



PRESIDING

Dr. Anita Dille, Kansas State University

PRESENTATION OF HONORS AND AWARDS

Dr. Dwight Lingenfelter, Penn State University

Awards

Photo Contest Awards
Annual Meeting Graduate Student Grants
John Jachetta Undergraduate Research Awards
Outstanding Extension
Outstanding Research
Outstanding Graduate Student
Outstanding Teacher
Outstanding Paper – *Invasive Plant Science & Management*
Outstanding Paper – *Weed Science*
Outstanding Paper – *Weed Technology*
Outstanding Reviewers
Outstanding Early Career Weed Scientist
Outstanding Industry
Public Service Award
WSSA Fellows and Honorary Member

Subcommittee Chair

Angela Post
Mayank Malik
Whitney Brim-Deforest
Eric Prostko
Peter Dotray
Nick Basinger
Greg MacDonald
John Madsen
Pat Tranel
Peter Dittmar
Chris Willenborg*
Prasant Jha
Rich Zollinger
Mike Barrett
Krishna Reddy

*Director of Publications

WEED SCIENCE SOCIETY OF AMERICA AWARDS

ANNUAL MEETING GRADUATE STUDENT GRANTS. The purpose of these grants is to encourage the involvement of graduate students in the annual WSSA meeting early in their degree programs, and to broaden the attendance of graduate students from nontraditional weed science research programs. The grants are limited to students for their first time WSSA meeting attendance.

JOHN JACHETTA UNDERGRADUATE RESEARCH AWARD. A competitive research grant awarded to undergraduate students to encourage and support undergraduate involvement in weed science research. Sponsored by WSSA Endowment.

OUTSTANDING REVIEWERS. This award recognizes WSSA journal reviewing excellence. Winners of the award are determined by Associate Editor Reviewer rankings and completed review times. The two reviewers with the highest rankings (composite score of quality, number and return times) receive the award.

OUTSTANDING INDUSTRY AWARD. The recipient must be a member of the WSSA and be employed in private industry. This award recognizes professional accomplishments via products, processes, patents, and publications.

FELLOWS. The nominees must be active members of the WSSA at the time of their nomination and have been active members for at least 10 years. They must have made substantial contributions in more than one of the following areas: (1) professional publications, (2) educational contributions other than publications, (3) development of improvement of weed science programs, practices, and products, (4) other professional contributions, (5) service to WSSA or regional conferences, and (6) service to the profession outside the society. Up to 0.25 percent of the active membership of WSSA may be elected to fellowship in one year.

HONORARY MEMBER. Honorary memberships are given for significant contributions to the field of weed science. Active membership in WSSA is not a requirement.

INDUSTRY-SPONSORED AWARDS

OUTSTANDING EXTENSION AWARD. The recipient of this award must have been active in extension work for four out of the past five years and must devote at least 75 percent of their extension activities to weed science work. Sponsored by Corteva Agriscience.

OUTSTANDING RESEARCH AWARD. This award is for research workers who have demonstrated originality and creativity and whose work has had an impact in the field of weed science. The award is established to recognize outstanding contributions to both applied and basic weed science research. Sponsored by Corteva Agriscience.

OUTSTANDING GRADUATE STUDENT AWARD. The student must be a candidate for the MS or PhD degree or have received the degree within the past twelve months at the time the award is presented. The student should have made notable contribution to weed science and should have a good academic record and sound training in weed science. Above all, the recipient must be recognizable as a truly outstanding individual with excellent potential for continued development. Sponsored by Corteva Agriscience.

OUTSTANDING TEACHER AWARD. To be eligible for this award, the nominee must be currently active in teaching weed science. The recipient must have taught a weed science course(s) at least five times or have served as major professor for at least five students who have received advanced degrees and whose research was in weed science. Sponsored by Syngenta.

OUTSTANDING PAPER IN INVASIVE PLANT SCIENCE AND MANAGEMENT. This award is given to the author(s) of the paper published and judged to be the outstanding contribution in the journal, *Invasive Plant Science and Management*. Sponsored by Cambridge University Press.

OUTSTANDING PAPER IN WEED SCIENCE. This award is given to the author(s) of the paper published and judged to be the

outstanding contribution in the journal, *Weed Science*. Sponsored Cambridge University Press.

OUTSTANDING PAPER IN WEED TECHNOLOGY. This award is given to the author(s) of the paper published and judged to be the outstanding contribution in the journal, *Weed Technology*. Sponsored Cambridge University Press.

OUTSTANDING EARLY CAREER WEED SCIENTIST AWARD. This award is for young scientists who have demonstrated originality and creativity have made a notable contribution to weed science and have potential for continued excellence. Nominees are eligible for consideration for the Weed Science Society of America 'Early Career Outstanding Scientist Award' if they demonstrate accomplishments in a career in the discipline of weed science for no more than ten (10) years since completion of their terminal degree. The years are further qualified as not calendar years but years. Sponsored by BASF.

PUBLIC SERVICE AWARD. Awarded annually to a WSSA member for accomplishments in advancing Public understanding of the scientific principles of Weed Science (including but not limited to study of weeds, their place in the environment, and the means by which they may be controlled and/or managed. Sponsored by Bayer US – Crop Science.

US HRAC HERBICIDE RESISTANT MANAGEMENT AWARD. WSSA members who have conducted outstanding Research/Extension with a significant impact on the scientific understanding and/or addressing herbicide resistance issues and promoting best management practices are eligible. Multistate Research/Extension groups/teams, individuals, or regional/national initiatives fostering engagement and collaboration among stake holders including growers, industry and public institutions to develop sustainable herbicide resistance management are eligible. This award is established to recognize outstanding contributions to both applied and basic weed science research/extension on herbicide resistance.

2021 AWARDS

PHOTO CONTEST AWARDS

ANNUAL MEETING GRADUATE STUDENT GRANTS

Sponsor:WSSA

UNDERGRADUATE RESEARCH AWARDS

Sponsor:WSSA Endowment



OUTSTANDING EXTENSION AWARD

Industry Sponsor:Corteva Agriscience

JANE M. MANGOLD



Jane Mangold is a Professor and Extension Invasive Plant Specialist in the Department of Land Resources and Environmental Sciences at Montana State University in Bozeman, MT. She has been in this position since 2008; prior to that she worked as a research scientist for USDA-Agricultural Research Service in Burns, OR. Her degrees are from Iowa State University (B.S. in Biology, 1994) and Montana State University (M.S. in Abused Land Rehabilitation, 1997; Ph.D. in Land Resources and Environmental Sciences, 2004).

Jane's Extension and research program focuses on ecology and management of invasive plants on pasture, range, and wild lands. Much of her time is spent working on non-native annual grasses, but she has also researched and taught others about a variety of invasive and weedy species including spotted knapweed, hoary alyssum, houndstongue, field bindweed, tall buttercup, western salsify, non-native thistles, and perennial non-native grasses like crested wheatgrass and smooth brome.

During her tenure at MSU she has presented at nearly 400 Extension programs and in every county in Montana, been presenter or co-author on 58 conference presentations, and invited to give 44 additional presentations; she has published 46 Extension publications and 49 peer-reviewed journal articles. Jane has provided service and leadership at the university, state, and regional level. Some recent highlights include MSU Extension Program Leader for Agriculture and Natural Resources and a member of the Montana Invasive Species Council. Jane has served on various committees and the board of directors for Western Society of Weed Science. She was an Associate Editor for *Invasive Plant Science and Management* (2014-2019) and *Journal of Rangeland Ecology and Management* (2008-2010). She also served as a guest editor for a special issue of the journal *Agronomy*. Awards have included Outstanding Young Range Professional in 2009 from the Society for Range Management, Outstanding Early Career Weed Scientist in 2013 from Western Society of Weed Science, and the Presidential Award in 2013 from the Montana Weed Control Association. The MSU Extension IPM team, including Jane, won the Western Extension Directors Association Award of Excellence in 2020.



