



Agenda
23—25 April
Gainesville, Florida

Hosted by:

Imported Fire Ant and Household Insects Research Unit
Center for Medical, Agricultural and Veterinary Entomology
USDA, Agricultural Research Service
1600 SW 23rd Drive
Gainesville, FL 32608



We gratefully acknowledge sponsors of the 2007 IFA Conference



Bayer Environmental Science



AGENDA
2007 IFA Conference
Gainesville, Florida

Presentations

Monday, April 23

5:00 PM – 7:00 PM: Registration (Hotel Lobby)

5:00 PM – 7:00 PM: Poster Setup (San Felasco Meeting Room)

7:00 PM – 10:00 PM: Reception (Pool Deck/Mezzanine)

Tuesday, April 24

7:00 AM – 8:30 AM: Registration (Hotel Lobby)

8:30 AM – 9:00 AM: Welcome: Robert Vander Meer (Springhills Ballroom)

9:00 AM – 10:00 AM: Keynote Address (Springhills Ballroom):

Dr. Walter Tschinkel

“Fire Ants and Native Ants: A Cautionary Tale”

10:00 AM – 10:20 AM: Break

10:20 AM – 11:30 AM: Presentations (Springhills Ballroom)

Session 1: Extension/Management/Range Expansion

Moderator: ***David Oi***

10:20 AM – 10:25 AM: Announcements

1) 10:25 AM – 10:40 AM: Bastiaan “Bart” M. Drees, Kathy Flanders, Henrietta Ritchie.

eXtension fire ant web-site launch at <http://www.extension.org>.

2) 10:40 AM – 10:50 AM: Xing Ping Hu, Dunlun Song.

Field trials of fire ant bait products for controlling fire ants.

3) 10:50 AM – 11:00 AM: Seigo Higashi, Shyuhei Koulo.
Increasing threats of invasive ants in Japan.

4) 11:00 AM – 11:15 AM: Ronald D. Weeks, Jr.
Best management practices (BMP) for guarding against imported fire ants (IFA) in agriculture and forestry commodities known to harbor IFA.

5) 11:15 AM – 11:30 AM: Charles Barr.
Speed, effectiveness and duration of consumer bait and contact insecticides.

11:30 AM – 1:00 PM: LUNCH (provided)

1:00 PM – 2:30 PM: Presentations
Session 2: Biological Control and Behavior
Moderator: **Sanford Porter**

1:00 PM – 1:05 PM: Announcements

6) 1:05 PM – 1:15 PM: Don Henne, Seth Johnson.
Zombie fire ant workers: behavior controlled by decapitating fly parasitoids.

7) 1:15 PM – 1:30 PM: Tom Fink, Vijay Ramalingam, Shirong Du, Lichuan Gui, Doug Streett, John Seiner.
Behavioral interactions between black imported fire ants (*Solenopsis richteri* Forel) and their “stealthy” parasitoid Phoridae flies (*Pseudacteon curvatus* Borgmeier) as revealed by field high-speed videography.

8) 1:30 PM – 1:40 PM: Yoshifumi Hashimoto, Steven M. Valles.
Solenopsis invicta virus-1 tissue tropism and intra-colony infection rate in the red imported fire ant: A quantitative PCR-based study.

9) 1:40 PM – 1:55 PM: Jian Chen, C.L. Cantrell, S.O. Duke, M.L. Allen. Repellency of callicarpenal and intermedeol against workers of imported fire ants.

10) 1:55 PM – 2:05 PM: **Patricia Toth**, Phil Koehler, Roberto Pereira, Dave Williams.

Effects of indoxacarb on foraging behavior of *Solenopsis invicta*.

11) 2:05 PM – 2:20 PM: **L.M. Hooper-Bùi**, B. Wiltz, L.A. Womack, M.A. Seymour.

FAST (Fire Ant Surge Threat) prevention program in south Louisiana after hurricanes Katrina and Rita.

12) 2:20 PM – 2:30 PM: **Sanford Porter**.

Distribution of the Formosa strain of the fire ant decapitating fly *Pseudacteon curvatus* three years after releases in North Florida.

2:30 PM – 2:50 PM: *BREAK*

2:50 PM – 5:00 PM: *Presentations*

Session 3: Biology/Ecology

Moderator: **DeWayne Shoemaker**

2:50 PM – 2:55 PM: Announcements

13) 2:55 PM – 3:10 PM: **Sherri L. DeFauw**, James T. Vogt, Debbie L. Boykin.

Influences of imported fire ant (Hymenoptera: Formicidae) bioturbation on soils and turfgrass in a sod production agroecosystem.

14) 3:10 PM – 3:20 PM: **Deby Cassill**, Anthony Greco, Rajesh Silwal, Xuefeng Wang.

Opposable “thumbs” facilitate object manipulation in fire ants.

