



## PRESIDENT'S MESSAGE

As we enter the autumn season our thoughts are first with our weed science colleagues, friends, and communities in Puerto Rico, Mexico and the southern United States that have been impacted by the recent natural disasters. We are hoping for rapid recoveries, continued resilience, and health and safety for all. We know that support for those impacted has been and will continue to be greatly appreciated.

Since our last newsletter there have been many extra efforts from our volunteers to support the mission of WSSA. We are excited about our upcoming 58th Annual WSSA meeting being held January 29th through February 1st, 2018 in Arlington, VA, which is just across the Potomac river from Washington, DC. Scott Senseman, our program chair, has done an outstanding job working on a robust program covering all aspects of weed science research, education, and extension. Scott has been working with our local arrangements committee (Phil Banks and Lee Van Wychen) along with Eric Gustafson, our Executive Secretary, to finalize all the events that will make this meeting a great success. In addition to hundreds of weed science posters and presentations, stimulating science information exchange forums will abound at the meetings this year. A wide range of symposia topics are planned including:

- Fostering Sustainable Programs to Improve Pesticide Applications and Promote Resistance Management
- Grade Report for New Dicamba Technology in 2017
- Pesticide Registration in the U.S. and How the WSSA Can Inform the Process
- Herbicide Metabolism in Crops and Weeds: A Revisit, Current Understanding, and New Insights
- The State of the Weed Control Industry In 2018
- Learning by Listening: Herbicide Resistance Listening Sessions

In addition to the six symposia, there will also be a great weed science teaching workshop and the graduate students have organized a provocative workshop on "Which Road to take—an extension, education, research and industry perspective," which should be of interest to all students attending the conference.

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**CALL FOR PAPERS  
2018 GUIDELINES**  
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There are two special events scheduled, including a tour of the Botany Department at the National Museum of Natural History (with a focus on activities and research on plant conservation and endangered plant species) and a tour of the beautiful United States Botanic Garden.

I would like to thank the many member volunteers for their continued extra efforts and time to support the WSSA mission and special thanks to our Executive Secretary, Eric Gustafson, our Director of Science Policy, Lee Van Wyche, the WSSA Board of Directors, our EPA Subject Matter Expert, Mike Barrett, our USDA-NIFA Fellow, Donn Shilling, our WSSA committees, and our regional weed science societies. We would like to give a SHOUT-OUT and many thanks to Mike Barrett as he transitions off his role as the WSSA-EPA liaison after an amazing and tireless four years of service. Mike's contributions to our discipline and the very important work being done by EPA is greatly appreciated and highly valued.

The WSSA Board of Directors had a productive summer board meeting which included an excellent meeting with EPA scientists on a wide range of weed science topics. The Board approved the appointment of Greg Kruger as our incoming WSSA-EPA Subject Matter Expert and we want to congratulate and thank Greg for accepting this very important role for our society. The Board also approved the formation of a special committee on herbicide off-target movement with the goal of advancing the understanding of herbicide off-target movement and impacts. Key objectives for the committee are to identify information and data gaps relevant to research, education, best practices and stewardship related to off-target movement and develop plans to address. Thanks to our WSSA Past President, Kevin Bradley, for agreeing to chair this committee and to the other volunteers serving on the committee. The Board also approved a pilot graduate student enrichment/development scholarship targeting the four regions (Northeast, Southern, North Central, and Western) and Canada to begin in the summer of 2018. We greatly appreciate the initiative of our WSSA graduate students for the proposal. More information on the new scholarships and the application process will be included in our next newsletter. The herbicide resistance education committee chaired by David Shaw continues to be extremely active and the members are working on publishing the information from the seven very successful regional herbicide resistance listening sessions held over the past year with a broad range of stakeholders. Additionally, this committee is continuing to make excellent progress on the "Herbicide Resistance Information Portal" to be located on the WSSA website in 2018.

In September, EPA issued two very important guidance documents on pesticide resistance management labeling (Pesticide Registration Notice 2017-1) and herbicide resistance management, labeling, education, training and stewardship (Pesticide Registration Notice 2017-2). I would like to thank Mike Barrett, Lee Van Wyche, the Science Policy Committee, and the many weed scientists who contributed to the constructive comments provided to the EPA during the public comment process. We look forward to the members of the society continuing to lead the research, education, extension and stewardship efforts critically important for herbicide resistant weed management.

I hope to see all of you in Arlington, Virginia at our Annual Meeting at the end of January. I welcome your input on any WSSA-related issues at any time. Please do not hesitate to contact me, Eric Gustafson, Lee Van Wyche, or any of the Board members if you have questions, suggestions, or concerns regarding WSSA business or activities.

Janis McFarland  
President, WSSA  
(Cell 336-707-5873)

## **WSSA FUTURE MEETING SITES AND DATES**

**Jan. 29–Feb. 1, 2018**  
**58th Annual Meeting**  
**Crystal Gateway Marriott**  
**Arlington, Virginia**  
**Scott Senseman, Chair**  
**Email: [ssensema@utk.edu](mailto:ssensema@utk.edu)**  
**Phone: 865-974-8033**

**WSSA HOME PAGE  
ACCESSED AT:  
[www.wssa.net](http://www.wssa.net)**

**THINK NEWSLETTER**  
**Deadline for January issue**  
**December 1, 2017**

**SEND NEWSLETTER  
MATERIAL TO:**  
**Carl Libbey**  
**225 S. 10th Street**  
**Mount Vernon, WA 98274**  
**[newsletter@wssa.net](mailto:newsletter@wssa.net)**  
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## **WSSA NEWSLETTER**

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**225 S. 10th St.**  
**Mount Vernon, WA 98274**  
**[newsletter@wssa.net](mailto:newsletter@wssa.net)**

# CALL FOR PAPERS

## 2018 WSSA MEETING

### 58th Annual Meeting of the Weed Science Society of America Arlington, Virginia • January 29–February 1, 2018

#### INVITATION

You are invited to submit titles and abstracts for papers and posters to be presented at the WSSA Meeting in Arlington, VA, January 29th to February 1st, 2018, Monday to Thursday. Volunteer papers may be presented orally in one of the section meetings or as a poster. An individual may personally present only one volunteer, non-poster paper. This rule will be strictly followed. In addition to the volunteer paper, an individual may present a poster, may be co-author of papers presented by other authors, and may present an invited symposium paper. The abstract submission site will be open September 15, 2017.

