



Western Society of Weed Science Newsletter

205 W. Boutz, Bldg. 4, Ste. 5, Las Cruces, NM 88005

(575) 649-7157

wsws@marathonag.com

Fall 2016

IN THIS ISSUE:

- President's Report
- Call for Distinguished Achievement Awards
- 2017 Program Chair Report
- Note from the Business Office
- Local Arrangements
Coeur d'Alene Notes
- Student Liaison Report
- Herbicide Properties Tool (HPT) Webinar
- Grass Mapper Website
- Global Herbicide Resistance Challenge
- Student Paper and Poster Contest Information
- Career Opportunities with OSU & UPI
- Knockoutweeds Workshops
- Washington Report
- 2017 Weed Short Course Announcement
- Call for Research Progress Reports
- 2017 annual Meeting Registration Form
- Publication Order Form

Sidebar highlights

- Contact Us
- Officers & Executive Committees
- Publications
- Calendar of Events



President's Report by Kirk Howatt

The US Presidential campaign is in the final throws of banter and accusation as I write this report. Many have expressed disinterest in either candidate, which has led to an unusual feeling of turmoil. Similarly, there is uncertainty in agriculture. Several issues such as atrazine use rate, drift mitigation labeling, and use of dicamba are opportunities for us to offer expertise to promote stability. Please contribute time and talent as you are able to provide

guidance as these issues are resolved. We have members offering time and talent for office of WSWS leadership. Fortunately, our election is not contentious and is between desirable candidates. Please review materials and vote when distributed.

One selection that has been completed is our Business Manager. We have signed a contract with Interactive Management Incorporated under direction of Gary Leeper in Westminster, CO. This group was awarded contract by several societies, which should maintain continuity and strengthen services offered to the societies. We again are very grateful to Phil Banks and his staff for many years of exemplary service. A two-month overlap is planned during the annual meeting to facilitate training and introduction.

Recipients of the Elena Sanchez Memorial Scholarships also have been selected. The Awards Committee was very impressed with the caliber of applicants. I was pleased to notify Neeta Soni, Colorado State University in Fort Collins, and Mariano Galla and Caio Brunharo, University of California at Davis, of their awards, which include support for travel to present and serve at the meetings in Coeur d'Alene. Congratulations to these individuals and please encourage student participation in our Society.

We have other awards available to recognize excellence in weed science. Fellows, Honorary Members, Outstanding Weed Scientists, and Distinguished Service Awards offer several categories to honor our colleagues. I remind you to finish the final touches on nominations you are preparing and submit them for consideration.

To find out who receives these awards make plans to join us at the 2017 Annual Meeting in Coeur d'Alene. Monte Anderson and the Program Committee have worked closely with Amy Ferriter of the Western Aquatic Plant Management Society to bring us a truly joint meeting (in structure and content if you have read the General Session lineup). I look forward to your research presentations, be mindful of the December 1 title deadline, and please take advantage of the interesting aquatic presentations.

Thanks for your involvement and see you soon.

2017 CALL FOR NOMINATIONS: DISTINGUISHED ACHIEVEMENT AWARDS

Reminder: 2017 call for nominations for DISTINGUISHED ACHIEVEMENT AWARDS are due **December 1st**. Categories include OUTSTANDING WEED SCIENTIST, OUTSTANDING WEED SCIENTIST – EARLY CAREER, WEED MANAGER and PROFESSIONAL STAFF. See the WSWS meeting website for instructions (<http://www.wsweedscience.org/annual-meeting/awards/>). Please send nominations to the Awards committee chair Roger Gast at regast@dow.com.

Weeds of All Types at the Coeur d'Alene Meeting

- Monte Anderson, Program Chair

Imagine going to a weeds conference and getting the latest about this subject on land, in water, and even as a crop. The joint meeting of the Western Society of Weed Science and Western Aquatic Plant Management Society will be a unique experience for members of both societies on March 13-16, 2017. The Coeur d'Alene Resort welcomes us back to their beautiful facility on the lake. I realize that mid-March in the inland Northwest isn't everyone's cup of tea for weather, especially with the latest predictions for a wet, snowier winter than normal. However, if you like to ski, it should be a great season at nearby mountains. The program chair of the WAPMS and I believe you will enjoy the combined meeting where we are coordinating our programs so that you can easily move from session to session.

At this conference, there will be a special symposium on Thursday on the effects of climate change on western agricultural and rangeland weeds. Numerous speakers are planned to give a broad perspective, and it will run from the end of the business meeting until just after noon. If you know of interested parties outside of the WSWS and WAPMS, be sure to let them know they can attend just the climate change symposia for a nominal charge. Attendance is included for those who register for the joint meeting.

Two additional symposia will cover risk communication with the general public by Kaci Buhl from the National Pesticide Information Center, and macro photography by Robert Norris from UC-Davis. Education and Regulatory chair Brian Jenks has been working to secure these symposia offerings. As always, members are encouraged to bring forward symposia topics for future meetings.

A joint General Session will have the presidents from both societies providing their comments followed by our normal update from the science policy director. Geologist Nick Zentner of Central Washington University will describe the connection between the Ice Age Floods and agriculture as we know it today in the Pacific Northwest. Private contractor Dr. Alan Schreiber of Ag Development Group will discuss cannabis legalization and the issues associated with growing this crop.

Research Section Chair Prashant Ja is working to insure that project chairs are organizing discussions among our five projects: Agronomic Crops, Horticultural Crops, Weeds of Range and Natural Areas, Basic Biology and Ecology, and Teaching and Technology Transfer. Please enrich our conference by offering a paper or poster presentation in one of these areas, or even in the aquatics session!

To enjoy all the diversity of attending this unique conference, it's best to register by December 1. If you wish to give a paper or poster, that deadline is December 1. Abstracts are due March 1 but can be submitted earlier to help obtain pesticide credits in certain states. A reminder that posters can be up to 48 X 48 inches at this meeting. The meeting starts March 13 with a joint welcoming event that includes the traditions of the WSWS honoring of retirees and of the WAPMS presidential reception.

A Note from the Business Office

Registration for the 2017 joint WSWS/WAPMS meeting in Coeur d'Alene is now open and you can go to our website (<http://www.wsweedscience.org/annual-meeting/>) to conveniently register online or you can use the registration form found in this newsletter. The Annual Meeting page on the website also has information for making a room reservation at the Coeur d'Alene Resort Hotel and for title and abstract submissions. Titles must be submitted before December 1, 2016. The meeting preregistration and hotel reservation deadline is February 13, 2017. Please read through all the registration information carefully since the joint meeting options are a little more complicated than usual.

This will be my last Note from the Business Office that will be published in the Newsletter. After ten years of serving as your Business Manager, it is time to move on to something else. It has been a privilege to work with all of you and I know the WSWS will continue to be an important organization in weed management science and education for the western U.S. The new Business Manager will be Tara Steinke with Integrated Management Inc. and she will be working with me and Ed at the meeting.

I look forward to seeing you all at the meeting. As always, if you need to contact the office, please give us a call at (575) 649-7157 or e-mail at wsws@marathonag.com.