OUTSTANDING RESEARCH AWARD

Industry Sponsor: Corteva Agriscience

MITHILA JUGULAM



Mithila Jugulam is a Professor (Weed Physiology) in the Department of Agronomy at Kansas State University (KSU). She received her B.Sc. and M.Sc. degrees in Agriculture in India. She worked as a Scientist with Indian Council of Agricultural Research (ICAR) before obtaining her Ph.D. degree and postdoctoral training at the University of Guelph, Canada. She joined KSU in 2011.

Jugulam's research program is internationally recognized for increasing our understanding of the evolution and fundamental mechanisms of herbicide resistance in weeds. Her research also focuses on the effect of climate change factors on herbicide efficacy, consequently weed management. She is an award-winning teacher with the responsibility to teach graduate and undergraduate courses related to herbicide physiology, molecular biology and molecular cytogenetics at KSU and also internationally. She has served as major/ co-major advisor for 13 MS and PHD students and 10 postdoctoral fellows/visiting scholars. She also served on supervisor committee of 9 graduate students.

Jugulam is a recipient of several awards, including, Outstanding Scientist Award- Sigma Xi (KSU); Distinguished Achievement Award (Research) – NCWSS; Fulbright Specialist Award; Outstanding Research Award (Gamma Sigma Delta-KSU), KSU-College of Agriculture Excellence in Graduate Teaching Award, Faculty Development Award, and Academic Excellence Award (twice). Mithila is an active member of several professional societies including IWSC, WSSA, NCWSS, and WSWS.

Jugulam has authored or co-authored a career total of >80 peer-reviewed publications in high-impact journals including PNAS, Plant Physiology, Scientific Reports, Weed Science and Pest Management Science. She also edited a book "Biology, Physiology and Molecular Biology of Weeds." She is currently on the Editorial Board for Pest Management Science, Weed Science journals. For more information about Mithila Jugulam's lab and her publications, please access the following link
<https://www.agronomy.k-state.edu/people/faculty/jugulam-mithila/>



OUTSTANDING GRADUATE STUDENT

Industry Sponsor: Corteva Agriscience

ANIRUDDHA MAITY



Aniruddha Maity is a Ph.D. candidate with Dr. Muthukumar Bagavathiannan at Texas A&M University-College Station. Maity's research interests include weed seed biology and ecology, herbicide resistance evolution, gene flow, and integrated weed management. His PhD dissertation research objectives included characterization of diversity for the weediness traits among the ryegrass accessions collected from across the Texas Blacklands region wheat fields; determination of herbicide resistance and its association with phenotypic traits; and elucidation of the impact of environmental stressors such as CO₂, drought, and temperature on the weediness traits of ryegrass. Further, Maity investigated molecular mechanisms governing seed shattering in ryegrass using the genotyping by sequencing (GBS) approach.

Maity has received several competitive scholarships, fellowships, and awards at the institutional, national, and international levels throughout his career. As part of the 2019 Endeavour Leadership Award from the Government of Australia, Maity visited the Australian Herbicide Resistance Initiative (AHRI) at the University of Western Australia, where he was mentored by Dr. Hugh Beckie on a project investigating the adaptive characteristics of ryegrass accessions collected in Western Australian Wheat Belt, in comparison with the Texas Blacklands accessions. He was chosen as the 2019 Outstanding Graduate Researcher at the Department of Soil and Crop Sciences, and the recipient of the 2020 Dean's Outstanding Graduate Student Award from the College of Agricultural and Life Sciences, TAMU.

Maity serves as a Scientist at the Indian Council of Agricultural Research (Indian equivalent to USDA-ARS). He received a B.Sc. from Uttar Banga Krishi Viswavidyalaya and an M.Sc. from the Indian Agricultural Research Institute, India. Maity is an active member of many science societies including ASA-CSSA-SSSA, Weed Science Society of America, Indian Society of Genetics and Plant Breeding, and Indian Society of Weed Science. He has authored or co-authored more than 30 articles in leading peer-reviewed journals in his area and several are currently in review/being developed. He also produced a number of popular and extension articles, book chapters, training manuals, and website contents. His publications have so far received 211 citations. Maity leads various student and professional groups in different capacities. He loves cricket, soccer, poetry, and political debate during his leisure time.



OUTSTANDING TEACHER AWARD

Industry Sponsor:Syngenta Crop Protection

KATIE JENNINGS



Katie received a B.S. degree in horticulture from the University of Maryland, and a Master of Science and PhD in weed science from North Carolina State University. She worked in industry with American Cyanamid and BASF as a Field Development Rep and a Project Development Manager. Katie is an associate professor and leads the research and extension program for weed management in vegetable and small fruit crops at North Carolina State University.

She maintains an active research program focused on control of Palmer amaranth, nutsedge species, and other troublesome weeds in vegetable and small fruit crops. She has published over 90 peer-reviewed scientific journal articles, 22 extension publications, 119 abstracts, and 6 book chapters.

Katie does not have a formal teaching appointment. However, she is often invited to lecture in courses in the Departments of Horticultural Science and Crop and Soil Science. She works with growers of over 20 vegetable and 4 small fruit crops, crops that are valued at over \$650 million. Much of her work has been directly adopted by growers in North Carolina and many other states.

Katie has mentored 16 Master of Science and 7 PhD students and has served on many graduate committees. Her students have been very successful as they have won 75 awards for oral and poster competitions at the Southern Weed Science Society (SWSS), Weed Science Society of NC (WSSNC), National Sweetpotato Collaborators Meeting, the American Society of Horticultural Science, and the American Society of Enology and Viticulture; the SWSS Enrichment Scholarship, competitive national and international travel grants to conferences, and various awards at the SWSS and Northeastern Weed Science Society Weed Contests, and Outstanding Graduate Student Awards at the SWSS, and WSSNC weed meetings. Her students are professionally working in farming, academia, and industry.

Katie places a priority on education of growers through her extension program with a focus on reducing their risk from weeds. She has prioritized the development of students in her graduate education program so they are prepared professionally when they graduate.



OUTSTANDING PAPER: Invasive Plant Science and Management

Industry Sponsor:Cambridge University Press

Evaluation Landscape Characteristics of Predicted Hotspots for Plant Invasions

Invasive Plant Sci Manag 13 (3): 163-175

ADRIAN LAZARO-LOBO

Adrian Lazaro-Lobo, Kristine O. Evans, and Gary N. Ervin



I received my bachelor's degree in Biological Sciences and my master's degree in Ecological Restoration from the Complutense University of Madrid. For my PhD, I am studying different aspects about biological invasions in the Department of Biological Sciences at Mississippi State University. I am interested in understanding how species interactions, abiotic factors, and landscape characteristics affect species distributions at multiple spatial scales and land covers, including forests, prairies, wetlands, and roadsides. I intend to use this ecological knowledge to help preserve biodiversity, restore ecosystems, and manage biotic resources.



OUTSTANDING PAPER: Weed Science

Sponsor:Cambridge University Press

Phenotypic Diversity of Weedy Rice (Oryza sativa f. spontanea) Biotypes Found in California and Implications for Management Weed Science doi: 10.1017/wsc. 2020.43

WHITNEY BRIM-DEFOREST

Whitney Brim-DeForest, Elizabeth Karn, Teresa De Leon, Luis Espino, and Kassim Al-Khatib



Whitney Brim-DeForest is the County Director for University of California Cooperative Extension Sutter-Yuba, and the UCCE Rice and Wild Rice Advisor for Sutter, Yuba, Placer, and Sacramento counties. She holds a M.S. in International Agricultural Development and a PhD in Horticulture and Agronomy from the University of California, Davis. She also holds a dual BA in Biology and Music from Brown University. Whitney has been working in rice for more than 15 years, with her research and extension activities focusing primarily on the identification and management of weeds in rice and wild rice

systems. She was also a Sustainable Agriculture Volunteer with the United States Peace Corps in Senegal, West Africa, where she served three years. She started working in rice systems in Senegal.