#### DEADLINE

Abstract Titles and Author Information must be submitted electronically by **October 13, 2017**, to be considered. Those not submitted by this deadline will not be accepted. This deadline applies to symposium papers, as well as to volunteer papers and posters. Abstract texts must be submitted by **January 8, 2018**. The program will be posted on the WSSA website (<http://www.wssa.net>) and members will be informed when it is available by email from Eric Gustafson.

#### MEETING SCHEDULES

Volunteer papers will be presented within a **15-minute schedule**. Concurrent sessions dictate that the time schedule be strictly followed. To allow for introduction, transition of speakers, and questions, you should plan to present your paper in 12 or 13 minutes. Papers should report the results of completed research or other substantive information. Information should not have been presented at a previous WSSA national meeting. Ideally, research reported at the WSSA Meeting should be publishable in *Invasive Plant Science and Management*, *Weed Science*, *Weed Technology*, or a similar scientific journal.

#### SYMPOSIUM PAPERS

Speakers participate in symposia by invitation. Deadlines and procedures for preparing and submitting abstracts of symposium papers are the same as for volunteer papers, except that the author must send a copy of the abstract to the symposium organizer.

#### COMPUTER AND PROJECTION EQUIPMENT

The WSSA has adopted LCD projection for PowerPoint presentations as the standard and will be used exclusively

during the annual meeting. LCD projectors and Windows PC laptop computers will be supplied by WSSA members and coordinated by section chairs. Presenters will **NOT** be allowed to use their own computers in the sessions. If possible, computers will be located on the podium in each session. If this is not possible, an infrared remote providing forward and backward control of the PowerPoint presentations will be provided in each session. Screens, microphones, carts, and extension cords will continue to be supplied by AV services and paid for by the Society. In order to make this process go as smoothly as possible, please follow the guidelines below.

#### FORMAT

All presentations **MUST** be in PowerPoint (any version) for MS Windows (PC compatible). PowerPoint 2010 will be the software used. Macintosh/Apple formats will **NOT** be supported. Your presentation must be saved as a PowerPoint show file. **The section chairs have requested that ALL presentations be prepared and uploaded on the abstract submission site so that preloading prior to the meeting can be accomplished** (see Submission of Presentations). Please limit the size of presentations to less than 25 MB. If your presentation contains video clips or animation you must contact the section chair for approval one week **PRIOR** to sending your presentation to ensure compatibility with the equipment. Limit fonts used in the presentation to basic fonts, as not all machines may have the same choice of fonts. Examples of standard fonts are Times, Arial, Courier, Tahoma, or similar equivalents. Section chairs and computer operators are not responsible for changes in fonts, bullets, and other formatting at the time of presentation. Use up-to-date virus protection software to avoid infecting the computers provided by the section chairs.

#### SUBMISSION OF PRESENTATIONS

Presentations must be uploaded on the submission site prior to the meeting. Section chairs must receive the presentation at least one week in advance of the meeting (**no later than January 22, 2018**). Please coordinate with your section chair if you want to preview your presentation at the meeting to ensure that the formats/fonts are all as you intended them to be. Due to the limited time and equipment, last minute editing is highly discouraged. Submission of files at the time of the presentation or at any other time during the session will **NOT** be allowed.

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## CALL FOR PAPERS CONTINUED from pg 3

*Be alert to changes, modifications, and refinements to these guidelines between now and the meeting. This information will be published in the October and January issues of the WSSA Newsletter. For non-WSSA members, the WSSA Newsletter is available on the WSSA website (<http://www.wssa.net>).*

### SUBMISSION OF ABSTRACT

Volunteer papers, posters, and symposium papers all require abstracts to be submitted electronically. To submit abstract titles/authors and abstract texts electronically, go to the Weed Science Society of America website (<http://www.wssa.net>).

- After **September 15, 2018**, you will be able to access the Title/Abstract Submission Page from the WSSA website. Additional instructions will be provided on the Title/Abstract Submission Page.

The Program will be printed exactly as submitted, other than format and font changes for uniformity; therefore, proofread your submission very carefully. Primary contact authors will receive an email indicating their abstract was received and a later email confirming the section/day/time when and where the paper will be presented.

### STUDENT CONTEST INFORMATION

#### A. ELIGIBILITY

1. Any student who is a WSSA member and has registered to attend the current WSSA annual meeting is eligible to compete in the poster or oral presentation contest.
2. Students are eligible for participation in the Student Poster Contest and Oral Presentation Contest multiple times during a M.S. program and a Ph.D. program; however, **a student cannot** participate in both the oral presentation contest and poster presentation contest during the same annual meeting.
3. A student can only win 1st place in the poster or oral presentation contest once per degree program. Once a student places 1st in a given contest (i.e. oral or poster presentation contest), they are no longer eligible to compete in said contest and 1st place in the oral presentation contest while in a M.S. or Ph.D. program; however, a student may not enter both contests at the same annual meeting. A student may win 1st place in the poster or oral presentation contest in the M.S. degree program and then compete and win 1st place for an oral or poster presentation while in a Ph.D. degree program.

