

April 2009

Special Points of Interest

- Research updates from the University of Florida and the UK
- TREE Fund Special Events update

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“As the poet said, ‘Only God can make a tree’ -- probably because it’s so hard to figure out how to get the bark on.

- Woody Allen

ISA Chapters Rise to the Challenge

How do you raise \$400,000 in a recession? Ask an arborist. With a tool kit consisting mainly of creativity, passion and persistence, 18 regional chapters of ISA raised more than \$400,000 for tree research and education in 2008.

The TREE Fund’s “Chapter Challenge” results for ‘08 reveal a dedication to our mission of advancing knowledge in tree research and education that would be impressive even in a growing economy. The majority of the ISA chapters that participated in the Chapter Challenge attained “Platinum” status, raising an amount equivalent to \$40 per registered chapter member. Five chapters achieved “Gold” status (\$30 per member) and two more were ranked “Bronze” (\$20 per member).

The virtual plaque for Platinum Chapter Challenge achievement in 2008 will list eight ISA chapters, three more than the 2007 listing. Platinum achievers in ‘08 include ISA chapters from Illinois, Indiana, Kentucky, Midwestern, Minnesota, New Jersey, Ohio and Wisconsin. Achieving Gold status in the ‘08 Challenge are Florida, New York, Pacific Northwest, Penn-Del and Rocky Mountain chapters. This also

represents an increase over 2007’s results, which included just four Gold level participants.

The Mid-Atlantic and Western chapters attained Bronze status, though it should be noted that the Western chapter’s total contribution in ‘08 was second only to Pacific Northwest’s. The top five contributors for 2008 are as follows (‘08 chapter membership in parentheses):

- PNW \$50,260 (1,257)
- Indiana \$38,593 (183)
- Western \$49,541 (2,226)
- Midwestern \$31,665 (492)
- Illinois \$40,930 (759)

The Chapter Challenge totals include chapter sponsorships of TREE Fund special events, dollars raised by Tour des Trees riders, proceeds from chapter donations to the gala auction, proceeds from local fundraising projects, and individual and corporate donations to the TREE Fund obtained through the efforts of each chapter. The TREE Fund staff and Board of Trustees extends a sincere “Thank you!” to the ISA Chapters and the TREE Fund Liaisons that rallied their members to the cause. We couldn’t have done it without you!

TREE Fund Research Report

Use of biologically inert film forming polymers to control foliar diseases of urban trees

By Dr Glynn Percival

*Hyland Johns Grant Recipient
R.A. Bartlett Tree Research Laboratory
University of Reading, Reading, United Kingdom*

During their life cycle, urban trees are susceptible to a broad range of pathogenic fungi that, if uncontrolled, can result in high mortality rates. Control of these diseases is primarily through the use of fungicides. Recorded cases of increased tolerance to commercially available fungicides, failure of many fungicides to adequately control disease once a tree is infected and increased legislative restrictions regarding the use and application of pesticides means

new techniques of disease control are of fundamental importance.

Recent developments in polymer technology have led to the development of a range of biologically inert film-forming polymers (FFPs). Recent studies using FFPs as an alternative to fungicides have found several to be effective in controlling foliar pathogens of a variety of plants including cereals, vegetables, fruit and ornamentals. Because FFPs act by physical and not chemical means they are not subject to the stringent government legislative restrictions that relate to the use and application of conventional pesticides.

(continues on page 5)

Checking-In With Our Constituents

By Janet Bornancin

TREE Fund Executive Director

While traveling this winter on behalf of the TREE Fund I had the privilege to meet and learn from a number of business owners and managers, researchers, educators, climbers, consultants, and foresters who have dedicated themselves to the arboriculture industry. At TCIA's Winter Management Conference, conversations focused on managing the challenges that we all face in these difficult economic times. Several self-proclaimed "old timers" recalled their vision for the TREE Fund when the merger was first proposed, and reaffirmed that the TREE Fund's mission continues to be important to them. The education of future arborists through the youth programs and scholarships funded by the Robert Felix Fund is vital to the future of their businesses. And the scientific research supported by the TREE Fund keeps their workforce informed and prepared to meet the industry's evolving challenges. This issue of the TREE Fund Report includes updates on recently completed and ongoing research projects partnered by the TREE Fund.