Over the past four years as an Extension Advisor, her research has focused on weedy rice, an emerging and important pest in California rice systems. In a relatively short amount of time, she and her team have conducted extensive research on California weedy rice including its genetics, identification, competition with cultivars, emergence, herbicide susceptibility, and even drone mapping.

She currently holds the UC ANR Presidential Endowed Fellowship in California Rice, serves on several WSSA committees, and the California Weed Science Society Board. She also teaches plant science and agriculture courses at California State University, Chico.



OUTSTANDING PAPER: Weed Technology

Sponsor:Cambridge University Press

Tillage Based, Site-Specific Weed Control for Conservation Cropping Systems Weed Tech
doi 10.1017/wet20.20.34

MICHAEL WALSH

Michael J. Walsh, Caleb C. Squires, Guy R. Y. Coleman, Michael J. Widderick, Adam B. McKiernan,
Bhagirath S. Chauhan, Carlo Peressini, and Andrew L. Guzzomi



Michael Walsh is an Associate Professor and Director Weed Research at the University of Sydney. Michael completed his B.Sc. at the University of Western Australia, M.Sc. from La Trobe University, Melbourne and PhD from the University of Wyoming. He joined AHRI in 1999 where he focused on the development and introduction of harvest weed seed control systems. Michael has spent 20 years working on the development of alternative weed control techniques and believes that recent technological advances are creating exciting opportunities for the future use of new weed control systems.



OUTSTANDING REVIEWER AWARDS

Sponsor:WSSA

SARAH WARD



After 25 years on the Colorado State University faculty as a professor of plant genetics, Dr. Sarah Ward is now Research Director for Landganics. She has been an active WSSA member, including 6 years as Associate Editor for Weed Science and serving for 10 years on the Board of Directors, first as Member-at-Large and then as Director of Publications. Originally from the UK, Sarah now lives in Montana.

CHARLIE CAHOON



Charlie Cahoon is an Assistant Professor and Extension Weed Specialist in the Crop and Soil Sciences Department at North Carolina State University. Charlie was born and raised in the blacklands of eastern North Carolina where he worked on his family's row crop, vegetable, and hog farm. He graduated Summa Cum Laude from North Carolina State University with a BS in Agronomy-Soil Science. While still an undergraduate, Charlie stumbled into a summer job working for the legendary Extension Weed Specialist, Dr. Alan York. Following that summer, Charlie knew he had found his calling and commenced his graduate education in Weed Science under the direction of Drs. York and David Jordan. He received his PhD in 2015 and later that year began his career as an Extension Weed Specialist at Virginia Tech. Based at the Eastern Shore AREC in Painter, Virginia, Charlie had sole responsibilities for weed management in cotton, peanuts, and vegetables and split grain responsibilities with Dr. Michael Flessner. In 2018, Charlie was fortunate to replace his mentor at North Carolina State University as the Extension Weed Specialist for corn and cotton. In addition to his extension and research duties, Charlie teaches a cross-listed undergraduate/graduate introductory Weed Science course and guest lectures in various other classes. Charlie has authored or co-authored 30 peer-reviewed papers, 34 peer-reviewed extension publications, and 61 meeting abstracts. He has mentored 5 MS and 1 PhD students and served as a committee member for 11 additional students. Charlie has been involved with the SWSS, NEWSS, and WSSA. Charlie organized the 2019 SWSS Graduate Student Contest as chair of the contest committee. In further service to his discipline, he serves as an ad hoc reviewer for Weed Technology, Weed Science, Journal of Aquatic Plant Management, Agronomy Journal, Crop, Forage, and Turfgrass Management, Journal of Cotton Science, and Hort Technology. Charlie is a member of Wendell Baptist Church. In his spare time he enjoys tinkering on his 1962 John Deere 1010 tractor, farming/gardening, hunting, reading, playing cards, and spending time with his wife (Jenny), two children (Lila and Liam), and yellow lab (Sweet).



NITHYA SUBRAMANIAN



Nithya Subramanian is a Molecular Weed Scientist at Texas A&M University (TAMU), College Station. Prior to that, she worked as a postdoctoral scientist in Plant Breeding & Genetics at TAMU and previously at the University of Arkansas, Fayetteville. She received her doctoral degree in Plant Genetics at the University of Nottingham, Sutton Bonington, England/The James Hutton Institute, Dundee, Scotland; and her B.Sc., M.Sc. & M.Phil in Biochemistry at Bharathiar University, Tamil Nadu, India. Her current research primarily focuses on understanding the physiology and molecular biology of weed species adaptation to management tools and environmental conditions. She is collaborating with a team of scientists in understanding the nature and dynamics of gene flow between crop and wild relatives and fitness (specifically sorghum-johnsongrass; rice-weedy rice). She investigates the utilization of weedy/wild relatives of crops as a source of germplasm for crop improvement, with a focus on crops that are important to TX and parts of the southern US. Her research also focuses on developing novel herbicide-resistant crops using classical breeding and CRISPR/Cas9 gene editing approaches. Dr. Subramanian has co-mentored a number of graduate and undergraduate students with their research projects, and participated in graduate student advisory committees. She also trained several students and staff with molecular tools and genetic mapping. She authored or co-authored more than 25 peer reviewed journal articles and one book chapter. She has reviewed articles for several peer-reviewed journals, including Weed Science, Crop Science, PLoS One, Molecular Breeding, and Food and Energy Security.



OUTSTANDING EARLY CAREER WEED SCIENTIST

Industry Sponsor:BASF Corporation

CHENXI WU



Dr. Chenxi Wu is currently a Research Scientist of Bayer CropScience based in St Louis, Missouri. Chenxi grew up as a farm kid in Guangxi, China and received her B.S. degree in Ecology from China Agricultural University. Her passion for precision Agriculture brought her to the United States to obtain her M.S. degree in Weed Ecology from Iowa State University in 2011, and Ph.D. degree in Molecular Weed Science from the University of Illinois at Urbana-Champaign in 2016, under the direction of Drs. Mike Owen and Pat Tranel, respectively.

Chenxi began her career with Monsanto/Bayer in 2016 and was privileged to have Drs. Doug Sammons and Alejandro Perez-Jones served as her manager and mentor. As a R&D scientist with the leading global enterprise in high-tech Agriculture, Chenxi demonstrated a strong ability to innovate by leading some of the most cutting-edge research projects to identify novel weed control technologies. Chenxi played a significant role in Bayer's next generation weed control system, the parallel development of crop tolerance traits and novel herbicides to greatly enhance the ability of farmers to fight herbicide resistance. Bayer's novel weed control system will provide great value to growers in key markets, including US, Canada, Argentina and Brazil.

Chenxi's research helped provide novel insights to effectively mitigate the evolution of herbicide resistant weeds, which has informed industrial weed management strategies and was featured by major media outlets. Her doctoral research which focused on the fitness costs of five key herbicide resistance traits was recognized by the International Weed Science Society (IWSS) with the Larry Burrill Outstanding Student Research Award in 2016. During her four years' tenure with Bayer, she authored five peer-reviewed

publications, including the first research in decades that elucidates the molecular mechanism of synthetic auxins resistance, work that was published in PNAS.

Chenxi is actively engaged in Bayer's outreach programs and in regional/national weed science communities, including service on committees, section moderator, and judge for student presentation/weed contest/photo contest. She is also an associate editor for the Weed Science journal since 2019 and has reviewed more than 40 papers for other journals in the field.



OUTSTANDING INDUSTRY AWARD

Sponsor:WSSA

PETER J. PORPIGLIA



Peter has spent his career developing technologies and building industrial research teams in Weed Science, Plant Growth Regulation and other disciplines. After completing graduate degrees at Cornell and Virginia Tech, his research philosophy was bolstered working for a Syngenta legacy company (CIBA-GEIGY) in various positions including Director of Research and Development for the Weed Control business. During this time, Peter's teams introduced nearly a dozen new active ingredients at the Weed Science Society of America which were subsequently commercialized. Peter has held management positions in several global organizations with responsibility for product development in numerous countries around the world. He was fortunate to help build a start-up company around natural insecticide chemistries which are now marketed by a major consumer products company.

