

Beyond Pesticides

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EPA Ignores Risks and Expands Uses of Toxic Herbicide Enlist Duo

(*Beyond Pesticides*, January 18, 2017) Despite science affirming its hazards, the U.S. Environmental Protection Agency (EPA) has expanded the registration of the toxic herbicide mixture, Enlist Duo, which contains [2,4-D](#) and [glyphosate](#), for use on genetically engineered (GE) cotton and extended its use on GE corn, soybean, and cotton from 15 to 34 states. This approval late last week comes at a time when widespread chemical use is threatening public health and the environment and weed resistance continues to grow, threatening farmers' productivity and profitability.

Over 600 public comments were submitted to EPA on this issue, with many comments vehemently opposing the current uses and the proposed expansion of uses. In [its decision](#), EPA stated that Enlist Duo “meets the safety standard for the public, agricultural workers, and non-target plants and animal species.” However, as *Beyond Pesticides* stated in [comments to the agency](#), EPA has not fully considered all the environmental costs, including the cost of tackling increased 2,4-D resistant weeds, crop and non-target damages from uncontrolled drift, as well as unanswered questions regarding synergistic chemical effects in non-plant species. Advocates predict weed resistance to Enlist Duo and have urged EPA to reject its continued use and incentive sustainable organic practices.

Additionally, EPA made a “No effects’ determination for species listed as threatened or endangered under the Endangered Species Act [ESA].” While a new process for handling ESA consultations was outlined in 2013, EPA continues to bring pesticides to market without adequate data on a chemical’s adverse effects. EPA routinely disregards this requirement, and has been [sued numerous times](#) for failing to ensure adequate protections for endangered species.



EPA withdrew its registration approval for Enlist Duo’s use in genetically engineered (GE) crops in November 2015, following an EPA review triggered by manufacturer claims that Enlist Duo ingredients have synergistic effects, which EPA had not initially evaluated. According to EPA, its latest review of the data found no synergistic effects. However, it does not appear that assessments of exposure to both glyphosate and 2,4-D choline have been conducted to properly assess whether synergistic effects can occur in non-plant organisms.

Developed by Dow AgroSciences (Dow), Enlist Duo is an herbicide that incorporates a mix of glyphosate and a new formulation of 2,4-D, intended for use on GE Enlist-Duo-tolerant corn and soybean crops. This herbicide has been marketed as a “solution” for the control of glyphosate-resistant weeds brought on by the [widespread use of the chemical](#) on Roundup Ready crops over the last decade that has led to superweeds. The proposed expansion of Enlist Duo presents unreasonable adverse risks to humans and the environment.

Enlist Duo was [officially registered in October 2014](#), and shortly after a [lawsuit was filed](#) by Beyond Pesticides and other environmental groups, challenging the approval under the *Federal Insecticide, Fungicide, and Rodenticide Act*. The groups argue that in its approval of Enlist Duo EPA disregarded negative impacts on sensitive species, including nearly two hundred species protected under ESA, from the increased use of the toxic cocktail on crops genetically engineered to withstand its application. In addition to environmental damage, these chemicals have been linked to a myriad of human health problems. 2,4-D has been linked to [soft tissue sarcoma](#), [non-Hodgkin's lymphoma](#) (NHL), neurotoxicity, kidney/liver damage, and harm to the reproductive system. Additionally, glyphosate has been [classified as a human carcinogen](#) based on laboratory studies by the World Health Organization (WHO) in March 2015.

In November 2015, [EPA revoked the registration of Dow's Enlist Duo](#) based on new information on the toxic effects associated with the synergistic interactions of the chemical cocktail, including 2,4-D, glyphosate, and other undisclosed ingredients, to plants outside the treated area. In January 2016, the 9th U.S. Circuit Court of Appeals [rejected the revocation](#) in a three-sentence order that gave no reasoning.

A large shift in agricultural practices is necessary to ensure protection of human health and the environment over the long-term. Beyond Pesticides has long supported organic land management as a systems approach that values healthy, biologically active soils to support plant life and provide critical environmental benefits. It is through this soil based systems approach that we will eliminate toxic chemicals in land management, which have been identified as a driver in soil contamination and loss of microbial and faunal diversity.

Ecological pest management strategies, organic practices, and solutions that are not chemical-intensive are the most appropriate and long-term solution to managing unwanted plants and insects. Beyond Pesticides is working to [strengthen organic farming](#) systems by encouraging biodiversity and holistic management practices, and [upholding the spirit and values](#) on which the organic law was founded. Underpinning the success of organic in the U.S. are small-scale producers who focus on fostering biodiversity, limiting external inputs, improving soil health, sequestering carbon, and using integrated holistic approaches to managing pests, weeds, and disease.