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News from the

# SOUTHERN WEED SCIENCE SOCIETY

# SWSS



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The Southern Weed Science Society is a special organization. It has been special to me and to many of you for a long time. I'm humbled by the opportunity to serve as your president this year. My commitment is to work hard in order to serve you well and strengthen our society.



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The 2010 annual meeting in Little Rock was a success in many respects. We had good participation and involvement. There were 326 attendees, of that total 96 were students and 84 were walk-ins. There were 89 posters, 182 papers and three symposia.

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We will build on the success that Dan Reynolds, Past President, has worked hard to accomplish. The closer you were to operations of the 2010 meeting the more you saw-and-realized how much time and effort Dan gives to our society. Without Dan's dedication, attention to details, persistence and patience (especially with me), our Little Rock meeting would not have been the success it was. From all of us, Dan – thank you!

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A special mention and thanks must also to be conveyed to our Local Arrangements Committee chaired by Dick Oliver; they did a great job. Local arrangements are involved long before, during and long after the event is over. It's a big responsibility, critical to a successful meeting and too often goes without enough recognition. I never knew what a "stickler to detail" Dick Oliver was until seeing him in action this past year.

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Another acknowledgement goes out to the companies that sponsored the coffee breaks and luncheons; those companies were Dow AgroSciences, Monsanto, Bayer, Syngenta and BASF. Ken Smith, Chairman of Sustaining Memberships, did an excellent job coordinating the company support.

Reasons the SWSS is special include the participation of and the relationship we have with students. For all of you reading this that are students, please understand that we value you; <u>you</u> are the future leadership of the SWSS. Thank you for your past involvement and we hope you plan to participate in the upcoming meeting; please encourage your fellow students to become involved with the SWSS. Robin Bond, Daniel Stephenson, Jason Bond and Tom Mueller did an excellent job developing and implementing a strong graduate student program.

I could go on with more thanks and probably still miss someone but will stop with this last recognition.

To all of you that served as Section Leaders, moderators, judges and our "Honorable" MC, Scott Senseman – thank you!!

# Current-and-Looking-Forward to Puerto Rico.

Barry Brecke has put together a strong Program Committee; they are working hard to develop an excellent program for our 2011 meeting. Read more from Barry in his update below.

Dearl Sanders is serving as Local Arrangements Chairman. We are fortunate to have Dearl in this role as he frequently works and has many contacts in Puerto Rico.

As most of you know, Bob Schmidt, our Business Manager, has decided to step down from his post. He was gracious enough to stay with us until we could find and transition a new Business Manager. Bob will officially retire from the SWSS as of May 31, 2010. Our thanks and congratulations to Bob for his 30 years of service to the SWSS.

We are very fortunate to have Phil Banks stepping into the Business Manager position. Phil brings a lot to our society including 1) his experience as the WSWS Business Manager and 2) his history and passion for the SWSS. Even though he has been working with Bob in the transition phase, June 1 is Phil's official start date. As most of you know, the Business Manager is one of the most important positions in our society. President's come-and-go, but the Business Manager has a longer tenure and normally serves as the glue of an organization. Please welcome Phil at your earliest opportunity.

We need to work to keep our Society strong and vibrant. I'm excited to tell you that we will be launching a new SWSS website in the near future. Phil Banks is overseeing this implementation; I've asked him to shoot for June 1 as the rollout date. The new website will have several improvements including online registration for our annual meeting.

We want to thank Al Rankins for serving as Newsletter Editor and welcome Bob Scott as our incoming Newsletter Editor. Bob is a great example of a person that started as a student and continues to be committed in helping the SWSS be a great organization

Our Society operates on the foundation of our Manuals of Operating Procedures (MOPs), which were built by past direction and leadership. If you are not familiar with these MOPs they are posted on the SWSS Website. Included in the MOPs are standing committee positions. One of my goals, to be accomplished by the end of Q2, is to have all standing Committee Chair positions filled, have the MOPs understood by those chairs and develop a solid Committee Chair succession plan.

Several of you mentioned at the meeting in Little Rock that you would like to become more involved. Becoming a standing committee chair is a great way to increase your involvement. Please let me know if you are interested in a Committee Chair position.

The SWSS has a vibrant future; a continued engaged membership is important for our continued success.

#### A special message to company members:

Besides the value of learning and sharing weed science knowledge at the SWSS annual meeting, members of our Society have the additional opportunity of meeting students (aka future employees) and having them understand us (i.e. our companies) better. We will work on developing a "venue" in Puerto Rico to enhance and take advantage of this valued networking opportunity. I challenge all of those from industry reading this note to help us expand our company representation through your company's participation in the "venue". If you work for a company and believe that a networking opportunity has value, please contact me to learn about how your company can become involved during the Puerto Rico meeting.

The SWSS depends on industry participation and support, which has dwindled over the past several years; it's time to start rebuilding our corporate support network to ensure our Society's vibrant future.

#### **Puerto Rico:**

This is going to be a special meeting as we're going someplace we've never been. We are reaching out to weed scientists from Mexico to Brazil. We have an increase in general interest to the point that Barry Brecke is opening up new Sections. In addition, companies have told me they are changing their meeting dates around so they can attend our annual meeting, and I've heard that a lot of spouses are coming.

My goal is to have 400 registered participants.

In a recent meeting Dearl Sanders said, "The 2011 SWSS participants will have an exceptional experience in Puerto Rico".

What can you do to help?

- Reach out to someone that you know has been a member in the past and has fallen off our membership list. Urge them to join us in Puerto Rico.
- Reach out to someone or some company that has never been involved in the SWSS but who you believe should be. Promote our Society and encourage their involvement.

We are all working to help make the 2011 meeting in Puerto Rico a success. Please join us!

# People & Places

The Weed Science Society of North Carolina held its 28<sup>th</sup> annual meeting on March 11, 2010. Peter Dittmar was awarded the Outstanding PhD Graduate Student Award and Steve Meyers (advisors Katie Jennings and David Monks) won first place in the PhD poster contest.

**Steve Meyers** earned 2<sup>nd</sup> place in the NC State University Graduate Student Symposium poster contest in the Agricultural Sciences Division (advisors Katie Jennings and David Monks).

**Peter Dittmar** won 1<sup>st</sup> place for his paper "Determining the effect of ethylene on internal black marbling expression in sweet potato" for the Southern Region ASHS (advisor David Monks).

**David Monks** received the American Society for Horticultural Science Outstanding Extension Educator Award for 2009.

**David Monks, Katie Jennings**, and colleagues received the American Society for Horticultural Science Extension Publication Award for the article "Economic Evaluation of Methyl Bromide Alternatives for the Production of Tomatoes in North Carolina" HortTech 18(4):705-713.

**Katie Jennings** and colleagues from NC State University and a number of other southeastern U.S. universities received the American Society for Horticultural Science Outstanding Extension Publication Award for the Southeastern U.S. 2009 Vegetable Crop Handbook.