15) 3:20 PM – 3:35 PM: **Murali M. Ayyanath**, Gerald T. Baker, Peter W. K. Ma.

Partial characterization of PBAN-like immunoreactivity in the hybrid-imported fire ant, *Solenopsis invicta* Buren X *Solenopsis richteri* Forel (Hymenoptera: Formicidae).

16) 3:35 PM – 3:45 PM: **S. Bradleigh Vinson**, M Walker Hale, J. Bernal. Effects of *Thelohania solenopsae* (Microsporidia: Thelohaniiidae) infection on *Solenopsis invicta* colony fitness components and queen adoption.

17) 3:45 PM – 4:00 PM: **Henry Y. Fadamiro**, Li Chen.

Semiochemical mediated responses of phorid fly *Pseudacteon tricuspis* to imported fire ant odor.

18) 4:00 PM – 4:10 PM: **Chin-Cheng Yang**, Wen-Jer Wu, Cheng-Jen

Shih. Revised data showing alternative distribution of two social forms of red imported fire ant, *Solenopsis invicta*, in Taiwan.

19) 4:10 PM – 4:25 PM: **Freder Medina**, Haiwen Li, Brad Vinson, Craig J. Coats.

Bacterial microbiology of the red imported fire ant (*Solenopsis invicta* Burren) midgut.

20) 4:25 PM – 4:40 PM: **Andrew M. Bouwma**, D. DeWayne Shoemaker.

No evidence for Wolbachia phenotypic effects in newly mated queens of the fire ant, *Solenopsis invicta* (Hymenoptera: Formicidae).

21) 4:40 PM – 4:50 PM: **Robert Renthall**, Otis Blanchard, Daniel Gon-

zalez. Proteomics as a tool for developing IFA control strategies.

22) 4:50 PM – 5:00 PM: **Samuel A. Ochieng**.

Imported fire ant responses to interspecies gland extracts.

5:00 PM – 6:00 PM: *Poster Presentations (San Felasco)*

Presenters available at posters from 5:00 PM – 6:00 PM, 24 April 2007.

6:30 PM – 7:00 PM: *Cocktails (Springhills Ballroom)*.

7:00 PM – 10:00 PM: *Banquet (Springhills Ballroom)*.

Guest Speaker: Dr. Richard J. Brenner

Wednesday, April 24

8:00 AM – 10:15 AM: *Presentations (Springhills Ballroom)*

Session 4: Extension/Management/Prevention

Moderator: **Steven Valles**

8:00 AM – 8:05AM: Announcements

23) 8:05 AM – 8:20 AM: **Nate Royalty**, Jeff Michel, Britt Baker, Tom Macom.

MaxForce FC fire ant bait and TopChoice on fertilizer—the latest developments in fire ant management from Bayer.

24) 8:20 AM – 8:30 AM: **Lekhnath Kafle**, Wen-Jer Wu, Yi-You Huang, Cheng-Jen Shih.

Evaluation of a water tolerant bait for red imported fire ant *Solenopsis invicta* (Hymenoptera: Formicidae) in Taiwan.

25) 8:30 AM – 8:45 AM: **Yang-Yuan Chen**, Hui-Min Lin, Yu-Ching Tseng, C.T. Chen, C.C. Lin, C.J.W. Maa.

Eradication of fire ants using liquid nitrogen and heated gas pulses.

26) 8:45 AM – 9:00 AM: **Eva Yi-Fan Huang**, Po-Yung Lai, William Wei-Lien Chyi, Kevin Tsair-Bor Yen, Yang-Yuan Chen.

Utilization of odor sensibility of dogs in detecting the red imported fire ant, *Solenopsis invicta* Buren.

27) 9:00 AM – 9:10 AM: **James Saulnier**, Phil Boeing.

RIFA control in the Coachilla Valley, California.

28) 9:10 AM – 9:25 AM: **Charlie Cassidy**, Les Greenberg.

Field trials using reduced risk fire ant baits.

Session 5: Biology/Ecology

Moderator: **Steven Valles**

29) 9:25 AM – 9:40 AM: **James Anderson**, Jake Marquess.

Particle velocity measurements inside IFA tunnels: Was Hickling right?

30) 9:40 AM – 9:50 AM: **Les Greenberg**, John Kabashima, Mike Rust, John Klotz.

Lethal dose-response curves of several ant species to fire ant venom.

31) 9:50 AM – 10:05 AM: **Alejandro A. Calixto**, Marvin K. Harris, Charles L. Barr.

Interference competition by *Solenopsis invicta* displaces native ants at broadcast baits: Implications for management of *Solenopsis invicta* and restoration of native ants.

32) 10:05 AM – 10:15 AM: **Kuo-Hsun Hua**, Wen-Jer Wu, Ting-Hsuan Hung.

Application of monoclonal antibodies on detection of red imported fire ant venom proteins and antibodies in mouse.

