

# The 47th Annual Meeting of the Weed Science Society of America

Hyatt Regency Hotel, San Antonio, Texas • February 4 - 8, 2007

**Vegetable Tour**  
Sunday, Feb. 4 - 2007

**Workshop**  
**Monday, Feb. 5**  
Statistical Assessment of  
Dose-response Curves with  
Free Software

**Conference**  
Monday, Feb. 5 - Thursday, Feb. 8, 2007

**Symposia**

- Employment Opportunities for Weed Scientists and How to Make Yourself More Marketable
- Nursery Stock vs. Invasive Plant: Which is it, and why do we care?
- Using Emerging Technologies to Study Weed Biology
- Integrated Weed Management Revisited



## Contents

Schedule of Events .....	2	
Vegetable Tour .....	3	
Workshop .....	4	
Hotel Information.....	5	
Travel & Reservation Information .....	6	
Registration Form .....	7	

Dear WSSA Member,

A special invitation is extended to each of you to participate in the 47th Annual meeting of the Weed Science Society of America. Our meeting will be held at the Riverwalk Hyatt Regency in San Antonio, TX. Jill Schroeder, the Program Chair, and the Program Committee have been working diligently to ensure an excellent program for members and guests. The scientific program will feature special topic symposia and poster and oral paper presentations on the latest weed science research. There will be special pre-meeting Leafy Green Vegetable tour of the Wintergarden area of Texas as well as a statistic workshop on Monday. In addition, there will be a special all-day symposium on Thursday on Nursery Stock vs. Invasive Plants. The entire program will be posted on the WSSA web site ( [HYPERLINK "http://www.wssa.net" www.wssa.net](http://www.wssa.net)). Symposium speakers and those who register by December 30th, 2006 will receive their printed programs in the mail. Please be sure to bring those programs with you to the meeting.. Programs for late registrants and on-site registrants will be available at the registration desk in San Antonio.

Please take the time to complete and mail the meeting registration and hotel reservation forms that are included in the brochure. It's not too early to make travel plans for what promises to be an excellent meeting. I look forward to seeing all of you in San Antonio. The hotel is right on the Riverwalk and the weather should be much better than it was in New York last year. Please come and help us have another excellent meeting.

Dale Shaner  
President



## Schedule of Events

### Sunday, February 4

<i>Leafy Green Vegetable Tour</i>	7:30 a.m. to 5:30 p.m.
Board of Directors	7:30 a.m. to 5:00 p.m.

### Monday, February 5

<i>Workshop: Statistical Assessment of Dose-Response Curves</i>	7:00 a.m. to 4:00 p.m.
Committee Meetings	10:00 a.m. to 3:30 p.m.
Board of Directors	8:00 a.m. to 3:00 p.m.
General Session & Awards Presentation	4:15 p.m. to 6:00 p.m.
Awards Reception	6:00 p.m. to 8:00 p.m.

### Tuesday, February 6

Poster Session A	7:30 a.m. to 9:00 a.m.
Paper Sessions	9:15 a.m. to 12 noon
<i>Symposium: Graduate Student Symposium: Employment Opportunities For Weed Scientists &amp; How to Make Yourself More Marketable</i>	10:00 a.m. to 12 noon
Graduate Student Lunch and Meeting	
Following Symposia	12:00 noon to 1:00 p.m.
<i>Symposium: Using Emerging Technologies to Study Weed Biology: An Educational Forum</i>	1:00 p.m. to 5:00 p.m.
Paper Sessions	1:00 p.m. to 5:00 p.m.

### Wednesday, February 7

Board of Directors & Committee Chairs	7:00 a.m. to 8:30 a.m.
Poster Session B	7:30 a.m. to 9:00 a.m.
Paper Sessions	9:15 a.m. to 12 noon
<i>Symposium: Integrated Weed Management Revisited</i>	1:00 p.m. to 5:00 p.m.
Paper Sessions	1:00 p.m. to 5:00 p.m.
WSSA Business Meeting	5:30 p.m. to 6:30 p.m.
Reception	6:35 p.m. to 8:30 p.m.

### Thursday, February 8

Paper Sessions	8:00 a.m. to 12 noon
<i>Symposium: Nursery Stock vs. Invasive Plant: Which is it and Why do we Care</i>	8:00 a.m. to 5 p.m.
Paper Sessions	1:00 p.m. to 5:00 p.m.

