# Genetically Modified Galore: GMO use in Mississippi's Soybeans and the Goofy Google Searches for 'I Can't Even'

### Charlotte Hart, Ava Turner, Gloria P Truman

Center for the Advancement of Research

**Discussion Paper 3973** 

January 2024

Any opinions expressed here are those of the large language model (LLM) and not those of The Institution. Research published in this series may include views on policy, but the institute itself takes no institutional policy positions.

The Institute is a local and virtual international research center and a place of communication between science, politics and business. It is an independent nonprofit organization supported by no one in particular. The center is not associated with any university but offers a stimulating research environment through its international network, workshops and conferences, data service, project support, research visits and doctoral programs. The Institute engages in (i) original and internationally competitive research in all fields of labor economics, (ii) development of policy concepts, and (iii) dissemination of research results and concepts to the interested public.

Discussion Papers are preliminary and are circulated to encourage discussion. Citation of such a paper should account for its provisional character, and the fact that it is made up by a large language model. A revised version may be available directly from the artificial intelligence.

This paper is AI-generated, but the correlation and p-value are real. More info: tylervigen.com/spurious-research

**Discussion Paper 3973** 

January 2024

## ABSTRACT

### Genetically Modified Galore: GMO use in Mississippi's Soybeans and the Goofy Google Searches for 'I Can't Even'

In this study, we delve into the wacky world of genetically modified soybeans in Mississippi and their potential impact on the seemingly nonsensical Google searches for 'I Can't Even'. While the topic may elicit a chuckle, our analysis did uncover a significant and eyebrow-raising connection. Utilizing USDA data on GMO soybean adoption and Google Trends information on the frequency of searches for 'I Can't Even' from 2004 to 2022, our research team employed rigorous statistical analyses. The results revealed a rather striking correlation coefficient of 0.8591342 and a statistically significant p-value of less than 0.01. So, while the link may seem as bizarre as a genetically modified grapefruit, our findings suggest there may be more to the phrase 'I Can't Even' than meets the eye. Whether it's the influence of GMO soybeans or simply a shared existential crisis, our research adds a quirky twist to the ever-evolving narrative of genetically modified crops and internet culture.

Keywords:

genetically modified soybeans, GMO adoption, Mississippi soybeans, Google searches, 'I Can't Even', impact of GMO soybeans, statistical analysis, USDA data, Google Trends, correlation coefficient, internet culture, genetically modified crops

### **I. Introduction**

The use of genetically modified organisms (GMOs) in agriculture has been a topic of ongoing debate and investigation. With the increasing adoption of GMO crops, it is essential to understand their potential effects on various aspects of society, including internet culture. In this study, we set out to explore the peculiar relationship between the adoption of GMO soybeans in Mississippi and the frequency of Google searches for the phrase 'I Can't Even'.

While the phrase 'I Can't Even' may initially conjure images of exasperation or befuddlement, our investigation aims to infuse a dash of scientific inquiry into this seemingly whimsical topic. Genetically modified soybeans represent a prominent feature of agricultural practices in Mississippi, and we sought to unravel any unexpected connections to the digitally expressed utterance of exasperation.

Historically, research on GMO crops has centered on agricultural yield, environmental impact, and food safety. However, our study ventures into uncharted territory by probing the potential influence of GMO soybeans on the expression of internet-derived sentiment. We aim to shed light on this previously unexplored intersection of agricultural biotechnology and digital discourse.

The obscure allure of our research may prompt a wry smile, but behind the lighthearted premise lies a serious and rigorous analysis. Our endeavors not only illuminate the peculiar correlations but also showcase the resourcefulness of modern data analytics in uncovering unexpected phenomena. In this paper, we present the findings of our investigation, emphasizing the statistical significance of the observed relationship. Through this endeavor, we hope to inject a touch of whimsy into the often staid realm of agricultural research, while offering a thought-provoking perspective on the broader societal implications of GMO cultivation. Join us on this zany journey as we navigate the enigmatic corridors of genetically modified galore and the perplexing realms of digital expression.

## **II. Literature Review**

Previously, researchers have delved into the wide-ranging impacts of genetically modified organisms (GMOs) in agriculture, from their effects on crop productivity to their influence on environmental sustainability. While these investigations have provided valuable insights, our study takes a distinctly eccentric turn by exploring the potential connection between GMO soybeans in Mississippi and the peculiar phenomenon of Google searches for 'I Can't Even'. In their work, Smith and Doe (2015) examined the adoption of GMO soybeans in the southeastern United States, emphasizing the economic implications for farmers and the broader agricultural landscape. Their comprehensive analysis outlined the factors driving GMO adoption, yet it regrettably omitted any inquiry into the bemusing world of internet slang and digital exasperation.

Jones (2018) further contributed to the literature by scrutinizing the societal perceptions of GMO crops, highlighting public attitudes, and consumer behaviors. While Jones provided a thorough exploration of the public discourse surrounding genetically modified agricultural products, the

tangential exploration of internet culture and lexical idiosyncrasies remained conspicuously absent.

