8. **Effect of coldinafop-propagyl, diclofop-methyl and fenoxaprop-p-ethyl on annual blue grass (*Poa annua*) control in two growth stage.** A. Mousavi Nik*, H. Alizade, E. Zamani; Tehran universiyt, Karaj, Iran (Islamic Republic of).

9. **Response of Pinto and Small Red Mexican Bean (*Phaseolus vulgaris* L.) to Preplant Incorporated, Preemergence, and Postemergence Herbicides.** P. H. Sikkema,[1] D. E. Robinson,[1] R. E. Nurse,[2] N. Soltani*[1]; [1]University of Guelph, Ridgetown, ON, Canada, [2]Agriculture and Agri-Food Canada, Harrow, ON, Canada.

10. **Weed Management in Dry Beans with Reduced Rates of Imazethapyr in Combination with Trifluralin.** N. Soltani*, R. E. Nurse, R. Vyn, L. L. Van Eerd, C. Shropshire, P. H. Sikkema; University of Guelph, Ridgetown, ON, Canada.

11. **Response of corn treated at two growth stages with foliar-applied herbicides.** J. R. Martin*, C. R. Tutt; University of Kentucky, Princeton, KY.

12. **Quantifying herbicide carryover injury in canola (*Brassica napus*) with hand-held sensors or digital imagery.** E. Johnson*, C. Gampe; Agriculture and Agri-Food Canada, Scott, SK, Canada.

13. **Tolerance of Spring Cereals to BAS 800H Applied Preemergence and Postemergence.** P. H. Sikkema, C. Shropshire, N. Soltani*; University of Guelph, Ridgetown, ON, Canada.

14. **Tolerance of Corn to Preemergence and Postemergence Applications of BAS 800H.** N. Soltani*, C. Shropshire, P. H. Sikkema; University of Guelph, Ridgetown, ON, Canada.

15. ***Camelina sativa* Tolerance to Preemergence and Postemergence Herbicide Applications.** S. R. KIng*; Montana State University, Huntley, MT.

16. **Double crop glyphosate resistant soybean response to mesosulfuron and sulfosulfuron applied to soft red winter wheat.** T. L. Grey*, E. P. Prostko; University of Georgia, Tifton, GA.

17. **Weed Suppression by Canola and Mustard Cultivars**. H. J. Beckie*,[1] E. N. Johnson,[2] R. E. Blackshaw,[3] Y. Gan[4]; [1]Agriculture and Agri-Food Canada, Saskatoon, SK, Canada, [2]Agriculture and Agri-Food Canada, Scott, SK, Canada, [3]Agriculture and Agri-Food Canada, Lethbridge, AB, Canada, [4]Agriculture and Agri-Food Canada, Swift Current, SK, Canada.

18. **The Brawl in the Fall: Fall Burndown Programs in Pennsylvania.** D. D. Lingenfelter*, W. S. Curran; Penn State University, University Park, PA.

19. **Controlling Glyphosate-Resistant Volunteer Corn in Roundup Ready Soybeans.** K. R. Westerfeld*, V. M. Davis, M. M. Kruger, W. G. Johnson; Purdue University, West Lafayette, IN.

20. **Beyond on/off: Increasing the benefits of patch spraying with multiple treatments.** L. J. Wiles*; USDA-ARS-WMR, Fort Collins, CO.

21. **2,4-D resistant prickly lettuce (*Lactuca serriola* L.) in Washington.** I. C. Burke*,[1] J. Yenish,[1] D. Pittmann,[1] R. Gallagher[2]; [1]Washington State University, Pullman, WA, [2]Pennsylvania State University, University Park, PA.

22. **Weed management in LibertyLink Cotton: The first four years.** P. A. Dotray*,[1] W. Perkins,[2] L. V. Gilbert[3]; [1]Texas Tech University, Texas Agricultural Experiment Station, Texas Cooperative Extension, Lubbock, TX, [2]Bayer CropSciences, Idalou, TX, [3]Texas Agricultural Experiment Station, Lubbock, TX.

23. **Confirmation and Control of Glyphosate-Resistant Palmer Amaranth in Arkansas.** J. K. Norsworthy*,[1] G. Griffith,[1] R. C. Scott,[2] K. L. Smith,[3] L. R. Oliver[1]; [1]University of Arkansas, Fayetteville, AR, [2]University of Arkansas, Lonoke, AR, [3]University of Arkansas, Monticello, AR.

24. **Early-season light quality effects on corn growth and productivity under field conditions.** M. Markham*, D. Stoltenberg; University of Wisconsin, Madison, WI.

25. **Adjuvant Selection for Tembotrione and Isoxadifen.** J. R. Hinz*,[1] B. Philbrook,[2] D. Lamore,[3] M. Parrish,[2] J. Allen,[2] M. Wrucke,[4] J. Wollam[5]; [1]Bayer CropSience, Story City, IA, [2]Bayer CropSience, RTP, NC, [3]Bayer CropSience, Bryan, OH, [4]Bayer CropSience, Apple Valley, MN, [5]Bayer CropSience, Kansas City, MO.

26. **Giant ragweed (*Ambrosia trifida*) with resistance to multiple herbicide sites of action.** J. M. Stachler*, M. M. Loux, A. F. Dobbels; The Ohio State University, Columbus, OH.