#### B. RULES AND PROCEDURES

1. Notice of the contests will be included with the Call for Papers.
2. A contestant may enter the poster or oral presentation contest multiple years per degree program. Persons who have graduated from a degree program (M.S. or Ph.D.) and are actively pursuing an additional degree may only enter the contest for that degree program during the first annual meeting following graduation.
3. Contestants will indicate in the title submission that they wish to enter either the poster or oral presentation

contest. Title and contest declaration must be turned in by the deadline that title submissions are due. If a contestant does not turn in a title and contest declaration by the time that title submissions are due, they will be ineligible for the contest unless the Student Program Chairperson declares the student eligible based on student's situation. ABSTRACTS FOR CONTEST PRESENTATIONS must be submitted electronically by January 8, 2018. This allows time for the committee to prepare copies or e-mail abstracts to the appropriate judges prior to the contest.

4. Evaluation forms and rules will be posted to the WSSA website.

### PREPARATION OF ABSTRACT

Following are the guidelines for the preparation and submission of an abstract. Be alert to additional instructions that may appear on the site itself.

1. **Contents** – The abstract should include a brief overview of essential aspects of experimental procedures and should highlight significant results and their interpretation. Write the abstract so it consists entirely of information. Do not include statements such as “The results of the experiments will be presented” or “The significance of these results will be discussed.”
2. **Formatting** – Typing and format instructions will be provided on the Title/Abstract Submission Page of the WSSA website. In the abstract, authors will be identified by occupational affiliation and location, not by mailing address. Therefore, please type the title, author(s), the affiliation (institution, agency or company), and location (city and state or country, but not the zip code). When authors are from different locations or affiliations, group authors by their affiliations/locations.

**Capitalize the first letter of all major words in the title and end the title with a period. Include both the common and scientific names of weeds and uncommon crop plants in the title** (authorship of plants is not necessary), but only the common names of herbicides and well-known crop plants. **You do not need to type the title in bold-face;** the system will do that automatically. **First names followed by initial** (period after initial) **should be typed before last names of all authors.** The site will provide a method for indicating the presenter, be sure to **specify the presenting author.** Do not include departments, divisions or zip codes. Do not abbreviate the word “University” to “Univ.”

**Example 1. Role of Adjuvants on Sulfonylurea Herbicide Efficacy.** D. Sanyal<sup>\*1</sup>, P. C. Bhowmik<sup>2</sup>, <sup>1</sup>Monsanto Company, St. Louis, MO, <sup>2</sup>University of Massachusetts, Amherst, MA.

**Example 2. Evaluation of an In-Row Rotating Cultivar in Vegetable Crops.** S. A. Fennimore<sup>\*1</sup>, R. F. Smith<sup>2</sup>, J. Rachuy<sup>2</sup>, <sup>1</sup>University of California, Davis, CA, <sup>2</sup>University of California, Monterey County, CA.

**Example 3. Teaching Weed Science in an Off-Campus**

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**Setting.** R. E. Whitesides\*, C. V. Ransom;  
Utah State University, Logan, UT.

3. **E-mail Address** – For better communication among researchers, place the e-mail address of the senior author following the last sentence of abstract.
4. **Herbicide nomenclature** – A list of common and chemical names of herbicides approved by the WSSA is available at <http://wssa.net/Weeds/Tools/Herbicides>. When the common name refers to the parent acid, salt or ester forms used in the experiments should be identified at the first mention of the common name (e.g., methyl ester of diclofop). At the first mention of an herbicide application rate, list whether the weight is acid equivalent (ae) or active ingredient (ai) (e.g., kg ai ha<sup>-1</sup>). If no common name is available, use its designation (trade name or code) followed by the full chemical name. If the chemistry is confidential, identify the source (company) in parentheses after designation.
5. **Adjuvant nomenclature** – Where possible, use the WSSA *Herbicide Handbook*, 10th edition (2014), p. 479–481; *Weed Science* (1985) 33 (Suppl. 1): 22–23; or the WSSA *Monograph* (1982) *Adjuvants for Herbicides*. Otherwise, use the most complete available chemical description of the adjuvant.
6. **Weed nomenclature** – Identify weeds by common names. At first mention of a weed, whether in the title or text, follow the common name with the scientific name (underlined and in parentheses). Do not repeat the scientific name in the text if given in the title. A list of WSSA approved common and Latin names of common weed species can be found at <http://wssa.net/wssa/weed/composite-list-of-weeds/>. If there is no WSSA-designated common name, use common scientific names from another source such as *Hortus Third Dictioinary*.
7. **Crop nomenclature** – Scientific names for crop plants are optional. They are not needed for well known crops, but should be included for less common crops and whenever needed for clarity. Place scientific names, underlined and in parentheses, following first mention of the common name, whether in the title or text.
8. **Soil nomenclature** – Include the soil series with textural classification and the subgroup name using the terminology of the U.S. Dept. Agric. Natr. Res. Conserv. Serv. publication, *Soil Taxonomy*, U.S. Gov. Printing Office, Washington, D.C. 1988. For soils outside the U.S.A., use the local official terminology.
9. **Measurements** – Report all measurements in International System of units (SI). Abbreviate units of measure if preceded by a number. See *Weed Science* (2003) 51:1029–1033 for additional suggestions and WSSA *Herbicide Handbook*, 10th edition (2014), p. 488–491 for metric conversions.
10. **Abbreviations** – Use abbreviations as shown at <http://wssajournals.org/userimages/ContentEditor/135879>.
11. **Numbers** – Use Arabic numerals for all numbers with two or more digits and for all measurements such as

time, weight, length, area, quantity, or degree except when the number is the first word in the sentence. Spell out numbers when they are the first word in a sentence or when they are less than 10 and not measurements.

