

# Comments on the USDA APHIS Draft Environmental Impact Statement and Draft Plant Pest Risk Assessment for the Darling 54 GE American Chestnut Tree

Submitted by: Global Justice Ecology Project, Inc.

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## 1. Opposition to Deregulation of the GE Darling 54 American Chestnut

We strongly oppose the proposed deregulation of the Darling 54 genetically engineered (GE) American chestnut tree. This proposal represents an unprecedented ecological experiment—one that seeks to intentionally alter forest ecosystems by reintroducing a genetically modified wild tree species that would form **self-perpetuating populations**. This scale and type of intervention has **never before been attempted**, and the current state of data and analysis is wholly inadequate to support such a high-risk undertaking.

## 2. Insufficient Testing and Irreversible Consequences

The GE chestnut has undergone **less than ten years of field trials**, far too short a time to assess risks for a tree known to live **hundreds of years** and reproduce sexually. As noted by the Center for Food Safety, **reliable nut production** does not begin until **20 years** or more.

The USDA must recognize that a comprehensive **life-cycle risk assessment** cannot be rushed. Attempting to make a plant pest risk determination after only a few short years is **irresponsible**, and risks a **new ecological disaster** in the very forests this initiative purports to restore.

## 3. Catastrophic Collapse of the Darling 54/58 Program

The collapse of the Darling 58 and the revelation that research was mistakenly conducted on a different GE line (Darling 54) points to gross **scientific negligence**, insufficient oversight, and a **lack of transparency** in the development process.

The public was not informed that the trees used in field trials were not the trees that had been petitioned for deregulation. This **bait-and-switch undermines the credibility** of the research and taints the entire USDA review process. In light of this, the USDA must **immediately reject** the deregulation petition.

## 4. Scientific Flaws: Gene Silencing and Insertional Mutagenesis

The use of the **CaMV 35S promoter**, known for gene silencing over time, is a fundamental design flaw. Predictably, the trees began to lose blight resistance, become stunted, and die. In addition, the transgene in Darling 54 was inserted into a **coding region**, deleting over 1,000 base pairs from the SAL1 gene involved in **salinity tolerance**—which may contribute to the poor performance of the D54.

It is unacceptable for USDA to deregulate a tree with such **unstable traits** and known genetic defects, particularly when it will be released into wild ecosystems with the explicit intent to

**cross-pollinate** with native populations including long surviving American chestnuts with some level of blight tolerance whose progeny could be irreversibly damaged by such cross-pollination, risking yet another catastrophe for the recovering American chestnut.

## 5. Violation of the Precautionary Principle and International Norms

Allowing this GE tree to spread its transgenes through wild forests without strict containment measures would set a dangerous global precedent. It **contravenes international agreements** such as the **Cartagena Protocol on Biosafety** and undermines **Indigenous Peoples' rights** to maintain culturally and ecologically significant species free from transgenic contamination.

As Indigenous experts like Dr. Neil Patterson have expressed, this intervention represents a **deep cultural and spiritual violation**, especially when Indigenous communities are not consulted or included as decision-makers.

## 6. Commercial Interests Driving Public Policy

**ESF researchers who developed the D54 along with TACF as a supposed public resource free from patents, have been negotiating multi-million dollar licensing deals** with a private company, formerly American Castanea, now called SilvaBio, even as their GE trees were failing in trials. This commercialization effort casts doubt on the objectivity of the research and raises critical concerns about **conflicts of interest**.

According to TACF, SUNY-ESF requested **six-figure licensing fees and royalties** from them even after the discovery that their product was genetically flawed. This behavior appears to prioritize **private profit over public safety**, and should be investigated by the USDA Office of Inspector General.

## 7. Inadequate Regulatory Framework

As the 2019 National Academies of Science report stated, **there are currently no adequate federal regulations** specific to GE trees. USDA APHIS is attempting to shoehorn forest-scale ecological interventions into a **plant pest risk framework** designed for agricultural crops. This is **regulatory malpractice**.

The unique, long-lived, sexually reproductive nature of trees means their impact on the environment would be **irreversible** and **uncontainable**—yet no long-term monitoring or liability mechanisms are proposed in the DEIS or PPRA.

## 8. A Better Path Exists: Support Natural and Traditional Restoration

There is a viable, non-GMO alternative: the work of the **American Chestnut Cooperators Foundation (ACCF)**. For more than 40 years, ACCF has been identifying and breeding **naturally blight-tolerant wild chestnuts** and returning them to the forests. They began public releases in 2023, with promising results.

Their approach respects natural genetic diversity, forest ecology, and the **sovereignty of wild species**—without introducing unpredictable genetic constructs into ecosystems.

### **Conclusion: USDA Must Reject Deregulation**

The GE Darling 54 tree is a **failed experiment**, marred by scientific error, rushed testing, and unethical commercialization. To approve deregulation now would be to **ignore all evidence**, **sidestep public concern**, and **jeopardize forest ecosystems** across the eastern U.S.

**Although under Trump, perhaps this is, in fact, the point.**

We demand USDA APHIS:

- **Reject the deregulation request** for Darling 54.
- **Require independent full life-cycle analysis of the ecological and social risks** specific to genetically engineered trees.
- **Investigate SUNY-ESF's ethically questionable actions** through the Office of Inspector General.
- **Prioritize and support non-GE restoration** approaches that align with ecological science and Indigenous rights.
- **Receive Free, Prior and Informed Consent from all Indigenous territories and nations within the potential area impacted by the D54 prior to any consideration of deregulation.**

The future of our forests depends on rigorous science, public accountability, and respect for nature—not on commercial shortcuts or genetic gambles.

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**Signed,**



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