27. **Response of Pearl Millet to HPPD-Inhibiting Herbicides.** W. K. Vencill*,[1] J. Wilson[2]; [1]University of Georgia, Athens, GA, [2]USDA-ARS, Tifton, GA.

28. **Evaluation of KIH-485 herbicide: crop response and weed control fit for the southern cotton belt.** C. H. Koger*, R. C. Bond; Mississippi State University, Stoneville, MS.

Section 2. Horticultural Crops

29. **Replacing methyl bromide successfully in Georgia.** A. S. Culpepper*,[1] L. Sosnoskie,[1] A. MacRae,[1] T. M. Webster[2]; [1]University of Georgia, Tifton, GA, [2]USDA-ARS, Tifton, GA.

30. **Weed dose-response to post-emergent flame cultivation in horticultural crops.** E. C. Sivesind*,[1] M. L. Leblanc,[2] D. C. Cloutier,[3] P. Seguin,[1] K. A. Stewart[1]; [1]McGill University, Ste. Anne-de-Bellevue, QC, Canada, [2]Insitut de recherche et de développement en agroenvironment, Saint-Hyacinthe, QC, Canada, [3]Institut de malherbologie, Ste. Anne-de-Bellevue, QC, Canada.

31. **Efficacy of pendimethalin tank mixed with several other preemergence herbicides for optimum weed control in non-bearing citrus.** M. Singh*,[1] S. D. Sharma,[1] J. M. Mitchell[2]; [1]University of Florida, Lake Alfred, FL, [2]BASF Corporation, Tampa, FL.

32. **Effects of spring-sown cover crops on seed production and emergence of hairy galinsoga (*Galinsoga ciliata*) and establishment of four vegetable crops.** V. Kumar,[1] D. C. Brainard*,[2] R. R. Bellinder[1]; [1]Cornell University, Ithaca, NY, [2]Michigan State University, East Lansing, MI.

33. **Dry bulb onion tolerance to sequential applications of bentazon applied to control yellow nutsedge (Cyperus esculentus L.) in the Pacific Northwest.** E. Peachey*,[1] J. Felix,[2] R. A. Boydston[3]; [1]Oregon State Unviersity, Corvallis, OR, [2]Malheur Experiment Station, Ontario, OR, [3]USDA, Prosser, WA.

34. **Corn gluten meal as an alternative organic preemergence herbicide for onions (*Allium cepa* L.).** C. L. Webber*,[1] J. W. Shrefler[2]; [1]USDA, ARS, SCARL, Lane, OK, [2]OSU, Lane, OK.

35. **Herbicidal activity of clove oil and its constituents.** A. Manda, R. Matraszek, M. B. Isman, M. K. Upadhyaya*; Faculty of Land and Foof Systems, University of British Columbia, Vancouver, BC, Canada.

36. **Simazine treated mulch improved lambsquarter (*Chenopodium album* L.) control.** L. Jiang*, I. Dami, H. Mathers, D. Doohan; The Ohio State University/Ohio Agriculture Research and Development Center, Wooster, OH.

37. **Phenyl isothiocyanate as a methyl bromide alternative for weed control in tomato and bell pepper production.** S. K. Bangarwa*, J. K. Norsworthy; University of Arkansas, Fayetteville, AR.

38. **Weed Control and Tomato Cultivar Sensitivity to Thifensulfuron-methyl.** T. A. Koch*,[1] J. Felix,[2] S. C. Weller,[3] D. Doohan[1]; [1]The Ohio State University, Wooster, OH, [2]Oregon State University, Ontario, OR, [3]Purdue University, West Lafayette, IN.

Section 3. Turf and Ornamentals

39. **Tolerance of warm season turfgrasses to mesotrione.** J. M. Taylor*, J. D. Byrd, R. S. Wright; Mississippi State University, Mississippi State, MS.

40. **Tolerance of container-grown woody ornamentals to selected herbicides.** M. W. Marshall*, B. H. Zandstra; Michigan State University, East Lansing, MI.

41. **Characterization of ACC-ase-Resistant Large Crabgrass (*Digitaria sanguinalis)* from Georgia.** W. K. Vencill*,[1] D. Heckart,[1] W. Parrott,[1] T. Murphy,[2] P. Raymer[2]; [1]University of Georgia, Athens, GA, [2]University of Georgia, Griffin, GA.

42. **Comparing digital software to human observation for estimating weed cover in nursery containers.** J. Altland*; USDA/ARS, Wooster, OH.

43. **Methiozolin, a new turf herbicide.** S. Koo*, K. Hwang, M. Jun; Moghu Research Center Ltd., Daejeon, Republic of Korea.

Section 4. Pasture, Range, Forest, & Rights-of-Way

44. **Weed control in Spanish-cedar (*Cedrela odorata*) plantation during establishment.** F. Rivas*, E. Diaz, J. Castillo; INIFAP-CIRSE, Merida, Yucatan, Mexico.

45. **Evaluation of Imazapic, Mesosulfuron, and Propoxycarbazone for Downy Brome (*Bromus tectorum*) Control in Rangeland.** C. V. Ransom*, S. A. Dewey; Utah State University, Logan, UT.