12. **Tables, figures, or literature citations** – There will be a system in place on the abstract submission site to add these.

## SUBJECT INDEX

A subject index consisting of weed/crop names, herbicides, and other key words will be included in addition to the author index. Providing key words to be used in indexing will be the responsibility of the authors. Words in the title are not automatically indexed. Only key words provided by the authors will be used. The abstract submission site utilizes a new key word system. There are drop down boxes for each type of subject with a listing of choices. It is recommended that you utilize these pre-selected choices, but there is an area for authors to type in user defined key words that are not found in any of the selections.

1. A **maximum** of five key words per abstract will be indexed. Most abstracts should only require two or three words.
2. Prioritize key words based on the importance of a given subject, especially for abstracts containing more than five weeds and herbicides. Use a priority ranking of (a) weeds and/or crops, (b) herbicides, other chemicals (including adjuvants) and other types of weed control (e.g., cultural, biological), (c) additional topic words or phrases.
3. Use scientific name of weeds, without authority. Genus plus species is considered one key word.
4. Genera names may be used when more than one species in that genus is mentioned in the abstract.
5. Use common names of crops (for less common crops, use scientific names without authority).
6. Use common names of herbicides and other chemicals (including adjuvants) or code numbers for experimental compounds.
7. Chemical class names, e.g., sulfonylureas, should be used when more than one herbicide in that class is mentioned in the abstract.

## POSTERS

The information presented as a poster is very similar to that presented as an oral paper, but it is presented on poster board rather than orally at the meeting. Directions for preparing a poster can be found under POSTER SESSION (see below). There are key differences between a poster and a commercial exhibit. The commercial exhibits are presented by Sustaining Members of WSSA and consist of educational information that may be of a promotional nature about products and/or services. Posters may be presented by personnel of the same sustaining member companies and may concern commercial products, but they

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## CALL FOR PAPERS CONTINUED from pg 5

must present results of completed research with these products rather than promotional material about them.

### POSTER SESSION

There may be split sessions for presentation of posters. In addition to specifying Poster Session, authors should indicate a category from Section 1 through 14. Poster presentations will be grouped by these categories.

1. Authors are expected to be at their poster during the period reserved for viewing the poster to answer questions and to discuss their research with interested parties.
2. Participants in Section 15, the Poster Session, will meet at a location designated in the program before the Poster Session begins to elect a chair-elect of the section for 2019 (Section Chair in 2019) and discuss recommendations for improvement of the Poster Session.
3. **Poster Boards. One board 48 x 48 inches will be provided for each poster. There will be no exceptions to the rule of one board per paper. Posters should be no larger than this size.**
4. Content of Paper. Text, graphs, and tables must be easily read from a distance of 6 feet. Titles and headings should be larger and readable from a greater distance.
5. Because of cost and logistics, it will not be possible to provide electrical connections, video equipment, or other special equipment for posters.
6. Groups of authors may present more than one poster, but at least one author must be present at each poster during the time designated exclusively for viewing the poster.

### Committee Members:

Chair: Scott Senseman (contact: [ssensema@utk.edu](mailto:ssensema@utk.edu))

Vice-Chair: Larry Steckel (contact: [lsteckel@tennessee.edu](mailto:lsteckel@tennessee.edu))

Ex-off: Eric Gustafson (contact: [info@wssa.net](mailto:info@wssa.net))

### Section/Chair 2018

1. Agronomic Crops / [Lins, Ryan](#)
2. Horticultural Crops/[Samtani, Jayesh](#)
3. Turf and Ornamentals/[Derr, Jeff](#)
4. Pasture, Range, Forest, & Rights of Ways/[Russell, David](#)
5. Wildlands & Aquatic Invasives/[Enloe, Stephen](#)
6. Regulatory Aspects/[Moore, Cherilyn](#)
7. Teaching and Extension/[Rana, Sandeep](#)
8. Formulation, Adjuvant, & Application Technology/  
[Ferguson, Conner](#)
9. Weed Biology and Ecology/[Tekeila, Dan](#)
10. Biocontrol of Weeds/[Boyette, Doug](#)
11. Physiology/[Van Horn, Christopher](#)
12. Soil and Environmental Aspects/[Gannon, Travis](#)
13. Integrated Weed Management/[Ribeiro, Daniela](#)
14. Sustaining Member Exhibits/[Dahl, Greg](#)
15. Poster Sessions/[Laforest, Martin](#)
16. Student Contest/[Schraer, Marty](#)

# 58TH ANNUAL MEETING OF THE WEED SCIENCE SOCIETY OF AMERICA

**JANUARY 29 – FEBRUARY 1, 2018**  
**CRYSTAL GATEWAY MARRIOTT**  
**ARLINGTON, VIRGINIA**

- **ANNUAL MEETING PAGE ON WSSA.NET**
- **LINK TO THE ABSTRACT SITE**
- **HOTEL INFORMATION/REGISTRATION**



## WSSA Contacts

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**2018 Annual Meeting**  
**Scott Senseman, President-Elect**  
**[ssensema@utk.edu](mailto:ssensema@utk.edu)**  
**(865) 974-8033**



# WASHINGTON REPORT

by Lee Van Wychen, Director of Science Policy

## HOUSE PASSES ALL 12 FY 2018 APPROPRIATIONS BILLS

On Sept. 14, the House of Representatives passed a package of 12 funding bills (H.R. 3354) to provide all discretionary funding for the federal government for the 2018 fiscal year. The bill, also known as the Make America Secure and Prosperous Appropriations Act, was passed on a vote of 211–198.