Phil Banks, WSWS Business Manager/Treasurer

Contact Us

Newsletter Editor

Carl Libbey

Washington State University
Mount Vernon, WA 98273
(360) 848-6139

libbey@wsu.edu

WSWS Officers and Executive Committees

President

Kirk Howatt

North Dakota State University
NSDU Dept 7670
PO BOX 6050

Fargo, ND 58108-6050

kirk.howatt@ndsu.edu

Awards, Site Selection

President-Elect

Monte Anderson

Bayer CropScience
16304 S Yancey Ln

Spangle, WA 99031-9563

monte.anderson@bayer.com

Program, Poster,
Publications, Student Paper
Judging, Local Arrangements

Immediate Past President

Joe Yenish

Dow AgroSciences
101 Calendula Circle
Billings, MT 59105

jpyenish@dow.com

Fellows & Honorary
Members, Sustaining
Members, Nominations

Secretary

D. Chad Cummings

Dow AgroSciences
382 W FM 1753
Bonham, TX 75418

dccummings@dow.com

Necrology

WSSA Representative

Marty Schraer

Syngenta Crop Protection
152 E Cassidy Drive
Meridian, ID 83646

marty.schraer@syngenta.com

Legislative

CAST Representative

Brian Jenks

North Dakota State University
5400 Hwy 83 S.
Minot, ND 58701
brian.jenks@ndsu.edu

Member-At-Large

Public Sector

Scott Nissen

Colorado State University
115 Weed Research Lab
Fort Collins, CO 80523-1179
scott.nissen@colostate.edu

Finance

Member-At-Large

Private Sector

Charlie Hicks

Bayer CropScience
3008 Shore Rd
Fort Collins, CO 80524
charlie.hicks@bayer.com
Herbicide Resistant Plants

Research Section Chair

Prashant Jha

Montana State University
Southern Agricultural Research
Center
Huntley, MT 59037
pjha@montana.edu

Research Section Chair-Elect

Brad Hanson

University of California - Davis
Dept. of Plant Sciences MS-4
One Shields Ave
Davis, CA 95616
bhanson@ucdavis.edu

Education Section Chair

Brian Jenks

North Dakota State University
5400 Hwy 83 S.
Minot, ND 58701
brian.jenks@ndsu.edu

Education

Public Relations

Education Section Chair-Elect

Dirk Baker

Campbell Scientific, Inc.
815 West 1800 North
Logan, UT 80525
dbaker@campbellsci.com

Coeur d'Alene Local Arrangements – Scott Cook

The 2017 WSWS meeting in Coeur d'Alene, ID is coming on fast! Preregistration is now offered, and it will remain available until February 11, 2017. This date is also the deadline for reserving hotel rooms at the meeting block rate. Please see <http://www.wsweedscience.org/annual-meeting/> for important registration links. Here is information to assist you with travel planning.

Options for travel from the Spokane International Airport to the Coeur d'Alene Resort

Shuttle -The Resort does offer a Shuttle; you would need to call 24-hours ahead of time to assure timely accommodations. The cost for this is about \$69, the number is (855) 999-7998.

Taxi – There are several taxi services either in Coeur d'Alene or Spokane. It seems that Spokane Cab is good, they offer a one way trip to the Resort for about \$100 and offer discounts for multiple riders. Their number is (509) 568-8000 or www.spo-cab.com. Another good one is 24/7 Taxi Cab. They are offering us \$85 if we book 24 hours in advance. You can call (509) 703-4884 or text (509) 255-3030, their web site is www.spokane247taxicab.com. Another option in Coeur d'Alene is Airport Shuttle, their number is (208) 765-5930.

Rental Car – There are several rental agencies in the Spokane Airport, Avis, National, Enterprise, Thrifty, and Budget. I sure would recommend a rental car as there are so many awesome sites to see around the Northwest. Then you have a good way to get to your ski resorts! See the Summer Newsletter for further info on the great ski resorts around the area (<http://www.wsweedscience.org/wp-content/uploads/2016-Summer-Newsletter-1.pdf>).

If you are planning on driving to the meeting here are directions from every direction

From the West (Spokane, WA) – From Spokane head east on I-90, 33 miles, then get off at exit 11, Northwest Blvd, head south. About 2.5 miles and take a right on 2nd/Front Ave, then into the Resort.

From the East (Missoula, MT) – From Missoula head west on I-90, 160 miles, then get off at exit 15, Sherman Ave, head west, about 1.5 mile then left on 7th, then right on Front Ave, the Resort is straight ahead.

From the South (Boise, ID) – From Boise head north on Highway 55 then it changes to Highway 95 at New Meadows, this is about 370 miles. Cross the Spokane River and take a right, south, on Northwest Blvd. about a mile and then take a right on 2nd/Front Ave and it will lead you right into the Resort.

From the North (Bonners Ferry, ID) – From Bonners Ferry head south on Highway 95, 80 miles. Continue through Coeur d'Alene on Highway 95, just before the Spokane River take a left, south, on Northwest Blvd. about a mile and then take a right on 2nd/Front Ave and it will lead you right into the Resort.

Parking at the Coeur d'Alene Resort

The Resort offers Valet-parking for \$22 a night or Self-parking for \$18 a night. On the east side of the resort, they offer outside parking for about \$15 a night. Note the outside parking is not affiliated with the Resort.



Student Liaison Report - by Breanne Tidemann

Alright everyone, there is already snow outside my window. It's early even for us up here in Canada, and there's still some research plots outside. Since I don't really want to think about that, it's time to start thinking about the Annual Meeting in Coeur d'Alene! Make sure you pay attention to the deadlines elsewhere in this newsletter and get registered, get your titles in, and make your travel plans. We don't want to miss out on seeing you! The student competition is usually one of the highlights of the meeting, so make sure you're prepared to really show off the research you've been working so hard on - the guidelines for the contest have already been sent out. Please contact me if you didn't receive them.

Also at the meeting is our annual Silent Auction. We will be starting to gather items to auction off in Coeur d'Alene. Last year we met our goal of raising \$3,000 to fully fund the Elena Sanchez Outstanding Student Scholarships. We could use your help in meeting that goal again. If you have any items to donate, or suggestions of people to contact for items, it would be greatly appreciated. Both of our contact information is below so feel free to get in touch with us with ideas or items. It is only through the support of the society members that we are successful in funding our student scholarships which help more students attend, network and present their research at the Annual Meeting. Your support each year is greatly appreciated. Students, you can help fund scholarships for yourself or other students! Consider donating an item crested by your university, a framed picture that you took in the field, or other fun, weed science related items. The continued support of the society allows us to continue supporting students who will keep our society going in the future.

Speaking of the student scholarships, congratulations to Mariano Galla (UC Davis), Neeta Soni (Colorado State) and your very own Student Liaison Chair Elect Caio Brunharo for being the recipients of this year's Elena Sanchez Student Scholarships! We didn't have a lot of applications this year and I would encourage all students to apply next year. In addition, mention it to new students who are starting their program and will be attending the meeting. Supervisors, you can encourage your students to apply too! While we only award three scholarships each year we would like to see lots of applicants for those scholarships. Make the Award's Committee's lives a little bit harder... I'm sure they won't mind.

The last thing I'll mention is that in March we will be looking for a new Student Liaison Chair Elect as I step out of the Student Liaison Chair role and Caio steps in. This position is an exciting and fulfilling opportunity. Students, you will be getting emails explaining the position and the requirements over the next couple of months. Please consider putting your name forward for the position.

As always keep an eye on the Facebook (<https://www.facebook.com/WSWSStudentSection/>) and Twitter (@WSWSstudents) pages for reminders and information. Don't forget to get ready for the meeting, look for donations, and get in touch if you have any questions, comments or concerns.

If you have any questions, you can contact Breanne Tidemann, Chair (blaturnu@ualberta.ca) or Caio Brunharo, Chair Elect (cabrunharo@usdavis.edu).

