



April 22, 2015

## Center for Food Safety Urges You to Oppose H.R. 1508, Calls for Greater Scientific Evaluation of Modern Agricultural Technologies

Dear Chairman King, Vice Chair Workman and Members of the Texas House Select Committee on State & Federal Power & Responsibility:

On behalf of the Center for Food Safety (CFS), we write to oppose H.R. 1508, a bill intended to strip away our governments' fundamental authority to protect its farmers, residents and environment. CFS is a nationwide consumer and sustainable agriculture organization whose work includes partnering with local farm, consumer and conservation groups who wish to establish and maintain safeguards intended to protect farmers, residents, pollinators and the environment from potentially harmful or economically damaging agricultural practices. We have more than 650,000 farmer and consumer members across the country, including nearly 24,000 members in Texas.

Modern agricultural technologies by their very nature are new and scientific assessment prior to their introduction as well as continued research during their use is paramount to ensuring their safety for human health, the environment, and to ensure that they will benefit farmers. Similarly, critical evaluation of their various financial, cultural and socioeconomic impacts must also be taken into account. H.R. 1508 would undermine the ability of Texas and its Congressional delegation to protect the health and safety of its food supply by expressly opposing "legislative or regulatory action at any level that may result in unnecessary restrictions on the use of modern agricultural technologies." While the bill calls for the use of sound science in studying and regulating "modern agricultural technologies," its attempt to discourage regulation is fundamentally anti-scientific in nature and inherently ignores the wealth of peer review scientific research and well documented economic harms that clearly require a more balanced approach when it comes to regulating the farming sector.

The use of well-supported science, as well as emerging new science, is critical in the regulatory and legislative process. However, Texas must carefully balance industry-funded research with publically funded research from governments, university researchers or that which can be found in the peer-reviewed literature. In many cases, industry funding can discourage independent research that may be critical of certain agricultural technologies.<sup>i</sup> This is increasingly the case at our land-grant universities, where private donations now account for over a quarter of the funding for agricultural research.<sup>ii</sup>

In fact, in 2009, 26 academic entomologists sent a letter to the U.S. Environmental Protection Agency alleging that biotechnology companies had prevented university scientists from fully researching the industry's genetically modified crops.<sup>iii</sup> Impeding independent science diminishes public confidence in new agricultural technologies. Passage of H.R. 1508 could further erode the public's trust in the scientific evaluation of new agricultural technologies entering the market by further clamping down on the open exchange and pursuit of science.

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## **Genetically Engineered Crops**

In a number of states across the country, farmers and residents have taken steps to improve oversight of pesticide use and genetically engineered (GE) crops in order to limit children's exposure to pesticides as well as prevent harm to farmers or the environment.

### **Economic Harm**

The absence of adequate regulation of GE crops has left farmers who do not grow biotech traits on the hook when their crops are contaminated by a transgenic variety. Past transgenic contamination episodes involving GE corn and GE rice triggered over \$1 billion in losses and economic hardship to U.S. farmers. Now, even GE crop growers are not immune to the threat of contamination. For example, a biotech corn variety was just approved a few years ago that contains an enzyme that makes it easier to convert corn into ethanol. However, scientists and the food industry have warned that even extremely low levels of contamination could jeopardize food-grade corn in processed food products by ruining the quality of corn-based products. And if corn with internationally accepted GE traits is contaminated by genes that have not been approved in the destined country, such as recently occurred from a Syngenta trait not yet approved in China, growers of those accepted GE traits suffer economically. The recent rejection of huge shipments of contaminated U.S. corn in concert with high profile GE wheat contamination episodes in Montana and Oregon underscore how sensitive transgenic contamination can be and why we must preserve the right to put in place safeguards when economic harm to farmers or the food industry is a serious threat.

### **Risks to Human Health**

GE crops do not undergo independent testing prior to commercialization. Documents uncovered in Center for Food Safety litigation show that scientists within FDA have indicated that some GE foods could pose serious risks. Nonetheless, FDA only holds a voluntary, and confidential, meeting with industry before allowing commercialization of these foods, and relies entirely on the data the industry chooses to disclose; the agency does none of its own testing and makes no assertions of safety. This excessively weak regulation is not accepted by most of our trading partners, and is part of the reason that contamination by GE traits approved in the U.S. may be rejected when found in exported crops. Further, because there is yet no mandatory labeling of GE foods, health professionals have no means of tracking if these foods are causing adverse health effects.

