



**To: Insects, Diseases and Invasive Plants (IDIP) – SRS-4552**

**From: Doug Streett, Project Leader**

## NOTES # 71

**February 1, 2012**

### **Unit News**

**News Flash...** For all you iPhone and iPad Lovers the first version of the Invasive Plants of Southern Forests App was released in late January. The app includes all the text and images from the Jim Miller's "A Field Guide for the Management of Invasive Plants in Southern Forests" as well as the control recommendations from the management guide. Future versions will include reporting to the EDDMapS website. While everyone may wish to thank the Southern Research Station, in actuality our research unit was responsible for the support to develop the App. Check out the URL address below:

<http://itunes.apple.com/us/app/invasive-plants-in-southern/id495852751?mt=8&ls=1>

**News Flash...** Congrats to our own **Kier Klepzig and Jim Miller** for the 2011 Science Delivery Southern Research Station's Director Award: The Southern Forest Futures Project. The citation reads "Science Delivery Award, which includes the research, analysis, and compilation of the entire SFFP report and the delivery of that report with the 10 key findings to key end users."

**News Flash ...John Moser's** illustration of the architecture of nest of the leafcutting ant, *Atta texana*, is featured on page 428 of Showalter, 2011. Insect Ecology, An Ecosystem Approach. 631pp., the most recent text on Insect ecology.

**News Flash ...John Moser's** data on the mites associated with fire ants has been published in eXtension. URL address: <http://www.extension.org/pages/62144/insects-and-mites-that-hitchhike-on-flying-fire-ants>

## **New IDIP Technical Transfer Activities**

**Kier Klepzig** had a paper published: Joseph J. Doccola, J.J., **B. L. Strom**, C. Brownie, and **K. D. Klepzig**. 2011. Impact of Systemic Fungicides on Lesions Formed by Inoculation with the Bluestain Fungus (*Ophiostoma minus*) in Loblolly Pine (*Pinus taeda* L.) Arboriculture & Urban Forestry. 37(6): 288–292

**Bud Mayfield** gave a presentation titled "Southern Research Station Hemlock Woolly Adelgid Research Updates" at the HWA Biological Control Meeting, Jan 10, 2012, Annapolis, MD.

... **Bud** presented the following posters at the 23rd USDA Interagency Research Forum on Invasive Species Jan 10-13, 2012, Annapolis, MD.

**Mayfield A.**, A. Taylor, **S. Fraedrich**, P. Merten, and D. Bailey. Effect of debarking and heating on survival of the thousand cankers disease vector and pathogen in black walnut logs.

**Shepherd W.P.**, **A.E. Mayfield**, **B.T. Sullivan**, and K.F. Wallin. Studies of the chemical ecology of *Laricobius nigrinus*.

Jetton R.M., **A.E. Mayfield**, Z.L. Powers, and F.P. Hain. Operation adelgification: evaluating a rain down technique to artificially infest seedlings with the hemlock woolly adelgid.

**Stephen Fraedrich** had two papers published: Harrington, TC, Yun, HY, Lu, SS, Goto, H, Aghayeva, DN and **Fraedrich, SW**. 2011. Isolations from the redbay ambrosia beetle, *Xyleborus glabratus*, confirm that the laurel wilt pathogen, *Raffaelea lauricola*, originated in Asia. Mycologia 103: 1028-1036.

...Riggins, JJ, **Fraedrich, SW**, and Harrington, TC. 2011. First occurrence of laurel wilt in sassafras in Mississippi. Plant Disease 95: 1479.

Stephen also had a paper accepted: Cram, MM and **Fraedrich, SW**. 2012. Nematode Damage and Management in North American Forest Nurseries. Tree Planters' Notes (in press).

**Jim Miller** had several invited presentations:

**Miller, J.H.** Seventy-five years of fighting exotics in the southeastern forests from 1975-2050. Plenary Presentation to the 38<sup>th</sup> Natural Areas Conference, November 1, 2011, Tallahassee, FL.

**Miller, J.H.** Overview of regional cogongrass control efforts for 2011. Opening presentation and moderator for Workshop on the Biology and Control of Cogongrass: Research and Management Update, November 3, 2011, Tallahassee, FL. <http://www.cogongrass.org/conference11.cfm> (Moderated session)

**Miller, J.H;** Enloe, S.F. Successful cogongrass suppression using loblolly pine reforestation. Workshop on the Biology and Control of Cogongrass: Research and Management Update, November 3, 2011, Tallahassee, FL. <http://www.cogongrass.org/conference11.cfm>

**Miller, J.;** Chambliss, E.; Dwight, L.; Minogue, P. Imazapyr and glyphosate herbicide rate and timing response for cogongrass management in pine forests. Workshop on the Biology and Control of Cogongrass: Research and Management Update, November 3, 2011, Tallahassee, FL. <http://www.cogongrass.org/conference11.cfm>

**Michael Ulyshen** had a paper published: Duan, JJ, Opper, CB, **Ulyshen, MD**, Bauer, LS, Lelito, J. 2011. Biology and life history of *Tetrastichus planipennis* (Hymenoptera: Eulophidae), a larval endoparasitoid of the emerald ash borer (Coleoptera: Buprestidae). Florida Entomologist 94: 933-940.

