

# Proceedings

## 29<sup>th</sup> Southern Forest Tree Improvement Conference

Tree Improvement in North America: Past, Present, and  
Future



Joint Meeting

Western Forest Genetics Association  
&  
Southern Forest Tree Improvement Committee

Galveston, TX  
June 19-22, 2007

Proceedings of the 29<sup>th</sup> Southern Forest Tree Improvement Conference

Tree Improvement in North America: Past, Present, and Future, WFGA/SFTIC Joint Meeting,  
Galveston, TX. June 19-22, 2007

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The papers and abstracts in these proceedings were submitted by the authors as electronic files. Modifications were made in format to provide for consistency and to allow best possible placement of figures and tables. The authors are responsible for the technical content of their respective papers.

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<http://www.rngr.net>

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## Foreword

The first ever, joint meeting of the Southern Forest Tree Improvement Conference and the Western Forest Genetics Association was held June 19-22 in Galveston, TX. This meeting, the 29<sup>th</sup> SFTIC and the 51st gathering of the WFGA, focused on our shared history, compared and contrasted present strategies and attempted to chart our collective futures. Invited speakers for the opening session included James B. Hull who addressed the changing face of forestry in Texas and the nation, Steven McKeand and Glenn Howe who spoke on the history of tree improvement in the southeast and the Pacific Northwest, respectively and Bradley St. Clair who outlined novel uses of tree improvement data to address climate change issues. During the final plenary session, John Helms addressed the rapidly changing social environment in which foresters must function, Robert Kellison and Adam Costanza each spoke about the adoption of forest biotechnology, and Clark Binkley addressed the valuation and impact of forestry research. During the intervening two days of concurrent sessions, participants were privileged to hear 52 contributed papers and view 11 posters on topics that included selection, progeny testing, marker aided breeding, genetic diversity and gene conservation, physiology, and climate change as well as a variety of other topics.

Two changes were made to accommodate the different meeting styles of the two groups. Publication of papers and extended abstracts was optional. Articles submitted by their authors for publication at the time of the meeting are included in the first part of this proceeding. A complete set of pre-meeting abstracts are included as a separate section. The second change was that the two groups combined awards for outstanding contributions to the conference. All participants were eligible regardless of their affiliation. The awards presented included the following:

The **Tony Squillace Award** given by the SFTIC for the overall best oral presentation based on content, style and use of visual aids was awarded to **Alex Mangini** for the presentation entitled “A south-wide rate test of esfenvalerate (Asana® XL) for cone and seed insect control in southern pine seed orchards.”

The **Bruce Zobel Award** given by the SFTIC for an outstanding oral presentation by a student was presented to **Shiqin Zu** for the presentation entitled “Genetic diversity and hybridization in natural stands of shortleaf pine (*Pinus echinata* Mill.) and loblolly pine (*Pinus taeda* L.)”.

The **Critchfield Award** presented by the WFGA for an outstanding oral presentation by a student was made to **Daniel Chmura** for the presentation “Integration of crown morphology and leaf-level physiology as a tool for explaining differences in aboveground productivity among elite families of loblolly and slash pine.”

The **Belle Baruch Foundation Award**, normally made by SFTIC for the best student poster was presented jointly this year by the WFGA and SFTIC. The award was made to **Lisa Worthen** for the poster entitled “Male genotype influences seed set and seed size in controlled crosses of American chestnut (*Castanea dentata* [Marsh] Borhk).”

We would like to thank Penny Sowell, who made all of the physical arrangements and coordinated the registration procedure, breaks, and the banquet. Larry Miller and Fred Raley also aided during registration and organized the presentations with the audio visual staff at the hotel.

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Photo: David Reid

The 118 conference participants represented 11 countries and 19 states within the US.