Currently, Peter is Vice President of Product Development and a member of the Executive Committee at AMVAC Corporation in Newport Beach, California. Peter has been an active member of all regional weed science organizations and a member of the Weed Science Society of America for more than 25 years. At WSSA, he has served on several committees as well as eight years on the Board including four years on the Executive Board. Peter has authored numerous papers and presentations in all the Weed Science Societies in the USA as well as multiple international societies. In addition, he is an active advisor in academic graduate programs at Cornell and Iowa State Universities. Like many, Peter has been weathering the pandemic from his home in Putnam Valley, NY.



WSSA PUBLIC SERVICE AWARD

Sponsor:Bayer U.S. – Crop Science

DAVID E. ERVIN



David Ervin is a Professor Emeritus of Environmental Management and Economics and a Senior Fellow in the Institute for Sustainable Solutions at Portland State University. He has conducting interdisciplinary research on agricultural and environmental topics in academe, federal government and non-profit think-tanks. Prior posts include Professor and Head of Agricultural and Resource Economics at Oregon State University, Professor of Agricultural Economics at the University of Missouri-Columbia, Chief of Resource Policy Branch in the U.S. Department of Agriculture’s Economic Research Service, Visiting Scholar at the Office of Technology Assessment, U.S. Congress, and Director of the Policy Studies Program for the Henry A. Wallace Institute for Alternative Agriculture. He has BS and MS degrees from The Ohio State University and a Ph.D. from Oregon State University. His current research program focuses on the sustainability of genetically engineered crops, with

emphasis on pest resistance management, the valuation of ecosystem services from natural and urban systems, and motivations for business sustainability. His research and education projects have received \$12 million in competitive funding since 2000. He has published extensively on these topics and other subjects in peer-reviewed journals. During 2008-2010, he chaired the National Research Council Committee “Impact of Biotechnology on Farm Sustainability in the United States” and co-authored its report. Since 2013, he has served as a member of the WSSA-Herbicide Resistance Education Committee. In 1987 and 2008, he was a visiting scholar in the Department of Land Economy at Cambridge University. His consulting assignments include the Organization for Economic Cooperation and Development, the European Commission, and the North American Commission for Environmental Cooperation. He speaks to local, national and international audiences on the sustainability of agricultural systems, ecosystem service valuation, and business sustainability. In his spare time, he enjoys growing heirloom tomatoes and hiking and cycling in the wilds of the Pacific Northwest and Europe.



US-HRAC HERBICIDE RESISTANCE MANAGEMENT AWARD

Sponsor:US HRAC

MICHAEL WALSH



Michael Walsh is an Associate Professor and Director Weed Research at the University of Sydney. Michael completed his B.Sc. at the University of Western Australia, M.Sc. from La Trobe University, Melbourne and PhD from the University of Wyoming. He joined AHRI in 1999 where he focussed on the development and introduction of harvest weed seed control systems. Michael has spent 20 years working on the development of alternative weed control techniques and believes that recent technological advances are creating exciting opportunities for the future use of new weed control systems.

WSSA FELLOW AWARDS

Sponsor:WSSA

SCOTT SENSEMAN



Scott Senseman graduated from Wilmington College of Ohio in 1986 with a B.S. in Agricultural Business. He completed his M.S. and Ph.D. at the University of Arkansas in Agronomy-Weed Science (1990) and Agronomy-Pesticide Residue (1994), respectively. He served on the faculty in the Department of Soil and Crop Sciences at Texas A&M University for more than 18 years starting in October 1994. Prior to that appointment, he served as Head of the Department of Plant Sciences at the University of Tennessee where he has been employed since July, 2013. He also served as Deputy Assistant Dean for Strategic Planning for the Herbert College of Agriculture from April

2019 to May 2020. He is currently Professor and Interim Dean of UT Extension that began in June of 2020. He has authored or coauthored 107 peer-reviewed journal articles and 229 abstracts of poster and oral presentations. In 2007, he finished service as editor for the Weed Science Society of America's Ninth Edition of the Herbicide Handbook. He served as President for both the Southern Weed Science Society (2014) and the Weed Science Society of America (2018). Dr. Senseman helped develop and teach the beginning course in agronomy (SCSC 101 Introduction to Agronomy), two undergraduate courses related to the evolution, role, and fate of agricultural chemicals in row crop production (SCSC 435 Ecology of Agrochemicals and SCSC 446 Weed Management and Ecology), a graduate and distance course related to herbicide mode of action and environmental fate (SCSC 650 Mode of Action and Environmental Fate of Herbicides) as well as an analytical course related to instrumentation used in environmental aspects of agronomy (SCSC 618 Methods of Plant, Soil, and Water Analysis in Environmental Systems). He also co-developed and co-taught PLSC 456/556 Turfgrass Weed Science at the University of Tennessee. Dr. Senseman has served as major advisor or co-advisor for 22 graduate students and has served on 66 other graduate student committees and four international undergraduate internships during his academic career.



DAVID L. JORDAN



David Jordan was raised on a small farm in eastern North Carolina and received BS and MS degrees from North Carolina State University and a PhD in Agronomy from the University of Arkansas (1993). David was a Post-Doctoral Associate at the University of Georgia (1993) and a faculty member at the Louisiana State University Agricultural Center (1993-1996). David is currently a Professor at North Carolina State University in the Department of Crop and Soil Sciences. David's first formal experiences with weed science were in Doug Worsham's weed science course and through an internship with DuPont under Louis Rodrigue. David's MS and PhD programs were directed by Alan York and Robert Frans, respectively. David focused on weed management in rice and soybean at LSU. David's focus in North Carolina has been peanut-based cropping systems in areas of agronomy, weed science, and IPM with both research and extension responsibilities. From 2007 to 2011, David provided assistance in weed science programs across several agronomic crops in North Carolina due to vacancies in key weed science positions. David has

instructed courses in weed science, soil-crop management systems, IPM, and peanut production. David has directed statewide education programs associated with peanut management in North Carolina since 1996. David has served in elected, appointed, and volunteer positions in both WSSA and SWSS as well as other

professional organizations and societies. David has made significant contributions in Sub-Saharan Africa since 2002 in areas of agronomy, weed science, IPM, and aflatoxin mitigation in peanut. David's work in the United States includes general weed management, pesticide compatibility, adjuvants, and management of herbicide-resistant weeds. David has led efforts to develop risk management tools for peanut in several countries. David has co-authored over three hundred peer-reviewed papers and has advised, co-advised or served on committees for over 90 graduate students. Since becoming a member of both the WSSA and SWSS in 1987, David has worked alongside many dedicated and talented people in academia and graduate education, industry, government and regulatory agencies, and NGOs as well as farmers and their advisors to address important issues related to managing weeds.



WSSA HONORARY MEMBER AWARD

Sponsor: -----WSSA

BHAGIRATH SINGH CHAUHAN



Bhagirath Chauhan is Professor and holds a joint appointment with the Queensland Alliance for Agriculture and Food Innovation (QAAFI) and School of Agriculture and Food Sciences (SAFS) at the University of Queensland (UQ), Australia. He conducts research on weed biology and management. His specific interests are weed seed ecology, nonchemical weed management options, herbicide use, management of herbicide-resistant weeds, and integrated weed management systems using agronomic and varietal components.

Bhagirath comes from a rural background of Haryana, India and completed his BS (Hons) Agriculture (1998) and MS (Agronomy) (2000) from Haryana Agricultural University. He was awarded John Allwright Fellowship for PhD from the University of Adelaide, Australia, where he studied the ecology and management of weeds under no-till conditions. After completing his PhD (2007), he joined the International Rice Research Institute (IRRI), Philippines, as a post-doctoral fellow. Later, Bhagirath was promoted to the head of the weed science department. At IRRI, he developed a strong collaboration in several countries, including India, Sri Lanka, Bangladesh, Bhutan, China, Pakistan, Nepal, Malaysia, and Vietnam. His main work at IRRI was to develop weed management strategies for direct-seeded rice systems. In 2014, Bhagirath moved to Australia and joined UQ as the weed team leader, where he is continuing his research and teaching.