Herbicide Properties Tool (HPT) Webinar November 14, 2016

National Pesticide Information Center's latest web app, **HPT**, helps users evaluate the potential for movement of herbicides in the environment in an efficient and user-friendly manner.

Join the team that designed and created the HPT web app as we give you a brief overview and explore the app's handy features. No registration is required to join the webinar. To watch the webinar live at 1:00 PM Pacific (4:00 PM Eastern) on 14 November, 2016, go to: <https://oregonstate.webex.com/oregonstate/j.php?MTID=m52f63aaf3b77adacbe23f35eb1573ed7>

Or join by phone: +1-415-655-0002 US Toll

Need help joining the meeting?

If you miss the live version, this (and all of our past webinars) session will be recorded and posted **online**.

Treasurer / Business Manager

Phil Banks

Marathon Ag Company

205 W. Boutz Road
Bldg 4, Ste 5
Las Cruces, NM 88005
wsws@marathonag.com

Constitution & Operating Procedures Representative

Tim Miller

Washington State University
16650 SR 536
Mt. Vernon, WA 98273
twmiller@wsu.edu

Webmaster & Web Editor

David Krueger

Apex WebStudio LLC
PO Box 91235
Raleigh, NC 27675
david@apexwebstudio.com

Student Liaison

Breanne Tidemann

University of Alberta
6000 C and E Trail
Lacombe, AB T4L 1W1
Canada
blaturnu@ualberta.ca

Student Liaison Chair-elect

Caio Brunharo

University of California, Davis
625 Cantrill DR #268-A
Davis, CA 95618
cabrunharo@ucdavis.edu

Science Policy Director

Lee Van Wychen

The National and Regional
Weed Science Societies
5720 Glenmullen Place
Alexandria, VA 22303
(202) 746-4686
Lee.VanWychen@WSSA.net

Publications

WSWS ONLINE EDUCATION
<http://passel.unl.edu/pages/index2col.php?category=weedscience#>

WSSA Journals Website Online
www.WSSAJournals.org

CALENDAR OF EVENTS

70th Annual Meeting of the Canadian Weed Science Society

November 22-24, 2016
Moncton, New Brunswick,
Canada
www.weedscience.ca

Weed Science Society of America Annual Meeting

February 6-9, 2017
Tuscan, Arizona
www.wssa.net

Western Society of Weed Science Annual Meeting

March 13-16, 2017
Coeur d'Alene, Idaho
www.wsweedscience.org

Western Invasive Weed Short Course

April 17-20, 2017
Loveland, Colorado
www.mountainwestpest.com/ShortCourse.html

2nd Global Herbicide Resistance Challenge

May 14-18, 2017
Denver, Colorado
www.ghrc2017.org

26th Asian Pacific Weed Science Society Conference 'Weed Science for People, Agriculture, and Nature'

September 19-22, 2017
Kyoto, Japan
www.c-linkage.co.jp/apwss2017/

INVASIVE GRASSES CAN'T HIDE ANYMORE



Grass Mapper is a website and mobile browser that allows scientists, managers, and the public to help identify, report, and track the spread of invasive grasses.

Why grasses? Grasses make up one of the largest plant families in the world, many of which are invasive in North America. However, few tools for identification and tracking are available to the general public.

The grasses that are of particular interest to us are ventenata (*Ventenata dubia*), cheatgrass (*Bromus tectorum*) and medusahead (*Taeniatherum caput-medusae*). We hope to add more species to the website over time.

Use the website to identify an invasive grass species, and then report it by logging in, entering the location information, and uploading photos to help verify the identification!

If this website is of interest to you, we are open to feedback! Let us know what you think, and how you would like to use GrassMapper!

WWW.GRASSMAPPER.ORG

Contact us at:
grassmapper@gmail.com

**Aug
2016**



Global Herbicide Resistance Challenge May 14-18, 2017 in Denver, Colorado

The Scientific Program Committee is developing a program that will bring together academic and industry weed researchers, land managers, policy makers, and communications experts. The program includes invited speakers in plant molecular genetics, non-chemical weed management, communications, socio-economics, as well as experts from insecticide, fungicide, and antibiotic resistance for an inter-disciplinary program.

We hope you and your colleagues will participate in this event. It is a great opportunity to interact with other scientist and professionals in research, education, government, and industry for four days of oral paper and poster presentations and networking on key herbicide resistance issues spanning the spectrum from genomics to management.

Visit the official website (www.ghrc2017.org) for detailed information about the program, registration, hotel accommodations, travel, sponsor/exhibitor opportunities and much more!

STUDENT PAPER AND POSTER CONTEST INFORMATION

Joel Felix – Chair

The Student Paper and Poster contest at the Western Society of Weed Science Annual Meeting offers students an opportunity to improve their presentation skills and increase their visibility within the Society. The top students in each division of the contest will be recognized with a plaque and receive a cash award to honor their achievement.

All graduate students are encouraged to enter one paper and/or one poster in the contest. Undergraduate students may enter one poster in the contest. Other papers or posters may be submitted in the project sessions outside the context of the contest. Information presented in the WSWS Student Paper and Poster Contest is to be original and unique. If a topic has been used by the author in another presentation, additional data must be included to constitute a unique presentation. *It is important to point out that there*

should be no overlap between the data presented in the poster and oral format by the person (if entered in a competition). In other words, oral and poster presentations entered for competition by the same person should be substantively different from each other (not just changing the title or simply adding more data to the poster.) Information regarding the scoring of papers and posters is listed in the table below.

As the chair of the 2017 Student Paper and Poster contest, I am asking for non-student volunteers to participate as judges for this competition. If you haven't done this before, it is a rewarding experience to provide valuable feedback to our students who are giving oral or poster presentations. If you are interested in volunteering, please contact me by email or phone: (joel.felix@oregonstate.edu) or (541) 889-2174.

| Paper Contest* | Points | Criteria |
|------------------------|--------|---|
| Abstract | 10 | Format, grammar, and content |
| Introductions | 10 | Rational, hypothesis, and objectives |
| Methods | 15 | Experimental design, treatments, measurements, and statistical analysis |
| Results and Discussion | 25 | Results, interpretation, conclusions, future directions, and implications |
| Visual Aids | 15 | Easily read; uncluttered; in focus; balance to text, tables, figures, and photographs |
| Oration | 20 | Voice, confidence, enthusiasm, enunciations, and response to questions |
| Time | 5 | Allowed 2 to 4 minutes for questions (all-or-nothing points) |
| Total | 100 | |

*Previous first place winners in the paper contest are ineligible for the paper contest, but may enter the poster contest.

| Poster Contest* | Points | Criteria |
|-----------------------|--------|---|
| Abstract | 10 | Format, grammar, and content |
| Content and Mechanics | 15 | Grammar, style, and quantity of information |
| Development | 20 | Rationale, hypothesis, objectives, organization, and methods |
| Analysis of Results | 20 | Results, interpretation, conclusions, future directions, and implications |
| Appearance | 20 | Easily read, uncluttered, well-designed tables and figures, clear and relevant photographs, and balanced layout |
| Oration | 10 | Voice, confidence, enthusiasm, enunciations, and response to |
| Physical Presence | 5 | Interaction with audience and mannerisms |
| Total | 100 | |

*Previous first place winners in the poster contest are ineligible for the poster contest, but may enter the paper contest.

Assistant Professor, Extension Specialist—Vegetable and Specialty Seed Crops

The Department of Horticulture at Oregon State University seeks outstanding candidates for a full-time, nine month, tenure track position titled: Extension Specialist—Vegetable and Specialty Seed Crops. The position is based at the North Willamette Research and Extension Center (NWREC) located in Aurora, OR—about 90 minutes north of Corvallis, OR and Oregon State University’s main campus. The position is at the assistant professor rank.