On the Senate side, the Appropriations Committee has passed 8 of the 12 spending bills, but none of them have made it to the Senate floor for amendments and votes. Four of the spending bills in the Senate have yet to be marked up in committee.

The Senate Appropriations Committee did pass their agriculture spending bill at the end of July. Both the House and Senate ag spending bills provide much more favorable numbers than the President's budget request. The Senate numbers are particularly favorable with increases in FY 2018 funding for USDA's National

Institute of Food and Agriculture (NIFA), Agricultural Research Service (ARS), Economic Research Service (ERS), National Agricultural Statistics Service (NASS), APHIS, and NRCS compared to FY 2017 (see table below). The final endgame for the FY 2018 appropriations process is still a big question mark, but given the House and Senate numbers for USDA programs important to weed science, we should be ok.

## NATIONAL ACADEMIES SEEK INPUT ON FUTURE OF FOOD AND AGRICULTURE RESEARCH

*Science Breakthroughs 2030: A Strategy for Food and Agricultural Research* is a new National Academies of Science study to identify ambitious scientific opportunities in food and agriculture research. They are asking for input from scientists to identify emerging opportunities. You can submit your ideas on [IdeaBuzz](#) and "vote" and comment on ideas that have already been submitted.

## USDA MOVES OPMP TO THE OFFICE OF THE CHIEF ECONOMIST

WSSA applauds Secretary Perdue's decision to move USDA's Office of Pest Management Policy (OPMP) from the Agricultural Research Service (ARS) to the Office of the Chief Economist, which advises the Secretary of Agriculture on the economic implications of policies and programs affecting the U.S. food and fiber system and rural areas. OPMP's focus does not match up well with the mission of ARS and will be better situated in the Office of the Chief Economist.

OPMP was established in September 1997, with the mandate to:

- Integrate USDA's strategic planning and activities related to pest management
- Coordinate USDA's role in the pesticide regulatory process and related interagency affairs, primarily with the EPA
- Strengthen USDA's support for agriculture by promoting the development of new pest management approaches that meet the needs of an evolving and sustainable U.S. agricultural system

OPMP is directed by Dr. Sheryl Kunickis and currently has a staff of eight pest management specialists, including Dr. Jill Schroeder, a past president of both WSSA and WSWS.

## JOHN DEERE BUYS BLUE RIVER'S PRECISION WEEDING TECHNOLOGY

On September 6, John Deere announced it was spending \$305 million to acquire [Blue River Technology](#), a developer of crop-spraying equipment that relies on machine learning. The acquisition also gives John Deere

**Selected USDA Discretionary Appropriations Accounts**

PROGRAM	2015 Final	2016 Final	2017 Final	2018 President	2018 House	2018 Senate
(Millions of Dollars)						
NIFA	1289	1326	<b>1362</b>	1253	1341	1373
Hatch Act	244	244	<b>244</b>	243	244	244
Smith-Lever 3b & c	300	300	<b>300</b>	299	300	300
AFRI grants	325	350	<b>375</b>	349	375	375
IR-4	11.9	11.9	<b>11.9</b>	11.9	11.9	11.9
CPPM*	17.2	17.2	<b>20.0</b>	14.0	20.0	20.0
ARS**	1132	1143	<b>1170</b>	993	1133	1182
ERS	85	85	<b>86</b>	77	77	86
NASS	172	168	<b>171</b>	186	184	192
APHIS	871	894	<b>946</b>	810	906	953
NRCS	846	850	<b>864</b>	766	859	874

\*Crop Protection and Pest Management (CPPM): Addresses high priority pest issues using IPM.

\*\*House and Senate Appropriations rejected the White House proposal to close 17 of ARS's 112 research facilities, estimated to be at least \$1 billion behind in deferred maintenance needs.

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a 60-person team in the heart of Silicon Valley where it just opened an office to focus on high tech agricultural solutions.

**Blue River Technology** was founded in 2011 by **Jorge Heraud**, the former head of precision agriculture at Trimble, and Lee Redden, a Stanford PhD student and roboticist who grew up in Nebraska detassling corn on his father's and grandfather's farms. Together, they built and tested their idea in California's Central Valley – proving the applicability of machine learning, computer vision, and robotics to the field of agriculture. With an idea, support from friends and family, and a grant from the National Science Foundation's (NSF) Small Business Innovation Research (SBIR) program, Blue River Technology was born.

On a side note, **William Patzoldt, Senior Agronomist (and Weed Scientist) with Blue River**, will be speaking at the upcoming WSSA annual meeting in Arlington, VA as part of Steve Fennimore's symposium titled "The State of the Weed Control Industry In 2018."

### **FFAR CONTRIBUTES \$15 MILLION TOWARDS PHOTOSYNTHETIC EFFICIENCY RESEARCH**

The Foundation for Food and Agriculture Research (FFAR), along with the Bill & Melinda Gates Foundation and the U.K. Department for International Development (DFID) announced on September 15th they are co-funding a five-year, \$45-million research project that will continue the work of Realizing Increased Photosynthetic Efficiency (RIPE) for sustainable increases in crop yield.

RIPE, <http://ripe.illinois.edu/>, was formed in 2012 and built on 50 years of photosynthesis research. RIPE is led by the University of Illinois in partnership with the USDA-ARS, University of Essex, Lancaster University, Australian

National University, Chinese Academy of Sciences, Commonwealth Scientific and Industrial Research Organization, University of California, Berkeley, and Louisiana State University.