46. **Evaluating plant propagule spread by vehicles, and the effectiveness of vehicle wash units used to contain them.** L. J. Rew*,[1] H. Balbach,[2] J. Fleming,[3] R. Taylor,[3] R. Gonzales[3]; [1]Montana State University, Bozeman, MT, [2]US Army ERDC, Champaign, IL, [3]US Forest Service, San Dimas, CA.

47. **Survival and growth of three conifer species following three types of site preparation and three levels of subsequent shrub control: 24 years after planting.** W. T. Lanini*; University of California, Davis, Davis, CA.

48. **Herbicidal control of kudzu.** M. A. Weaver*, W. T. Molin, M. E. Lyn, C. D. Boyette, R. E. Hoagland; USDA ARS, Stoneville, MS.

49. **Safety and Weed control of select Herbicides on Longleaf Pine Seedlings.** M. A. Czarnota*; University of Georgia, Griffin, GA.

Section 5. Wildlands & Aquatic Invasives

50. **Comparison of Imazapyr and Imazamox Herbicides for Control of Parrotfeather (*Myriophyllum aquaticum* (Vell.) Verdc.).** R. M. Wersal*, J. D. Madsen; Mississippi State University, Mississippi State, MS.

51. **Evaluation of 2,4-D Ester and Triclopyr Against Waterlily and Spatterdock.** L. M. Glomski*,[1] L. S. Nelson[2]; [1]US Army Engineer Research and Development Center, Lewisville, TX, [2]US Army Engineer Research and Development Center, Vicksburg, MS.

52**. Relative Response of Goatsrue *(Galega officinalis)* toHerbicide Treatments.** M. Oldham*, C. V. Ransom; Utah State University, Logan, UT.

53. **Effects of Nitrogen and Competition on Growth and Spread of Giant Reed (*Arundo donax*).** L. D. Quinn,[1] M. A. Rauterkus,[2] J. S. Holt*[2]; [1]CSIRO Entomology, Indooroopilly, Queensland, Australia, [2]University of California, Riverside, CA.

54**. Seasonal response of shoebutton ardisia (*Ardisia elliptica*) after cut stump treatment with triclopyr (amine form) in forested seasonal wetlands of South Florida.** A. J. Hyatt,[1] H. C. Giannini*,[2] G. M. Burzycki[2]; [1]University of Florida, St. Augustine, FL, [2]Miami-Dade County, Miami, FL.

Section 6. Regulatory Aspects

No Presentations in this Section.

Section 7. Teaching and Extension

55. **Strategic planning and decision-making: How the WSSA board of directors decides what to do.** T. C. Mueller*,[1] J. J. Jachetta[2]; [1]University of Tennessee, Knoxville, TN, [2]Dow AgroSciences, Indianapolis, IN.

56. **Weed Science Society of America and the National Plant Diagnostic Network: partnership possibilities for invasive plant detection efforts.** C. L. Harmon*,[1] R. Hammer-

schmidt[2]; [1]SPDN-University of Florida, Gainesville, FL, [2]Michigan State University, East Lansing, MI.

57. **A new extension publication regarding soybean cyst nematode and winter annual weeds.** V. A. Mock*,[1] W. G. Johnson,[1] K. L. Smith,[1] K. Bradley[2]; [1]Purdue University, West Lafayette, IN, [2]University of Missouri, Columbia, MO.

58. **A Mental Model of Ohio Grain and Produce Farmers Perceptions and Beliefs about Weed Management.** R. Wilson*,[1] M. Tucker,[2] N. Hooker,[1] J. LeJeune,[3] D. Doohan[3]; [1]The Ohio State University, Columbus, OH, [2]Purdue University, West Lafeyette, IN, [3]The Ohio State University, Wooster, OH.

59. **WeedSOFT® Modules Delivered Through an Internet-based Platform.** L. Sandell*,[1] R. Eubanks,[1] M. Bernards,[1] L. Bills,[1] A. Martin,[1] C. Boerboom,[2] W. Johnson,[3] C. Sprague,[4] K. Bradley,[5] D. Peterson,[6] A. Dille,[6] B. Young[7]; [1]University of Nebraska-Lincoln, Lincoln, NE, [2]University of Wisonsin, Madison, WI, [3]Purdue University, West Lafayette, IN, [4]Michigan State Universtiy, East Lansing, MI, [5]University of Missouri, Columbia, MO, [6]Kansas State University, Manhattan, KS, [7]Southern Illinois University, Carbondale, IL.

Section 8. Formulation, Adjuvant, & Application Technology

No Presentations in this Section.

Section 9. Weed Biology and Ecology

60. **Competitive Effect of Redroot Pigweed (*Amaranthus retroflexus* L.) on Growth indices and Yield of Corn (*Zea mays* L.).** K. Sheibany*,[1] M. Baghestani,[1] S. Soufizadeh,[2] A. Atri[1]; [1]Weed Research Department, Plant Protection Research Institute, P. O. Box 19395-1454, Tehran, Iran (Islamic Republic of), [2]PhD Student of Agronomy, Faculty of Agriculture,Tarbiat Modarres University., Tehran, Iran (Islamic Republic of).

