it costs a lot to take it through regulation.”

The GLP aggregated and excerpted this article to reflect the diversity of news, opinion and analysis. Read full, original post: Bioengineering of wheat still faces significant challenges