**Dr. Sheryl Kunickis appointed Director of the USDA Office of Pest Management Policy** (**OPMP**), which is housed within the Agricultural Research Service (ARS). Dr. Kunickis and the OPMP staff will advise and represent USDA on policy matters related to pest management and the use and regulation of pesticides as they affect U.S. agriculture. Dr. Kunickis joins ARS from the USDA Natural Resources Conservation Service (NRCS), where she has served for the past 21 years as Research Coordinator, Program Manager and Laboratory Director, and Soil Scientist and Landscape Analyst. Most recently, she has been serving in Beltsville, Maryland, as Director and Program Manager of the NRCS Remote Sensing Laboratories. In that capacity, she was involved in leadership efforts ranging from drafting Science Ethics Policy to coordinating the Conservation Effects Assessment Program with other Federal agencies. Dr. Kunickis has a

background in soil science and agronomy, with significant experience using new technologies for soil surveying and mapping. She earned Bachelor's and Master's degrees in Agronomy from Brigham Young University and a Ph.D. in Soil Science from North Carolina State University in 2000.

**Jason Norsworthy**, University of Arkansas, was awarded the Early Career Weed Scientist Award at the annual WSSA meeting held in Denver, CO this past February. Dr. Norsworthy worked as an Assistant and then Associate Professor at Clemson University from 2000 to 2006 and has been with the University of Arkansas since then. Dr. Norsworthy is currently an Associate Professor in the Crop, Soil, and Environmental Science Department.

**Robert Scott,** Professor of Weed Science, in the Crop Soil and Environmental Science Department at the University of Arkansas, was awarded the 2010 Achievement Award, from the Arkansas County Agents Association, recognizing his contributions to the Extension Service in Arkansas.

**Dick Oliver**, University of Arkansas, was awarded the 2009 Southern Regional Teaching Award at the annual meeting of the Association of Public and Land-Grant Universities. The award recognizes six outstanding faculty members based on their ability as classroom teachers, use of innovative teaching methods, and service to students and their profession.



Mississippi State University has named Greenville, Miss. native, **Tom Eubank** as soybean weed scientist and agronomist at the Delta Research and Extension Center in Stoneville effective April 16. Eubank has 15 years experience as an agronomist working with Delta farmers and for Mississippi State. He shares a dual appointment with Mississippi State Extension Service and the Mississippi Agricultural and Forestry Extension Service. "We are excited to have Dr. Eubank coming on board as an Assistant Professor. His expertise with soybeans and weed science is greatly needed, and will be a valuable asset to our growers," said Steve Martin,

DREC head. Eubank will receive his doctorate in weed science from Mississippi State in May. He has worked at DREC since 2006, and fills the position vacated by Dan Poston in 2008. Eubank can be reached at (662) 686-3232 or teubank@drec.msstate.edu.

**Brad M Davis** received his Master of Science degree in Weed Science from the University of Arkansas. Brad is currently a Program Associate with the University of Arkansas, Cooperative Extension Service.

# 2011 Program Theme - "Back to the Future"

The 2011 Program Theme was selected to reflect new interest in some weed management techniques that may have not received much attention in recent years. As we look for ways to

reduce inputs and manage emerging issues such as weed resistance the older technologies need to be re-visited. This is not to say that new weed management technology is not important and there will be many opportunities to present information on new techniques at the 2011 SWSS meeting.

The 2001 Program will have many of the same Sections as previous meetings. However, there will be at lest two changes. In the past Turf and Ornamentals have been grouped together in a single section. For 2011, there will be separate Turf Weed Management and Ornamentals Weed Management Sections. There will also be an Aquatics Weed Management Section, an area that has not been a part of the SWSS program for several years.

We are also developing symposia for the 2011 meeting. Several topics have already been suggested including: Photography (follow up to the session at the 2010 meeting), Management of Herbicide Resistant Weeds, Tropical Agriculture Interaction with Temperate (Mainland) Weed Science and Appropriate Statistical Analysis Techniques. If you have other ideas for symposia topics please send them to me as soon as possible.

The Caribe Hilton is an excellent site for the 2011 meeting. Local Arrangements Chair Dearl Sanders is working with his contacts in Puerto Rico to make the meeting a truly memorable one. He is developing plans for tours of the rainforest and of some of the tropical agriculture in the area. The tours will be scheduled so they will not interfere with the meeting sessions.

We would like to reach out to those that should be SWSS members but who are not presently associated with SWSS. If you know of someone that fits this description, please forward his/her contact information to me and I will send them information on the SWSS and about the 2011 meeting Program. We need to increase awareness of the SWSS to this group and encourage them to become involved with SWSS.

More information on the meeting program and tours will be sent as plans are finalized. Please send me your input on: 1) ideas for the program, 2) symposia topics, and 3) contact information for potential new SWSS members.

Thanks.

Barry Brecke President Elect and Program Chair bjbe@ufl.edu 850-982-1871

## **Award Winners**

2009 Distinguished Service Award – Industry Jacquelyn ''Jackie'' Driver Syngenta



2009 Outstanding Educator Award Peter Dotray Texas Tech University



Outstanding Graduate Student Award (PhD) Tom Eubank Mississippi State University



2009 Outstanding Young Weed Scientist-Academia Bob Scott University of Arkansas



2009 Weed Scientist of the Year Don Murray Oklahoma State University



Outstanding Graduate Student Award (MS) Robin Bond Mississippi State University



## **Nominations Needed!!!**

The SWSS has many deserving members, take time to nominate your deserving fellow members for these awards. See awards at (www.swss.ws). Please consider sending in nominations for awards this year.

Dan Reynolds SWSS - Past President

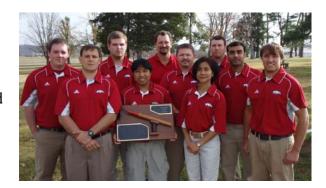
#### 2009 Weed Contest

The 2009 Weed contest was hosted by Andrew Price and Stanley Culpepper at the University of Georgia. A special recognition was given to Wayne Currey and David Team, who along with Ray Cooper (Eli Lilly at that time) hosted the first weed contest in Albany Georgia. The year was 1980, three teams participated, and the contest was called "The Deep South Invitational Weed Meeting". Wayne and David are pictured along with the 2009 Weed contest Chair, Andrew Price and Georgia host, Stanley Culpepper.



This year's contest winners were: 1st place team, University of Arkansas (pictured); 2nd place

team, University of Florida; 3<sup>rd</sup> place team, North Carolina State University. Individual winners included: 1<sup>st</sup> place, Sanjeev Bangarwa (AR); 2<sup>nd</sup> place, George Place (NC State); 3<sup>rd</sup> place, Brent Johnson (AR); 4<sup>th</sup> place, Griff Griffith (AR); 5<sup>th</sup> place, Brandon East (FL); and 6<sup>th</sup> place, Jason Weirich (MSU). The high individual undergraduate award went to Josh Wilson (AR), 2<sup>nd</sup> undergraduate went to Dane Wilbur (OSU), and the 3<sup>rd</sup> individual undergraduate award went to Jess Scott (NC State).