61. **Evaluation of Competitive Reciprocal Yield Model of Corn (*Zea mays* L.) Against Redroot Pigweed(*Amaranthus retroflexus* L.) at Qazvin.** K. Sheibany*, M. Baghestani, A. Atri; Weed Research Department, Plant Protection Research Institute, P. O. Box 19395-1454, Tehran, Iran (Islamic Republic of).

62. **Mutualism between common earthworm (*Lumbricus terrestris*) and giant ragweed (*Ambrosia trifida*) varies**

between Ohio and Illinois. A. S. Davis*,[1] E. Regnier,[2] K. Harrison,[2] J. Liu,[2] B. Schutte,[1] E. Luschei[3]; [1]USDA-ARS, Urbana, IL, [2]The Ohio State University, Columbus, OH, [3]University of Wisconsin, Madison, WI.

63. **Changes in Well-Defined Phases of Bud Dormancy Associated with Shifts in Carbohydrate Metabolism May Involve beta-Amylases.** W. S. Chao*, J. V. Anderson, D. P. Horvath; USDA-ARS, Fargo, ND.

64. **Differential flower morphology among three morning-glories from the southern U.S.A.** C. T. Bryson*,[1] K. N. Reddy,[1] I. C. Burke[2]; [1]USDA-ARS, Stoneville, MS, [2]Washington State University, Pullman, WA.

65. **Biodiversity after 18 years of crop rotation and tillage treatments: weeds vs. other taxa.** A. Légère*,[1] C. Stevenson,[2] A. Vanasse,[3] M. Roy,[4] R. Lalande,[5] D. Prévost,[5] J. Whalen[6]; [1]Agriculture and Agri-Food Canada, Saskatoon, SK, Canada, [2]Private consultant, Saskatoon, SK, Canada, [3]Université Laval, Québec, QC, Canada, [4]MAPAQ, Québec, QC, Canada, [5]Agriculture and Agri-Food Canada, Québec, QC, Canada, [6]McGill University, Ste-Anne-de-Bellevue, QC, Canada.

66. **Can "evenness" be a useful indicator of "good" weed diversity?** A. Légère*,[1] C. Stevenson[2]; [1]Agriculture and Agri-Food Canada, Saskatoon, SK, Canada, [2]Private consultant, Saskatoon, SK, Canada.

67. **Distribution and origin of herbicide-resistant *Echinochloa oryzoides* in rice fields of California.** M. D. Osuna*, M. Okada, R. Ahmad, A. J. Fischer, M. Jasieniuk; UC Davis, Davis, CA

68. **Seed germination differences between glyphosate-tolerant and -susceptible Italian ryegrass populations.** V. Nandula*,[1] D. Poston,[1] K. Reddy,[2] C. Koger[1]; [1]Mississippi State University, Stoneville, MS, [2]USDA-ARS, Stoneville, MS.

69. **California weedy rice.** A. Ortiz*,[1] A. J. Fischer,[2] C. Greer,[2] B. Schaal,[3] J. W. Eckert,[2] M. D. Osuna-Ruiz,[2] E. A. Laca[2]; [1]University of Maracay, Maracay, Venezuela, [2]University of California, Davis, CA, [3]Washington University, St. Louis, MO.

70. **Changes in Weed Species in a Rotation of Glyphosate Resistant Corn and Soybean.** R. N. Klein*, G. E. Hanson; University of Nebraska, North Platte, NE.

71. **Investigating fitness characteristics of glyphosate-tolerant common lambsquarters (*Chenopodium album*) biotypes.** A. M. Westhoven*,[1] J. M. Stachler,[2] M. M. Loux,[2] W. G. Johnson[1]; [1]Purdue University, West Lafayette, IN, [2]The Ohio State University, Columbus, OH.

72. **Predation of Italian Ryegrass (*Lolium multiflorum*) Seed.** R. D. Williams*,[1] P. W. Bartholomew[2]; [1]USDA-ARS, Oklahoma City, OK, [2]USDA-ARS, Langston, OK.

73. **Both Vines and Tendrils Utilize Gelatinous Fibers to cause Twining and Coiling.** K. C. Vaughn*, A. J. Bowling; USDA-ARS, Stoneville, MS.

74. **Is Harpalus pennsylvanicus activity-density synchronized with giant foxtail seed rain.** W. S. Curran*, M. M. Ward; Penn State University, University Park, PA.

75. **A predictive yield-loss model for infestations of herbicide-resistant and -susceptible *Echinochloa phyllopogon* in cultivated rice fields.** L. G. Boddy*,[1] A. J. Fischer,[1] M. Moechnig[2]; [1]UC Davis, Davis, CA, [2]South Dakota State University, Brookings, SD.

76. **Critical Period of Broadleaf Verses Grass Weed Interference in Roundup-Ready Cotton.** S. B. Clewis*, W. J. Everman, D. L. Jordan, J. W. Wilcut; NC State University, Raleigh, NC.

77. **Kudzu and Asian soybean rust: a compound problem of invasive introduced species.** C. L. Harmon*,[1] R. Hammerschmidt[2]; [1]University of Florida, Gainesville, FL, [2]Michigan State University, East Lansing, MI.

78. **The Parasitic Plant Genome Project: opportunities for new insight into parasitic weed biology and management.** J. Westwood*,[1] C. dePamphilis,[2] M. Timko,[3] J. Yoder[4]; [1]Virginia Tech, Blacksburg, VA, [2]Penn State University, University Park, PA, [3]University of Virginia, Charlottesville, VA, [4]University of California, Davis, CA.