NWREC is a 160 acre research farm located in the Willamette Valley and the center of the state’s specialty crop and horticultural region. The fresh and processed vegetable industry sectors of agriculture include a farm gate value of more than \$100,000,000 annually in the Willamette Valley. Also, the valley is one of the primary seed crop production regions in the United States and world for vegetable, flower and herb seed production.

We seek an individual that will develop a regionally and nationally recognized, Extension outreach and research program in support of the fresh and processed vegetable and specialty seed crop industries. Extramural funding generated by the incumbent will help support this position and grow capacity. The appointment is 50% Extension, 30% research, 15% scholarship, and 5% service. Potential areas of emphasis could include, but are not limited to: pest management, irrigation, soil fertility and nutrient management, production science, food safety, marketing, environmental monitoring, technology and automation. The incumbent will be expected to publish in peer-reviewed scientific journals and present at professional meetings. Also, the incumbent will be expected to work closely with other OSU faculty—on campus and off-campus who support vegetable and specialty seed crop research, teaching, Extension and outreach.

Salary is commensurate with education and experience. A competitive start-up package is provided.

The northern Willamette Valley, is the heart of one of the nation’s most diverse agricultural industries. More than 220 farm crops are commercially marketed. Surrounding communities are regularly listed among the most livable small towns, and the dynamic city of Portland is less than 25 miles away. Aurora, OR is 90 minutes from the Pacific Ocean to the west and 90 minutes to the east is the nation’s only year-around skiing on Mt. Hood. The Department of Horticulture at Oregon State University includes over 48 nationally and world renowned faculty who explore a diverse range of questions and topics related to horticultural systems.

Qualifications:

Ph.D. in Horticulture or related field with demonstrated expertise in research and outreach community education related to vegetable and specialty seed crop production and management and related fields.

- Demonstrated capacity for scholarship and evidence of high potential to obtain extramural funding to support Extension and research programs.
- Demonstrated ability to effectively communicate verbally and in writing.
- Demonstrated commitment to promoting and enhancing diversity.

This position is designated as a critical or security-sensitive position; therefore, the incumbent must successfully complete a Criminal History Check and be determined to be position qualified as per OAR 576-055-0000 et seq. Incumbents are required to self-report convictions and those in Youth Programs may have additional Criminal History Checks every 24 months.

To Apply:

Find the full position description, application instructions, and the online submission portal here:

<https://jobs.oregonstate.edu/postings/34112>

For full consideration applications must be received by November 20, 2016 and the position will close November 27, 2016.

Inquiries about the position should be directed to the Search Committee Chair, Chip Bubl, OSU Columbia County Extension Agriculture Agent at chip.bubl@oregonstate.edu or (503) 397-3462.



Apply via our Career Page at UPI-USA.com
Field Development Representative
Job Description

Summary

The Field Development Representative is responsible for the implementation of product development projects within regions where pest management research is conducted, as well as research methodology, including statistical analysis and field plot technique. Reporting to Director of Field Development, the Field Development Representative has responsibility for the day to day monitoring and evaluation of plant protection technologies and development of new label use instructions for existing products.

This position requires the ability to 1) draft label revisions and/or additions, supplemental, 24C or section 18 emergency use instructions, 2) compile, interpret, and present of project data in written and oral formats (i.e. trial summaries et al), and 3) assist the sales group in handling customer complaints.

Key accountabilities include the implementation and achievement of specific pest management and/or product testing program objectives and specific major R&D projects within the defined budget guidelines. This position is also responsible for providing the necessary technical support to the regional sales and national marketing, regulatory affairs and R&D functions, as well as providing support to strategic planning for the development or acquisition of new agrichemical products and maintenance and expansion of United Phosphorus' existing business.

Qualifications

The successful candidate will be a self-starter with the proven ability to understand, influence and relate to customers, regulatory agencies, university and contract researchers, and coworkers across the Company. To perform this job successfully, an individual must be able to perform each essential duty satisfactorily. The requirements listed below are representative of the knowledge, skill, and/or ability required.

This position requires a solid understanding of agronomic, cropping practices in TNV, row crops, etc, within a specified territory. This person must have effective presentation skills and the ability to analyze, interpret and act upon complex data and analyze and solve complex problems, demonstrated project leadership skills and in-depth and/or broad scientific knowledge. This position recognizes invention and follows through to patent with technical assistance. This position knows and utilizes business and scientific resources throughout UPI.

Essential Duties and Responsibilities include the following. Other duties may be assigned.

- Provide creation, oversight and coordination of field trial programs.
- Provide technical leadership within areas of expertise to Sales, Marketing, Regulatory Affairs, and provide technical support to these departments within pest management areas.
- Develop and maintain key relationships with relevant university personnel and institutions, and maintain/update product recommendations with key universities, consultants, and influential organizations.
- Assist in developing pest management R&D field programs and budget.
- Propose new development projects, products and business objectives into technical projects, and translate UPI strategies.

Education and/or Experience

M.S./Ph.D. in **plant sciences (entomology, plant pathology, agronomy, or weed science)**. All candidates must have at least ten years of field experience, with at least 5 of those years working with **herbicides**.

Competencies

Customer focused Effective team building Resourceful Instills trust
Drives results Resilient Collaborative

Physical Demands

The physical demands described here are representative of those that must be met by an associate to successfully perform the essential functions of this job.

There may be long periods of standing, walking, and exposure to fields and farms. This position also requires normal, everyday use of standard office equipment.

Travel is required for this position, including via car, plane, and other modes of transportation. This will entail multi-state coverage and will be a minimum of 40% travel. This person must hold a valid driver's license and be insurable by the Company. Travel outside of the U.S. may be required, depending on the duties and primary territory assigned.

Work Environment

The general environment is a farm/field environment, with exposure to plants and chemicals. This position requires the use of a home office.

Reasonable accommodations may be made to enable individuals with disabilities to perform the essential functions.

How to Apply: [http://www.upi-usa.com/contact-us/car__Join Our Team](http://www.upi-usa.com/contact-us/car__Join%20Our%20Team), or e-mail your word .doc or .docx CV with Cover Letter to upi.hr@uniphos.com.

No calls please.

Knocking Out Noxious Weeds on Rangelands Workshop Series

The workshops have a dynamic list of speakers covering a range of land management topics associated with invasive species. This workshop is designed for ranchers, land managers, consultants and conservation organization staff.

The direct annual cost to monitor and control invasive plants in California is \$82 million, and the indirect economic impacts are even larger. Join the fight to reduce noxious weeds on rangelands and get the latest management tools at the 2016 Knocking Out Noxious Workshop Series!

The workshop will include:

- Showcase effective strategies to manage invasive species;
- Highlight cost-effective approaches that maximize success;
- Feature reduced-risk practices while promoting biodiversity; and
- Discussion on the economic losses caused by invasive species on rangelands.

Join us on:

November 16, 2016 –Salinas
December 13, 2016-Eureka

November 17, 2016 -Fresno
December 14, 2016-Susanville

For additional information and to register please visit <http://knockoutweeds.com/> or contact event manager Tracy Schohr at tk schohr@ucdavis.edu or (916) 716-2643.

WASHINGTON REPORT

October 31, 2016

Lee Van Wychen

New Rapid Response Ag Research Funds Available from FFAR

On September 25, the Foundation for Food and Agriculture Research (FFAR) opened the Rapid Outcomes from Agricultural Research (ROAR) program, making available up to \$150,000 to accelerate initial research and outreach response to combat new pest outbreaks by pre-establishing teams of experts, agreements, and funding sources. The \$150,000 is the maximum per one-year grant and requires matching funding.