# **Southern Weed Science Society Endowment Foundation**

# Donations March 15, 1988 thru March 23, 2010

Total Donations as of April, 2010 (\$247,895.71)

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Southern Weed Science Society

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# WASHINGTON UPDATE By Lee Van Wychen April 2010



#### **Doubling Campaign for USDA Agricultural and Food Research Initiative (AFRI)**

The National and Regional Weed Science Societies have joined in an effort with other agricultural research organizations to double the USDA Agricultural and Food Research Initiative (AFRI) competitive grants program over the next 5 years. Funding was \$193 million in FY 2008 and \$201 million in FY 2009. Our agriculture research coalition was pushing Congress for \$250 million in FY 2010 (exclusive of any Section 406 Program funding), with a goal of \$500 million in total funding by FY 2015. The FY 2010 Ag appropriations bill was passed last fall with \$262 million for AFRI.

The FY 2011 budget, released on February 1, targets AFRI for \$429 million. Great! However, \$45.15 million of that increase comes from the Section 406 Integrated Programs being "zeroed out". The National and Regional Weed Science Societies strongly oppose this budget maneuver. The Section 406 programs include \$4.1 million in funding for the Regional Pest Management Centers, \$5 million for the Organic Transitions Program, \$1.4 million for the Crops at Risk from FQPA Implementation and \$4.4 million for the FQPA at Risk Mitigation Program for Major Food Crop Systems.

#### **USDA Releases RFA's for AFRI Competitive Grants**

On March 22, USDA released the request for applications (RFA's) for AFRI and represents a major departure from previous USDA competitive funding. For 2010, \$262 million is available through AFRI, \$61 million more than last year. No less than 30 percent of this will fund integrated projects that have research, education, and extension components.

There are six AFRI RFAs: one Foundational Program RFA and five RFAs targeted at addressing five "challenge" areas. The RFAs support a variety of project sizes and types. The five RFAs in the challenge areas include funding for **large**, **multi-disciplinary**, **multi-million dollar** projects called Coordinated Agricultural Projects (CAPs) that are broad in scope. There will be a seventh RFA supporting pre- and post-doctoral fellowships that has not yet been released.

For a **comprehensive chart** of the program areas, program area contacts, and deadlines for **letters of intent** and the final **application deadline**, please go to:

The makes \$64 million available to fund research-only projects in program areas that existed in the previous iteration of AFRI and that correspond to congressionally-designated priorities written into the farm bill. These programs previously received the bulk of the program funding, so many of the earlier programs that evolved over the past several decades have **now been ended** as separate priorities, given the decrease in dollars available. This includes the \$4.6 million biology of weedy invasive species program. The members of the National and Regional Weed Science Societies have voiced their extreme dissatisfaction with this since this was the ONLY program that has supported weed science work. Many of the other agricultural science disciplines had multiple program areas supported in the old NRI and under the new AFRI structure, at least maintain their disciplines' identity.

The makes \$55 million available to fund integrated, research, education, and extension projects that seek to reduce agricultural use of energy, nitrogen, and water, and that increase carbon sequestration. The RFA includes funding for a Climate Change Mitigation and Adaptation in Agriculture. Specific priorities include developing or improving models and technologies for climate mitigation or adaptation to forecast and control weed, pest, disease, and invasive species outbreaks brought about by climate variability and long-term climate change.

The makes \$40 million available to fund Regional Bioenergy CAPs and research grants to help meet the goal of 36 billion gallons/year of biofuels by 2022. The Regional Bioenergy CAPs will support the development of regional systems of bioenergy production that reduce dependence on foreign oil; have net positive social, environmental, and rural economic impacts; and are integrated with current agricultural systems. For biofuel feedstock production systems, they are looking for RFA's that will identify management practices that minimize water usage, and nutrient, pesticide, and herbicide inputs.

The makes \$19 million available to fund integrated, research, education, and extension projects that improve food availability and food accessibility, focusing on research that addresses production challenges and that supports the development of sustainable food systems. The FAO estimates that **more than 40 percent** of current crop production among the ten leading food crops is lost to pests and diseases annually. And a majority of that is **due to weeds!** However, this entire program area leaves much to be desired and completely falls of short of supporting any practical research that will ensure global food security by economically managing weeds.

The makes \$20 million available to fund integrated, research, education, and extension projects that seek to improve food safety through the development and implementation of detection technologies, traceability systems, and other strategies, and through increasing the number of food safety scientists. The RFA focuses on particular pathogens and viruses, and includes research on multiple scales of production and processing.

The makes \$25 million available to fund integrated, research, education, and extension projects that contribute to reducing the prevalence of obesity among children and teens. The RFA seeks to fund proposals that generate new knowledge, develop effective behavioral and environmental interventions, bring to scale effective interventions and assess their impacts, and increase the number of researchers, educators, and practitioners trained to address the problem of obesity.

The webcast by Dr. Beachy regarding the AFRI RFA's can be viewed at

<u>Herbicide Resistance Management Policy -</u>WSSA members Bill Vencill, Carol Mallory-Smith, Bill Johnson, Nilda Burgos, Ted Webster, Bob Nichols, John Soteres, and Mike Owen have been working on a "state of the science" review paper on the development of herbicide-resistant weeds and weed shifts that are linked to the introduction of GE herbicide-tolerant corn, soybeans, wheat, rice, cotton, alfalfa and switchgrass. The goal is publish the review paper via "open access" in *Weed Science* by **Sept. 2010**.

The WSSA continues to work with EPA and industry stakeholders involved in a sound herbicide resistance management program. There is general agreement with the usefulness of mode of action labeling and the critical need for the WSSA education materials including an economic message. Dr. David Shaw, WSSA Past-President, has given presentations to EPA, CropLife America, and the National Association of Conservation Districts where he discussed results after 3 years from the 6-state benchmark study that has shown that net returns on fields managed according to recommended best practices are equal to or greater than the returns on those where glyphosate is used alone. WSSA recommendations include focused educational efforts that target all appropriate groups including media, growers, dealers/distributors, and consultants. We need to convey a consistent, accurate message about managing herbicide resistance and it must be urgent.

Clean Water Act (CWA) National Pollutant Discharge Elimination System Permits (NPDES) The WSSA wants to ensure that FIFRA remains the preeminent federal law for pesticide regulation that protects both people and the environment. The extensive research and science-based risk assessments required by FIFRA should not be jeopardized by political agendas. In January 2009, the 6th Circuit Court ruled that EPA's rule exempting pesticides from CWA permits was not a reasonable interpretation of the CWA since the terms "chemical waste" and "biological materials" unambiguously include aquatic pesticides. The National and Regional Weed Science Societies along with many other stakeholders (including USDA Secretary Vilsack, and House and Senate Ag Committees) asked EPA to petition for a full 6<sup>th</sup> Circuit court rehearing because it was EPA's rule that was vacated by the court. When that did not happen, industry petitioned the full 6<sup>th</sup> Circuit Court to rehear the case, while in the meantime, EPA only asked for 2 year stay in the 6<sup>th</sup> Circuit decision in order have time to implement National Pollutant Discharge Elimination System (NPDES) permits for pesticides applied "in, over, or near water". The industry (Crop Life, National Cotton Council, etc...) appeal to the full 6th Circuit Court was denied last summer. Industry then petitioned the Supreme Court to hear the case, but as expected, the Supreme Court decided not to hear the appeal at this time.