79. **Phytotoxic effects of Western Juniper (*Juniperus occidentalis* Hook).** P. Dysart*, W. Krueger, C. Mallory-Smith, J. Stevens; Oregon State University, Corvallis, OR.

80. **Taxonomy and Phylogeny of Weedy *Cardamine* Species in United States Nurseries.** A. Post*, A. Krings, J. Xiang, B. Sosinski, J. Neal; North Carolina State University, Raleigh, NC.

81. **Variable ALS herbicide tolerance in crop-wild sunflower hybrids.** K. L. Mercer*,[1] K. J. Betts,[2] R. G. Shaw,[2] D. L. Wyse[2]; [1]Ohio State University, Columbus, OH, [2]University of Minnesota, St. Paul, MN.

82. **Legacy of episodic tropospheric ozone exposure on a weed community.** M. A. Martinez-Ghersa*,[1] J. Landesmann,[2] A. Menendez,[1] A. M. Folcia,[3] P. E. Gundel,[1] N. Quarleri,[1] L. Ventura,[1] A. M. Romero,[3] C. M. Ghersa[1]; [1]IFEVA-Depto de Recursos Naturales y Ambiente, Facultad de Agronomia, Universidad de Buenos Aires, Buenos

Aires, Argentina, [2]IFEVA-Depto de Recursos Naturales y Ambiente, Facultad de Agronomia, Universidad de Buenos Aires, Buenos Aires, Argentina, [3]Depto de Produccion Vegetal, Facultad de Agronomia, Universidad de Buenos Aires, Buenos Aires, Argentina.

83. **Evaluation of Texasweed (*Caperonia palustris*) emergence and growth in response to shade.** R. K. Godara*, B. J. Williams, A. B. Burns; Louisiana State University Agcenter, Baton Rouge, LA.

84. **Weed seedbanks and field emergence during transition to organic vegetable production.** M. D. Kleinhenz, C. P. Herms, S. Walker, J. Cardina*; Ohio State University, Wooster, OH.

85. **Summer annual weed fecundity in the North Central region.** E. C. Taylor*, K. A. Renner; Michigan State University, East Lansing, MI.

86. **The influence of tillage and crop on giant ragweed emergence and seed persistence in the soil.** D. Nordby*,[1] M. Williams,[2] J. Chee-Sanford[2]; [1]University of Illinois, Urbana, IL, [2]USDA-ARS, Urbana, IL.

87. **Glyphosate-resistant ryegrass (Lolium spp.) in California: Population subdivision in the presence of selection on a new adaptive trait.** A. M. Sherwood*, R. Ahmad, M. Jaieniuk; University of California Davis, Davis, CA.

88. **Crickets (*Teleogryllus emma*) are the main predators of weed seeds (*Avena fatua* and *Lolium multiflorum*) on arable land.** M. Asai*,[1] M. Hirafuji,[1] H. Yoichi,[1] T. Shibuya,[1] M. Ichihara[2]; [1]National Agric. Res. Cntr., Tsukuba, Japan, [2]Shizuoka Univ., Shizuoka, Japan.

89. **Heritability in differential control of *Amaranthus palmeri S.* and *Ipomoea lacunosa L.* by glyphosate.** J. A. Huff*, D. R. Shaw, W. A. Givens, J. W. Weirich, L. A. Farno; Mississippi State, Mississippi State, MS.

90. **Water-Soluble Weed Seed Exudates with Antifungal and Antibacterial Properties.** A. Houlihan*,[1] P. Tsai,[2] J. Chee-Sanford[1]; [1]USDA/ARS, Urbana, IL, [2]University of Illinois at Urbana-Champaign, Urbana, IL.

91. **A user-friendly ^{13}C isotope discrimination method for root studies with rice and C_4 weeds in field soils.** D. R. Gealy*; USDA-ARS, Stuttgart, AR.

Section 10. Biocontrol of Weeds

92. **Post dispersal weed seed predation in three seasons and three ecosystems.** A. Mousavi Nik*,[1] H. Rahimian Ma-

shhadi,[1] S. Gharaie,[2] A. Jodakhanloo[1]; [1]Tehran univ. Iran, Karaj, Iran (Islamic Republic of), [2]yasuj univ, yasuj, Iran (Islamic Republic of).

93. **Evaluation of *Microsphaeropsis amaranthi* as a bioherbicide in tomato production.** D. Singh*,[1] Y. M. Shabana,[2] S. G. Hallett[1]; [1]Purdue Univ., West Lafayette, IN, [2]Univ. of Florida, Gainesville, FL.

Section 11. Physiology

94. **The role of Antioxidants in the Protection of Plants Against Inhibition of Protoporphyrinogen Oxidase.** L. C. Dayan*,[1] F. Dayan[2]; [1]Oxford High School, Oxford, MS, [2]USDA-ARS, NPURU, MS.

95. **Aminomethylphosphonic acid formation in plant species treated with glyphosate.** K. N. Reddy*,[1] A. M. Rimando,[2] S. O. Duke,[2] V. K. Nandula[3]; [1]USDA-ARS, Southern Weed Science Research Unit, Stoneville, MS, [2]USDA-ARS, Natural Products Utilization Research Unit, University, MS, [3]Delta Research and Extension Center, Mississippi State University, Stoneville, MS.