During a visit to the research fields and labs at the University of Florida I hand-delivered a John Duling grant check to Dr. Ed Gilman and his research team. They gave me a first-hand look at the root pruning study we funded, including a pruning techniques demonstration, and brought me up to date on related ongoing research supported by the TREE Fund. I also met with University of Florida Assistant Professor of Forest Pathology Jason Smith, who received a 2007 John Duling grant to improve hazard tree diagnostic tools for arborists. Jason showed me samples of the fungal fruiting bodies he is studying to assess how well visual observations of these fungi can predict the extent of wood decay in the tree.

"Preventing tree failure due to fungal decay can save lives and dollars," he asserts, but his efforts to enlist local arborists to help with sample collection had so far yielded disappointing

results. Part of the TREE Fund's mission is to facilitate relationships between researchers and practitioners, thereby becoming a catalyst for change. Together we identified strategies and actions for obtaining the samples he needs. Upon completion this project will show how the presence and types of fungal fruiting bodies relate to the extent of wood decay present in urban trees and establish recommendations for assessing hazard trees in the field. Contact Jason Smith at University of Florida (jasons@ufl.edu) if you can contribute samples for his research.

The last stop on my University of Florida visit was a private tour of the Ordway-Swisher Biological Station, a 9000-acre sanctuary used by researchers from around the world. My guide was John Hayes, chairman of the University of Florida's Wildlife Ecology and Conservation Department. He described the research being conducted at the sanctuary, which is looking into the feasibility of tracking treehoppers, known carriers of Bacterial Leaf Scorch, by following their sound. He also showed off the Station's beautiful live oaks and educated me about the growth and sustainability of the long needle pine. As a former educator I also enjoyed seeing and discussing the plans for a public education facility on the outskirts of the Biological Station. I'll look forward to following the progress of these important projects, as well as the TREE Fund-supported research being conducted by Dr. Gilman and Jason Smith.



M. Janet Bornancin
TREE Fund Executive Director

Part of the TREE Fund's mission is to facilitate relationships between researchers and practitioners, thereby becoming a catalyst for change.

-M. Janet Bornancin

A Janet presents a Duling Award to U. Fl. researchers.

(Left to Right) Maria Paz, biologist; Jason Miesbauer, Ph.D. student; Chris Harchick, farm manager; Christine Wiese, biologist.

B Getting to know a long-needle pine.

C Janet and John Hayes at Ordway-Swisher.

D Majestic live oaks at the Ordway-Swisher Station.



Research Report *(continued from page 1)*

Current FFPs are also non-phytotoxic to leaf tissue, non-toxic to humans, and permeable to atmospheric gases and penetration of solar radiation. Consequently, they have no detrimental effects on tree biology when applied.

Use of FFPs potentially offers a cheaper (polymers cost 40-80% less than conventional fungicides) and environmentally more acceptable system compared with current fungicide spray methodology for reducing disease/pest related tree losses. FFP usage also has applicability to a wider range of important forestry, agricultural and horticultural crops.

Aims of this investigation were to investigate the efficacy of a range of commercially available film forming polymers on controlling apple scab (*Venturia inaequalis* (Cooke) G. Wint.), powdery mildew (*Microsphaera alphitoides* Griffon and Maubl.) and *Guignardia* leaf blotch (*Guignardia aesculi* (Peck) Stewart). These three foliar biotrophic pathogens are frequently encountered in urban environments.

Summation

Detached leaf bioassays (tests) were used to determine the influence of several FFPs and a conventional triazole fungicide on apple scab, powdery mildew and *Guignardia* leaf blotch development under laboratory *in vitro* conditions. These were supported by field trials using established apple cv. Golden Delicious, English oak (*Quercus robur* L.) and horse chestnut (*Aesculus hippocastanum* L.) to further assess the efficacy of foliar applied FFPs as foliar protectant compounds.