RIPE has simulated the 170-step process of photosynthesis from the inner workings of enzymes to interactions between neighboring plants in the field. RIPE has used these models to identify seven potential pipelines to improve photosynthesis and turn their ideas into sustainable yield increases. Last year, RIPE published work in *Science* that described how these pipelines could increase crop productivity by 20 percent – a dramatic increase compared to typical annual yield gains of just one percent or less. Two other RIPE pipelines have now shown even greater yield improvements in greenhouse and preliminary field trials. Researchers anticipate commercial seeds benefiting from this research will be available to farmers within approximately 15 years.

### **WOTUS RULE RESCINDED**

On July 27th, the EPA and Army Corps of Engineers published their proposed rule, "Definition of "Waters of the United States (WOTUS)" – Recodification of Pre-Existing Rules." This is the first step of a two-step process intended to review and revise the definition of "waters of the United States" consistent with President Trump's Executive Order of February 28, 2017.

This first step rescinds the WOTUS rule that was issued by EPA and the Army Corp in 2015. That rule is in judicial limbo as it was stayed by the 6th Circuit Court in a lawsuit brought by states that opposed it. Re-codifying the regulations that existed before the 2015 Clean Water Rule will provide continuity and certainty for regulated entities, the States, agency staff and the public. Nothing in the proposed rule

issued on July 27th restricts the ability of States to define the scope of "navigable waters" more broadly than the federal law definition.

Comments on the reinstatement of the pre-existing WOTUS rule are due on September 27, 2017 and should be limited to the appropriateness of the rescission and not on the scope of the definition of WOTUS. Comments can be submitted at: <https://www.regulations.gov/docket?D=EPA-HQ-OW-2017-0203>.

### **PUBLIC STAKEHOLDER SESSIONS FOR NEW WOTUS DEFINITION BEGIN SEPTEMBER 19**

In step two of President Trump's Executive Order, the EPA and Army Corp of Engineers will pursue notice-and-comment rulemaking in which the agencies will conduct a substantive re-evaluation of the definition of "waters of the United States" (WOTUS).

The agencies will hold 11 stakeholder input sessions on the proposed revised definition of WOTUS. Nine sessions will be two-hour long teleconferences that will be tailored for specific sectors, one will be open to the general public and one will be an in-person session for small entities.

The stakeholder sessions will be held on a weekly basis beginning Sept. 19 and will continue each Tuesday thereafter for ten weeks. Each will run from 1 to 3 p.m. eastern time. Information on how to register for each of these meetings is available

<https://www.epa.gov/wotus-rule/outreach-meetings>.

Registration for each webinar will close a week prior. Those wishing to provide verbal recommendations during the teleconference will be selected on a first-come, first-serve basis. Due to the expected volume of participants, individuals will be asked to limit their oral presentation to three minutes.

CONTINUED on pg 9 ➤➤



### Stakeholder Sessions Schedule:

- Sept. 19, 2017 – small entities (small businesses, small organizations and small governmental jurisdictions)
- Sept. 26, 2017 – environment and public advocacy
- Oct. 3, 2017 – conservation, e.g., hunters and anglers
- Oct. 10, 2017 – construction and transportation
- Oct. 17, 2017 – agriculture
- Oct. 24, 2017 – industry
- Oct. 31, 2017 – mining
- Nov. 7, 2017 – scientific organizations and academia
- Nov. 14, 2017 – stormwater, wastewater management and drinking water agencies

The agencies will be accepting written recommendations on the step two rulemaking effort through a non-regulatory docket at <https://www.regulations.gov/docket?D=EPA-HQ-OW-2017-0480>. The agencies ask that this in-

formation be submitted on or before Nov. 28, 2017.

### U.S. FWS PROVIDES UPDATE ON ASSESSING MONARCH BUTTERFLY STATUS

In August, the U.S. Fish and Wildlife Service (FWS) provided an update via a webinar on its Species Status Assessment (SSA) framework for the monarch butterfly. The FWS is developing a status review using the SSA framework as the scientific foundation for their decision on whether the monarch butterfly should be listed under the Endangered Species Act, which is due June of 2019.

[Watch the species status assessment update webinar](#) – August 2017 (24 minutes)

For more info on the monarch butterfly assessment process:

<https://www.fws.gov/savethemonarch/SSA.html>

During the webinar, the U.S. FWS discussed their initial work in creating their Monarch Conservation Efforts Database (MCED). Their goal is to capture all monarch conservation efforts that are ongoing and planned. One of the key components of the MCED is milkweed and blooming nectar plant metrics. U.S. FWS will continue to provide updates and webinars on the MCED through June 2018 when they expect the MCED will be open for data entry.

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## WSSA PUBLICATIONS NEWS

The 2016 impact factors released in July by Clarivate Analytics (formerly Thomson Reuters) were lower for all three WSSA journals. The two-year impact factor for *Weed Science* is currently 1.862 (1.993 in 2015), for *Weed Technology* 0.880 (1.487 in 2015) and for *IPSM* 0.952 (1.210 in 2015). Some WSSA members have asked whether this decline was caused by the move to Cambridge University Press and on-line-only publication. The answer is no; these impact factors are based on the average number of citations received in 2016 by articles published in 2014 and 2015. For example, the *Weed Science* 2016 impact factor is calculated as:

Citations in 2016 to papers published in 2015 = 142  
and for 2014 = 154.