Professor Chauhan has published >350 articles in peer-reviewed journals and several books and book chapters. He has also published several extension and conference articles. He serves as Associate Editor for Weed Science, Speciality Chief Editor for Frontiers in Agronomy and Associate Editor for Indian Journal of Weed Science. He has been the Editor-in-Chief of Crop Protection. Bhagirath is a life member of several societies, including Asian-Pacific Weed Science Society (APWSS), International Weed Science Society and Indian Society of Weed Science (ISWS). He has won the Young Scientist Award from the APWSS and Best Book Award from the ISWS.

Bhagirath thanks his parents, wife, teachers and friends for helping him to shape his life with positivity and passion. He is married to Neetu Rani and has a son, Vivek, and a daughter, Varsha. His hobbies are watching Bollywood movies and cricket.

PREVIOUS WSSA AWARD WINNERS

OUTSTANDING PAPER IN *WEED SCIENCE*

1964 - R.N. Andersen A.J. Linck R. Behrens M.L. Weaver R.E. Nyland	1983 - R.A. Evans D.A. Easi D.N. Book J.A. Young	1999 - C.V. Eberlein M.J. Guttieri J. Steffen-Cambell	2012 - K. Thinglum C.W. Riggins A.S. Davis K.W. Bradley K. Al-Khatib P.J. Tranel
1966 - J.H. Ohman T. Kommedahl L.L. Jansen	1984 - E.P. Flint D.T. Patterson	2000 - M.J. Foes L. Liu P.J. Tranel L.M. Wax E.W. Stoller	2013 - J. Moriles S. Hansen D. Horvath G. Reicks K.M. Barlow
1967 - L.L. McCormick A.E. Hiltbold	1985 - E.E. Schweizer R.L. Zimdahl	2001 - J. S. Holt A.B. Boose	2014 - S.E. Wortman A.S. Davis B.J. Schutte J.L. Lindquist J. Cardina J. Felix C.L. Sprague J.A. Dille A. Ramirez G. Reicks S. Clay
1968 - R. Prasad C.L. Foy A.S. Crafts	1986 - M.R. Pareja D.W. Staniforth	2002 - L. Hall K. Topinka J. Huffman L. Davis A. Good	2015 - J.F. Egan K.M. Barlow D.A. Mortensen D. Clay S. Clay
1969 - C.R. Swanson H.R. Swanson	1987 - R.N. Paul S.O. Duke W.H. Kenyon	2003 - B.V. Ottis A.M. Prazak-Harvey C.A. Bormans C. Sneller J.M. Chandler W.D. Park	2016 - L.M. Schwartz D. J. Gibson K.L. Gage J.L. Matthews D.L. Jordan M.D.K. Owen D.R. Shaw S.C. Weller R.G. Wilson B.G. Young
1970 - J.B. Weber S.B. Weed T.M. Ward	1988 - S.L. Sherrick H.A. Holt F.D. Hess	2004 - M.A. Stanislaus C. Cheng	2017 - M. Dogramaci G.G. Gramig J.V. Anderson W.S. Chao M.E. Foley
1971 - L. Thompson, Jr. F.W. Slife H.S. Butler	1989 - P.J. McCall 1990 - D.A. Mortensen H.D. Coble	2005 - A.N. Steinau D.Z. Skinner M. Steinau	2018 - G. Cundiff T.C. Mueller D.B. Reynolds
1972 - R.D. Gruenhagen D.E. Moreland	1991 - W.H. Ahrens	2006 - I. Rajcan K.J. Chandler C.J. Swanton	2019 - A. Kniss
1973 - J.L. Hilton M.N. Christiansen	1992 - J.M. Shribbs D.W. Lybecker E.E. Schweizer	2007 - J.T. Dauer D.A. Mortensen R. Humston	2020 - J. Montgomery A. Sadeque D. Giacomini P. Brown P. Tranel
1974 - J.T. Daniel G.E. Templeton R.J. Smith, Jr. W.T. Fox	1993 - J.S. Holt D.R. Orcutt	2008 - K.W. Davies R.L. Sheley	
1975 - A.D. Worsham	1994 - L.J. Wiles G.G. Wilkerson H.J. Gold H.D. Coble	2009 - D.P. Horvath D. Llewellyn S. Clay	
1976 - R. Parker M.C. Williams	1995 - D.A. Derksen A.G. Thomas G.P. Lafond H.A. Loeppky C.J. Swanton	2010 - S.S. Kaundun I. Zelaya R.P. Dale A.J. Lycett P. Carter K. Sharples E. McIndoe	
1977 - J.M. Anderson C.G. McWhorter	1996 - C.G. McWhorter R.N. Paul J.C. Ouzts	2011 - J. Storkey S. Moss J. Cussans	
1978 - C.G. McWhorter	1997 - M. Jasieniuk A.L. Brule-Babel I.N. Morrison		
1979 - P.G. Bartels C.W. Watson	1998 - F. Forcella R.P. King S.M. Swinton D.D. Buhler J.L. Gunsolus		
1980 - P.E. Brewer C.J. Arntzen F.W. Slife			
1981 - D.T. Patterson E.P. Flint			
1982 - P.H. Westra D.L. Wyse E.F. Cook			

OUTSTANDING PAPER IN *WEED TECHNOLOGY*

1988 - S.O. Duke J. Lydon	1999 - K.D. Morrison E.G. Reekie K.I.N. Jensen	2008 - M.P. Blair S.M. Zedaker J.R. Seiler P.L. Hipkins P.L. Burch	2016 - L.L. Beck A. Patton Q. Law D.V. Weisenberger J.T. Brosnan J.J. Vargas Almodovar G.K. Breeden D.A. Kopsell
1989 - R.J. Smith	2000 - R.E. Blackshaw G. Semach X. Li T. O'Donovan K.N. Harker	2009 - A. Légère F.C. Stevenson N. Ziadi	2017 - M. Wiggins R.M. Hayes L. Steckel
1990 - R.J. Kremer N.R. Spencer	2001 - J. Zhang S. Weaver A. Hamill	2010 - H.J. Beckie X. Reboud	2018 - M. Loux B. Young K. Bradley B. Johnson D. Spaunhorst A. Dobbels L. Steckel M. Palhano J. Norsworthy
1991 - B.D. Maxwell M.L. Roush S.R. Radosevich	2002 - C. Leger S.G. Hallett A.K. Watson	2011 - R. A. Mischler W.S. Curran S.W. Duiker J. A. Hyde	2019 - M. Walsh J. Broster S. Powles
1992 - R.D. Cousens	2003 - L.W. Lass D.C. Thill B. Shafii T.S. Prather	2012 - S. Fogliatto F. Vidotto A. Ferrero	2020 - K. Lillie D. Giacomini P. Tranel
1993 - M. Sattain G. Zanin A. Berti	2004 - H.J. Beckie K.J. Kirkland	2013 - G. Evans R. Bellinder R. Hahn	
1994 - G. Kapusta R. Krausz	2005 - W.W. Donald W.G. Johnson	2014 - R. Werle M.L. Bernards	
1995 - T.M. Webster M.M. Loux E.E. Regnier S.K. Harrison	2006 - A.S. Sciumbato J.M. Chandler S.A. Senseman R.W. Bovey K.L. Smith	2015 - M.J. Walsh S.B. Powles	
1996 - I. A. Bello M.D.K. Owen H.M. Hatterman- Valenti	2007 - S.B. Powles C. Preston		
1997 - F. Forcella K.R. Banken			
1998 - T.M. Wolf S.H. Liu B.C. Caldwell A.L. Hsiao			