### Friday, February 9

Board of Directors	7:30 a.m. to 4:00 p.m.
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## Leafy Green Vegetable Tour



Winter is the time for vegetables, at least in Texas! Agricultural land in Texas consists of over 150 million acres, with 600,000 acres producing horticultural crops. Texas is a leading producer of winter-grown vegetables, including the region known as the Texas Wintergarden. This region includes many counties located in southwestern Texas near the Rio Grande River and Mexico, and contains over 40,000 acres of vegetables valued annually at \$85 million. In addition, over 49,000 acres of pecans are produced in the region with an estimated value of \$58 million. The cool, mild winter climate and fertile soils offer excellent growing conditions for spinach and other leafy greens, as well as onions, cabbage, carrots, beets, potatoes and green beans.

On Sunday, February 4, 2007, attendees at the 47th annual Weed Science Society of America meeting held in San Antonio will be able to participate on an all day tour of the Wintergarden region to experience Texas-sized agricultural production. This tour will include visits to local producer's farms

in Frio, Zavala and Uvalde counties, as well as a visit to the Del Monte Agricultural Research Farm where herbicide and disease control research is conducted in cooperation with Texas A & M University and the University of Arkansas spinach breeding program. After tasting an authentic Texas BBQ, tour participants will also be offered a unique opportunity to see up close what it takes annually to produce millions of cans of spinach and other vegetables at the Del Monte Processing Plant located in Crystal City. Along the way participants may also be able to view Texas-sized cattle, sheep and goat ranches, as well as other "wild critters" found in the region.

The tour is being coordinated by the Weed Science Society of America, the Texas A & M University Agricultural Research & Extension Center and Texas Cooperative Extension, as well as support from Del Monte Foods and the Wintergarden Spinach Producers Board. Tour sponsors include AMVAC, BASF, Chemtura, Dow AgroSciences, Gowan Company,

Helena Chemical, Syngenta, UAP Chemical, and Wilbur-Ellis.

Cost for the tour is \$20.00 per person. The tour bus will leave the conference hotel at 7:30 a.m. and will return at approximately 5:30 p.m.





## Workshop at the WSSA Meeting 2007

### Statistical Assessment of Dose-response Curves with Free Software

**Organizers:** Jens C. Streibig and Christian Ritz (KVL, Copenhagen, Denmark).

**Venue:** Hyatt Regency Hotel, San Antonio, Texas

**Time:** 7 a.m. -4 p.m.  
February 5, 2007

**Cost:** \$150

### Course Description

A repeat of last year's course. Herbicides are designed to kill plants and their selective use in crops is a question of dose. Consequently, use of dose-response curves is fundamental to understanding herbicide selectivity and efficacy. This principle can be extended to other branches of weed management, e.g. allelopathy, flame weeding, weed steaming, physical control, laser cutting and radiation and weed crop competition.

Dose-response curves, germination curves, and competition models are genuine non-linear. The way they are summarized varies and often depends on tradition and/or available statistical software rather than theoretical considerations of the best way to exploit the information contained in the data.

The aim of the course is to make participants able to succinctly assess toxicity on the basis of proper choice of dose-response models and compare dose-response curves statistically using the free software programme R and a specific developed extension package, drc, developed for weed scientists and freely downloadable at URL: [www.bioassay.dk](http://www.bioassay.dk). Additionally the package drc can also be used to fit germination curves and user-defined functions, for example competition models.

### Course Content

- 1) The meaning of dose-response curves
- 2) Installation of R and how to work with the programme.
- 3) Fitting and comparing dose-response curves, e.g.: discrete versus gradual endpoints, relative versus raw data, upper and lower limits, measurement of effi

cacy and index of selectivity, bioassay design, heterogeneity of variance, which model to choose and how to assess hormesis responses.

- 4) Working on handout data or, preferentially, own data.

### Participants

Graduates and postgraduate students, weed scientists in public and private institutions. **There will be a maximum of 25 attendees.** Participants must bring their own PC and data to get the maximum benefit from the course.

### Course Material

Essential course material will be emailed to participants one week before the course and a cd with all material will be distributed to participants at the course.

### Prerequisite

Basic knowledge of statistics, including regression analysis, would be preferable. Participants must bring their own PC; PC's will not be provided.

Ritz, C. and Streibig, J.C. (2005). Bioassay Analysis using R, J. Statist. Software, Vol. 12, Issue 5. URL: [www.bioassay.dk](http://www.bioassay.dk).

### INVASIVE PLANT SYMPOSIUM

**Organizers:** Alan Tasker, USDA APHIS, Riverdale, MD and Nelroy Jackson, Consultant, Corona, CA

In conjunction with the session chairs for Turf and Ornamentals: Scott McElroy, Wildland and Aquatic Invasives: Lars Anderson, and Regulatory Affairs: Larry Fowler.

