



# THE CENTER FOR FOOD SAFETY

## LEGAL PETITION TO REGULATE LIBERTYLINK RICE AS A PLANT PEST

### EXECUTIVE SUMMARY

The Center for Food Safety filed a legal petition requesting that the United States Department of Agriculture (“USDA”) regulate genetically engineered, LibertyLink rice varieties as “plant pests” under the Plant Protection Act on September 14, 2006. The citizen petition calls for the USDA to strictly regulate genetically engineered rice and prevent its commercial introduction and dissemination into the environment. It demonstrates that the government has overlooked significant concerns about genetically engineered rice.

### Background

LibertyLink rice is genetically engineered with a gene from a bacterium and DNA sequences from a virus that allow the rice to survive the application of glufosinate, the active ingredient in the herbicide Liberty.

LibertyLink rice was briefly field tested before 1999, when USDA deregulated two varieties of the rice, LLRICE06 and LLRICE62, in response to a petition by the manufacturer, Bayer CropScience. The third variety, LLRICE601, was never approved for commercial sale. None of the LibertyLink rice varieties have been planted commercially due to opposition from the rice and food industries. The discovery of the unapproved variety, LLRICE601, in the food supply damaged rice commodities and warrants immediate action by the USDA.

### Legal Petition

The legal petition demands that USDA regulate LibertyLink rice as a plant pest because its commercial release will injure plants and agricultural commodities, which the Plant Protection Act aims to prevent. The environmental and agricultural effects of LibertyLink rice raise concerns that USDA must consider. LibertyLink rice has been inadequately tested and it must be strictly regulated to prevent harm to the environment, agricultural practices, and rice commodities.

LibertyLink rice poses a host of plant pest risks, including the development of herbicide-resistant weeds, the contamination of rice commodities, and adverse effects of increased

herbicide use. First, because LibertyLink rice is genetically engineered to withstand herbicide use, it will create weeds that are difficult for farmers to control. Through cross-pollination, LibertyLink rice will spread herbicide tolerance to red rice, one of the worst rice weeds in the South. Additionally, LibertyLink rice is designed to be used with one herbicide, glufosinate, and the use of a primary herbicide in fields planted with herbicide-tolerant crops provides strong selection pressure for weeds that are naturally resistant to the herbicide. Therefore, LibertyLink rice promotes the development of other weeds that are resistant to herbicides.

Second, LibertyLink rice is a serious threat to rice commodities and thus must be regulated as a plant pest. If grown commercially, LibertyLink rice will inevitably contaminate rice commodities and rice seed stocks through cross-pollination and commingling of seeds. Already, nearly all tested commercial long-grain rice supplies contain unapproved LLRICE601 resulting in serious harm to the rice industry. The presence of any LibertyLink rice in U.S. rice commodities will harm U.S. rice exports. Due to the LLRICE601 contamination, Japan halted all long grain rice imports from the U.S. and the European Union put controls in place to assure all imports were free of LibertyLink rice. As the world's fourth largest exporter of rice, the U.S. rice industry is vulnerable to sensitive markets. Economic losses even result from USDA-approved genetically engineered crops because many export markets restrict genetically engineered varieties or require labeling and segregation. Millions of consumers the world over also refuse to buy genetically engineered foods. Additionally, cross-pollination between LibertyLink and organic rice threatens to undermine organic rice commodities.

Third, LibertyLink rice will greatly increase the use of glufosinate herbicide on rice, resulting in adverse impacts. Since LibertyLink rice, unlike conventional varieties, can survive the application of glufosinate, farmers will use more of this herbicide on LibertyLink rice. This will increase the environmental and human exposure to glufosinate, just as the widespread adoption of Roundup Ready crops has significantly increased the use of Roundup. The increased use of glufosinate associated with LibertyLink rice may injure other plants, cause shifts in biological diversity, and harm organisms that are beneficial to agriculture. USDA must consider the increased use of herbicide associated with LibertyLink rice and prevent adverse environmental effects that can harm U.S. agriculture.

Finally, the unintended effects of genetic engineering have not been adequately assessed for LibertyLink rice, another reason that regulation of LLRICE601, LLRICE06, and LLRICE62 is warranted. In the 1990s when LibertyLink rice was field tested, there was little known about the unintended effects of genetic engineering. New science shows that unintended effects can increase production of harmful toxicants, anti-nutrients, or allergens. The data submitted to USDA on LibertyLink rice suggests that there are unintended characteristics of LibertyLink rice that may influence its fitness, weediness, and disease susceptibility. USDA should regulate LibertyLink rice until all plant pest concerns are eliminated.

## **Conclusion**

The Center for Food Safety's citizen petition specifically requests that the USDA: (1) Determine that all varieties of LibertyLink rice, including LLRICE06, LLRICE62, and LLRICE601, are plant pests under the Plant Protection Act § 7711; (2) Add LibertyLink rice varieties to the list of organisms that are plant pests; and (3) Determine that LibertyLink rice is a regulated article and restrict its introduction, dissemination, interstate movement, and conveyance under 7 C.F.R. §340.0.