EPA has until **April 9, 2011** to implement NPDES permits for all pesticides applied in, over, or near water. EPA plans to release NPDES general permit draft language for public comment by **May 2010**. This will be a very short comment period, likely **no more than 45 days.** Comments will be incorporated into final permit language that will be released to the states in December 2010. States will be required to do their own permitting (except for AK, ID, MA, NM, OK and VT which don't have EPA authority to do so). State general permits must be approved by EPA prior to **April 9, 2011** 

My biggest concern is that exposure to nuisance claims, litigation and onerous fines would prevent/inhibit weed managers from carrying out an appropriate weed management program. In discussions with EPA last week, pesticide applicators could be fined up to \$32,000/ day for violating the terms of the NPDES permit and \$11,000/day for simple record keeping violations. Depending on how EPA drafts language pertaining to "adverse incidents", weed managers could be in for real surprises come April 2011. I'll need all your help in reviewing the NPDES permit language once it's published in the Federal Register in May. Stay tuned.

Spray Drift Labeling. EPA has proposed new language for FIFRA labels which poses many problems. Vague language such as "could cause" or "may cause" adverse effects does not belong on a pesticide label because it is NOT in accordance with the FIFRA risk-based standard of 'no unreasonable adverse effects' and it forces state regulators into the role of risk assessor to determine what 'may or could' cause an effect, which they are not trained to do and is EPA's role. EPA's guidance on how to enforce the proposed drift label language sets an unachievable zero drift standard and sets the stage for frivolous lawsuits and enforcement actions. For example, a headache that is untreated or even verified by a medical professional, may be the basis for an enforcement action or lawsuit, particularly when a farmer's neighbor has a predetermined reason or history of conflict with the farmer. On March 3<sup>rd</sup>, I submitted comments on behalf of the WSSA, the American Phytopathological Society and the Entomology Society of America Plant-Insect Section in response to the Federal Register notice regarding EPA's proposed new regulations for pesticide drift labeling and drift labeling interpretation. Together these three societies represent a healthy fraction of all agricultural research and extension efforts on pest management.

#### **Atrazine Re-Evaluation in 2010**

Atrazine was re-registered in 2006 after a 3 year review of over 6,000 studies on atrazine. EPA concluded that "no harm that would result to the general U.S. population, infants, children or other...consumers" from atrazine use. However, the new EPA administration wants to review atrazine again, based on questionable data from a study generated by a researcher with a track record of letting his "activism" generate his data. The results from this study have not been able to be reproduced by other scientists. Its unfortunate that this researcher will not

share his raw data with EPA, but feels compelled to publish his studies "via press releases" coordinated by agenda-driven environmental groups. We strongly urge EPA to base their conclusions about the future use of atrazine on research that can stand up to scientific rigor and thoroughness.

# **Senator Reid Introduces Invasive Species Emergency Response Fund Act**

In March, Senate Majority Leader Harry Reid introduced S. 3063, the Invasive Species Emergency Response Fund Act. The bill is co-sponsored by Sens. Begich (AK), Bennet (CO), Bennett (UT), Feinstein (CA), Merkley (OR), Murkowski (AK), and Wyden (OR). The companion bill in the House, HR 4782 was introduced by Rep. Don Young (AK) and co-sponsored by Shelley Berkley (NV). The purpose of the bill is to encourage partnerships among Federal and State agencies, Indian tribes, academic institutions, and public and private stakeholders to: (1) prevent against the introduction and spread of harmful invasive species; (2) Protect, enhance, restore, and manage a variety of habitats for native plants, fish, and wildlife; and (3) establish early detection and rapid response capabilities to combat incipient harmful invasive species. The bill authorizes \$80 million per year for 2011-2015 through federal loans, of which at least 25% of the loan must be repaid in 10yrs. However, "In-Kind Repayment" will be accepted for maintenance, remediation, prevention, alteration, repair, improvement, or restoration activities.

#### **House Passes Bill to Expand Research on Harmful Algal Blooms**

In March, the House of Representatives passed legislation that would expand research on harmful algal blooms and hypoxia in U.S. marine and fresh waters. The Harmful Algal Blooms and Hypoxia Research and Control Amendments Act of 2009 (HR 3650), sponsored by Representative Brian Baird (D-WA), passed by voice vote after falling two votes shy of passage under the 2/3's majority needed under suspension of House rules. If enacted, the bill would double authorizations for harmful algal blooms and hypoxia research programs at the National Oceanic and Atmospheric Administration (NOAA) and the Environmental Protection Agency (EPA), up to \$41 million a year. The legislation would also require NOAA to oversee the development of regional research and action plans for addressing these poor water quality events. The Senate is currently considering similar legislation (S. 952), which was approved by the Senate Commerce Committee last year.

Lee Van Wychen, Ph.D. Director of Science Policy The National and Regional Weed Science Societies 900 2nd St. NE, Suite 205 Washington, DC 20002

202-746-4686

# Request for information!

Leonard Gianessi with Crop Life Foundation is requesting information from the society, in the form of data and pictures, that illustrates how herbicides contribute to sustainable agriculture. If you work in this area and can provide some information to Leonard, please email him at: lgianessi@croplifefoundation.org. Thanks, Tom Holt

#### **ANNOUNCEMENTS**

Graduate assistantships (MS and PhD) are available in the vegetable and fruit crops in the Department of Horticultural Science at N. C. State University. Areas of focus include weed science research and culture in tomato, bell pepper, sweet potato, and/or most other vegetable crops, and fruit crops including wine grapes, peach, apple, blueberry, raspberry and blackberry. Students will be based in Raleigh, NC but would have the opportunity to travel throughout the state. Students will get vast experience and training in research, extension and teaching. The assistantships are competitive with other institutions offering similar areas of study. The candidate must have a valid driver's license. The projects would begin in summer 2010 or as soon as a suitable candidate is identified. Contact Drs. Katie Jennings (katie\_jennings@ncsu.edu), Dr. David Monks (david\_monks@ncsu.edu) and/or Dr. Jonathan Schultheis (jonathan\_schultheis@ncsu.edu) for more information.