**Venue:** Hyatt Regency Hotel, San Antonio, Texas

**Time:** 8:00 am - 5 pm  
February 8, 2007

**Cost:** \$50 for those who are not otherwise attending the WSSA annual meeting.

Nursery Stock vs. Invasive Plant. Which is it, and why do we care?

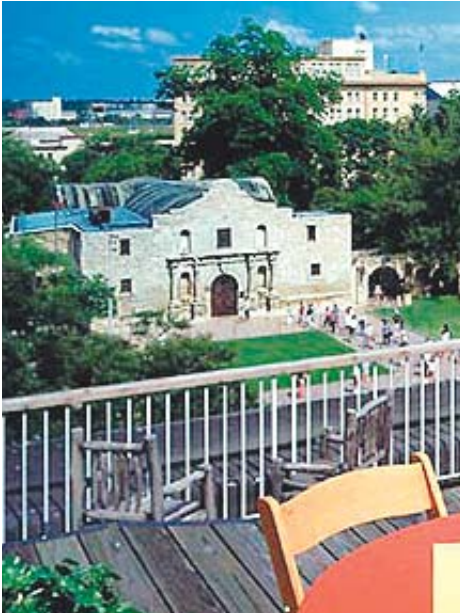
### Objectives:

Assess progress on implementing the 1999

St. Louis Accords, and provide information of interest to local and regional retail and wholesale nurserymen, gardeners and Education/Extension personnel.

### PROGRAM

- The Nursery Trade and the Invasive Plant Issue: Overview. Nelroy Jackson, Ph.D.
- Revising the USDA's Plants for Planting Import Regulations. Polly Lehtonen and A. Tschanz, USDA, APHIS, PPQ, PRIM, Riverdale, MD.
- APHIS Enforcement: Smuggling Interdiction, Trade Compliance and Interstate movement. Cornelia Mueller (APHIS PPQ Smuggling Interdiction and Trade Compliance) & Cassie Armingier (APHIS Investigative and Enforcement Services), Riverdale, MD.
- Plant Inspection System and the Impact of State Noxious and Invasive Plants Law on the Nursery Industry in Texas. Awinash P. Bhatkar, Ph.D., Texas Dept of Agriculture, Coordinator for Plant Quality Programs,
- The Pulling Together Initiative: A Texas-sized Partnership to Manage Invasive Species. Damon Waitt, Lady Bird Johnson Wildflower Center, Austin, TX.
- The 2001 St. Louis Declaration: The Voluntary Codes of Conduct Project—what have we learned so far? Valerie Vartanian, Missouri Botanical Gardens and The Nature Conservancy, St. Louis, MO.
- The Codes of Conduct: Issues for the Nursery Industry. Craig Regelbrugge, Exec Sec American Nursery and Landscape Association, Washington, DC.
- The Codes of Conduct for Botanic Gardens: The University of Washington Experience. Sarah Reichard University of Washington.
- The Cal-HIP (California Horticultural Invasives Prevention) process. Terri Kempton, San Francisco, CA
- The Gardener Perspective: If you don't know it, don't grow it. Paul Cox, Ph.D., Asst. Dir. San Antonio Botanic Garden, San Antonio, TX.
- Water Gardens: When getting Wet and going Wild is totally Inappropriate. Marshall Meyers, PIJAC (Pet Industry Joint Advisory Council), Washington DC.
- A Green Industry Prospective on Invasive Species. B. Brown and T. Wyatt, Texas Nursery & Landscape Association, Austin, TX.



**Hotel:** The Hyatt Regency San Antonio is located across from the Alamo, with stunning views of the Riverwalk and Old San Antonio. The hotel's 16 story garden atrium is built over an extension of the San Antonio River, which flows through the lobby via a series of cascading waterfalls. Guest rooms include TV with remote control, video messaging, voice mail, individual climate control, electronic door locks, full bath amenities, iron and ironing board, AM/FM alarm clock, hair dryer, coffee maker and mini-bar. The hotel has a heated outdoor swimming pool and whirlpool and a new 2800 sq ft hotel health club offering free weights, exercise cycles, stair climbers, treadmills, and Nautilus fitness equipment.

**Important Information:** One of the reasons we have been able to retain relatively low meet-

ing registration costs is that we receive free meeting space from the hotel. However, we are charged attrition fees if we do not meet our guest room block. Thus, your reservation at the Hyatt Regency rather than another location, ensures the success of the meeting for the Society and lower registration rates in the future.