OUTSTANDING PAPER IN *INVASIVE PLANT SCIENCE AND MANAGEMENT*

2010 - S.M. Ward C.E. Fleischmann M.F. Turner S.E. Sing	B. Rector D. Zhang	2018 - D. Tekiela J. Barney
2011 - K.M. Goodwin R.E. Engel D.K. Weaver	2015 - J. Leary B.V. Mahnken L.J. Cox A. Radord J. Yanagida T. Penniman D.C. Duffy J. Gooding	2019 - M. Rinella J. Davey G. Kyser F. Mashiri S. Bellows J. James V. Peterson
2012 - C.S. Jarnevich T.R. Holcombe D.T. Barnett T.J. Stohlgren J.T. Kartesz	2016 - J.M. Shields M.A. Jenkins M.R. Saunders K.D. Gibson P.A. Zollner J.B. Dunning, Jr.	2020 - J. Leary B. Mahnken C. Wada K. Burnett
2013 - A. Herrera-Reddy R. Carruthers N. Mills	2017 - A. Boswell S.E. Sing S. Ward	
2014 - J. Gaskin M. Schwarzlander H. Hinz L. Williams III E. Gerber		

OUTSTANDING TEACHER AWARD

1971 - A.P. Appleby	1996 - J.B. Weber
1972 - P.W. Santelmann	1997 - D. Penner
1973 - F.W. Slife	1998 - R.E. Talbert
1974 - N.D. Nalewaja	1999 - D.R. Shaw
1975 - W.F. Meggitt	2000 - J.L. Griffin
1976 - E.G. Rodgers	2001 - K.K. Hatzios
1977 - G.F. Warren	2002 - D.A. Mortensen
1978 - D.E. Davis	2003 - G.R. Stephenson
1979 - D.E. Bayer	2004 - B. Maxwell
1980 - R.E. Frans	2005 - K. Harrison
1981 - M.G. Merkle	2006 - J. Wilcut
1982 - L.S. Jordan	2007 - M. Chandler
1983 - T.J. Monaco	2008 - A. DiTommaso
1984 - A.D. Worsham	2009 - No award
1985 - M.D. McGlamery	2010 - No award
1986 - L.R. Oliver	2011 - S. Glenn
1987 - R.D. Ilnicki	2012 - G. MacDonald
1988 - R.L. Zimdahl	2013 - W. K. Vencill
1989 - C.G. Messersmith	2014 - P. Dotray
1990 - H.D. Coble	2015 - K. Howatt
1991 - D.L. Wyse	2016 - A. Shrestha
1992 - M.A. Ross	2017 - No award
1993 - P.B. Cavers	2018 - J.A. Dille
1994 - W.W. Witt	2019 - A.K. Renner
1995 - W.H. Vanden Born	2020 - B. Rubin

OUTSTANDING EXTENSION AWARD

1972 - E.L. Knake	1990 - C.L. Elmore	2008 - J.M. DiTomaso
1973 - E.P. Sylvester	1991 - D.N. Weaver	2009 - C. Boerboom
1974 - H.A. Friesen	1992 - M.D.K. Owen	2010 - W.G. Johnson
1975 - L.E. Anderson	1993 - L.C. Burrill	2011 - E. Prostko
1976 - H.P. Alley	1994 - E.C. Murdock	2012 - A.S. Culpepper
1977 - M.D. McGlamery	1995 - W.M. Stall	2013 - W.S. Curran
1978 - L.W. Mitich	1996 - A.R. Martin	2014 - R.R. Hahn
1979 - G.R. Miller	1997 - A.C. York	2015 - L. Steckel
1980 - J.V. Parochetti	1998 - P. Westra	2016 - S. Askew
1981 - J. Miller	1999 - S.A. Dewey	2017 - M.J. VanGessel
1982 - L. Thompson, Jr.	2000 - T.R. Murphy	2018 - C.L. Sprague
1983 - R.E. Doersch	2001 - R.K. Zollinger	2019 - S.F. Enlow
1984 - F.L. Baldwin	2002 - J.W. Boyd	2020 - J. Byrd
1985 - R.A. Fawcett	2003 - R.G. Hartzler	
1986 - C.W. Swann	2004 - G. N. Rhodes Jr.	
1987 - L.K. Binning	2005 - D. Peterson	
1988 - W.M. Lewis	2006 - R. Wilson	
1989 - A.G. Dexter	2007 - T.F. Peeper	

OUTSTANDING RESEARCH AWARD

1973 - D.E. Moreland	1985 - C.L. Foy	1997 - D.C. Thill	2009 - R. Charudattan
1974 - D.E. Davis	1986 - F.W. Slife	1998 - J.C. Hall	2010 - J.S. Holt
1975 - P.C. Kearney	1987 - D. Penner	1999 - R.E. Hoagland	2011 - D.A. Mortensen
1976 - J.L. Hilton	1988 - R.H. Shimabukuro	2000 - F. Forcella	2012 - P. Bhowmik
1977 - C.G. McWhorter	1989 - L.M. Wax	2001 - M. Barrett	2013 - D. L. Shaner
1978 - E.W. Hauser	1990 - S.O. Duke	2002 - C.J. Swanton	2014 - K.N. Harker
1979 - O.C. Burnside	1991 - S.R. Radosevich	2003 - D. Shaw	2015 - F. Dayan
1980 - A.F. Wiese	1992 - E.E. Schweizer	2004 - J.T. O'Donovan	2016 - C. Mallory-Smith
1981 - J.B. Weber	1993 - J.D. Nalewaja	2005 - K. Vaughn	2017 - J. DiTomaso
1982 - R.J. Smith, Jr.	1994 - K.K. Hatzios	2006 - R.E. Blackshaw	2018 - J. Norsworthy
1983 - A.P. Appleby	1995 - J.A. Young	2007 - J.L. Griffin	2019 - B. Maxwell
1984 - F.M. Ashton	1996 - E.W. Stoller	2008 - K.N. Reddy	2020 - P. J. Tranel

OUTSTANDING INDUSTRY AWARD

1989 - R.A. Gray	2001 - J.M. Green	2013 - S.R. Gylling
1990 - G.E. Barrier	2002 - E.J. Retzinger, Jr.	2014 - C. Somody
1991 - T.D. Taylor	2003 - R. Ratliff	2015 - D. Drost
1992 - J.D. Riggelman	2004 - P. Banks	2016 - R. Gast
1993 - D.L. Shaner	2005 - S. Rick	2017 - A. Cotie
1994 - W.D. Carpenter	2006 - J.J. Jachetta	2018 - M. Peterson
1995 - T.J. Holt	2007 - D. Maurice	2019 - R. Jain
1996 - E.A. Woolson	2008 - V.F. Peterson	2020 - T. R. Wright
1997 - M.N. Baig	2009 - N. Jackson	
1998 - J.L. Barrentine	2010 - J.E. McFarland	
1999 - J.R. Bone	2011 - R.A. Forney	
2000 - No award	2012 - No award	

OUTSTANDING GRADUATE STUDENT AWARD

1975 - F.D. Hess	H.J. Streck	1995 - T.E. Klingaman	2008 - J. Barney
1976 - D.H. Teem	1985 - D.R. Shaw	1996 - J.L. Lindquist	2009 - T. Gaines
1977 - B.G. Todd	1986 - J. McFarland	1997 - D.E. Riechers	2010 - V. Davis
1978 - D.N. Duncan	R. Liebl	1998 - T.R. Wright	2011 - M. Ryan
1979 - P.F. Boldt	1987 - C.E. Snipes	1999 - J.A. Dieleman	2012 - S. Wortman
J.E. Street	1988 - D.C. Bridges	2000 - A.S. Culpepper	2013 - A. Post
1980 - J.K. Soteris	M.L. Roush	2001 - J. Norsworthy	2014 - E. Haramoto
1981 - P. Westra	1989 - B.D. Maxwell	2002 - S. Askew	2015 - S. Berger
E.S. Hagood, Jr.	1990 - J.L. Flint	2003 - W.A. Pline	2016 - R. Werle
1982 - M.W. Bugg	1991 - R.H. White	2004 - I.C. Burke	2017 - M. Jeffries
1983 - D. McAuliffe	1992 - L.D. Boldt	2005 - W. Patzoldt	2018 - C. Meyer
L.S. Quackenbush	1993 - S.E. Hart	2006 - T.J. Koschnick	2019 - T.R. Butts
1984 - D.D. Buhler	1994 - G.E. MacDonald	2007 - W. Thomas	2020 - H. Takano