DuPont™ Pastora® Herbicide Receives Federal Registration for Control of Grass Weeds, Problem Broadleaf Weeds on Bermuda Grass Acres. WILMINGTON, Del., April 13, 2010 — Cattle and commercial hay producers have an effective new tool to control problem grasses in Bermuda grass pastures and hay meadows: DuPont<sup>TM</sup> Pastora® herbicide. The U.S. Environmental Protection Agency has granted DuPont federal registration approval for Pastora®, a new herbicide that provides selective control of problem broadleaf and grass weeds with no grazing restrictions. "Weeds are responsible for significant reductions in hay crop quality and profitability, as well as long-term negative effects on livestock that graze Bermuda grass pastures," said John Chrosniak, regional director, North America – DuPont Crop Protection. "Pastora® will help clear problem weeds for visibly cleaner Bermuda grass, better grass and hay quality, and, ultimately, better protection of bottom-line profits." Pastora® provides postemergence control of field sandbur and johnsongrass, which reduce quality and profitability of commercial hay production in Bermuda grass pastures and hay meadows. Pastora® also delivers long-lasting postemergence control of broadleaf weeds, including common broomweed, buttercup and musk thistle. In field trials, Pastora® controlled more than 25 grass weeds and 100 broadleaf weeds. Forage and pasture experts consider effective weed control an essential part of an overall pasture management program that includes good soil fertility; adequate moisture, insect and rodent control; grazing/haying management; and other agronomic practices to optimize Bermuda grass growth. DuPont is a science-based products and services company. Founded in 1802, DuPont puts science to work by creating sustainable solutions essential to a better, safer, healthier life for people everywhere. Operating in more than 70 countries, DuPont offers a wide range of innovative products and services for markets including agriculture and food; building and construction; communications; and transportation. DuPont<sup>TM</sup> Pastora® herbicide is not registered for sale or use in all states. No offer for sale, sale, or use of this product is permitted prior to issuance of the required EPA and state registrations. The DuPont Oval Logo, DuPont™. The miracles of science™ and Pastora® are registered trademarks or trademarks of DuPont or its affiliates.

**50<sup>th</sup> Anniversary APMS Annual Meeting.** This year marks the 50<sup>th</sup> Anniversary of the Aquatic Plant Management Society. Please join us at the annual meeting in July for a special celebration! The meeting will be held July 11-14, 2010, at the Hyatt Regency Coconut Point in Bonita Springs, Florida. The Program Committee is preparing an interesting, full 3-day agenda with special symposia, panel discussions and invited speakers to present the history of aquatic plant management and the APMS, a symposium on hydrilla (biology, ecology, environmental consequences of invasion, and management), and the status of NPDES legislation. As always, we will hold a graduate student paper and poster contest; our student speakers are sure to impress. The Program, Meeting Planning, and Student Affairs Committees are also hard at work preparing special social events to honor our 50<sup>th</sup> anniversary milestone with a President's Reception on Sunday evening, Poster Session on Monday evening, Banquet and Awards Ceremony on Wednesday evening with special musical guests, "The Weeds Band," and a post-conference aquatics field tour for students. You won't want to miss it! For up-to-date meeting information, go to and click on "2010 Meeting."

# NEWSLETTER SUBMISSION Instructions and Deadlines

ISSUE	<b>DEADLINE</b>
August 2010	July 1, 2010
<b>December 2010</b>	<b>November 1, 2010</b>
May 2011	April 1, 2011

Please send text information as Microsoft Word or WordPerfect files, and pictures as JPEG or BMP files to:

# 2010 Weed Contest Will be Hosted by Monsanto at the Scott Learning Center on August 3-4, 2010

For more info contact:

Jay Mahaffey

Learning Center Manager Monsanto Company 1 Cotton Row Scott, MS 38772 (662) 742-4282 - Office (662) 742-4795 - Fax (662) 347-2039 - Mobile

# 2010 SWSS WEED CONTEST RULES, REGULATIONS, AND GUIDELINES

#### **PURPOSE**

The purpose of the Southern Weed Contest is to provide an educational experience from which undergraduate and graduate students in Southern Universities can broaden their applied skills in Weed Science. The contest provides an opportunity for Weed Science students to socialize, be exposed to weed scientists from other universities and industry, as well as apply what they have learned using a contest to measure their capabilities. It is also hopeful that the contest will increase the visibility of Weed Science and intensify the interest level of those participating in the discipline of Weed Science.

#### **ELIGIBILITY**

Any undergraduate or graduate student currently enrolled and pursuing a B.S., M.S., or Ph.D. degree is eligible to participate. Each team will consist of three or four members, composed of (a) graduate, (b) undergraduate, or (c) a combination of graduate and undergraduate students. If a university does not have sufficient students for a team, up to two students may enter as individuals. All students will compete using the same contest material. A team may also bring three alternates. Alternate scores will only count toward individual awards. Team scores will be determined from averaging the the individuals scores from each team member. A maximum of two coaches per team can attend the contest. Students will be allowed to participate in the contest five times as a team member or alternate; however, the student can only participate as a team member three times. Undergraduate participation will not count against the 5-time rule. All teams must enter the contest by July 1, 2010. E-mail the names of coaches, team members and alternates to Jay Mahaffey (jay.s.mahaffey@monsanto.com) by this date.

#### AWARDS

TEAM - The highest average team score from all events will determine the overall contest winner. A traveling "Broken Hoe" trophy will be presented to the overall winner and will rotate yearly. The first place team will receive a check for \$500 and each member and coach will

receive an engraved plaque. The second and third place teams will receive checks of \$300 and \$200, respectively. Each will also receive an engraved plaque as described above.

INDIVIDUAL - The highest combined score from all events, except team sprayer calibration and mystery event, will determine the overall-winning individual. The top 10 individuals will be recognized and awarded a plaque. The winning individual will receive a check for \$400. Individuals finishing second, third, fourth, and fifth will receive checks for \$250, \$100, \$75 and \$50, respectively. The high individual in Weed Identification, Crop Response to Herbicides, Sprayer Calibration, and Crop/Weed Situation and Recommendations will be recognized and awarded a plaque. If at least four undergraduate students participate in the contest, the top three individual scores will be recognized with 1<sup>st</sup>, 2<sup>nd</sup>, and 3<sup>rd</sup> place plaques and checks for \$200, \$100, and \$50, respectively.

#### **EVENTS**

The contest will consist of four major events plus a mystery event. Inclement weather may delay the contest; however, it will continue as soon as conditions permit.

# 1. WEED IDENTIFICATION (100 points) -

From the contest weed identification list, the host will pick a total of 50 weeds and/or weed seeds to be identified. Plants may be in any stage of growth or development within reason. A complete weed identification list will be sent by the contest chairman to each participating university with the correct spelling of each species. Students will be responsible for the correct WSSA common and scientific name and spelling (Weed Science Composite List of Weeds - 2007). The fall preceding the contest the host should evaluate its weed seed supply and obtain additional seeds if needed so that an excellent representation of the weed species can be selected for identification. It is important to utilize as many plant species as possible. If at all possible the contest weeds should be grown outside and in sufficient numbers so that adequate plant samples are available so that 15 to 40 contestants can have specimens for identification. Each contestant will be allowed ample time to identify each specimen. The contestant's score will be figured as follows: 2 points for each correctly identified species (1) point for common name and 1 point for scientific name with 1/2 a point for Genus and 1/2 a point for species) x 50 = 100 points. If names are not spelled or capitalized correctly, they are wrong. Teams will not be supplied with weed seed for study, but rather rely on their own training resources. However, teams are encouraged to expand/improve their training resources through contacts with other weed scientists. This approach may better reflect individual and team preparation for the contest.

