# RESEARCH GRANT FUND REPORT 2025

## John Z. Duling Grant Program

The John Z. Duling Grant Program was established and funded by a bequest from the estate of John Z. Duling of Indiana, a strong advocate of research who in 1972 proposed the establishment of the ISA Research Trust.

The goal of this program is to provide start-up or seed funding to support innovative research and technology transfer projects that have the potential of benefiting the everyday work of arborists.

## TOTAL DONATIONS

January 1 – December 31, 2025: $0

## AWARDED IN 2025

2025 John. Z. Duling Grant was awarded to Brett Fredericksen Jr. of Southern Illinois University- Edwardsville for the project, “Environmental Indicators and Intervention Treatment for Horned Oak Gall Outbreaks on the Common Street Tree Quercus palustris.” for **$14,745.**

## 1 APPLICATIONS

23 applications were received for this grant during the 2025 Fall Grant Application Cycle.

## AWARDEE DETAILS

Southern pin oaks or Spanish swamp oak (*Quercus palustris*) are some of the most commons street trees across the Midwest. Favored for their fast growth in open environments and moderate stress tolerance in urban areas, these trees occupy many yards, boulevards, and parks. However, these trees are also susceptible to a small, nonstinging wasp known to form Horned Oak Galls. These wasps create galls on both leaves and stems of pin oaks and are most recognized for their large, spiked stem galls. For unknown reasons, the degree of gall formation induced by these wasps is highly variable from tree to tree. In the most severe cases, over 80% of the branches may contain galls which weakens the health and aesthetic value of the trees. There is currently no effective treatment for horned oak galls other than early pruning of branches and expensive systemic insecticides.

Our research group is working in collaboration with the City of Edwardsville (IL) to assess the severity of horned oak gall outbreaks and track these outbreaks through time and space. We hope that by mapping the severity of galls across the city, we will reveal common patterns associated among galled/not galled trees. By determining the drivers of gall outbreaks, we can begin to make predictions regarding if gall outbreaks will increase or decrease moving into the future, and we can begin to test early intervention strategies to give pin oaks a better chance of resisting gall spread.

**Completed research in 2025:**
No research projects were completed in 2025. The next scheduled project completion date is in 2026.