Annual Meeting Graduate Student Grants

2009 - B. Pandey	E. Burns	H.W. Kim	2019 - B. Alexander
J. Moriles	F. Turner	D. Sarangi	J. Gizotti de Moraes
B. Martins L.	R.L. Butler	S. Rana	V. Yurchak
L. Christ	S. Li	2016 - J.V. Fernandez	C. Sias
A. Cho	2013 - R. Pedroso	A. Howell	J. Schramski
2010 - L. Bast	M. Elmore	N. Soni-Castillo	M. Brooke
J. Hill	K. Jungune	S. McGowen	2020 - G.L. Priess
M. Pearce	T. Burke	E. Reasor	S. Striegel
K. Polacik	C. Rouse	A. Bajwa	J.A. Cubins
T. Skurski	S. Birthisel	M. Bertucci	P. Agarwal
E. Waring	2014 - K. Belmont	V. Bhaskar	B. Gairhe
2011 - R. Holmes	D. Palik	L Murray	E. Law
P. Quackenbush	M. Ashworth	K. Segobye	2021 - M. Barth
M. Nicolai	A. Mckenzie-Gopsil	S. Shrestha	I. Effertz
J. Mann	A. Wright	2018 - C.A. Brunharo	M. Kutugata
E. Haramoto	S. Rios	F. Browne	U.R. Pedireddi
2012 - A. Lindsey	2015 - Z. Beres	J. Boe	
A. Knight	S. Betha	R. Yadav	

OUTSTANDING STUDENT ENDOWMENT AWARD

1989 - J.D. Moore
 1990 - K. Diehl
 1991 - M.K. LeJune
 D.E. Riechers
 1992 - C. Mikloiche
 T.R. Wright
 1993 - G.L. McMurray
 W.H. Morris

OUTSTANDING EARLY CAREER WEED SCIENTIST AWARD

1982 - R.G. Harvey	1992 - M. Barrett	2001 - I. Singh	2011 - A. Davis
1983 - S.R. Radosevich	1993 - M.D. Devine	2002 - S.A. Senseman	2012 - S. Askew
1984 - S.O. Duke	1994 - J.W. Wilcut	2003 - D.L. Jordan	2013 - S. McElroy
1985 - F.D. Hess	1995 - R.E. Blackshaw	2004 - P. Dotray	2014 - B.D. Hansor
1986 - K.K. Hatzios	1996 - D.R. Shaw	2005 - E. Webster	2015 - I. Burke
1987 - D.L. Wyse	1997 - D. Buhler	2006 - F.E. Dayan	2016 - J. Barney
1988 - P.A. Banks	1998 - D.C. Bridges	2007 - P. Tranel	2017 - A. Jhala
1989 - A.K. Watson	1999 - A.R. Bonanno	2008 - N.R. Burgos	2018 - P. Jha
1990 - D.C. Thill	L.B. McCarty	2009 - C.L. Sprague	2019 - T. Gaines
1991 - K.C. Vaughn	2000 - T.C. Mueller	2010 - J. Norsworthy	2020 - M. Bagavathiannan

OUTSTANDING REVIEWER AWARD

2006 - C.L. Main	2011 - J. Norsworthy	2015 - M. Bagavathiannan
J. Ferrell	S.O. Duke	R.D. Sammons
2007 - A. Dexter	S.S. Seefeldt	2016 - T. Mueller
D. Shaw	2012 - R.E. Blackshaw	K. Renner
2008 - V.K. Nandula	D. Shaner	2017 - A. Chandi
W.K. Vencill	2013 - R. Leon	A Ayeni
2009 - J. Felix	A. Shrestha	2018 - A. Jhala
J.F. Gaskin	2014 - P. Jha	N. Korres
2010 - J. Yenish	D. Shaner	2019 - T. Tseng
W. Everman		C. Dalley
		2020 - V. Kumar
		L. Schwartz-Lazaro
		C. Huebner

WSSA FOUNDER AWARD

1974 - R.H. Beatty

WSSA ORIGINAL HONORARY MEMBERS*

1964 - A.S. Craft	1967 - W.S. Ball
K.P. Buchholtz	W.B. Ennis, Jr.
F.L. Timmons	1968 - G.F. Warren
C.J. Willard	1969 - E.P. Sylwester
1966 - R.H. Beatty	

WSSA PUBLIC SERVICE AWARD*

2015 – D.R. Shaw
2016 – J. Schroeder
2017 – M. Barrett
2018 – P. Stahlman
2019 – D. Shilling
2020 – S. Koehler

WSSA FELLOWS*

1970 - W.C. Shaw	C.L. Switzer	C.J. Scifres	R. Norris
F.W. Slife	R.B. Taylorson	B. Truelove	H.D. Skipper
1971 - W.A. Harvey	1983 - R.N. Anderson	J.A. Young	D.C. Thill
L.G. Holm	W.D. Carpenter	1992 - R.J. Aldrich	D. Wauchope
D.D. Hemphill	J.E. Gallagher	C.C. Dowler	2000 - L.K. Binning
1972 - B.E. Day	D.L. Linscott	S.O. Duke	N.D. Camper
W.H. Minshall	L.W. Mitich	C.G. Messersmith	R. Charudattan
1973 - E.K. Alban	1984 - G.A. Buchanan	A.G. Ogg, Jr.	J.S. Holt
W.R. Furtick	W.A. Gentner	J.V. Parochetti	D.L. Shaner
R. Behrens	M.M. Schreiber	1993 - R.E. Doersch	G.A. Wicks
G.C. Klingman	R.L. Zimdahl	C.L. Elmore	2001 - C.E. Beste
1974 - D.L. Klingman	1985 - S.R. McLane	R.E. Eplee	R.R. Hahn
R.D. Sweet	J.F. Miller	J.O. Evans	A. Legere
P.W. Santelmann	W.J. Saidak	L.R. Oliver	A. Martin
L.L. Danielson	E.E. Schweizer	D. Penner	R.D. Williams
1975 - D.E. Davis	R.J. Smith, Jr.	W.V. Welker	G. Wills
J.R. Hay	J.B. Weber	1994 - J.R. Abernathy	2002 - R.E. Blackshaw
E.G. Rodgers	1986 - L.C. Burrill	J.R. Baker	J.M. Chandler
R.P. Upchurch	R.D. Comes	J.F. Ellis	J. Doll
1976 - A.P. Appleby	R.A. Evans	R.E. Hoagland	J.C. Hall
R.D. Ilnicki	R.H. Schieferstein	G. Kapusta	D. Shaw
D.E. Moreland	1987 - F.M. Ashton	W.A. Skroch	S.C. Weller
1977 - E.L. Knake	J.W. Herron	1995 - E.F. Eastin	2003 - S.A. Dewey
C.G. McWhorter	G.R. Miller	A.S. Hamill	R.M. Hayes
H.S. Friesen	M.G. Merkle	K.K. Hatzios	R. Nishmoto
L. Southwick	J.D. Nalewaja	H.D. Tripple	A. Watson
1978 - O.H. Fletchall	W.H. Vanden Born	H.J. von Amsberg	T. Whitson
J.L. Hilton	1988 - D.E. Bayer	H.P. Wilson	J.W. Wilcut
H.M. LeBaron	G.H. Friesen	1996 - F.L. Baldwin	2004 - B.J. Brecke
D.W. Staniforth	M.C. McGlamery	W.L. Barrentine	J.L. Griffin
1979 - H.P. Alley	J.A. Meade	P.C. Bhowmik	A.E. Miller
R.E. Frans	A.R. Putnam	J.C. Graham	M.K. Upadhyaya
K.C. Hamilton	J.D. Riggleman	F.D. Hess	2005 - D.D. Buhler
T.J. Sheets	1989 - O.C. Burnside	A.E. Smith	J. McFarland
A.F. Wiese	W.R. Mullison	1997 - H.D. Coble	M.D.K. Owen
1980 - J.D. Bandeen	E.C. Spurrier	R.G. Harvey	C.J. Swanton
S.N. Fertig	G.R. Stephenson	R. Prasad	2006 - M.E. Foley
C.L. Foy	L.M. Wax	R.L. Rogers	J.J. Kells
L.S. Jordan	A.D. Worsham	M. Singh	R.G. Lym
R.A. Peters	1990 - S.W. Bingham	W. W. Witt	A.C. York
1981 - J.F. Ahrens	R.W. Bovey	1998 - J.L. Barrentine	2007 - K.N. Harker
L.H. Hannah	T.J. Monaco	M.D. Devine	R.J. Kremer
W.F. Meggitt	E.W. Stoller	A.G. Dexter	B.A. Majek
R.R. Romanowski	E.W. Stroube	C.V. Eberlein	K. Vaughn
C.R. Swanson	R.E. Talbert	S.D. Miller	2008 - M.A. Locke
1982 - J. Antognini	1991 - R.M. Devlin	P.S. Zorner	R. Wilson
G.H. Bayer	T.L. Lavy	1999 - I. Morrison	C. Mallory-Smith