#### 2. CALIBRATION (100 points) -

This event consists of two sections: an individual written test worth 50 points and a team sprayer calibration event worth 50 points.

The individual written test will cover problems and factual information about sprayer and seed treatment calibration of all types; the written portion will be scored as an individual and team event (50 points per person). The host should take particular care to insure all banded application and skip-row calibration problems are stated clearly. Individual team members and alternates will be given a maximum of 1 hour to complete the written exam. The host will NOT provide calculators and students will be required to bring their own. Any make or model is acceptable, but programmable calculators are not allowed. The three individual team member scores will be added and divided by the number of individuals on the team to give the number of points out of 50 for the team score.

In the team section, the host will provide a hands on calibration activity that focuses on team, rather than individual performance. Students should have practical calibration knowledge for air blast sprayers, tractor sprayers, backpack sprayers, granular applicators, greenhouse spray chambers, etc. Differences in time for the competition will count no more than 40% of the overall score. Accuracy of calibration is critical.

To determine final team score for the calibration event the number of points scored out of 50 obtained in the team event will be added to the average score of the three high team members from the individual calibration problems for a maximum possible of 100 points.

Reference material for the individual problems will be Chapter 23 of Applied Weed Science by Ross and Lembi (2009); Circular 1192 - Equipment and Calibration: Low-Pressure Sprayers, and Circular 1240 - Equipment and Calibration: Granular Applicators, both by Bode and Pearson (University of Illinois); Roth, L. O. and H. L. Field, eds. 1991. Introduction to Agricultural Engineering: A Problem Solving Approach, Second Edition, New York: Chapman and Hall; Aerial Application Handbook for Applicators by Dennis K. Kuhlman, Kansas State University; Research Methods in Weed Science, 3rd ed. SWSS 1986; Physiology of Herbicide Action. M.D. Devine, S. O. Duke, and C. Fedtke, 1993; Herbicide Handbook. WSSA 9<sup>th</sup> ed. 2007, and various unit conversions.

# 3. CROP RESPONSE TO HERBICIDES (100 points) -

This is an area of extreme difficulty for the students. Thus, the host must have available a sprinkler irrigation system so that residual herbicides will be activated and weeds and crops maintained in an active growth stage for postemergence treatments. A list of possible crops and herbicides with rate and method of application will be provided by the weed committee. The host will give to the weed contest chairman by May 1 each year the rate to be applied for the soil-applied herbicides at their location and give soil type. Each herbicide plot will contain a 1X rate of the unknown herbicide. It is suggested that the test be planted 4 to 5 weeks prior to the contest with post herbicides being applied 10 to 14 days prior to the contest. Each contestant will be required to identify the unknown herbicides by WSSA approved chemical family and common name by observation of crop responses. Both names will be given equal credit; in other words missing family or common name will be half right. Put the letter for the correct family listed above, and follow it with the correctly spelled common name. For the aryloxyphenoxy or cyclohexanes family, the host may choose the specific product. There should be from 10 to 15 plots. Herbicide plots may be duplicated and check plots can be utilized. It would be of great benefit to the students if they could be led back through the plots following the event. Students will not be allowed to pull any portion of the plants in the plots. If plants are pulled, the student will lose the points for that plot.

## 4. CROP/WEED SITUATION AND RECOMMENDATIONS (100 points) -

Contestants will be required within 15 minutes to determine and evaluate a crop/weed situation and recommend the most effective legal remedy to the problem. Each contestant will have two field problems to solve. Recommendations must comply with the label of each herbicide recommended. Students should give consideration to such factors as stage of growth, crop tolerance, climatological factors, agricultural spraying procedures, weed control, economics, and impact upon the environment. The host will determine the best answer considering all alternatives for a situation, although several possible answers may be correct. The latest Federal (Section 3) or state (Section 24C) labels of the product constitutes legal control. The event will be conducted as a "role-play" situation and the potential problem will be in one of the crops listed on the problem-solving sheet. The contestant will be asked to assume the role of a chemical company representative when dealing with the farmer and scored as follows:

20 points - understanding and solving problem 12.5 points - recommendations for this year's crop 12.5 points - recommendations for next year's crop

All contestants will experience the same set (2) of field problems. The assigned judge and farmer will independently score each participant, compare scores, and adjust if necessary. Each field problem will be worth 50 points and to obtain the participants score, the two scores will be added for a maximum of 100 points. Judges will be available to discuss the problems and desired solutions immediately after the contest.

#### 5. MYSTERY EVENT (up to 20 points) –

This team event will not likely be an agronomic related problem and the contestants will not be advised of the area to study prior to the contest. The mystery event will influence team score but not individual scores. Each phase of the contest will be scored equally (100 pts each) except for the mystery event (up to 20 pts) for a total of 420 points per team. Examples are:

#### A. All teams with four individuals.

		Events									
Super		Crop/Wee	Field Problem			Calibration				Individual	Team
University	ID	d Response	<u>1</u>	2	Tota I	Team	Indv.	Mystery	Score	Placing	Placing
_ John Doe	86	60	25	19	44		45		235	9	
Bill Smith	80	65	47	31	78		35		258	5	
Jane Doe	95	75	45	15	60		45		275	1	
Roy James	63	50	43	43	86		45		244	7	
Total	324.0	250.0			268	40	42.5	20			
Team avg	81.0	62.5			67			20			
Team Total	313					8	32.5				3
<u>Alternate:</u>											
Pat Ray	80	60	31	20	51		45		236	8	
Jim Jones	65	45	27	18	45		50		205	20	

B. Mixed three and four individual teams (if teams with three individuals attend).

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#### **Events**

Super		Crop/Wee	Field Problem		Calibration			Individu Team			
		d d	_							al	
University ID		Response	1	2	Tota I	Team	Indv.	Mystery	Score	Placing	Placing
John Doe											
Bill Smith	80	65	47	31	78		35		258	5	
Jane Doe	95	75	45	15	60		45		275	1	
Roy James	63	50	43	43	86		45		244	7	
Total	238.0	190.0			224	40	41.67	18			
Team avg	79.3	63.33			74.6 7			18			
Team						8	31.67				2
Total	317										
Alternate:											
•	80	60	31	20	51		45		236	8	
Jim Jone:	65	45	27	18	45		50		205	20	

Alternates and low individuals of four member teams will not be scored as part of a team but can win individual prizes.

#### CONTEST COMMITTEE

All coaches and individuals within academia, research, and industry, as well as potential contest hosts are invited to serve on the committee. Individuals from the host location and all committee members will be the authority for all questions relating to the contest. If questions arise that cannot be resolved through interpretation of the standing rules or cannot be resolved through communication with the committee chairman or members of the committee, the contest host has the authority to make the final decision in the best interest of the contest.