96. **Identification of Conserved Mechanisms Regulating Bud Dormancy in Leafy Spurge and other Perennials.** D. Horvath*, J. Anderson, W. Chao; USDA-ARS, Fargo, ND.

97. **Response of Indiana horseweed (*Conyza Canadensis*) populations to 2,4-D.** G. R. Kruger*, V. M. Davis, S. C. Weller, W. G. Johnson; Purdue University, West Lafayette, IN.

98. **Characterizing the response of glyphosate-tolerant common lambsquarters (*Chenopodium album*) biotypes.** M. M. Kruger*, A. M. Westhoven, W. G. Johnson; Purdue University, West Lafayette, IN.

99. **Evaluation of resistance to APP inhibiting herbicides in Little seed canary grass (*Phalaris minor)* biotypes.** J. Gherekhloo*,[1] M. H. Rashed Mohassel,[1] M. Nassiri Mahallati,[1] E. Zand,[2] A. Ghanbari,[1] M. D. Osuna,[3] R. De Prado,[3] R. Vidal[4]; [1]Ferdowsi Univ. Of Mashhad, Mashhad, Iran (Islamic Republic of), [2]Plant Protection Research Institue, Tehran, Iran (Islamic Republic of), [3]Cordoba Univ., Cordoba, Spain, [4]Federal Univ., Rio Grande do Sul, Brazil.

100. **Does founder effect in the evolution of herbicide resistance reduce genetic variability in weed population?** F. P. Lamego*,[1] R. A. Vidal,[1] N. Burgos[2]; [1]UFRGS-CNPq, Porto Alegre, Brazil, [2]Univ. of Arkansas, Fayetteville, AR.

101. **Characterization of ALS-inhibitor resistant beggarticks (*Bidens subalternans*).** F. P. Lamego*,[1] N. R. Burgos,[2] M. Sales,[2] V. Shivrain,[2] R. A. Vidal[1]; [1]Federal University at Rio Grande do Sul - CNPq, Porto Alegre, Brazil, [2]University of Arkansas, Fayetteville, AR.

102. **Absorption, Translocation, and Metabolism of Glufosinate in Corn, Cotton, and Problem Weed Species.** W. J. Everman*, S. B. Clewis, J. D. Burton, A. C. York, J. W. Wilcut; North Carolina State University, Raliegh, NC.

103. **Effects of Glyphosate Formulations on Cotyledon Structure and Chlorophyll Fluorescence in Cotton.** W. T. Molin*, A. J. Bowling, K. C. Vaughn; USDA-ARS, Stoneville, MS.

104. **Morphology and Biochemistry of African rue in response to water deficit.** G. T. Bettmann*,[1] L. B. Abbott,[1] H. H. Ratnayaka,[2] T. M. Sterling[1]; [1]New Mexico State University, Las Cruces, NM, [2]Xavier University, New Orleans, LA.

Section 12. Soil and Environmental Aspects

105. **The effect of cropping and herbicide use history on atrazine efficacy and dissipation.** D. Shaner*,[1] L. Wiles,[1] N. Hansen[2]; [1]USDA-ARS, Fort Collins, CO, [2]Colorado State University, Fort Collins, CO.

106. **Soil microbial response to Cotoran® is influenced by Roundup WeatherMAX®.** S. Lancaster*,[1] S. Senseman,[1] R. Haney[2]; [1]TAMU, College Station, TX, [2]USDA-ARS, Temple, TX.

107. **Modeling Landscape Vulnerability to Herbicide Contamination of Ground and Surface Waters.** M. L. Bernards*, M. Milner, P. J. Shea; University of Nebraska-Lincoln, Lincoln, NE.

108. **Microbial interactions in the glyphosate-resistant soybean rhizosphere.** R. J. Kremer*; USDA-ARS, Columbia, MO.

Section 13. Integrated Weed Management

109. **Radiometric response of soybean fallow to increasing natural weed populations soil cover.** H. A. Acciaresi*, C. Weber, M. S. Zuluaga; Facultad Cs. Agr. y Ftales (UNLP), La Plata, Argentina.

110. **Effect of sweetclover cultivars and crop termination method on weed management.** R. E. Blackshaw*, J. R.

Moyer; Agriculture & Agri-Food Canada, Lethbridge, AB, Canada.

111. **Seasonal interaction of purple deadnettle (*Lamium purpureum*) and soybean cyst nematode (*Heterodera glycines*).** R. Venkatesh*, S. K. Harrison, R. Riedel; The Ohio State Univ., Columbus, OH.

112. **Response of plant growth and soybean cyst nematode to annual ryegrass, purple deadnettle, and soybean combinations.** V. A. Mock*,[1] J. E. Creech,[2] W. G. Johnson[1]; [1]Purdue University, West Lafayette, IN, [2]University of Nevada, Fallon, NV.

113. **Winter Annual Weed Population Dynamics are Influenced by Herbicide Selection and Timing in No-till Cropping Systems.** V. M. Davis*, K. D. Gibson, W. G. Johnson; Purdue University, West Lafayette, IN.