WSSA FELLOWS* (cont.)

J.H. Dawson	D.A. Mortensen	2014 - J. V. Anderson	2018 - H. Beckie
2009 - K. Renner	K. Al-Khatib	T.C. Mueller	J. Norsworthy
M. Barrett	2012 - J. Derr	P.H. Sikkema	2019 - A. Davis
A.R. Bonanno	J.J. Jachetta	2015 - R.D. Sammons	D. Peterson
2010 - J. Schroeder	P. Stahlman	W.C. Johnson, III	2020 - D. Reynolds
J.A. Dusky	2013 - P. Banks	2016 - D. Shilling	B. Young
K. Reddy	D.S. Murray	W.K. Vencill	
M. Newton	F. Forcella	2017 - N. Roma-Burgos	
2011 - J.M. DiTomaso	J.M. Green	R. Zollinger	

HONORARY MEMBERS*

1974 - Hans Gysin	1988 - Werner Koch	2000 - Allan Walker	2012 - C. Baskin
1975 - A. John Speziale	1989 - Tetsuotakema Tsu	2001 - Baruch Rubin	J. Baskin
1976 - Keith C. Barrons	1990 - Agustin Mitidieri	2002 - Karl Hurle	2013 - No Award
1978 - John D. Fryer	1991 - Okezie Akobundu	2003 - Helmut Walter	2014 - P. Kudsk
1979 - Menashe Horowitz	1992 - Jonathan Gressel	2004 - Aldo Alves	2015 - S. Singh
1980 - Virgil H. Freed	1993 - Hwan Seung Ryang	2005 - Aurora Baltazar	2016 - J.L. Gonzalez- Andujar
1981 - Les J. Mathews	1994 - Peter Böger	2006 - Robinson A. Pitelli	2017 - No award
1982 - Gideon D. Hill, Jr.	1995 - Keith Moody	2007 - Bernal E. Valverde	2018 - R. De Prado
1983 - Shooichi Matsunaka	1966 - Su Shao Quan	2008 - R. Labrada Romero	2019 - P. Christoffoleti
1985 - Abed R. Saghir	1997 - Stephen B. Powles	2009 - H. Matsumoto	2020 No Award
1986 - Beatriz L. Mercado	1988 - Jens C. Streibig	2010 - No Award	
1987 - Yang-han Li	1999 - Jost Harr	2011 - R. Cousens	

*Society members being honored were originally referred to as Honorary Members. Beginning in 1970 the term was changed to WSSA Fellows and the term Honorary Member has since been reserved for honoring contributions to Weed Science regardless of WSSA membership status.

* The Public Service Award was initiated in 2015.

OUTSTANDING PUBLICATION IN *WEEDS TODAY*

1982 - L. Holm	1985 - A.R. Putnam
1983 - L.G. Bethards	1986 - N.P. Chow
1984 - J.D. Banting	

OUTSTANDING STUDENT ESSAY AWARD

1986 - M.E. Lind	1990 - D.K. Robinson
1987 - P.D.G. Dyck	1991 - D. Franzenburg
1988 - no contest	1992 - D.J. Kelner
1989 - S. Howatt	

UNDERGRADUATE RESEARCH AWARD

1992 - J. Picketts B. Thorpe	2002 - B. Dixon P. Buck	A. Ryan D. Triebwasser	G. Gundy J. Bramhall
1993 - G. Chammas J. Sweat	S. Schoesk H. Shriner	2009 - B. Pandey J. Moriles	N. Steppig R. Han
1994 - B.A. Galloway R. Lunsford J. Murthy W.B. White	M. Naveed V. Davis L. Bewick	B. Martins L. Christ A. Cho	S. Parry W. Kim
1995 - E. Miller S. White S. Steed T. Bradford	2003 - K. Branum K. R. Dawson R. Kennedy E. La Malfa R. Lynch M. Stanford B. Webster	M. Nicolai Melanie Ho	2016 - S. Engelken P. Hedges O. Todd O. Obenland M. Joline M. Strelau K. Lillie K. Taylor A. Griffith C. Dau
1996 - J. Baumgartner W. Pline C. Flore A. Solie	2004 - J. Flagg C. Curran T. Gaines	2010 - J. Scott A. Asebedo A. Grothaus A. Wing	2017 - H. Bateman R. Engel A. Friesen A. Haddad R. Padilla K. Posey T. Randell K. Varnon D.A. Wolter
1997 - L. Fandrich T. Frey M. Furlong I. King G. Penny	2005 - H. Spalholz M. Pinch D.R. Drost V. Lee M. Lockhard K. Cockburn A. Haji	A. Saffer J. Schindler K. Kappeler D. Reif R. Dougherty L. Kelly	2018 - D. Came G.A. Caputo A. Constine J. Fisher M. Pitney D. Taylor S. Claire R. Watson
1998 - S.J. Gray L. Milliman G. Horsman A.S. Franssen J.J. Reilly J. Nguyen A. Anchieta	2006 - D. Heggenstalled K. Campbell M.L. Blanchard A. Hecker M.F. Rollins J. Vassios Z. Isaacson	2012 - T. Ortiz M. Angell D. Brachtenbach R. Brenner R. Mejorado K. Caudle Matthew Ho	2019 - A. Tucker D. McCormick A. Butler-Jones E. Eul K. Wills M. Stevens S. Kelly D. Decker B. Fehr J. Adam
1999 - B. Birch H. Chaffey J. Choy J. Groeteke N. Klenk M. Kuchuran C. Sykes	2007 - C. Thompson L. Rehak S. Tarolli J. Walter C. Fleischmann S. Rousonelos L.M. Kuehl R.L. Roten	2013 - E. Mayes K. Rimol A. Gardner D. Simmons L. Rios D. Rossman J. Baniszewski K. Caudle T. Donohoe T. Newell	2020 - E. Kubinski L. Miller S. Robbins A. Nuss B.D. Pritchard K. Brafford V. Oeggerli G. Celaya K. Mestayer
2000 - K.E. Bolton D. Coggon M. J. Donovan D. Krebs C. Schuster W. Thomas B. Trader	2008 - T. Brummer G. J. Miles R. M. Thomas A. J. Paik C. Lange V. A. Johnson L. Daconti A. Zwainz	2014 - R. Warnock C. Prince B. Janney M. Morris H. Tomlinson	
2001 - A.E. Guza W. Barker J. Siira T.L. Brenly M. MacDonald D. Solie R. Labbe	2010 - R. Marks A. Weiler	2015 - A. Thornton C. Noffsinger C. Hicks D. Farnsworth	





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UPL NA Inc.
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Marrone Bio Innovations, Inc.
Blue River Tech
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ABG AG Services
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Clariant Corporation
Lehigh Agri & Bio Services, Inc.
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