ROAR is structured around commodity consortia. To establish a consortium, interested groups are invited to self-organize or take advantage of pre-existing consortia of researchers, extension agents, institutions, commodity and industry representatives, diagnostic laboratories, and relevant state and local representatives.

In the event of a new or emerging agricultural pest outbreak, a given consortium will submit a proposal for rapid research and extension response. FFAR will render decisions to fund or not fund a proposal based upon qualifying criteria, including but not limited to:

- The outbreak has regional and/or national implications.
- The outbreak is acute in nature and has substantial economic implications for a commodity.
- The program will contribute to practical solutions that producers can implement in the field.

For more information, please visit: www.foundationfar.org/ROAR/

Federal Government Funded on CR Until Dec. 9.

A day before FY 2016 government funding expired on September 29, Congress passed a continuing resolution (CR), H.R. 5325 that extends government funding FY 2016 levels until Dec. 9, when lawmakers are expected to be in Washington for a lame-duck session after the election. The CR was cleared by the House on a 342-85 vote and earlier in the day was passed by the Senate, 72-26. The legislation includes \$1.1 billion in Zika response funding, \$500 million for flood relief in Louisiana and other states and fiscal 2017 appropriations for military construction and veterans. The initial conference report back in July contained language that would have provided mosquito sprayers, including vector control districts, a 180 day waiver from NPDES permit requirements for applying FIFRA approved insecticides near waters of the United States. Unfortunately, that language was eventually removed due to the objections from a handful of misinformed Senators and Representatives.

Weed Science Societies Comment on EPA's Draft Guidance for Herbicide Resistance Management Labeling and Stewardship

This summer EPA issued a Pesticide Registration Notice (PRN) that proposes an approach to address herbicide-resistant weeds by providing guidance on labeling, education, training, and stewardship for herbicides undergoing registration review or registration. The National and Regional Weed Science Societies recognize the critical need to protect all available weed management tools and are on record supporting proactive measures by EPA to combat the further evolution and spread of herbicide-resistant weeds. EPA's proposal represents a significant change in how resistance is monitored, mitigated and communicated to weed management stakeholders. We consider this proposal a first iteration that will need adaptation and evolution as our

experience with it grows and we hope the Agency has those same expectations. Our comments are at: <http://wssa.net/wp-content/uploads/Natl-Regl-Weed-Sci-Comments-on-EPA-PRN-2016-XX.pdf>

EPA is evaluating the public comments and expects to finalize their draft guidance in late 2016. The herbicide resistance management guidance will be implemented for existing herbicides during registration review and for new herbicides and new uses of existing herbicides at the time of registration.

EPA says Glyphosate “Not Likely to be Carcinogenic to Humans”

In September, EPA officially released its cancer review assessment and background paper on glyphosate along with more than 100 other documents. WSSA fully supports EPA’s Cancer Assessment Review Committee’s (CARC) report on glyphosate (<https://www.regulations.gov/document?D=EPA-HQ-OPP-2016-0385-0014>) and appreciates the scientific rigor and thoroughness of the CARC’s review of all available epidemiology and carcinogenicity studies. WSSA agrees with the CARC’s assessment that the few studies that the International Agency for Research on Cancer (IARC) selectively chose for its glyphosate review suffered from small sample sizes of cancer cases related to glyphosate exposure and had risk/odds ratios with large data variance beyond acceptable limits. Furthermore, WSSA feels that the IARC review process for glyphosate was flawed and represents a case of gross scientific negligence. There is no question that IARC arrived at their conclusion due to their inclusion of the positive findings from a selection of studies with known limitations, a lack of reproducible positive findings, and the omission of the negative findings from credible and reliable research.

A FIFRA Scientific Advisory Panel (SAP) was scheduled to be held October 18-21 to review the CARC report and other supporting documents. However, a few days before the meeting, EPA issued a notice saying it was postponed “due to recent changes in the availability of experts for the peer review panel.” As it turned out, CropLife America showed that one of the SAP members, Dr. Peter Infante, demonstrated repeated bias in statements about pesticides and pesticide studies and cited a ruling in which a federal district court disqualified his testimony.

Written comments for the FIFRA SAP meeting were due October 4 in order to give panel members a couple weeks to read them. In addition to the comments above, WSSA also submitted information they developed for a Fact Sheet titled “Dispelling Common Misconceptions about Superweeds” and a press release titled “WSSA Scientists Say Herbicide Resistance Predates Genetically Engineered Crops by 40 Years.” Those comments are at: <http://wssa.net/wp-content/uploads/WSSA-comments-to-FIFRA-SAP-on-glyphosate.pdf>

WSSA Comments on Triazine Draft Ecological Risk Assessment

A number of concerns have been raised by various stakeholders relative to EPA’s draft ecological risk assessment for the triazines. These concerns include: errors in endpoint data and the water monitoring database; use of models that are not validated with field data; estimates of inflated hypothetical risks (e.g. atrazine applications resulting in 36% bird mortality) that have not been observed in over 55 years of atrazine use; use of data or findings not conducted in accordance with EPA’s scientific guidelines required under FIFRA; and ignoring the advice and findings of previous Scientific Advisory Panels on atrazine. The WSSA stresses the importance of addressing these concerns in order to maintain stakeholder confidence in the Agency’s science-based regulatory framework. However, our main concern, based on the current ecological draft risk assessment, is that atrazine and simazine would be restricted to less than 0.25 lbs a.i./A and 0.5 lbs a.i./A, respectively. At these low rates, atrazine and simazine would not provide efficacious weed control. In addition, using sub-lethal rates of atrazine or simazine is not an effective option for resistance management as it has been shown that this practice is likely to result in weeds with multiple-site or polygenic resistance which would make it more difficult to control these weeds. WSSA’s comments are at: <http://wssa.net/wp-content/uploads/WSSA-Comments-on-Triazine-Ecological-Risk-Assessment.pdf>

EPA Manual Available on How to Comply with the Revised Worker Protection Standards

The EPA in conjunction with the **Pesticide Educational Resources Collaborative (PERC)** has made available a guide to help users of agricultural pesticides comply with the requirements of the 2015 revised federal Worker Protection Standard (WPS). You should read this manual if you employ agricultural workers or handlers, are involved in the production of agricultural plants as an owner/manager of an agricultural establishment or a commercial (for-hire) pesticide handling establishment, or work as a crop advisor. The “How to Comply” manual includes:

- details to help you determine if the WPS requirements apply to you;
- information on how to comply with the WPS requirements, including exceptions, restrictions, exemptions, options, and examples;
- “Quick Reference Guide” - a list of the basic requirements (excluding exemptions, exceptions, etc.);
- new or revised definitions that may affect your WPS responsibilities; and explanations to help you better understand the WPS requirements and how they may apply to you.

The revised EPA Pesticide Worker Protection Standard “How to Comply” Manual is available at:

<https://www.epa.gov/pesticide-worker-safety/pesticide-worker-protection-standard-how-comply-manual>

MIT Researchers Find New Way to Make Pesticides Stick to Leaves 10 Times Better?