**John Moser** presented a poster: **John C. Moser** and Raymond J. Gagne, entitled The Gall Midges (Diptera: Cecidomyiidae: Celticecis) of Hackberry (Cannabaceae: Celtis), at the 1011 Annual meeting of the Entomological Association of America at Reno Nevada, Nov 13-16 2011. see attached.

**Stacy Blomquist and John Moser** had a paper published: Pernik, Milan, **Stacy R. Blomquist**, Dimitrios N Avtzis, and **John C. Moser**. 1012. New associations of phoretic mites on *Pityokteines curvidens* (Coleoptera, Curculionidae, Scoliotinae). Cent. Eur. J. Biol. 7:63-69.

**Jim Hanula** had a presentation: **J.L Hanula**, Y. Zhang and **S. Horn**. 2012. The bean plataspid, *Megacopta cribraria*, feeding on kudzu: an accidental introduction with beneficial effects. 23rd USDA Interagency Research Forum on Invasive Species. Jan. 10-13, 2012, Annapolis, MD,

... **Jim** had the following papers published:

Joseph, S. V., **J. L. Hanula**, and S. K. Braman. 2011. Distribution and Abundance of *Adelges tsugae* (Hemiptera: Adelgidae) within Hemlock Trees. J. Econ. Entomol. 104 (6):1918-1927.

Zhang, Y., **Hanula, J.L., S. Horn**, and S.K. Braman. 2011. Biology of *Leptophya hospita* (Hemiptera: Tingidae): a potential biocontrol agent of Chinese privet. Ann. Entomol. Soc. Am. 104: 1327-1333.

...**Jim** also has the following papers In Press:

Zhang, Y., **Hanula, J.L. and S. Horn**. In press. Biology of *Megacopta cribraria* and its impact on Kudzu. Environ. Entomol.

Burke, J.L., **J. L. Hanula, S. Horn**, J. P. Audley, K.J.K. Gandhi. In press. Efficacy of Two Insecticides for Protecting Loblolly Pines (*Pinus taeda* L.) from Subcortical Beetles (Coleoptera: Curculionidae and Cerambycidae). Pest Management Science.

**Dan Miller** had the following paper submitted:

Allison, J.D., J.L. McKinney, **D.R. Miller** and M.L. Gimmel. Kairomonal responses of natural enemies and associates of the southern *Ips* (Coleoptera: Curculionidae: Scolytinae) to ipsdienol, ipsenol and cis-verbenol. Journal of Insect Behavior. Submitted Dec 2011.

... **Dan** also had the following paper published:

**Miller, D.R.** and C.M. Crowe. 2011. Relative performance of Lindgren multiple-funnel, Intercept panel, and Colossus pipe traps in catching Cerambycidae and associated species in the southeastern United States. *J. Econ. Entomol.* 104: 1934-1941.

... **Dan** had the following invited talks presented at the USDA Research Forum on Invasive Species in Annapolis MD (11 Jan 2012):

... **Miller, D.R.** Trapping pine cerambycids.

... Sweeney, J., P.J. Silk, R. Webster, **D. Miller**, et al. Improved lures for early detection of longhorn beetles: Effects of trap height and host volatiles on efficacy of cerambycine pheromones.

... **Dan** had the following poster presented at the USDA Research Forum on Invasive Species in Annapolis MD: Barnes, B.F., **D.R. Miller**, C.M. Crowe and K.J.K Gandhi. Comparison of Trapping Methods for Large Woodboring Beetles.

**Doug Streett** had two papers published: Jin, X, **D. Streett**, Y. Huang, and T. Ugine. 2012. Development of a novel bioassay system to assess the effectiveness of entomopathogenic fungi against imported fire ants. *Biocontrol Science and Technology*. Online

... Yu Zeng, Charles Lafon, David Cairns, John Waldron, Weimin Xi, Szu-Hung Chen, Andrew Birt, Maria Tchakerian, Robert Coulson, and **Douglas Streett**. 2012 Evaluating Southern Appalachian Forest Dynamics without Eastern Hemlock: Impact of Herbivory by the Hemlock Woolly Adelgid. *Applied Vegetation Science* (accepted).

**Doug Streett** had a presentation: Coulson, B. Zeng, Yu, Charles Lafon, David Cairns, John Waldron, Weimin Xi, Szu-Hung Chen, Andrew Birt, Maria Tchakerian, and **Douglas Streett**. 2012. Evaluating the Impact of Eastern hemlock removal from Southern Appalachian Forests. 23rd USDA Interagency Research Forum on Invasive Species. Jan. 10-13, 2012, Annapolis, MD.