#### **EXPENSES**

Each university will provide its own transportation to and from the contest and cover all expenses incurred during travel. The host will provide meals the evening before and the day of the contest. The weed contest committee will provide the prize money and the plaques.

#### LOCATION

The Southern Weed Contest will be held at any facility within the Southern Weed Science Region with the capability of providing all the designated events.

# DISHONESTY

All coaches are charged with ensuring that teams abide by rules of the contest, and that no team gains an <u>unfair</u> advantage. This includes, but is not limited to, cheating. Cheating is defined as a dishonest violation of rules as determined by the coaches attending the contest. A committee made up of all coaches attending the contest will deal with Acts related to cheating. A team and/or individual that does not abide by the rules of the contest will be disqualified and will automatically receive last place at the contest. Teams are not allowed to visit contest site 30 days prior to contest without permission of host.

#### SCORE SHEETS

The host will provide the original score sheets back to the coaches as soon as possible after the contest. Score sheets must be completed according to directions. If answers are not placed in the correct blank it will be counted wrong.

#### 2009 SWSS WEED CONTEST WEED LIST

	Genus	Species	Common Name	Plant and Seed	Plant only	Plant and Tubers
1	Abelmoschus	esculentus	okra, wild	✓	Olliy	1 40015
2	Abutilon	theophrasti	velvetleaf	✓		
_	Acalypha	ostryifolia	copperleaf,			
3	71	<i>J J</i>	hophornbeam	$\checkmark$		
4	Acanthospermum	hispidum	starbur, bristly	✓		
5	Aeschynomene	indica	jointvetch, Indian	✓		
6	Alternanthera	philoxeroides	alligatorweed		$\checkmark$	
7	Amaranthus	blitum	amaranth, livid	✓		
8	Amaranthus	palmeri	amaranth, Palmer		$\checkmark$	
9	Amaranthus	spinosus	amaranth, spiny		$\checkmark$	
10	Ambrosia	artemisiifolia	ragweed, common	✓		
11	Andropogon	virginicus	broomsedge	✓		
12	Anoda	cristata	anoda, spurred	✓		
13	Campsis	radicans	trumpetcreeper		$\checkmark$	
14	Cardamine	hirsuta	bittercress, hairy	✓		
15	Cardiospermum	halicacabum	balloonvine	✓		
16	Cenchrus	echinatus	sandbur, southern	✓		
17	Ceratophyllum	demersum	coontail		✓	
18	Chamaecrista	fasciculata	partridgepea	✓		
19	Chamaesyce	maculata	spurge, spotted	✓		
20	Chamaesyce	nutans	spurge, nodding		✓	
	Chenopodium	album	lambsquarters,			
21	•		common	✓		
22	Cirsium	vulgare	thistle, bull	$\checkmark$		
23	Cleome	hassleriana	spiderflower	✓		

24	Commelina	benghalensis	dayflower, Benghal	✓		
25	Commelina	diffusa	dayflower, spreading	✓		
26	Conyza	canadensis	horseweed	✓		
27	Coronopus	didymus	swinecress, lesser	$\checkmark$		
28	Crotalaria	spectabilis	crotalaria, showy	$\checkmark$		
20	Croton	glandulosus var.	croton, tropic	_		
29	Cynodon	septentrionalis dactylon	bermudagrass	✓ ✓		
30	Cyperus	esculentus	nutsedge, yellow	V	,	_
31	Cyperus	rotundus	nutsedge, purple		<b>√</b>	<b>v</b>
32	Cyperus	iria	flatsedge, rice		<b>v</b>	•
33	Dactyloctenium	aegyptium	crowfootgrass	_	•	
34	Datura Datura	stramonium	jimsonweed	<b>√</b>		
35	Datura Desmodium	tortuosum	beggarweed, Florida	<b>√</b>		
36	Dichondra	carolinensis	dichondra, Carolina	<b>√</b>		
37	Dicnonara Digitaria		· ·	<b>√</b>		
38	Diguaria Diodia	sanguinalis	crabgrass, large	<b>√</b>		
39		virginiana	buttonweed, Virginia	<b>√</b>		
40	Echinochloa	colona	junglerice	<b>√</b>		
41	Echinochloa E dinte	crus-galli	barnyardgrass	<b>√</b>		
42	Eclipta	prostrata	eclipta	✓	,	
43	Eichornia El	crassipes	waterhyacinth	,	$\checkmark$	
44	Eleusine	indica	goosegrass	<b>√</b>		
45	Eupatorium	capillifolium	dogfennel	<b>√</b>		
46	Euphorbia	heterophylla 	poinsettia, wild	✓		
47	Fatoua	villosa	mulberry weed	$\checkmark$		
48	Geranium	carolinianum	geranium, Carolina	$\checkmark$		
49	Heteranthera	limosa	ducksalad		$\checkmark$	
50	Hydrilla	verticillata	hydrilla		$\checkmark$	
51	Imperata	cylindrica	cogongrass	$\checkmark$		
52	Ipomoea	coccinea	morningglory, red	$\checkmark$		
53	Ipomoea	hederacea	morningglory, ivyleaf	$\checkmark$		
54	Ipomoea	lacunosa	morningglory, pitted	$\checkmark$		
55	Ipomoea	pandurata	morningglory, bigroot	$\checkmark$		
56	Ipomoea	purpurea	morningglory, tall	$\checkmark$		
	Ipomoea	quamoclit	morningglory,			
57	7	. 1.	cypressvine	<b>√</b>		
58	Ipomoea	turbinata • 1	moonflower, purple	✓		
50	Ipomoea	wrightii	morningglory,	✓		
59	Jacquemontia	tamnifolia	palmleaf morningglory,	V		
60	Jacquemonna	ummyonu	smallflower	$\checkmark$		
61	Kyllinga	brevifolia	kyllinga, green	✓		
62	Lamium	amplexicaule	henbit	✓		
63	Lemna	minor	duckweed, common		✓	
64	Lolium	arundinaceum	fescue, tall	✓		
65	Lolium	perenne ssp.	ryegrass, Italian	<b>√</b>		
00		r ssp.	-J -8 J	•		