Massachusetts Institute of Technology. "Making pesticide droplets less bouncy could cut agricultural runoff: Researchers find a way to make pesticides stick to leaves instead of bouncing off." ScienceDaily, 30 Aug 2016. www.sciencedaily.com/releases/2016/08/160830121724.htm

By using a clever combination of two inexpensive polymer additives, called polyelectrolytes, MIT researchers found they could drastically cut down on the amount of liquid that bounces off plants. The new approach uses two different kinds of additives. The spray is divided into two portions, each receiving a different polymer substance. One gives the solution a negative electric charge; the other causes a positive charge. When two of the oppositely-charged droplets meet on a leaf surface, they form a hydrophilic (water attracting) "defect" that sticks to the surface and increases the retention of further droplets.

Based on the laboratory tests, the team estimates that the new system could allow farmers to get the same effects by using only 1/10 as much of the pesticide or other spray. And the polymer additives themselves are natural and biodegradable, so will not contribute to the runoff pollution.

Journal Reference: Maher Damak, Seyed Reza Mahmoudi, Md Nasim Hyder, Kripa K. Varanasi. **Enhancing droplet deposition through in-situ precipitation.** *Nature Communications*, 2016; 7: 12560 DOI: [10.1038/ncomms12560](https://doi.org/10.1038/ncomms12560)

Abstract: Retention of agricultural sprays on plant surfaces is an important challenge. Bouncing of sprayed pesticide droplets from leaves is a major source of soil and groundwater pollution and pesticide overuse. Here we report a method to increase droplet deposition through in-situ formation of hydrophilic surface defects that can arrest droplets during impact. Defects are created by simultaneously spraying oppositely charged polyelectrolytes that induce surface precipitation when two droplets come into contact. Using high-speed imaging, we study the coupled dynamics of drop impact and surface precipitate formation. We develop a physical model to estimate the energy dissipation by the defects and predict the transition from bouncing to sticking. We demonstrate macroscopic enhancements in spray retention and surface coverage for natural and synthetic non-wetting surfaces and provide insights into designing effective agricultural sprays.

Politicization of the Waters of the United States Rulemaking

On October 27, the House Oversight and Government Reform Committee released a report detailing findings from its investigation into the Waters of the United States (WOTUS) rulemaking process. The critical report shows how pressure from the White House and the EPA led to a rulemaking that is legally and scientifically insupportable. The report is available at:

<https://oversight.house.gov/wp-content/uploads/2016/10/WOTUS-OGR-Report-final-for-release-1814-Logo-1.pdf>

Key findings from the report include:

- The agencies pushed the rule through on an accelerated timeline that appeared to have been motivated by political considerations. Some officials involved in the process believed politics deprived them the opportunity to conduct a meaningful and full review of the rule before its promulgation.
- The U.S. Army Corps of Engineers, which shares jurisdiction over the Clean Water Act, was cut out of the rule development process.
- The EPA made no effort to ensure the rule was based on sound science. The EPA did not conduct additional research (which the Corps believed was necessary) to justify the rule's conclusions.
- The agencies did not consider alternatives to the rule, and even went so far as to gut the discussion of alternatives after the Office of Information and Regulatory Affairs stated such discussion was necessary.
- The agencies went to unusual and unprecedented lengths to avoid compliance with the National Environmental Protection Act, the Regulatory Flexibility Act, and Small Business Regulatory Enforcement Fairness Act.
- Public comments were not fully reviewed and considered before agencies drafted the final rule.

After the WOTUS rule took effect in August 2015, many stakeholder groups challenged the rule in federal courts as a violation of statutory and constitutional law. The 6th Circuit Court of Appeals issued a stay of the WOTUS rule, delaying its implementation pending further action by the Court. Opening briefs to the 6th Circuit Court are due Nov. 1, 2016.

NISC Adopts New Management Plan

The National Invasive Species Council (NISC) announced the release of their 2016-2018 Management Plan. The plan sets forth high priority, interdepartmental actions for the Federal government and its partners to take to prevent, eradicate, and control invasive species, as well as restore ecosystems and other assets adversely impacted by invasive species. The thirteen Federal Departments and Agencies whose senior officials comprise NISC will:

- Provide Federal leadership on invasive species issues by establishing the structures, policy, and planning priorities necessary to enable Federal agencies to effectively prevent, eradicate, and/or control invasive species, as well as restore impacted ecosystems and other assets;
- Limit the spread and impact of invasive species through high-level policy and planning by strengthening coordination between the United States and other governments, across the Federal government, and between the Federal government and non-governmental stakeholders;

- Raise awareness of the invasive species issue and mobilize the policies, programs, and financial resources necessary to minimize the spread and impact of invasive species;
- Remove institutional and policy barriers to the Federal actions needed to prevent, eradicate, and control invasive species, as well as restore ecosystems and other assets;
- Conduct assessments of Federal capacities to meet the duties set forth in Executive Order 13112, as well as other high-level policy priorities, and build Federal capacities, as needed;
- Foster the scientific, technical, and programmatic innovation necessary to enable Federal agencies and their partners to prevent and mitigate the impacts of invasive species in a timely and cost-effective manner with negligible impacts to human and environmental health.

The 2016-2018 NISC Management Plan is available at: <https://www.doi.gov/sites/doi.gov/files/uploads/2016-2018-nisc-management-plan.pdf>

FHWA Updates Roadside Revegetation Handbook with Emphasis on Pollinators

In its first major update since 2007, the Federal Highways Administration (FHWA) has expanded their roadside revegetation manual to include a major emphasis on pollinators. The handbook is now titled “Roadside Revegetation: An Integrated Approach to Establishing Native Plants and Pollinator Habitat”. With at least 17 million acres of roadsides in the U.S., roadside vegetation can serve as much needed habitat for pollinators, offering food, breeding, or nesting opportunities and connectivity that can aid pollinator dispersal. Roadside vegetation management influences how pollinators use roadsides, and even influences the number of pollinators killed by vehicles. For example, butterfly vehicle mortality rates increase with more frequent mowing and decrease with high plant diversity in roadside vegetation.

The publication is written specifically for the “designer,” those individuals or members of a road design team who will be directly involved in planning, implementing, monitoring, or maintaining a revegetation project. The first draft was released in September 2016 and is available at:

http://www.nativerevegetation.org/pdf/RoadsideReveg_PollinatorHabitat_DRAFTv1-1_sept2016.pdf

ASA, CSSA and SSSA Congressional Science Fellowship

Applications are now being accepted for the 2018 ASA, CSSA and SSSA Congressional Science Fellowship. Use your scientific knowledge working for a member of Congress in this year-long Fellowship in Washington, DC. Applicants must have exceptional competence in their field of study, be cognizant of a broad range of matters outside the Fellow’s particular area, and have a strong interest in working on a range of public policy issues. Must be a member of ASA, CSSA and/or SSSA and have completed or are approaching completion of their PhD in agronomy, crop science, soil science or related field. The 2018 Fellowship can begin anytime from September 2017 to January 2018; the exact date is flexible and open to negotiation. Application deadline, January 13, 2017.

<https://www.agronomy.org/science-policy/fellowship/application>

Lee Van Wychen, Ph.D.

Science Policy Director –

National and Regional Weed Science Societies

Lee.VanWychen@wssa.net

cell: (202) 746-4686

www.wssa.net

WESTERN INVASIVE WEED



April 17-20, 2017
Loveland, Colorado



The 7th Annual Western Invasive Weed Short Course will be held at Sylvan Dale Guest Ranch in Loveland, Colorado. The WIWSC is an intensive study of current technologies and best management practices associated with noxious and invasive weeds in the western United States. The course includes classroom lecture, hands-on demonstration, field plots, live weed and herbicide symptomology specimens, facilitated discussion, small group projects, educational games, and time for individual interaction with instructors.