Total = 296

Number of papers published in: 2015 = 89  
and in 2014 = 70. Total = 159

Impact Factor (IF) =  $296 / 159 = 1.862$

Unfortunately, the 2016 two-year impact factors reflect problems with our previous publisher in 2014 that resulted in a decline in manuscript submissions that year and in 2015. Submission rates and article output for all three WSSA

journals have rebounded since then, which should improve future impact factors. Cambridge University Press started publishing our journals in January 2017, so we will not see the full effect of this move on our 2019 impact factors until 2019. Meanwhile, our 2016 five-year impact factors (based on the average number of citations received in 2016 for articles published between 2011 and 2015) are more stable: *Weed Science* 2.167 (2.166 in 2015), *Weed Technology* 1.275 (1.280 in 2015), and *IPSM* 1.171 (1.330 in 2015).

On a more positive note, high-resolution online archiving of WSSA journal back issues, including all issues of *Weeds* (predecessor to *Weed Science* published 1951–1967), was completed in mid-July by the Cambridge University Press archiving team. The journal editors and I have also been working with Cambridge to develop new article templates that will update the look of the three WSSA journals with easier-to-read fonts, restructured layouts more suited to online publication, and greater use of in-text color. The new layouts will be phased in during early 2018.

Sarah Ward

Director of Publications

# WSSA-EPA Subject Matter Expert Selected

The WSSA Board of Directors created the position of WSSA-EPA Subject Matter Expert (SME) in May 2007. The liaison position is a partnership between WSSA and the EPA's Office of Pesticide Programs. Dr. Michael Barrett has served in this role since May 2013 and will be making his last visit to EPA later this fall.



The WSSA Board of Directors is pleased to announce the selection of Dr. Greg Kruger from the University of Nebraska as the next WSSA-EPA liaison. Dr. Kruger earned his Ph.D. in Weed Science from Purdue University in 2010 and is now an associate professor with both research and extension responsibilities located at the University of Nebraska's West Central Research and Extension Center in North Platte, Nebraska. His research interests include mitigating pesticide drift, optimizing pesticide application technologies, and management of herbicide-resistant weeds. While Greg has visited EPA a couple times in the past year to talk about various pesticide drift reduction technologies, his first official liaison visit to EPA will overlap with Dr. Barrett's last visits.

The vision for the SME position is to develop a liaison between the Weed Science community and the EPA in order to assist the Agency in addressing crop and non-crop weed management issues that directly impact the weed management practitioner. The WSSA-EPA SME is expected to learn the registration and re-registration processes, become familiar with the Agency's scientific committees and how they operate, and develop a basic understanding of how EPA Office of Pesticide Programs risk assessments are conducted. The WSSA-EPA SME represents the WSSA membership and relies on its member's expertise to answer Agency questions and provide critical input on topics such as the utility of herbicide label mitigations, spray drift management technologies, and herbicide resistant weed management.

The WSSA greatly appreciates Mike Barrett's time and efforts he put into this role because both the EPA and WSSA have benefited from Mike's contributions. The WSSA also welcomes Greg Kruger to the WSSA-EPA liaison role and wishes him the best as he continues to build this relationship for the benefit of both EPA and WSSA.

## THINK NEWSLETTER

**Deadline for January issue  
December 1, 2017**

**Send Newsletter  
material to:**

**Carl Libbey**

**225 S. 10th Street**

**Mount Vernon, WA 98274**

**newsletter@wssa.net**

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# Molisch Award Recipient Announced

Dr. Franck E. Dayan, professor in the department of Bioagricultural Sciences and Pest Management at Colorado State University, received the Molisch Award during the World Allelopathy Congress held in Marseille, France the week of June 24–28, 2017. He was recognized for his outstanding lifetime achievements in research on the field of allelopathy. His contribution to allelopathy includes a multidisciplinary approach that led to the elucidation of the molecular and biochemical machinery involved in the biosynthesis of sorgoleone in *Sorghum bicolor* and numerous publications on the mode of action of natural phytotoxins. Dr. Dayan would like to acknowledge the excellent leadership provided by Dr. Stephen

Duke, his former supervisor at the USDA-ARS Natural Products Utilization Research Unit, and the countless amazing and talented colleagues and collaborators that have made this accomplishment possible.

This award is named after Professor Molisch, ‘the father of allelopathy’, and is bestowed once every three years. Professor Molisch is best remembered for two books: *Microchemistry of Plants* (1912) and *The Influence of One Plant on Another: Allelopathy* (1937). This latter book blended Professor Molisch disciplinary interests and is credited with introducing the term ‘allelopathy’.





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# WSSA UNDERGRADUATE RESEARCH AWARD – 2018

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The WSSA “John Jachetta Undergraduate Research Award” is now entering its 26th year of operation and proved to be an effective method of recruiting new students into the discipline of Weed Science. As the fall semester rolls along, this would be a perfect time to invite them to consider conducting an undergraduate research project through this award. Please be proactive with this opportunity; you are the only link a student has with this research grant and this program can only work through your active outreach and participation.

The Weed Science Society of America (WSSA) has developed John Jachetta Undergraduate Student Research Grant program designed to encourage and involve exceptional undergraduates in agricultural research. Interested faculty members are encouraged to identify potential award candidates and discuss the possibility of sponsoring a research project. Awards may be used as a stipend, for research budget expenses (travel, supplies, etc.), to defer fees, to defray living expenses for summer research, or any combination of these items.

**AWARD:** Up to \$2,000 for support of undergraduate research to be conducted over a minimum of one quarter/semester during 2018. Support of a faculty sponsor is required. Awards will be made to the student, to be administered by the faculty sponsor’s department.

**APPLICANT:** The applicant is an enrolled undergraduate student with a strong interest in Weed Science. Students majoring in all related disciplines may apply.