**Room Reservations:** To make your room reservations, please complete the Hotel Reservation Form below and return it to the address listed on the form or call the hotel directly at 888-421-1442 or 210-222-1234. **Please be sure to mention you are with the Weed Science Society, to obtain the group-discounted rate. Our room block will be held until January 15, 2007. Accommodations requested beyond the cut-off date will be offered based on availability.**

**Please Reserve Accommodations For** *(please print)*

Name \_\_\_\_\_ Affiliation \_\_\_\_\_

Address \_\_\_\_\_

City/State/Zip \_\_\_\_\_

Email Address \_\_\_\_\_

Sharing room with \_\_\_\_\_ Signature \_\_\_\_\_

*One form per room*

**Room Type/Rates** *(please check appropriate box)*

Single person \$159 plus tax     Double \$159 plus tax    *Check-in: 3 p.m. • Check-out: 12 noon*

Arrival date: \_\_\_\_\_ Estimated time of arrival: \_\_\_\_\_ Departure date \_\_\_\_\_

**Payment**

Accommodations must be guaranteed by credit card or check made payable in the amount of one night's lodging plus tax. Unless reservations are cancelled 24 hours prior to arrival date, you will be charged for the first night. Unless otherwise indicated, any deposit received will be equally distributed among room occupants.

Check Enclosed     American Express     Diners Club     Discover     MasterCard     VISA

Card Number \_\_\_\_\_ Exp. Date \_\_\_\_\_

Cardholder Name \_\_\_\_\_ Signature \_\_\_\_\_

**DEADLINE FOR REGISTRATION IS JANUARY 15, 2007.**

**Reserve Your Room:**

- By Phone: 1-888-421-1442 **Please be sure to mention Weed Science Society of America and ask for the Convention Rate**
- By Fax: 1-210-227-4925
- Clip and mail form to: Hyatt Regency San Antonio 123 Losoya Street San Antonio, Texas 78205

## Travel Information

### San Antonio International Airport

SAT is serviced by 16 air-carriers: Aerolitoral, American Airlines, America West, Continental, Continental Express, Delta, and Delta Connection Carriers (ASA, Comair and Skywest), Frontier, Mexicana, Midwest, Northwest, Southwest, Sky West and United. These airlines collectively offer non-stop service to 31 different markets. San Antonio International Airport is approximately 8 miles from downtown and the River Walk and is directly linked via US Hwy. 281.

**SATRANS Airport Shuttle**  
1331 N. Pine

San Antonio, TX 78202  
(210) 212-5395  
Reservations:(210) 281-9900  
(800) 868-7707  
Fax:(210) 212-4514  
HYPERLINK  
"http://www.sairportshuttle.com"  
www.sairportshuttle.com  
Service between airport and downtown hotels \$12 each way with purchase of round trip, or \$14 one way. Services also available to other area destinations. ADA accessible mini-buses.

### Taxicabs

Metered service based on \$1.60 during daytime hours (5 a.m.-9 p.m.); \$2.60 during nighttime hours (9 p.m.-5 a.m.).

Time to downtown business district is approximately 15 minutes, average fare \$19.00 - \$20.00 plus tip. There is no extra charge for additional passengers. Rates subject to change. Large minivans are also available and can transport up to 7 passengers downtown for an



## Registration Information

### Registration Fees

Please see the registration form for costs on registration, the Leafy Green Vegetable Tour, and the Statistical Assessment Workshop. Take advantage of the early bird discounts and register by December 8th, 2006. Receipt of payment will be included in registration packets to be picked up at the registration site.

### How to Register

#### By Mail

Complete the registration form, include payment, and send to:  
WSSA Meeting Manager  
Registration 2007 Annual Meeting  
1822 West Lincoln  
Bozeman, MT 59715

#### On Line (for credit card registrations only)

Meeting registration can be accessed and paid for directly on line by going to the meeting registration section of the WSSA web site: <http://www.wssa.net>.

#### Fax (for credit card registrations only)

Complete the registration form found in the Weed Science Society of America's Annual Meeting Brochure or download the registration form from the society's web page and fax to 406-587-2451.

### Questions

Call 1-888-995-3088. E-mail address is [wssameeting@allenpress.com](mailto:wssameeting@allenpress.com).

### Cancellation Policy

Written notice of cancellation received on or before January 12, 2007 will be refunded, less a \$75.00 processing fee (to be processed after the annual meeting). **NO REFUNDS WILL BE ISSUED FOR CANCELLATIONS AFTER JANUARY 12, 2007.** Participants unable to attend the conference can make substitutions.









Weed Science Society of America  
Annual Meeting Registration  
P.O. Box 7050  
Lawrence, KS 66044-7050

First Class Mail  
U.S. Postage  
**PAID**  
Permit #1  
Lawrence, KS 66044



**Early Bird Registration by December 8**  
**Pre-Registration by January 12 for the WSSA 47th**  
**Annual Meeting in San Antonio, Texas**