What previous participants have said:

- "Outside plant ID with a botanist who knows what they are looking at is AWESOME training for plant community managers."
- "Great campus, food, and instructors. Good learning environment."
- "Very fun training. The trainers were entertaining and got the information to us in a fun way."
- "Great training and location."
- "Environment is awesome for the course."
- "Great trainers and very knowledgeable staff. Enjoyed the interactive session the most."

The registration fee (\$825.00 by January 31, 2017; \$925.00 on February 1, 2017) includes the educational program and daily refreshment breaks. Three lunches and three dinners are also included in the registration. Lodging at either Sylvan Dale Guest Ranch or La Quinta Inn & Suites is not included in the registration fee.

For more information:

www.mountainwestpest.com/ShortCourse.html

To register for the course, contact:

Sandra McDonald
970-266-9573

Sandra@MountainWestPEST.com



Abbreviations: Use abbreviations as shown in the Scientific Style and Format: The *CBE Manual for Authors, Editors, and Publishers* and as commonly used in *Weed Science* or *Weed Technology*. Abbreviations for weeds can be used in the tables. **Do not abbreviate the word inch.** Do not place a period after the abbreviation unless its omission could cause confusion. Abbreviations not shown in the *CBE Manual* (**including Bayer codes**) should be introduced in parentheses immediately after their first use in the text or footnoted if used in a table.

Numbers: Use Arabic numerals for numbers with two or more digits and for measurements of time, weight, and degrees, except when the number is the first word of a sentence. Spell out numbers less than 10 or when they are the first word of a sentence, except when they constitute a series in which one number has two or more digits. Write 10 by 20 rather than 10 x 20 and 1 to 5 rather than 1-5 except in tables where space is limited. Use decimals instead of fractions (0.5, not ½). Place zero at left of decimal (0.5, not .5).

Plant names: Weeds can be appropriately identified in the text by using the WSSA-accepted common names [*Weed Science*, 32 (Supplement 2): 1984 with *Weed Science* 36:850-851, 1988; Composite List of Weeds, available from WSSA; or WSSA.net].

Chemical names: Herbicides can be properly identified by the WSSA-accepted common name (appears in the back of *Weed Science* Vol. 54 issue No. 6). Other herbicides may be identified by giving the code number followed by the chemical name in parentheses. Do not use trade names in the title of the paper. If the trade name of a chemical (herbicide or adjuvant) appears in the paper, the author must supply a suitable justification statement for using the trade name; this statement is to be given on the index outline.

Herbicide rates: Express rates as active ingredient (ai) or acid equivalent (ae) (whichever applies), not as formulated material. When necessary, it is appropriate to mention a specific formulation, such as the specific ester or salt utilized in the research.

TABLES AND FIGURES: Use **10 pt (Times New Roman)** font. If space is limiting, font size may be reduced to as low as 8 pt. Single-space all tables. **Table width should be the size of the paper with margins one inch on all sides.** Tables may be landscape or portrait. Type the word "Table" with an uppercase "T" at the top of the table and follow it with a period. Do not use a table number unless the report has more than one table. Please note the following in the example table at the end of the guidelines: a) the unit designation for each column is below the line; b) only the first letter in each column heading and treatment is capitalized; c) a zero precedes each decimal (0.5, not .5); d) herbicide common names are written out when possible and necessary herbicide abbreviations are spelled out in a footnote; and e) use + to indicate herbicide tank mixtures and / to indicate herbicide premixtures. Use superscript numbers (^{1,2,3}, etc.) to indicate footnotes for tables. Begin the word "Figure", **below the Figure**, with a capital "F" and follow it with a period. Do not number the figure unless the paper has more than one figure. Figures that will reproduce well are acceptable.

INDEX OUTLINE: To enhance the publishing procedure, an index outline for each paper must be prepared by the author and submitted to the editors. The outline will include: Title of paper, author(s), Project, list of crops, list of weeds, list of herbicides, keywords, and reviewers' names. Choose the appropriate Project for your report. Projects are: 1. Range and Forest; 2. Horticultural Crops; 3. Agronomic Crops; 4. Teaching and Technology Transfer; 5. Wetlands and Wildlands; and 6. Basic Sciences. Authors must identify **weeds and crops by common and scientific binomial name and authority on the index outline.** Chemicals (herbicide and adjuvant) must be listed by common name **and trade name** or code number. Papers submitted without a **current** index outline will be returned. Attach the completed electronic index outline to the e-mail.

REJECTED REPORTS: Any report submitted that does not conform to the guidelines will not be published. Editors may, at their discretion, work with the author to correct the report if time permits.

INDEX OUTLINE FOR WSWs RESEARCH PROGRESS REPORTS
Complete one for each report.

1. TITLE:

2. AUTHOR'S NAMES:

3. CORRESPONDING AUTHOR:

Email

Phone number

Address

4. PROJECT (see choices under **INDEX OUTLINE**):

5. CROP(S) INVESTIGATED (List alphabetically by common name. **Include scientific binomial name plus authority**):

6. WEED(S) INVESTIGATED [List alphabetically by WSSA-approved common name. **Include scientific binomial name plus authority**. Many weeds can be found in COMPOSITE LIST OF WEEDS, Weed Science 32 (Supplement 2): Revised 1989 or at WSSA.net]:

7. HERBICIDES AND **ADJUVANTS** INVESTIGATED (List alphabetically by common name or code number AND include **trade name**):

8. KEYWORDS (examples biocontrol, direct-seed, herbicide resistant). Do not include words listed above in crop, weed, herbicide or adjuvant:

REVIEWS BY TWO PERSONS IN ADDITION TO SENIOR AUTHOR: I have reviewed the attached report and find the content to be appropriate and presented in the proper style for publications in the WSWs Research Progress Report.

Name _____

Name _____

Title _____

Title _____

Affiliation _____

Affiliation _____

EXAMPLE: RESEARCH PROGRESS REPORT

Weed control in imidazolinone-resistant winter wheat with imazamox. Traci A. Rauch and Donald C. Thill. (Plant Science Division, University of Idaho, Moscow, ID 83844-2339) A study was established in 'Fidel' imidazolinone-resistant winter wheat to examine weed control in 2001 and herbicide soil persistence in 2002 with imazamox. Wheat was seeded on October 3, 2000. Plots were 16 by 32 ft arranged in a randomized complete block design with four replications. All herbicide treatments were applied using a CO₂ pressurized backpack sprayer calibrated to deliver 10 gpa at 30 psi and 3 mph (Table 1). Wheat injury and weed control were evaluated visually on June 7, 2001. Wheat seed was harvested with a small plot combine on August 7, 2001. In spring 2002, each plot will be planted to spring barley and yellow mustard to evaluate soil persistence of imazamox.

Table 1. Application and soil data.

| | | Moscow, Idaho | |
|-------------------------------|------------------|---------------|----------------|
| Location | | | |
| Application date | November 2, 2000 | | April 24, 2001 |
| Wheat growth stage | 1 leaf | | 3 to 5 tiller |
| Volunteer barley growth stage | 2 leaf | | 2 to 3 tiller |
| Air temperature (F) | 50 | | 50 |
| Relative humidity (%) | 73 | | 86 |
| Wind (mph, direction) | 2, E | | 4, E |
| Cloud cover (%) | 30 | | 10 |
| Soil temperature at 2 in (F) | 44 | | 40 |
| pH | | 4.7 | |
| OM (%) | | 2.8 | |
| Texture | | loam | |

No treatment visibly injured wheat on June 7, 2001 (data not shown). All treatments controlled volunteer barley 98% or better (Table 2). Wheat grain yield (89 to 99 bu/A) was better with all treatments compared to the untreated check. Test weight (56 to 60 lb/bu) did not differ among treatments or from the untreated check.