All FFPs used in our investigations (Bond, Designer, Nu-Film P, Spray Gard, Moisturin, Companion PCT12) inhibited germination of conidia, subsequent formation of appressoria and reduced leaf disease severity using a detached leaf bioassay. The synthetic

fungicide penconazole resulted in the greatest levels of germination inhibition, appressorium development and leaf scab severity. Under field conditions, disease severity on leaves and fruit (apple cv. Golden Delicious only) treated with an FFP was less than on untreated controls. However, greatest protection in all field trials was provided by the synthetic fungicide penconazole.

Applications of FFPs or penconazole resulted in a higher fruit/seed yield per tree at

harvest in all field trials compared to untreated controls. Results suggest application of an appropriate FFP may provide a useful addition to existing methods of foliar disease management.

Greater emphasis on alternative pathogen control strategies to extend the effective commercial life of current synthetic fungicides and

reduce the risk of resistance development is now warranted. For a complete report please reference the publications below.

Publications

Percival, G C; Keary I P; Marshall K (2006). The use of film forming polymers to control *Guignardia* leaf blotch and powdery mildew on *Aesculus hippocastanum* L. and *Quercus robur* L. *Arboriculture and Urban Forestry*. 32(3): 100-108.

Percival, G C; Boyle, S (2008). Evaluation of film forming polymers to control apple scab (*Venturia inaequalis* (Cooke) G. Wint.) under laboratory and field conditions. *Crop Protection*. In Press, Doi:10.1016/j.cropro.2008.08.05

Percival, G C (2008). Overcoats for trees. Protecting against salt damage. *Tree Care Industry Magazine*. 29(2). February Edition.

Percival, G C (2004). Safer solutions to tree diseases. *Horticulture Week*, February 5th.



Click Your Mouse for Research!

Online bidding for the "Raise Your Hand for Research" auction opens in late June. Watch our website for updates.

To donate to the auction contact Mary at marydicarlo@treefund.org.

Auction sponsorship and underwriting opportunities are still available. Email Mary or call 630-369-8300.



Raise Your Hand for Research

Thank You Sponsors!

TREE Fund Partners, Asplundh Tree Expert Co., Duke Energy and the F.A. Bartlett Tree Expert Co. are joined this year by our new Crown Sponsor National Grid, whose \$50,000 contribution marks the inauguration of this level of sponsorship. We're grateful to all of these Partners and Sponsors for their support of our mission and our fundraising efforts. Sponsorship and underwriting opportunities are still available for the 2009 Tour and the "Raise Your Hand for Research" Gala Auction. Contact Mary at marydicarlo@treefund.org for more information.

President Confident of Continued Success

By David McMaster

President, TREE Fund Board of Trustees

A year to remember, 2008. It was exciting, challenging and fruitful. Our commitment to research and education was tested in many ways, but good science, passionate Trustees, and professional staff proved essential to well-being.

As new issues confront our community trees, arborists, researchers and students, the demand for new answers, new capabilities, and greater public understanding challenges the arboriculture profession and the TREE Fund. A slowing economy complicates the TREE Fund's capacity to address the array of needs begging for science-based attention.

The leaders of the TREE Fund uphold a positive attitude and remain aggressive in guiding programs and funding research that address the emerging critical issues facing arboriculture and urban forestry. The staff is committed to doing its best with the resources available. No doubt your continuing support through individual contributions, as well as

corporate donations and sponsorships is a strong message of encouragement and a solid vote of confidence.

The progress towards our annual campaign goal of \$780,000 is outstanding. As of February 2009 \$113,045, nearly 15% of our goal, had been raised. Our accomplishments have been the work of many hands. The vision and openness of the Trustees, the commitment and capacity of our professional staff, and the growing list of volunteers has combined to yield this success.

Based on the involvement and personal investment of concerned leaders during the past year, I am confident of a successful path to our annual campaign goal and continuation of highly productive, vital programs at the Tree Research and Education Endowment Fund. I am happy to celebrate with you our successes and look forward with confidence to the coming year.