33) 10:15 AM – 10:30 AM: **David Vander Hooven**, Darrell Courtney.
Endres processing presents Tast-E-bait.

10:30 AM – 10:45 AM: BREAK.

10:45 AM – 11:30 AM: Business Meeting to choose location and coordinators for the 2008 IFA Conference.

11:30 AM – 2:30 PM: Luncheon and Tour, Butterfly Museum, University of Florida (Optional).

3:00 PM – 5:00 PM: Areawide Core Meeting, USDA, Center for Medical, Agricultural and Veterinary Entomology.

Thursday, April 25

8:00 AM – 12:00 PM: eXtension Work Day (Springhills Ballroom)

Posters

► Biology/Ecology ◀

1. Seasonal shifts in the hyperspectral characterization of imported fire ant (Hymenoptera: Formicidae) mound features in turfgrass.

Sherri L. DeFauw, James T. Vogt.

2. The assembly of communities in a heterogeneous landscape: Are ant assemblages a product of local or regional environmental variation?

JoVonn G. Hill, Keith S. Summerville, Richard L. Brown, Joe A. MacGown.

3. Comparative electroantennogram response of two phorid fly species to different species of imported fire ants.

Li Chen, Samuel Ochieng, Henry Y. Fadamiro.

4. Developing methods to evaluate reproductive rates of *Pseudacteon curvatus* (Diptera: Phoridae) in *Solenopsis richteri* (Hymenoptera: Formicidae).

Maribel Portilla, Doug Streett, J.T. Vogt.

5. Enumeration, isolation, and characterization of heterotrophic bacteria in RIFA habitat in Taiwan.

Hsiu-Hui Chiu, How-Jing Lee, Wung Yang Shieh.

6. Potential impact of imported fire ants on loggerhead sea turtles

Stan Diffie, Jeannie Miller, Stacia Hendricks

7. Investigation of fire ant extract with significant activity against the infectious pathogen *Mycobacterium tuberculosis*.

John J. Bowling, James B. Anderson, Mark T. Hamann.

► Biological Control and Behavior ◀

8. *Pseudacteon* decapitating flies: Potential vectors of a fire ant virus?

Steven M. Valles, Sanford D. Porter

9. Laboratory host specificity testing of the microsporidian pathogen *Vairimorpha invictae*.

David H. Oi, Steven M. Valles, Juan A. Briano.

10. Current USDA, APHIS efforts to release phorid flies (*Pseudacteon* spp.) into imported fire ant populations in the U.S. and Puerto Rico.

Anne-Marie Callcott, Ronald D. Weeks, Jr.

11. Stridulation behavior of *Solenopsis invicta* and *Solenopsis richteri* during non-nestmate interactions.

J.R. Marquess, J.B. Anderson, T. Fink.

12. Passive traps for monitoring *Pseudacteon* parasitoids of *Solenopsis* fire ants.

Robert T. Puckett, Alejandro Calixto, Charles Barr, Marvin Harris.

► Extension and Management ◀

13. Efficacy and residual of BAS 320I (Metaflumizone) granular bait for fire ant control using broadcast application in urban settings in Arkansas.
John D. Hopkins, Kelly Loflin, Douglas Petty.

14. Areawide suppression of fire ants: Demonstration project in Mississippi, 2006.
D.A. Streett, A.M. Pranschke, J.T. Vogt, Jack T. Reed, Anne-Marie Callcott.

15. Fire ant management in urban landscapes.
James A. Reinert, Bart Drees, Joe McCoy, Kimberly Engler.

16. Asked and answered: The imported fire ant eXtension FAQs.
Kathy Flanders, Patricia Beckley, Carol Whatley, Virginia Morgan, Bart Drees.

17. Effective and economical control of imported fire ant in cattle production systems.
Henry Dorough.

18. Ouch! Who bit me? – IFA in Alabama.
V.E. Bertagnolli-Heller, L.C. “Fudd” Graham.

19. Evaluation of eradication of fire ants using liquid nitrogen and heated gas pulses.
Hui-Min Lin, **Yu-Ching Tseng**, Yang-Yuan Chen, C.T. Chen, C.C. Lin, C.J.W. Maa.

20. Utilization of odor sensibility of dogs in detecting the red imported fire ant, *Solenopsis invicta* Buren.
Eva Yi-Fan Huang, Po-Yung Lai, William Wei-Lien Chyi, Kevin Tsair-Bor Yen, Yang-Yuan Chen.

21. A new addition to our arsenal of ant WMDs.
L.C. “Fudd” Graham, Vicky Bertagnolli-Heller.



Notes:



Acknowledgements

Organizing Committee:

- Matt Aubuchon
- Eric Daniels
- Yoshifumi Hashimoto
- Margaret Martin
- David Oi
- Sanford Porter
- DeWayne Shoemaker
- Steven Valles
- Robert Vander Meer

- Best Western Gateway Grand
 - Elaine Connolly
 - Jorge Negron