Table 2. Weed control, wheat yield and test weight with imazamox near Moscow, Idaho in 2001.

| Treatment ¹ | Rate lb ai/A | Application timing | Volunteer barley control % | Wheat | |
|---|--------------------------|-----------------------|----------------------------------|---------------|----------------------|
| | | | | Yield bu/A | Test weight lb/bu |
| Imazamox | 0.04 | fall | 99 | 96 | 60 |
| Imazamox | 0.08 | fall | 98 | 95 | 60 |
| Imazamox | 0.04 | spring | 99 | 99 | 59 |
| Imazamox | 0.08 | spring | 99 | 99 | 56 |
| Imazamox + MCPA amine | 0.04 + 0.25 ² | spring | 99 | 95 | 59 |
| Imazamox + thifensulfuron/tribenuron | 0.04 0.016 | spring | 98 | 97 | 59 |
| Untreated check | | | -- | 89 | 59 |
| LSD (0.05) | | | NS | 5 | NS |
| Density (plants/ft ²) | | | 1 | | |

¹All treatments were applied with 90% nonionic surfactant (R-11) at 0.25 % v/v and 32% urea ammonium nitrate (URAN) at 1qt/A.

²MCPA amine rate is expressed as lb ae/A.

(EXAMPLE)

INDEX OUTLINE FOR WSWs RESEARCH PROGRESS REPORTS

Complete one for each report.

1. TITLE: Weed control in imidazolinone-resistant winter wheat with imazamox

2. AUTHOR'S NAMES: Traci Rauch and Donn Thill

3. CORRESPONDING AUTHOR:

Email trauch@uidaho.edu
Phone number (208) 885-9709
Address University of Idaho
 PSES Dept.
 PO Box 442339
 Moscow, ID 28244-2339

4. PROJECT (see choices under **INDEX OUTLINE**): 3. Agronomic Crops

5. CROP(S) INVESTIGATED (List alphabetically by common name. **Include scientific binomial name plus authority**):

wheat, winter (*Triticum aestivum* L.)

6. WEED(S) INVESTIGATED [List alphabetically by WSSA-approved common name. **Include scientific binomial name plus authority**. Many weeds can be found in COMPOSITE LIST OF WEEDS, Weed Science 32 (Supplement 2): Revised 1989 or at WSSA.net]:

barley, volunteer (*Hordeum vulgare* L.)

7. HERBICIDES AND **ADJUVANTS** INVESTIGATED (List alphabetically by common name or code number AND include **trade name**):

| | |
|-----------------------------|-----------------------------------|
| imazamox (Beyond) | thifensulfuron (Harmony Extra XP) |
| MCPA (MCPA 4 Amine) | tribenuron (Harmony Extra XP) |
| non-ionic surfactant (R-11) | urea ammonium nitrate (URAN) |

8. KEYWORDS (examples biocontrol, direct-seed, herbicide resistant). Do not include words listed above in crop, weed, herbicide or adjuvant:

persistence
plantback

REVIEWS BY TWO PERSONS IN ADDITION TO SENIOR AUTHOR: I have reviewed the attached report and find the content to be appropriate and presented in the proper style for publications in the WSWs Research Progress Report.

Name _____

Name _____

Title _____

Title _____

Affiliation _____

Affiliation _____

REGISTRATION FORM
**70th ANNUAL Western Society of Weed Science/Western Aquatic Plant
Management Society joint meeting**
Coeur d'Alene Resort, Coeur d'Alene, ID

(see the WSWS website www.wsweedscience.org for hotel room booking details)

Deadline: Mail-in registration must be postmarked by February 11, 2017. PAYMENT MUST ACCOMPANY REGISTRATION-NO EXCEPTIONS. Check or Money Order (U.S. Dollars) Only. Credit card payments may be made with online registration. Visit: www.wsweedscience.org No refunds after March 1, 2017.

Questions? wsws@marathonag.com or (57) 649-7157

| <u>Registration</u> | <u>Mail by 2/11/17</u> | <u>After 2/11/17</u> | <u>Total</u> |
|--|------------------------|----------------------|--------------|
| _____ Regular meeting (includes symposium) | \$ 250.00 | \$ 350.00 | _____ |
| _____ Student | \$ 125.00 | \$ 125.00 | _____ |
| _____ Spouse/Guest | \$ 50.00 | \$ 50.00 | _____ |
| _____ Climate Change Symposium (only) | \$ 35.00 | \$ 70.00 | _____ |
| | Total Remittance | | \$ _____ |

WSWS member only? _____ Yes (check only one)

WAPMS member only? _____ Yes

Member of both? _____ Yes

Do you want to participate in Student Night Out? _____ Yes _____ No

The Student Night Out program matches students with weed science professionals for an evening out to dinner during the Annual Meeting. If you checked Yes, someone will follow-up with you before the meeting.

Note: Onsite registration at the meeting is at the higher rates noted above. The full program will be posted at the website in mid January.

IF NOT ATTENDING, BUT WANT TO REMAIN A MEMBER, FILL IN THE INFORMATION BELOW AND SEND \$ 30.00 FOR DUES \$ _____

| | | |
|-----------|------------|-------------|
| Last name | First name | Affiliation |
|-----------|------------|-------------|

| | | | |
|-----------------|------|-------|----------|
| Mailing address | City | State | Zip code |
|-----------------|------|-------|----------|

| | |
|---------------------|----------------|
| Phone # w/area code | e-mail address |
|---------------------|----------------|

| | |
|-----------------------|------------------------------|
| Name Desired on Badge | Spouse name (if registering) |
|-----------------------|------------------------------|

Classification: Student ___ University ___ Federal Agency ___ State Agency ___
Industry ___ Industry (consulting) ___ Unemployed ___ Retired ___ Other (specify) _____

Send to: WSWS/Phil Banks
205 W. Boutz Rd., Bldg 4, Ste 5
Las Cruces, NM 88005

Publications Available From the Western Society of Weed Science

(All prices include shipping and handling; bulk orders may be discounted, see below)

| | |
|--|---------|
| _____ Weeds of the West..... | \$34.00 |
| _____ Aquatic and Riparian Weeds of the West..... | \$45.00 |
| _____ Weeds of California and Other Western States..... | \$85.00 |
| _____ Weed Control in Natural Areas in the Western United States | \$40.00 |
| _____ Interactive Encyclopedia of North American Weeds DVD..... | \$50.00 |

Total _____

All publications can be ordered online at www.wsweedscience.org (click on **WEED BOOKS**)

To order by mail and pay by check, send this completed form with payment to:
WSWS Business Manager, 205 W. Boutz Rd, Bldg 4, Ste 5, Las Cruces, NM 88005.

Contact the Business Manager (Phil Banks) at (575) 649-7157 for bulk order prices.

Shipping Information:

Name: _____
Address: _____ City: _____
State: _____ Zip Code: _____ Telephone: _____
e-mail: _____

WSWS Objectives

- ❖ To foster and encourage education and research in weed science.
- ❖ To foster cooperation among state, federal and private agencies in matters of weed science.
- ❖ To aid and support commercial, private and public agencies in the solution of weed problems.
- ❖ To support legislation governing weed control programs and weed research and education programs.
- ❖ To support the Weed Science Society of America and foster state and regional organizations and agencies interested in weed control.



Western Society of Weed Science
205 W. Boutz, Bldg. 4, Ste. 5
Las Cruces, NM 88005