Testimony statement provided March 22, 2021 to the AGRICULTURE FINANCE and POLICY COMMITTEE MINNESOTA HOUSE OF REPRESENTATIVES regarding LEGISLATIVE BILL HF766

Introduction: My name is Dr. Judy Wu-Smart and I'm an assistant professor and extension specialist at the University of Nebraska-Lincoln in the Department of Entomology. I want to first thank Representative Hansen and the committee for this opportunity to testify regarding **HF766** which seeks to require product stewardship for corn and soybean seed treated with systemic pesticides. I'm testifying in a neutral capacity, acting in my own personal capacity as an expert and not as a representative of the university.

I'm the director of the University Bee Lab in Nebraska, and we typically manage 60-85 honey bee colonies each year in roughly a dozen research and teaching apiaries. Since 2017, we have had consistent losses and 0% survivability of colonies only at apiaries located in Mead, Nebraska near a facility practicing treated seed disposal through ethanol processing that produced solid and liquid byproduct wastes highly contaminated with pesticide residues.

Main areas of concern: My testimony today highlights critical challenges we face addressing the environmental contamination issues and ecological impacts that has resulted from this practice of treated seed disposal.

Systemic pesticide pollution: Systemic pesticides, such as the neonicotinoid insecticides and various fungicides, can translocate to all parts of a treated plant, including the root system, making them popular chemical options for seed coat dressings. However, the systemic action of these chemicals also increases the risk of leaching and off-target movement. Systemic pesticide residues in contaminated water and soil may be picked up by nearby vegetation and expressed in leaves, nectar, and pollen where bees and other wildlife may become exposed. Current monitoring and mitigation efforts in water, soil, and air (which are separately regulated) are not fully considering the systemic movement of pesticides across these different matrices and uptake of residues into nearby vegetation.

Lack of regulatory oversight: Further, we have been unable to receive state or federal assistance to investigate bee losses because these losses are not suspected to be from "the misuse of a pesticide application" and do not fall under the pollinator protection regulations governed by the Department of Agriculture and The Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA). Instead, we have concerns that the bees are exposed to systemic pesticide pollution which falls in an unregulated gray area because of this improper disposal practice and the lack of information regarding the volume of treated seeds processed in this manner hinders our ability to understand the full extent of these contamination issues and potential long-term ecological ramifications. While this practice is an isolated and unique case, AltEn claims to have been processing 98% of **all** surplus treated seed from major producers across North America. Now that AltEn is shut down, the issue of treated seed disposal becomes a national environmental and agricultural challenge and HF766 begins to address this critical issue.

I thank the committee again for the opportunity to speak today and I welcome any questions.