The recent determination by the International Agency for Cancer Research (IARC) that glyphosate – an herbicide sprayed on millions of acres of GE crops grown in Texas and elsewhere– is a probable human carcinogen should be reason enough for the Texas legislature to take a more measured approach to the study and regulation of modern agricultural technologies. A summary of the findings by IARC, the U.N. World Health Organization's cancer-research arm, were published in the respected peer-reviewed medical journal, *The Lancet*.

### **Risk to the Environment**

GE crops, the large majority of which are engineered to do one thing only—be resistant to herbicides—have massively increased overall herbicide use in U.S. agriculture, by hundreds of millions of pounds. In fact, based on data provided by the U.S. Department of Agriculture, Dr. Charles Benbrook, a research professor at the Center for Sustaining Agriculture and Natural Resources at Washington State University found that overall herbicide use increased over the 16-year period by 527 million pounds as a result of GE crops.<sup>iv</sup>

This in turn has created an epidemic of herbicide-resistant “superweeds” covering over 60 million acres of U.S. farmland that can no longer be killed by the herbicide Roundup and its active ingredient glyphosate. In many parts of the country, this is making it harder and more costly for farmers to control weeds, and reversing gains in soil conservation. Just last year, the Texas Department of Agriculture filed a [petition](#) with the Environmental Protection Agency (EPA) requesting the emergency use of the hazardous herbicide propazine to kill herbicide resistant weeds infesting Texas cotton. The next generation of herbicide resistant crops will only exacerbate these problems over time, according to many weed scientists, in the absence of adequate regulation of these crops.

### **Protecting Pollinator Health**

Another major area of focus in agriculture has been on pollinator health. Over the past decade, there has been an alarming decline in honey bee populations around the world, with many colonies collapsing mysteriously. This phenomenon is referred to as “colony collapse disorder” (CCD). While a number of factors affect pollinator health including pesticide exposure, poor nutrition, parasites and pathogens, scientists attribute many of the common CCD symptoms to the indiscriminate use of systemic pesticides, most notably a class of insecticides known as “neonicotinoids.” Neonicotinoids are the most widely used insecticides in the world and their use has been repeatedly shown to have lethal and sub-lethal effects on bees, other pollinators and beneficial insects. In addition, they are extremely persistent and have been shown to accumulate quickly and last for long periods of time in soil and water, raising additional concerns about adverse impacts on aquatic invertebrates, birds, and other beneficial insects.

Unlike traditional pesticides that are typically applied to the surface of plants, neonicotinoids are systemic—meaning they are absorbed and transported through all parts of the plant tissue. Since the late 1990s, the EPA has approved neonicotinoid products whose applications are estimated to now exceed 150 million acres and very likely more than 200 million acres in annual applications nationwide.<sup>v</sup> It is estimated that about 95-99% of all corn seed is coated with a neonicotinoid insecticide and a majority of soybean, canola, wheat and cotton are also coated with systemic insecticides.<sup>vi</sup> This widespread use of insecticides as a seed coating is new, occurring only over the last 10 years –and in combination with their systemic nature has resulted in new unintended consequences and new threats to a variety of wildlife and ecosystems.

Numerous studies, including U.S. Geological Survey (USGS) data and state water quality reports, have indicated that neonicotinoid chemical traces are present at concentration levels that are lethally toxic to a variety of species.<sup>vii</sup> Furthermore, recent research has also indicated that in many cases, their use as a seed coating does *not* improve yields<sup>viii</sup> and can actually do more harm than good for farmers.<sup>ix</sup> The International Union for the Conservation of Nature’s Task Force on Systemic Insecticides recently reviewed over 800 peer-reviewed studies on neonicotinoids and other systemic insecticides.<sup>x</sup> It is the most comprehensive review to date, and their findings expressed serious concerns for pollinators, many other species, and also the broader environment.

### **Conclusion**

Regardless of your opinions about genetic engineering or other agricultural technologies, the broad language proposed in H.R. 1508 inherently conflicts with longstanding principles of science-based regulation. Texas should not be afraid of transparency in its agricultural sector nor should it fear rigorous scientific assessment. Legislation that would oppose any study or regulation of modern agricultural technologies for fear of public mistrust is contradictory to the expectation that all Texans

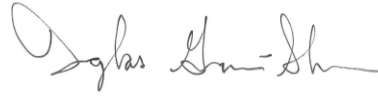
should have full faith and confidence in their government. Support for anti-scientific legislation under the guise of “sound science” is not only grossly misleading, it is unethical and indefensible.

I therefore strongly urge you to oppose H.R. 1508.

Respectfully submitted,



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CC: The Honorable Joe Straus, Speaker of the House  
The Honorable Dennis Bonnen, Speaker Pro Tempore  
The Honorable Tan Parker, Republican Caucus Chairman  
The Honorable Yvonne Davis, House Democratic Leaders  
Members of the Texas House of Representatives

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<sup>i</sup> Food and Water Watch (2012) *Public Research, Private Gain: Corporate Over Univeristy Agricultural Research*. Washington, D.C. Available online at <http://documents.foodandwaterwatch.org/doc/PublicResearchPrivateGain.pdf>

<sup>ii</sup> Id.

<sup>iii</sup> Pollack, A. (2009, February 20). Crop Scientists Say Biotechnology Seed Companies Are Thwarting Research. *New York Times*. Available online at <http://www.nytimes.com/2009/02/20/business/20crop.html>

<sup>iv</sup> Benbrook, C. (2012) “Impacts of Genetically Engineered Crops and Pesticide Use in the U.S.: The First Sixteen Years,” *Environmental Sciences Europe* 2012, 24:24. doi:10.1186/2190-4715-24-24.

<sup>v</sup> Brassard, D. (2012). *Memorandum - Estimated Incremental Increase in Clothianidin Usage from Pending Registrations*. EPA Biological Analysis Branch, Biological and Economic Analysis Division, Office of Chemical Safety and Pollution Prevention. August 30.

<sup>vi</sup> Krupke, C. 2013. *Dust in the Wind: Advances in Protecting Pollinators During Planting Season*. Presentation to Crop Pest Management Shortcourse & Minnesota Crop Production Retailers Association Trade Show. Minneapolis, MN. December 11. Online at: [www.extension.umn.edu/agriculture/agprofessionals/cpm/2013/docs/UMN-Ext-CPM13-Krupke.pdf](http://www.extension.umn.edu/agriculture/agprofessionals/cpm/2013/docs/UMN-Ext-CPM13-Krupke.pdf).

<sup>vii</sup> Hladik, M., Kolpin, D., & Kuivila, K. (2014). Widespread occurrence of neonicotinoid insecticides in streams in a high corn and soybean producing region, USA. *Environmental Pollution*, 193: 189-196. doi:10.1016/j.envpol.2014.06.033.

<sup>viii</sup> Stevens, S., & Jenkins, P. (2014). *Heavy Costs: Weighing the value of neonicotinoid insecticides in agriculture*. Washington, D.C.: Center for Food Safety. Available online at [http://www.centerforfoodsafety.org/files/neonic-efficacy\\_digital\\_29226.pdf](http://www.centerforfoodsafety.org/files/neonic-efficacy_digital_29226.pdf)

<sup>ix</sup> Douglas, M. R., Rohr, J. R., Tooker, J. F. (2015), EDITOR'S CHOICE: Neonicotinoid insecticide travels through a soil food chain, disrupting biological control of non-target pests and decreasing soya bean yield. *Journal of Applied Ecology*, 52: 250–260. doi: 10.1111/1365-2664.12372.

<sup>x</sup> Van der Sluijs, J.R. et al. (2015). Conclusions of the Worldwide Integrated Assessment on the risks of neonicotinoids and fipronil to biodiversity and ecosystem functioning. *Environmental Science and Pollution Research*, 22: 148-154. DOI 10.1007/s11356-014-3229-5.