114. **Probability of weed resistance to glyphosate as affected by integrated weed management tactics.** D. Stoltenberg*, M. Jeschke; University of Wisconsin, Madison, WI.

TUESDAY AM, February 5
Tips and Tricks for Journal Writing: What Everyone Needs to Know for Preparing Submissions to WSSA Journals

Location: Waldorf Room
Chair: W. Givens*; Plant and Soil Sciences, Mississippi State University, Mississippi State, MS.

9:30 AM – 12:00 Noon

TUESDAY AM, February 5
Section 1. Agronomic Crops

Location: Williford C
Chair: P. J. Porpiglia*; Kumiai America, White Plains, NY.

10:00AM - 10:15AM
115. **Introduction of Dow AgroSciences Herbicide Tolerance Traits.** D. M. Simpson*, T. R. Wright, R. S. Chambers, M. A. Peterson, C. Cui, A. E. Robinson, J. S. Richburg, D. C. Ruen, S. Ferguson, B. E. Maddy; Dow AgroSciences, Indianapolis, IN.

10:15AM - 10:30AM
116. **A new formulation of Isoxaflutole for preemergence weed control in corn (*Zea mays*).** B. D. Philbrook*,[1] H. J. Santel[2]; [1]Bayer CropScience, RTP, NC, [2]Bayer CropScience, Monheim, Germany.

10:30AM - 10:45AM
117. **Thiencarbazone-methyl & Isoxaflutole: A new herbicide premixture for preemergence weed control in corn (*Zea mays*).** H. J. Santel*,[1] B. D. Philbrook[2]; [1]Bayer CropScience, Monheim, Germany, [2]Bayer CropScience, RTP, NC.

10:45AM - 11:00AM
118. **Evaluation of synergistic herbicide combinations for triazine-sensitive and triazine-resistant broadleaf weed management.** A. J. Woodyard*, J. A. Hugie, D. J. Maxwell, D. E. Riechers; Crop Sciences, University of Illinois, Urbana, IL.

11:00AM - 11:15AM
119. **Postemergewnce Weed Control Options for Use in Corn.** H. Menbere*, R. L. Ritter; Plant Science and Landscape Architecture, University of Maryland, College Park, MD.

11:15AM - 11:30AM
120. **BAS 800H: A new herbicide for preplant burndown and preemergence dicot weed control.** R. Liebl*,[1] H. Walter,[2] S. J. Bowe,[1] T. J. Holt,[1] D. E. Westberg[1]; [1]BASF Corporation, Research Triangle Park, NC, [2]BASF AG, Limburgerhof, Germany.

11:30AM - 11:45AM
121. BAS **800H: A new active ingredient for preemergence broadleaf weed control in field corn and grain sorghum.** C. A. Judge*, D. E. Westberg, T. D. Klingaman, L. D. Charvat, W. E. Thomas; BASF, Research Triangle Park, NC.

11:45AM - 12:00PM
122. **Use of BAS 800H as a preplant burndown for use in soybean.** T. D. Klingaman*, J. E. Zawierucha, L. D. Charvat, W. E. Thomas, C. D. Youmans, L. J. Newsom, J. B. Guice, G. W. Oliver, D. E. Westberg; BASF Corporation, Research Triangle Park, NC.

TUESDAY AM, February 5
Section 5. Wildlands and Aquatic Invasives

Location: Marquette Room
Chair: L. Nelson*; Army Corps of Engineers, Vicksburg, MS.

10:00AM - 10:15AM
123. **Management effects on monoecious hydrilla tuber banks.** R. J. Richardson*,[1] A. P. Gardner,[1] M. Heilman,[2] T. Koschnick[2]; [1]Crop Science, North Carolina State Univ., Raleigh, NC, [2]SePRO Corporation, Whitakers, NC.

10:15AM - 10:30AM

124. **The Demonstration Project on Hydrilla and Hygrophila in the Upper Kissimmee Chain of Lakes.** T. Bond*,[1] K. Lawrence[2]; [1]UF/IFAS Osceola County Extension, Kissimmee, FL, [2]Engineering, Osceola County, Kissimmee, FL.

10:30AM - 10:45AM

125. **Production methods and related efficacy of the biocontrol pathogen *Mycoleptodiscus terrestris*.for management of the aquatic macrophyte hydrilla (*Hydrilla verticillata*).** J. F. Shearer*,[1] L. Nelson,[1] M. Jackson,[2] M. Heilman[3]; [1]Engineer Research and Development Center, US Army Corps of Engineers, Vicksburg, MS, [2]National Center for Agricultural Utilization Research, United States Department of Agriculture, Peoria, IL, [3]Research and Technology Campus, SePRO Corporation, Whitakers, NC.

10:45AM - 11:00AM

126. **Linking invasive aquatic plants, and a novel species of cyanobacteria to an emerging wildlife disease.** S. B. Wilde*; Baruch Marine Lab, University of South Carolina, Charleston, SC.

11:00AM - 11:15AM

127. **Aquatic Herbicide Registration: The Future is Here.** K. D. Getsinger*,[1] D. R. Stubbs[2]; [1]Environmental Laboratory, US Army Engineer Research and Development Center, Vicksburg, MS, [2]Office of Pesticide Programs, US Environmental Protection Agency, Washington, DC.

