

## **United States Department of Agriculture**

Marketing and Regulatory Programs John Cordts President

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Animal Plant Health Inspection Service

RSR number 21-257-01rsr

Biotechnology Regulatory Services RE: Regulatory Status Review of modified Corn (*Zea mays*, L.) developed using genetic engineering for embryo-preferred expression of *Phanerochaete chrysosporium* manganese peroxidase and glufosinate resistance via maize-optimized phosphinothricin N-acetyltransferase (PAT) from *S. viridochromogenes*.

4700 River Road Riverdale MD 20737

Dear Dr. Cordts:

Thank you for your letter dated November 21, 2021, submitted on behalf of Dr. Elizabeth Hood from Infinite Enzymes, Inc., requesting a Regulatory Status Review (RSR) for corn developed using genetic engineering (modified corn). In your letter, you described that the corn was modified to impart increased peroxidase levels via embryo-preferred expression of *P. chrysosporium* manganese peroxidase (MnP) and to confer glufosinate resistance via maize-optimized phosphinothricin N-acetyltransferase (PAT) from *S. viridochromogenes*.

The Plant Protection Act of 2000 (7 U.S.C. §§ 7701 et seq.) provides USDA authority to oversee the detection, control, eradication, suppression, prevention, or retardation of the spread of plant pests to protect agriculture, environment, and the economy of the United States. USDA, through the Animal and Plant Health Inspection Service (APHIS), regulates the "Movement of Organisms Modified or Produced through Genetic Engineering" as described in 7 CFR part 340.

Consistent with 7 CFR 340.4, APHIS reviewed your modified corn to determine whether it is subject to the regulations in 7 CFR part 340. Specifically, APHIS reviewed the modified corn to determine whether there is a plausible pathway by which the modified corn would pose an increased plant pest risk relative to the plant pest risk posed by an appropriate corn comparator. Based on information you provided, publicly available resources, and APHIS' familiarity with corn and knowledge of the trait, phenotype, and mechanism of action, APHIS considered the (1) biology of a nonmodified corn; (2) the trait and mechanism-of-action of the modification; and (3) the effect of the trait and mechanism-of-action on the (a) distribution, density, or development of the plant and its sexually compatible relatives, (b) production, creation, or enhancement of a plant pest or a reservoir for a plant pest, (c) harm to non-target organisms beneficial to agriculture, and (d) weedy impacts of the plant and its sexually compatible relatives. APHIS did not identify any plausible pathway by which your modified corn would pose an increased plant pest risk relative to its comparators. Once APHIS determines that a plant product is unlikely to pose an increased plant pest risk relative to a comparator, and, thus, is not a plant pest or a plant that requires regulation because it is capable of introducing or disseminating a plant pest, APHIS has no authority to regulate it under 7 CFR part 340. Accordingly, your corn is not subject to the regulations under 7 CFR part 340. APHIS' determination that this modified plant is not subject to the regulations extends to any progeny of the modified plant that is derived from crosses with other non-modified plants or other modified plants that are also not subject to the regulations in 7 CFR part 340.

Please be advised that APHIS' decision applies to the corn developed using genetic engineering exactly as described in your letter. If at any time you become aware of any information that may affect our review of your modified corn, including, for example, new information that shows the trait, phenotype, or mechanism of action is different than described in your letter, you must contact APHIS for further review of the plant at RSRrequests@usda.gov.

Please be advised that your plant product, while not regulated under 7 CFR part 340, may be subject to APHIS Plant Protection and Quarantine (PPQ) permit and/or quarantine requirements. For further information, you may contact the PPQ general number for such inquiries at 877-770-5990. Your plant

product may also be subject to other regulatory authorities such as the U.S. Environmental Protection Agency (EPA) or the Food and Drug Administration (FDA). Please contact EPA and FDA to enquire about the regulatory status of your product.

Sincerely,

Bernadette Juarez

APHIS Deputy Administrator Biotechnology Regulatory Services Animal and Plant Health Inspection Service U.S. Department of Agriculture October 20, 2022