**TO APPLY:** Applicants should prepare a 2–3 page research proposal including name, address, phone number, E-mail address, title, objective, experimental approach, discussion, budget and references. The discussion section of the proposal should describe the expected results and their possible significance to Weed Science. The student should provide a cover letter in which general academic and career goals are discussed. A copy of the student’s academic transcripts must also be provided.

**FACULTY SPONSOR:** Any faculty member who is actively engaged in Weed Science research is qualified to be a sponsor. The faculty sponsor should review the research proposal with special attention to the budget; the distribution of funds should be approved by both the student and sponsor. In addition, the sponsor should provide a letter of reference including a statement of his/her willingness to supervise the proposed research and to provide any needed space, equipment and supplies above those requested in the proposal. The sponsor is encouraged to assist the student in presenting his/her results at a regional Weed Science Meeting.

**SUBMISSION:** The completed proposal, academic transcripts, cover letter and faculty letter of support should be sent electronically as a SINGLE PDF document to Dr. Mithila Jugulam at the following email address: [mithila@ksu.edu](mailto:mithila@ksu.edu). Applicants will be notified by email to confirm successful submission of the package.

If proposals cannot be submitted electronically, packages may be mailed to the following address: Mithila Jugulam, Ph.D.; Department of Agronomy; Kansas State University; 1721 Claflin Road; Manhattan, KS 66506-0110, USA.

The deadline for submission is December 20, 2017. Funding decisions will be made by January 31, 2018, and announced at the 2018 WSSA National Meeting Awards Ceremony.

**QUESTIONS:** Please contact Dr. Mithila Jugulam by email ([mithila@ksu.edu](mailto:mithila@ksu.edu)) or by phone at (785) 532-2755.



# NECROLOGY

## **GUSTAVO SBATELLA**

**1964 – 2017**

Gustavo Marcelo Sbatella passed away on August 2, 2017 outside of Valley of Fire State Park in Nevada, while traveling to the WSSWS summer board meeting.

Gustavo was born on October 17, 1964. He was the son of Ricardo Aristides Sbatella and Maria Elena Alion and grew up in Buenos Aires, Argentina.

He received his bachelor's degree in agronomy from the Universidad de Nacional de Buenos Aires, Argentina in 1990. He came to Wyoming in 2002 where he earned his master's degree in 2004, and his doctorate degree in 2006, both in the College of Agriculture and Natural Resources from the University of Wyoming.

Following his education, he worked as a Post Doctoral Research Associate for the University of Nebraska from 2007 to 2011, before taking a job as an Assistant Professor at Oregon State University from 2011 to 2014. He returned to Wyoming in 2014 to become an Assistant Professor for the College of Agriculture where he specialized in irrigated crop and weed management. In this position, he taught courses and mentored graduate students, as well as conducted research and managed a valued extension program at the Powell Research and Extension Center.

Perhaps the greatest thing that can be said of Gustavo is that he loved life and the people in his life. He was a devoted father, grandfather, and friend. He loved his job and was dedicated to his research with a fervor that he instilled in his many students and colleagues. An avid motorcyclist and outdoors enthusiast, Gustavo often travelled around the state and region, soaking up the scenery on his adventures.

Gustavo was passionate about football (soccer) and brought many people together through his love of the game. During his time at University of Wyoming, Gustavo was instrumental in organizing the pick-up soccer games and match watch parties among the international students and other soccer aficionados on campus, a tradition that is still going strong today. He has left a legacy of camaraderie, compassion, and fun among those who were privileged to know him.

He is survived by his two children, Ángel Alex Sbatella and Mailen Sbatella, their mother, Maria Rosa Bravo, his two grandchildren, Adrian and Azariel, and his brother Ricardo.

A memorial account has been set up at UniWyo Federal Credit Union in Laramie in Gustavo's name. In lieu of flowers, the family is asking for contributions to be made to this fund.



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## CALENDAR OF UPCOMING EVENTS

DATE	EVENT	LOCATION	CONTACT
December 4–7, 2017	North Central Weed Science Society Annual Meeting (NCWSS)	Hyatt Regency St. Louis at the Arch Hotel St. Louis, Missouri	<a href="http://www.ncwss.org">www.ncwss.org</a>
January 9–11, 2018	Northeastern Weed Science Society Annual Meeting (NEWSS)	Hilton Philadelphia at Penn's Landing 201 South Columbus Boulevard Philadelphia, Pennsylvania 19106	<a href="http://www.newss.org">www.newss.org</a> Dr. Carroll Moseley Syngenta Crop Protection Greensboro, NC 27409 <a href="mailto:carroll.moseley@syngenta.com">carroll.moseley@syngenta.com</a> (336) 632-7754
January 22–24, 2018	Southern Weed Science Society Annual Meeting (SWSS)	Hyatt Regency Hotel Atlanta, Georgia	<a href="http://www.swss.ws">www.swss.ws</a>
January 29–February 1, 2018	Weed Science Society of America Annual Meeting (WSSA)	Crystal Gateway Marriott Arlington, Virginia	<a href="http://www.wssa.net">www.wssa.net</a>
March 12–15, 2018	Western Society of Weed Science Annual Meeting (WSWS)	Hyatt Regency Orange County Garden Grove, California	<a href="http://www.wsweedscience.org">www.wsweedscience.org</a>
July 15–18, 2018	Aquatic Plant Management Society Annual Meeting (AMPS)	Hyatt Regency Hotel Buffalo, New York	<a href="http://www.amps.org">www.amps.org</a>

Additional Weed Science Meetings and Events can be found at <http://wssa.net/meeting/calendar-of-meetings/>

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