A Message to Our Donors

By Mike Neal

Vice President, TREE Fund Board of Trustees

Thank you for your continued support of the Tree Research and Education Endowment Fund and our mission to advance knowledge in the fields of arboriculture and urban forestry to benefit people, trees and the environment.

Despite the challenges presented by 2008's volatile economy the TREE Fund had an exceptionally productive year. Because of your generosity, and because we are not reliant on government funding, we were able to continue to fund the important research being conducted by our grantees in areas of root and soil management, planting and establishment, plant health care, risk assessment and worker safety, hazard tree protocols and urban forestry.

At a time when private support is more important than ever, you have given at record levels. The TREE Fund finished the year with a total of \$854,000 in gifts, pledges and sponsorships, including 5 lead gifts or pledges to our endowment campaign totaling \$500,000. These gifts established named funds within our Endowment to support research, scholarship

and education, and laid the groundwork for the funding of tomorrow's research.

With two-and-a-half years left in our endowment campaign, the TREE Fund has raised 25% of its goal of 2 million dollars. The need remains great. In 2008 we received funding requests for more than three quarters of a million dollars worth of research. There is still much to learn about trees and proper tree care, particularly in the areas of arborist safety, hazard tree identification, management of invasive species and vegetation, and the education of our municipal decision-makers on the importance of proper tree maintenance.

Your generosity provides stability for our programs and the researchers we support during these tough economic times, enabling us to maintain programmatic excellence while addressing the critical issues of our industry. Thanks to you, the TREE Fund remains one of the top foundations focusing on tree research and education. With your continued support we will enhance our national and global reputation as a catalyst for change and growth in the fields of arboriculture and urban forestry. Thank you.



David McMaster

*President
TREE Fund Board of Trustees*



Mike Neal

*Vice President
TREE Fund Board of Trustees*

Important Dates:

▪ April 22 | Earth Day

Tree mulching service project in Naperville, from 9:00 to 11:30 am. Luncheon follows at Holiday Inn Select, Naperville. Events co-sponsored by Holiday Inn Select, TREE Fund, City of Naperville, Illinois Arborist Association. Visit www.naperselect.com or call 630-505-4900 for more details.



▪ April 24 | Arbor Day - Plant a Tree!

▪ May 1, by 5:00 pm

Applications due to TREE Fund for:

▪ Hyland R. Johns Grants

Applications are available online at https://fs2.formsite.com/TREEFund/HylandRJohnsGrant/secure_index.html.

▪ Robert Felix Memorial Scholarships

Applications are available online at https://fs2.formsite.com/TREEFund/RobertFelixMemorial/secure_index.html.

▪ Arboriculture Education Program Grants

Applications are available online at https://fs2.formsite.com/TREEFund/AEPG/secure_index.html.

▪ May 1

Rider registration deadline for the 2009 STIHL Tour des Trees. Register online at www.tourdestrees.org.

▪ July 19-25

2009 STIHL Tour des Trees New York City, NY to Providence, RI. (*Warm-up ride and banquet in New Jersey on July 18*).

▪ July 26

15th Annual Summer Golf Outing to benefit the TREE Fund, in Providence, RI, sponsored by Asplundh Tree Expert Co.

▪ July 27

"Raise Your Hand for Research" Gala Auction at the Westin Providence, RI, at 5:30 pm.

▪ November 1, by 5:00 pm

Applications due to TREE Fund for:

▪ John Z. Duling Grants

Applications are available online at https://fs2.formsite.com/TREEFund/JohnZDulingGrant/secure_index.html

▪ December 1, by 5:00 pm

Applications due to TREE Fund for:

▪ TREE Fund Research Fellowship Program

Applications are available online at https://fs2.formsite.com/TREEFund/ResearchFellowship/secure_index.htm

Raise Your Hand for Research!

Doors open for the 2009 "Raise Your Hand for Research" Gala auction at 5:30 pm July 27 at the Westin Providence in Rhode Island. This year's black-tie-optional Gala features the professional talents of Tom Weitbrecht, one of New England's most accomplished benefit auctioneers. Committed sponsors to date include ISA and Sherrill Tree. Among the highlights are an 8-foot wooden dinghy hand-crafted by TREE Fund Trustee Bob Miller, a Chicago "Stay & Play in 2010" package, a Kentucky Derby weekend, and a Big Apple getaway featuring the Broadway show of your choice. Bidders will also have a shot at a San Diego excursion, a South Dakota pheasant hunt and an encore of 2008's popular "Ozark Getaway." Several original art pieces and a helicopter photo shoot will be on the auction block, and every day brings new surprises. Advance tickets to the auction are \$20 with your ISA registration or \$25 at the door. The online auction jump-starts the excitement in late June. Watch our website for details. To donate to the auction contact Mary at marydicarlo@treefund.org. Auction sponsorship and underwriting opportunities are available as well. Email or call Mary at 630-369-8300.

Gearing up for a Summer to Remember: TREE Fund Special Events Update

By Mary DiCarlo

Fund Development Specialist for the TREE Fund

Fund Development at the TREE Fund is a year-round pursuit, but things really heat up in the summertime when the Tour des Trees and the "Raise Your Hand for Research" Gala Auction take place back-to-back in July.

2009 marks the inaugural year of the STIHL Tour des Trees to Benefit the TREE Fund and we couldn't be more excited. With substantial financial, media and P.R. support from STIHL Inc., this year's Tour will roll out from New York City July 19 and wind through the beautiful countryside of New England on its way to Roger Williams Park, RI. A rider welcome banquet in New Jersey on July 18 and an optional challenge ride into Maine on day 6 of the Tour bring the number of participating states to eight! As of April 1, 35

riders have registered. We're hoping to attract more than twice that many to this year's Tour. Keep up with the details at www.tourdestrees.org

In addition to the TREE Fund Partner companies listed on page 5, The Davey Tree Expert Co. is providing leadership for the educational and special events of the 2009 Tour, earning them "Platinum" level (\$15,000) sponsorship recognition. Wright Tree and West Coast Arborists have committed to "Gold" level sponsorship (\$10,000), and Collier Arbor Care and APS have signed on at the "Silver" level (\$5,000). Sponsorship and underwriting opportunities are still available for the 2009 Tour. Contact Mary at marydicarlo@treefund.org for more information.



Save the Date....

- **Sunday, July 26**
TREE Fund Golf Outing
Providence, RI
Sign up on 2009 ISA Conference Registration form
Sponsored by Asplundh
- **Monday, July 27, 5:30 pm**
"Raise Your Hand for Research" Gala Auction
Westin Providence, RI
Discount admission available until July 7th
with 2009 ISA Conference Registration



TREE FUND

Tree Research & Education Endowment Fund

552 S. Washington Street, Suite 109
Naperville, Illinois 60540

www.treefund.org



TREE FUND

Tree Research & Education Endowment Fund

Our Mission

To identify and fund projects and programs that advance knowledge in the field of arboriculture and urban forestry to benefit people, trees and the environment.

www.treefund.org

Ken Ottman 2008 "Volunteer of the Year" Award



Ken Ottman

The Ken Ottman "TREE Fund Volunteer of the Year" Award is presented annually by the TREE Fund in recognition of outstanding volunteer service to our organization. The award was first established in 2007 to recognize and honor

Ken Ottman's long and distinguished service as a TREE Fund Trustee. Ken devoted countless hours and seemingly endless energy to ensure that the TREE Fund had the resources necessary to carry out its mission of advancing knowledge in the field of arboriculture and urban forestry for the benefit of people, trees and the environment.

Ottman Award winners receive a pewter and brass beer stein adorned with the TREE Fund logo, their name and the year. Two Ottman Award

commemorative plaques are updated yearly with award recipients' names. One is displayed in the TREE Fund office, Ken has the other.

Deadline for Nominations is June 30th!

To nominate a candidate for the 2008 Ken Ottman Award call the TREE Fund office at 630-369-8300 or visit the Volunteer page on the TREE Fund website (www.treefund.org)



*Bid on this handmade boat!
See page 3 for details*