		multiflorum		
66	Matricaria	discoidea	Pineapple-weed	
67	Melochia	corchorifolia	redweed	✓
68	Mollugo	verticillata	carpetweed	✓
69	Murdania	nudiflora	doveweed	✓
70	Nuttallanthus	canadensis	toadflax, oldfield	✓
	Oenothera	laciniata	evening-primrose,	
71			cutleaf	$\checkmark$
72	Oxalis	corniculata	woodsorrel, creeping	$\checkmark$
73	Oxalis	stricta	woodsorrel, common	$\checkmark$
74	Panicum	dichotomiflorum	panicum, fall	$\checkmark$
75	Panicum	repens	torpedograss	$\checkmark$
76	Paspalum	dilatatum	dallisgrass	$\checkmark$
77	Phyllanthus	niruri	niruri	$\checkmark$
78	Phyllanthus	urinaria	chamber-bitter	$\checkmark$
79	Physalis	angulata	groundcherry, cutleaf	$\checkmark$
80	Phytolacca	americana	pokeweed, common	$\checkmark$
81	Pistia	stratiotes	waterlettuce	$\checkmark$
82	Poa	annua	bluegrass, annual	$\checkmark$
	Polygonum	pensylvanicum	smartweed,	
83	D . 1	•	Pennsylvania	✓
84	Portulaca	oleracea	purslane, common	✓
85	Portulaca	pilosa	purslane, pink	$\checkmark$
96	Pueraria	montana var.	kudzu	✓
86 97	Raphanus	lobata raphanistrum	radish, wild	<b>v</b>
87	Richardia	scabra	pusley, Florida	<b>v</b>
88	Rumex	acetosella	sorrel, red	<b>v</b>
89	Salvinia	minima	fern, watter	<b>v</b>
90	Sapium	sebiferum	tallow, Chinese	<b>∨</b> ✓
91 92	Scleranthus	annuus	knawel	<b>v</b>
	Senna	obtusifolia	sicklepod	<b>v</b>
93 94	Senna Senna	occidentalis	senna, coffee	<b>∨</b> ✓
	Sesbania	herbacea	sesbania, hemp	<b>∨</b> ✓
95 06	Sida	rhombifolia	sida, arrowleaf	<b>∨</b>
96 07	Sida Sida	spinosa	sida, prickly	<b>∨</b> ✓
97	Sinapis	arvensis	mustard, wild	•
98	Solanum	carolinense	horsenettle	<b>v</b>
99	Solanum			•
100	Somum	ptychanthum	nightshade, eastern black	✓
101	Solanum	viarum	soda apple, tropical	✓
102	Soliva	sessilis	burweed, lawn	<b>√</b>
103	Sorghum	halepense	johnsongrass	✓
103	Spergula	arvensis	spurry, corn	
105	Spi`rodela	polyrhiza	duckweed, giant	
103	Stachys Stachys	floridana	betony, Florida	· ./
100	Sucreys	joitaana	~~···ij, 1 1011uu	٧

107	Stellaria	media	chickweed, common	$\checkmark$
108	Taraxacum	officinale	dandelion	$\checkmark$
109	Urochloa	texana	millet, Texas	$\checkmark$
110	Urochola	platyphylla	signalgrass, broadleaf	$\checkmark$
111	Vicia	sativa	vetch, common	$\checkmark$
112	Wolffia	spp	watermeal	$\checkmark$
	Xanthium	strumarium	cocklebur, common	$\checkmark$

# 2010 SOUTHERN WEED CONTEST CROP RESPONSE TO HERBICIDES

## Potential Crops

Corn, cotton, grain sorghum, pink-eye purple-hull peas, peanut, rice, soybean, sunflower, squash/zucchini, transplanted tomato, transplanted pepper, wheat,

\*natural populations of palmer amaranth, hemp sesbania, and morningglory sp., etc. may be present. Mornigngloy species may include ivyleaf, pitted, and cypressvine.

#### Potential Herbicides

Acetamide	Isoxazolidinone
propanil (4 lbs. ai/PRE)	
Sulfonanalide	clomazone (0.375 lb ai/A PRE) Miscellaneous
diclosulam (0.023 lb ai/A PRE)	glufosinate (0.38 lb ai/A POST)
And trianing and	glyphosate (0.75 lb ai/A POST)
Aryl triazinone	N-phenylphthalimide
carfentrazone (0.023 lb ai/A POST) + COC	flumioxazin (0.096 lb ai/A PRE)
Danasia asid	flumioxazin (0.048 lb ai/A POST) + NIS
Benzoic acid	Phenoxy
dicamba (0.25 lb ai/A POST)	2,4-D (0.475 lb ai/A POST)
Danasata	2,4-DB (0.25 lb ai/A POST)
Benzoate	Phenyl urea
pyrithiobac (0.0475 lb ai PRE)	fluometuron (1.12 lb ai/A PRE)
pyrithiobac (0.064 lb ai/A POST) + NIS	diuron (1.00 lb ai/A PRE)
Benzothiadiazole	Pyridazinone (4.0 H ) (4.0 PRE)
bentazon (0.75 lb ai/A POST) + COC	norflurazon (1.0 lb ai/A PRE)
Bipyridylium	Pyridinecarboxylic acid
paraquat (0.47 lb ai/A POST) + NIS	triclopyr (0.38 lb ai/A POST) + NIS
Chloroacetamide	Sulfonylurea
S-metolachlor (1.27 lb ai/A PRE)	halosulfuron (0.047 lb ai/A POST) + NIS
	chlorimuron (0.008 lb ai/A POST) + NIS
	nicosulfuron (0.031 lb ai/A POST) + NIS
	trifloxysulfuron (0.007 lb ai/A POST) + NIS
Cyclohexanedione	Triketone
clethodim (0.094 lb ai/A POST) + COC	mesotrione (0.094 lb ai/A POST) + COC
Dinitroaniline	
pendimethalin (0.95 lb ai/A PRE)	Triazine
oryzalin (2.0 lb ai/A PRE)	atrazine (1.5 lb ai/A PRE)
	metribuzin (0.375 lb ai/A PRE)
	simazine (2.0 lb ai/A PRE)
Diphenylether	Quinoline carboxylic acid
Diprioriyiodiloi	Quinomic carboxylic acid

fomesafen (0.25 lb ai/A PRE) lactofen (0.195 lb ai/A POST) + NIS	quinclorac (0.3 lb ai/A PRE)
Imidazolinone imazapic (0.063 lb ai/A POST) + COC Imazethapyr (0.063 lb ai/A PRE)	

<sup>\*\*</sup>COC = crop oil concentrate at 1 % (v/v); NIS = nonionic surfactant at 0.25% (v/v). The soil type at this location will be a Commerce silty clay loam (1.0-1.2% O.M., CEC = 15.6 - 21.6, pH 7.3)

#### PROBLEM SOLVING AND RECOMMENDATIONS

## **Potential Crops:**

Corn
Cotton
Grain Sorghum
Pasture/Turf
Peanut
Pink-Eye, Purple-Hull Peas
Soybean
Squash/Zucchini
Transplanted Pepper
Transplanted Tobacco
Transplanted Tomato

#### Weeds:

Any weed from the 2010 weed identification list.

#### Herbicides:

Any herbicide labeled in the crops listed above.

#### Scoring:

The 'farmer' and a judge will independently score each contestant.

#### Role:

Each contestant will be assuming the role of a chemical company representative, independent crop consultant, or state extension specialist.

The Deadline for submissions for the August newsletter is July 15<sup>th</sup>, 2010. Please submit files as word documents and pictures as Jpg or equivalent to the Newsletter editor prior to this date. Submit information to:

Bob Scott, bscott@uaex.edu SWSS, Newsletter Editor