

## Questions and Answers: Kentucky Bluegrass

**Q. What is Kentucky bluegrass?**

**A.** Kentucky bluegrass is a turf and pasture crop that is grown throughout the United States, and is sold as a lawn grass.

**Q. What is herbicide-resistant Kentucky bluegrass?**

**A.** Scotts Miracle-Gro Company has developed a variety of Kentucky bluegrass that has been genetically engineered (GE) to be tolerant to the herbicide glyphosate. The glyphosate tolerance is caused by a single gene insertion, which does not create a new species of Kentucky bluegrass.

**Q. Is this line of GE Kentucky bluegrass regulated by the U.S. Department of Agriculture's Animal and Plant Health Inspection Service (APHIS) under its biotechnology regulations?**

**A.** Scotts Miracle-Gro Company sent APHIS a letter requesting that APHIS confirm that its GE Kentucky bluegrass variety is not a regulated article under APHIS' biotechnology regulations, 7 CFR part 340. APHIS confirmed that the GE bluegrass variety is not within the agency's regulatory authority because it does not contain plant pest sequences and no plant pest was used to create the GE Kentucky bluegrass. The glyphosate tolerance is caused by a single gene insertion, which does not create a new species of Kentucky bluegrass, meaning it is biologically the same as its traditional counterpart.

**Q. If other GE plants are made without plant pests, will those be regulated?**

**A.** APHIS biotechnology regulations regulate certain GE organisms that may be or are plant pests. If a GE organism is not a plant pest, is not made using plant pests, and APHIS has no reason to believe that it is a plant pest, then the GE organism would not fall under APHIS' regulatory authority. APHIS examines these situations on a case-by-case basis when a developer asks if a particular plant is a regulated article under the agency's biotechnology regulations.

**Q. Would APHIS instead regulate GE Kentucky bluegrass as part of its Federal noxious weed program?**

**A.** In 2002, the International Center for Technology Assessment (ICTA) and the Center for Food Safety (CFS) petitioned APHIS requesting that the agency list glyphosate-tolerant GE Kentucky bluegrass as a designated noxious weed under in its Federal Noxious Weed regulations, 7 C.F.R. Part 360. The APHIS Federal noxious weed program was designed to address weeds that were having significant impacts on both plant and animal agricultural operations. The vast majority of Federal noxious weed program funding is dedicated to addressing a small number of targeted weed priorities

Before a weed is added to the Federal noxious weed program list, APHIS conducts a risk assessment to determine whether it 1) meets the definition of a "noxious weed," and if yes, 2) should be regulated at the Federal level. In July 2011, APHIS conducted a risk assessment to determine the level of weed risk posed by Kentucky bluegrass, and subsequently evaluated whether the impacts posed by the plant would warrant it being regulated as a Federal noxious weed. APHIS determined that while the plant meets the definition of a "noxious weed," Kentucky bluegrass has not been found to cause impacts significant enough to warrant regulation at the Federal level. As a result of this analysis, APHIS determined it would not regulate Kentucky bluegrass, glyphosate-tolerant or traditional, as a Federal noxious weed.

**Q. What types of weeds are generally listed as Federal noxious weeds?**

**A.** Weeds are invasive, often non - native, plants which impact natural and managed ecosystems, often with significant negative consequences due to lost yields, changes in management practices, altered herbicide use, etc. Only a fraction of these problematic weeds are considered to be so invasive, so harmful, and so difficult to control that Federal regulatory intervention to prevent their introduction or dissemination is justified, and these are the focus of the regulatory controls placed on them by APHIS.

The vast majority of Federal noxious weed program funding is dedicated to addressing a small number of targeted weed priorities that cause damages ranging from eliminating native plants and altering entire aquatic ecosystems to suppressing or devastating crop growth.

**Q. What were the specific findings of the weed risk assessment Kentucky bluegrass?**

**A.** In July 2011, APHIS conducted a weed risk assessment and found that Kentucky bluegrass, both traditional and glyphosate-tolerant varieties, meet the definition of “noxious weed.”

**Q. Did APHIS look at all Kentucky bluegrass in its risk assessment or only glyphosate-tolerant GE varieties?**

**A.** Consistent with the provisions of the Plant Protection Act which provides APHIS authority to regulate noxious weeds, it has been the agency’s policy to regulate at the species level. APHIS looked at both types of Kentucky bluegrass in its weed risk assessment. The glyphosate tolerance is caused by a single gene insertion, which does not create a new species of Kentucky bluegrass.

We found that the risks posed by both varieties of the species are essentially the same, as there is no evidence available to us that glyphosate-tolerant Kentucky bluegrass would behave differently in the environment than non-GE, apart from the change in behavior caused by the glyphosate tolerant gene. The minor difference between the two is highlighted in the weed risk assessment and is factored into their impact potential, which only differs by one point as a result.

**Q. Why will APHIS not regulate GE Kentucky bluegrass if it found it to meet the definition of “noxious weed?”**

**A.** It is important to note that while the weed risk assessment identifies whether a plant is a weed, it does not set policy for the agency. The decision on whether to add any new plant species to the Federal noxious weed list is based on the findings of a risk assessment and also a policy determination of whether the plant should be regulated at the Federal level. After applying these criteria to Kentucky bluegrass, APHIS determined it would not regulate the plant as a Federal noxious weed. This determination covers both traditional Kentucky bluegrass and those varieties that have been genetically engineered to be glyphosate-tolerant.

**Q. Does this decision have an impact on organic producers?**

**A.** USDA’s National Organic Program certification rules do not penalize certified organic ranchers and

producers for unintended trace presence of GE material, as long as the Organic System Plan includes reasonable precautions to prevent contact and these precautions are properly implemented.

Once established, GE Kentucky bluegrass may prevent transition to organic status unless eradicated from the acreage to be transitioned.

**Q. ICTA and CFS sent its petition requesting the agency add GE Kentucky bluegrass to the Federal noxious weed list in 2002. Why did it take so long for the agency to make a determination?**

**A.** In 2002, APHIS received a petition from ICTA and CFS requesting the Agency to list two GE turf grass species (Kentucky bluegrass and creeping bentgrass) that are resistant to the herbicide glyphosate as designated Federal noxious weeds in its regulations.

In 2003, APHIS completed a weed risk assessment (WRA) and determined that GE glyphosate-tolerant creeping bentgrass did not meet the criteria to be regulated as a Federal noxious weed. The ICTA and CFS challenged APHIS’ decision on creeping bentgrass in Federal court in January, 2003. In 2007, the Court vacated the decision and remanded the matter back to the agency.

**Q. Has APHIS regulated other varieties of Kentucky bluegrass? What is the difference(s) between those regulated and this variety?**

**A.** Yes, other GE varieties of Kentucky bluegrass were genetically engineered using plant pests or plant pest sequences, thus were appropriately regulated under APHIS biotechnology regulations.

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