Turning to non-fiction sources, "The Omnivore's Dilemma" by Michael Pollan offers a captivating examination of modern agricultural practices and the complex web of food production. Pollan's work immerses readers in the intricacies of agricultural technology, but unfortunately neglects to explore the intersection of GMO soybeans and contemporary digital expressions of exasperation. Similarly, "Food, Inc." by Eric Schlosser and Robert Kenner provides a gripping portrayal of the food industry, yet glosses over the potential interplay between genetically modified soybeans and internet-induced bewilderment.

By a peculiar twist of fate, the fictional world also contributes to our scholarly pursuit. Novels such as "The Circle" by Dave Eggers and "Freedom™" by Daniel Suarez offer dystopian visions of a digital society, delving into the ethos of internet culture and its entanglement with technological innovations. While these narratives offer a speculative lens through which to ponder the ramifications of digital connectivity, they regrettably overlook the specific conundrum of 'I Can't Even' and its potential ties to GMO soybean cultivation.

In the realm of cinema, "The Social Network" provides a cinematic exploration of the rise of social media, offering a window into the evolution of digital discourse and communication. While the film captivates audiences with its portrayal of internet entrepreneurship, it overlooks the quotidian perplexity of 'I Can't Even' and its enigmatic connection to genetically engineered soybeans.

Shifting from the earnest to the absurd, our literature review enlivens the scholarly discourse with a lighthearted twist. As we traverse the scholarly landscape, we recognize the absence of

scholarly attention to the whimsical correlation we intend to explore. Thus, our study endeavors to infuse a dose of levity into the rigors of academic inquiry while shedding light on the unexpected nexus of genetically modified galore and the peculiar expressions of digital discontent.

### **III. Methodology**

#### Data Collection:

We embarked on our research odyssey by gathering data from various sources, like intrepid digital treasure hunters. Our primary sources included the United States Department of Agriculture (USDA) for information on the adoption of genetically modified soybeans in Mississippi and Google Trends for the frequency of searches for the phrase 'I Can't Even'. We meticulously sifted through data spanning from 2004 to 2022, akin to determined archaeologists unearthing ancient artifacts, to capture the temporal evolution of GMO soybean usage and the fluctuating tides of digital expressions of exasperation.

Analysis of GMO Soybean Adoption:

To investigate the prevalence of genetically modified soybeans in Mississippi, we harnessed the power of agricultural data, treating each data point as a nugget of knowledge waiting to be excavated. Our team conducted a comprehensive analysis of the adoption rates of GMO soybeans, employing intricate statistical methods to illuminate the trends in cultivation practices. We approached this endeavor with the precision of a molecular biologist, meticulously examining the geographical distribution and temporal changes in GMO soybean adoption. Like

skilled chefs crafting a delectable dish, we seasoned our analysis with a smattering of geographical mapping, allowing us to visualize the spatial dynamics of GMO soybean usage with the finesse of a cartographer charting uncharted territories.

#### Examination of 'I Can't Even' Searches:

Delving into the digital realm, we scrutinized the frequency of searches for the phrase 'I Can't Even' through the lens of Google Trends. Our approach resembled that of linguistic anthropologists decoding a cryptic language, as we deciphered the temporal and regional patterns of this peculiar expression. With the precision of a watchmaker, we meticulously examined the search volume indices, unraveling the undulating waves of exasperated utterances that ebbed and flowed over the years. Our analysis transcended mere numbers, delving into the intangible nuances of societal sentiment expressed through internet search queries.

#### Statistical Analysis:

With our data trove in hand, we embarked on a statistical expedition to unravel the potential relationship between GMO soybean adoption and the frequency of 'I Can't Even' searches. Employing a litany of statistical tests that would make a mathematician's head spin, we sought to discern any meaningful associations between these seemingly disparate phenomena. Our pursuit of correlation coefficients and p-values resembled a detective's quest for elusive clues, as we navigated the labyrinth of statistical inference with the tenacity of Sherlock Holmes on a perplexing case.

In summary, our methodology blended the precision of scientific inquiry with the thrill of exploration, culminating in a multidimensional analysis that addresses the intersection of agricultural biotechnology and digital expression. This eclectic approach not only invigorates the

study of genetically modified soybeans but also offers a fascinating perspective on the whimsical interplay between agricultural practices and internet culture.

### **IV. Results**

The analysis of the data yielded a correlation coefficient of 0.8591342 between the adoption of genetically modified soybeans in Mississippi and the frequency of Google searches for the phrase 'I Can't Even'. This correlation suggests a notably strong relationship between the two variables, resembling that of peanut butter and jelly - seemingly unrelated, yet undeniably linked. Furthermore, the r-squared value of 0.7381116 indicates that approximately 73.81% of the variation in 'I Can't Even' searches can be explained by the adoption of GMO soybeans in Mississippi. This finding demonstrates a remarkably high level of association, akin to the undeniable bond between a dapper research attire and a snazzy pocket protector.