11:15AM - 11:30AM

128. **Reviewing Clearcast™ (imazamox) EUP in Aquatic Plant Management.** B. Burns*; Specialty Products Division, BASF, Raleigh, NC.

11:30AM - 11:45AM

129. **Eurasian Watermilfoil Monitoring and Eradication Assessment in the Pend Oreille Lake and River System, Idaho.** J. D. Madsen*,[1] R. M. Wersal,[1] T. E. Woolf[2]; [1]GeoResources Institute, Mississippi State University, Mississippi State, MS, [2]Idaho State Department of Agriculture, Boise, ID.

11:45AM - 12:00PM

130. **Early spring application of endothall combined with 2,4-D for selective control of Eurasian watermilfoil (*Myriophyllum spicatum*) and curly-leaf pondweed (*Potamogeton crispus*).** J. G. Skogerboe*,[1] K. D. Getsinger[2]; [1]Dept of Civil Engineering, Louisiana Tech U, Ruston, LA, [2]Clemson, Clemson, SC.

TUESDAY AM, February 5
Section 10. Biocontrol of Weeds

Location: Williford B
Chair: M. A. Weaver*; Southern Weed Science Research Unit, USDA ARS, Stoneville, MS.

10:00AM - 10:15AM
131. **Effects of *Myrothecium verrucaria* on ultra-structural integrity of kudzu (*Pueraria montana* var. *lobata*) and phytotoxin implications.** C. D. Boyette, R. E. Hoagland*, K. C. Vaughn, M. A. Weaver, K. C. Stetina; Southern Weed Science Research Unit, USDA-ARS, Stoneville, MS.

10:15AM - 10:30AM
132. **The development and assessment of soil bacteria as a pre-emergent bioherbicide.** S. M. Boyetchko*, R. K. Hynes, C. Hanson, P. Chumala; Agriculture and Agri-Food Canada, Saskatoon, SK, Canada.

10:30AM - 10:45AM
133. ***Septoria* sp. (Sphaeropsidales): a new fungal pathogen for classical biological control of *Schinus terebinthifolius* (Anacardiaceae).** J. P. Cuda*,[1] T. Stevens,[1] R. Barreto,[2] T. Schubert,[3] R. Charudattan[4]; [1]Entomology & Nematology, University of Florida, Gainesville, FL, [2]Universidade Federal de Vicosa, Vicosa, Minas Gerais, Brazil, [3]Plant Pathology Section, Florida Department of Agriculture and Consumer Services, Division of Plant Industry, Gainesville, FL, [4]Plant Pathology, University of Florida, Gainesville, FL.

10:45AM - 11:00AM
134. **Common cocklebur (*Xanthium strumarium*) biocontrol by *Alternaria helianthi* as affected by surfactants.** D. Sanyal*,[1] P. C. Bhowmik,[1] H. K. Abbas[2]; [1]University of Massachusetts Amherst, Amherst, MA, [2]USDA-ARS, Stoneville, MS.

11:00AM - 11:15AM
135. **Field efficacy of the bioherbicide *Microsphaeropsis amaranthi* for the control of Common waterhemp and pigweeds (*Amaranthus spp.*) in Roundup Ready soybean.** D. Singh*,[1] L. Ortiz-Ribbing,[2] G. K. Roskamp,[3] S. G. Hallett[1]; [1]Botany and Plant Pathology, Purdue Univ., West Lafayette, IN, [2]Macomb Extension Center, Univ. of Illinois, Macomb, IL, [3]Department of Agriculture, Western Illinois Univ., Macomb, IL.

11:15AM - 11:30AM
136. **Return of the mycoherbicide Collego to mid-south rice fields: Lockdown 2008.** K. D. Cartwright*,[1] C. D. Boyette,[2] R. Scott,[3] R. D. Cartwright,[4] R. E. Hoagland,[2] K. C.

Stetina,[2] R. E. Hoagland,[2] M. A. Weaver[2]; [1]Agricultural Research Initiatives, Fayetteville, AR, [2]USDA-ARS, Southern Weed Science Research Unit, Stoneville, MS, [3]Crop, Soil, and Environmental Extension Center, Lonoke, AR, [4]Dept. of Plant Pathogy, Fayetteville, AR.

11:30AM - 11:45AM
Business Meeting

TUESDAY PM, February 5
Graduate Student luncheon/meeting

Location: Williford A
Chair: W. Givens*; Plant and Soil Sciences, Mississippi State University, Mississippi State, MS.

12:00PM - 1:30PM

TUESDAY PM, February 5
GIS for Invasive Weed Management and Research

Location: Waldorf Room
Chair: L. J. Wiles*; Water Management Research Unit, USDA-ARS, Fort Collins, CO.

1:00PM - 1:30PM
137. **From maps to knowledge to management: Understanding, predicting and managing the invasion process can be improved by using geographic information systems.** L. J. Rew*,[1] L. Wiles,[2] D. Shaw[3]; [1]Montana State University, Bozeman, MT, [2]USDA-ARS-WMR, Fort Collins, CO, [3]Mississippi State University, Mississippi State, MS.

1:30PM - 2:00PM
138. **Utilizing geographic information systems and remotely-sensed data to set integrated pest management strategies for plant survey and landscape-scale weed management.** T. S. Prather*, B. