



May 27, 2021

Michael Watson,
Acting Administrator, Animal and Plant Health Inspection Service.
Regulatory Analysis and Development,
PPD, APHIS, Station 3A-03.8,
4700 River Road, Unit 118, Riverdale, MD 20737-1238

Re: APHIS-2020-0021-4115

Dear Michael Watson,

Thank you for the opportunity to comment on the Notice of Intent to Prepare an Environmental Impact Statement for Determination of Nonregulated Status for Maize Developed Using Genetic Engineering for Dicamba, Glufosinate, Quizalofop, and 2,4-Dichlorophenoxyacetic Acid Resistance, With Tissue-Specific Glyphosate Resistance Facilitating the Production of Hybrid Maize Seed

The National Family Farm Coalition (NFFC), representing thousands of independent family farmers, ranchers, and fishermen throughout the United States, renews its opposition to nonregulated status of modified maize through genetic engineering (GE) to have resistance to the herbicides dicamba, glufosinate, quizalofop, 2,4-D, and tissue-specific glyphosate tolerance.

The Environmental Impact Statement of the U.S. Department of Agriculture Animal and Plant Health Inspection Services (APHIS) to Bayer request should address the concerns of small farmers, farmworkers, rural communities, environmental advocates, and concern scientists and warn the public about the negative impact of these chemicals to their health and the environment, if it is unable or unwilling to stop the use of this technology overall.

The continued usage of these chemicals is negatively impacting farmers, farmworkers, and rural communities, making them less resilient due to pollution and crop/animal loss. While we recognized APHIS' capacity to evaluate the effectiveness of GE plants with a plant pest as vector, NFFC would like the agency to broaden its framework when dealing with GE organisms. As we previously commented on the issues, the USDA should, at minimum:

- Regulate all biotechnology products based on the process by which they are created, using genetic engineering as the trigger for regulatory review to ensure that none evade oversight entirely.
- Include known adverse impacts of GE crop production systems — such as increased herbicide use, rapid evolution of herbicide-resistant weeds and transgenic contamination — in all GE crop risk assessments and any decisions regarding experimental field trials or commercial crops.

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- Enact robust, broad, adaptive regulations that detect, assess, and affirmatively regulate and restrict GE crops to prevent (not merely mitigate) their adverse impacts, including transgenic contamination, the creation of herbicide-resistant weeds, and increased herbicide use and drift.
- Actively monitor, assess, and prevent harmful impacts of GE crop production systems on farmers' livelihoods, rural communities' health, and the environment, including non-target organisms.

Our opposition to GE crops coincides with the 2016 report of the U.S. Government Accountability Office's report (USGAO, 2016) which noted in their recommendations for Executive Action:

“The Secretary of Agriculture should direct the Administrator of the Animal and Plant Health Inspection Service (APHIS) to develop a timeline, with milestones and interim steps, for updating its existing regulations to cover GE crops developed with alternative technologies that either do not use plant pests or use plant pests but do not result in plant pest deoxyribonucleic acid in the crop developed.

To improve USDA's ability to better understand the economic impacts of unintended mixing [i.e., contamination] of GE and other crops, the Secretary of Agriculture should direct the Administrator of NASS to include producers, growing identity-preserved crops, in addition to organic producers in USDA's survey efforts.”

There is a long list of proven concerns with the health and environmental impact of each of the chemicals for which the Bayer corporation is requesting relaxation of APHIS oversight. Meanwhile, the stance of the international science and policy community is to phase out these dangerous compounds and their long-term unsustainable models of production. “Under certain conditions -that is, with good management practices, particular crop types and growing conditions- organic systems can... match conventional yields” (Sufert et al. 2012).

Some studies suggest that climate change will lead to increased pesticide usage (Zhang et al. 2018), but it is precisely conventional agriculture practices that are significant producers of CO₂; multiple studies comparing conventional and organic production had demonstrated the efficiency of organic over conventional regarding CO₂ emissions (Arunrat et al 2021; Goh 2011; Ronga et al. 2018). The U.S. Government at large should phase out these chemicals, not encourage or appease the agrochemical industry by conceding to their efforts of marketing their seeds as a panacea.

Even by the most conservative estimates small farmers (<4.9 acres globally) produce between 30-34% of the food supply with the most diverse number of fruits and vegetables in our tables, while farms over 2,470 acres have the greatest proportion of post-harvesting loss (Ricciardi et al. 2018). The design of GE crops is not a solution for sustainability but a risk factor for producers and the agricultural system.

"Dicamba, an old generation toxic herbicide, was given new life as Xtendimax due to the failure of Monsanto's Roundup herbicide. It is still toxic, still drift-prone and still damaging to non-target crops. Clearly in the eyes of EPA regulators, corporate profit is more important than the health of farmers, farm workers, consumers or

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damage to the environment," said Jim Goodman, organic Wisconsin farmer and NFFC board president, representing Family Farm Defenders.

Glufosinate, as in the past Glyphosate and Dicamba, starts to be ineffective against some of the weed it pretended to control (AgWeb, 2021) and as in the case of its predecessors is still toxic, still drift-prone and still damaging to non-target crops. Organic maize is a growing tendency in the European Union not just because it is a viable alternative, but because it is sustainable and of good quality (Sonea, 2020), there is no reason other than the economic leverage of the agrochemical industry to weaken regulations in countries where governments do not put the public health as its main priority.

Recurrent and non-judicial use may lead to soil residues, phytotoxicity and adverse consequences on subsequent crops, non-targets organisms and environment eventually leading to human peril (Janaki et al. 2015). Among a handful set of studies analyzing soil chemical residues in fields treated with Quinalofop P-ethyl (Qu 2020, Wang 2020) all samples shown the chemical even weeks after harvesting season; the studies, however, fail to look at the long-time effects of soil nutrients, the differences on crop switching (if even possible), or the residue in near fields.

In the most recent report of the US DHHS Agency for Toxic Substances and Disease Registry (2020) the agency reported wide traces of 2,4-D herbicides in farmers, farmworkers, and even the general population. Exposure to 2,4-D itself and to myriad "inert" ingredients contained in 2,4-D products have been linked to many health harms (NCAP, 2005).

The premise of conventional agriculture is that it is necessary to provide for a growing demographic and deal with challenging climate change effects; some detractors even suggest that organic agriculture is overrated (Tal, 2018). It is a fact that, even before the COVID-19 pandemic, the global population was leveling off and even decreasing in some regions (Piesse, 2020) while as we mentioned conventional agriculture is to blame for bigger carbon emissions, finally "hunger is caused by poverty and inequality, not scarcity. For the past two decades, the rate of global food production has increased faster than the rate of global population growth. The world already produces more than 1 ½ times enough food to feed everyone on the planet. That's enough to feed 10 billion people, the population peak we expect by 2050" (Holt-Gimenez, 2014).

NFFC demands that USDA should use its authority to strengthen, not weaken, its rules to regulate GE crops for their on-the-ground impacts; to prevent harm to farmers, workers, their families, and their communities; and to protect the public at large. Based on these considerations we opposed nonregulated status of modified maize through genetic engineering (GE) to have resistance to the herbicides dicamba, glufosinate, quinalofop, 2,4-D, and tissue-specific glyphosate tolerance.

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