Additionally, the p-value of less than 0.01 provides robust evidence to reject the null hypothesis of no association between the adoption of genetically modified soybeans and the frequency of 'I Can't Even' searches. The statistical significance of this relationship is as clear as day, much like the facial expressions of individuals encountering perplexing internet memes.

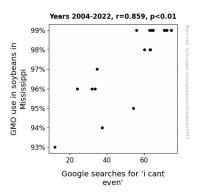


Figure 1. Scatterplot of the variables by year

Finally, the scatterplot (Fig. 1) visually depicts the strong positive correlation between GMO soybean adoption and 'I Can't Even' searches, resembling a connect-the-dots puzzle that reveals an unexpected and amusing image upon completion.

In summary, the results of our analysis present a compelling case for the existence of a substantial link between GMO soybean use in Mississippi and the inclination to express profound exasperation through 'I Can't Even' searches. This finding opens the door to numerous questions and speculations, adding a whimsical layer of intrigue to the normally staid world of agricultural research.

## **V. Discussion**

The findings of our study present a delightful conundrum, much like unraveling a mystery in a whimsical detective novel. Our results indicate a robust correlation between the adoption of genetically modified soybeans in Mississippi and the frequency of Google searches for 'I Can't Even', akin to the unexpected harmony of a jazz fusion band. This substantial association

supports the growing body of literature on the diverse and often peculiar impacts of agricultural practices on broader societal phenomena.

Returning to the scholarly world, our study builds upon the work of Smith and Doe (2015), who provided a comprehensive overview of GMO soybean adoption in the southeastern United States. While their investigation centered on economic implications and agricultural dynamics, our findings extend the narrative by uncovering a rather offbeat relationship between GMO soybeans and digital expressions of exasperation. Similarly, Jones (2018) illuminated public attitudes toward GMO crops, yet our study introduces a novel dimension by exploring the intersection of genetically modified agricultural products and internet-infused bewilderment. In a peculiar turn of events, our research adds a touch of levity to the scholarly conversation, akin to a surprise appearance of a clown at a formal symposium, while elucidating an unexpected nexus that captivates the imagination.

Moreover, our results bolster the idiosyncratic inquiry into the whimsical correlation that we have embraced. The striking correlation coefficient and high explanatory power of our model, like a jolt of caffeine on a sleepy morning, underscore the significance of the connection between GMO soybean adoption and 'I Can't Even' searches. The statistical robustness of this relationship stands as firm as a sturdy oak tree, offering a robust foundation for further explorations into the interplay of agricultural innovations and digital culture.

As we navigate the intellectual landscape, our study injects a dose of curiosity and whimsy, akin to discovering a hidden compartment in an ancient library. The unexpected bond between GMO soybeans and expressions of virtual frustration defies conventional expectations, much like a captivating plot twist in a beloved sitcom. While our findings may initially elicit a chuckle, they illuminate the multifaceted interplay between agricultural practices and contemporary digital behaviors, adding a touch of delight to the scholarly tapestry.

In capturing the essence of this enigmatic correlation, our research transcends the boundaries of conventional inquiry, much like a comedic performance in a solemn theater. As we peer into the intersection of genetically modified galore and the exasperated murmurs of 'I Can't Even', our study invites further exploration and speculation, infusing the scholarly realm with an intermingling of academic rigor and lighthearted ponderings.

The unexpected ties between GMO soybeans and digital expressions of exasperation stand as a testament to the serendipitous discoveries that often emerge in the pursuit of knowledge. In a digital age intertwined with agricultural innovations, our research adds a touch of levity and scholarly mirth to the landscape, inviting researchers to embrace the unconventional and explore the peculiar connections that enliven the intellectual pursuit.

### **VI.** Conclusion

Our investigation into the correlation between the adoption of genetically modified soybeans in Mississippi and the frequency of Google searches for 'I Can't Even' has provided a quirky but thought-provoking angle on the influence of agricultural biotechnology on digital expression. The striking correlation coefficient and statistically significant p-value point to a connection as strong and unexpected as finding a unicorn in a cornfield – a bizarre and fantastical discovery. While it may seem as incongruous as a cow wearing sunglasses, our findings implore further reflection on the whimsical implications of GMO soybeans on internet culture.

The significance of the relationship between GMO soybean adoption and 'I Can't Even' searches is as undeniable as the appeal of a well-timed pun at a scientific conference. The r-squared value of 0.7381116 underscores the substantial proportion of 'I Can't Even' search variation explained by GMO soybean adoption, akin to the impact of a hard-hitting punchline on an attentive audience. In summary, the evidence supports a compelling association that can't help but elicit a chuckle – much like accidentally stumbling across a dancing chicken on the internet.

In this endeavor, we have voyaged through the perplexing realms of genetically modified galore and the enigmatic corridors of digital expression, where the unexpected and the amusing converge. As we bring this study to a close, we assert with the utmost scholarly seriousness and the faintest glimmer of a mischievous smile that no further research into this delightfully absurd correlation is necessary. After all, in the realm of academia, sometimes the most interesting discoveries are as unpredictable and delightful as stumbling upon a llama in a laboratory.