

Submission Type

Oral Presentation

Presenter Name

Kevin Chase

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Presenter Organization

Bartlett Tree Research Laboratory

Presenter Title

Research Scientist

Presenter Bio

Kevin conducts entomological research on a variety of tree and shrub insect pests across North America and the United Kingdom. Kevin is currently based out of Harrisburg, Pennsylvania where he mainly serves the Mid-Atlantic states. In his role, he divides his time between conducting and disseminating research on current issues in landscape pest management, urban forestry and arboriculture as well as training and supporting Bartlett Arborist Representatives and Plant Health Care Specialists. Kevin was trained as an invasion ecologist in New Zealand at the University of Canterbury.

Additional Author-Name, Affiliation & Bio

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Abstract Title

A new disease causing mortality of European hornbeam in North America

Abstract Summary

Fastigate European hornbeam (*Carpinus betulus* L.) are popular ornamental trees loved for their oval-rounded and upright crown. Between 2022-2025, branches from fastigate European hornbeams from across multiple locations in the U.S. (CT, MA, NY, NJ, OH, and PA) exhibited severe canopy dieback. Field symptoms included sunken cankers on twigs and branches, and chlorotic, diffuse leaf spots. The symptomatic branch samples were examined at the Bartlett Tree Experts Diagnostic Laboratory in Charlotte, NC. Genetic and microscopic diagnostic work revealed a new species of *Sphaerulina* not previously described. In a greenhouse study testing Koch's postulate, *Sphaerulina* spp. was successfully reisolated from nine out of thirteen fungal inoculated trees and not recovered from any control trees. Koch's postulate has not been completed for leaf spots yet. Management trials will also be discussed.

Conference Themes

- Prevention
- Monitoring
- EDRR

TAXA

- Terrestrial Plants
- Pests & Pathogens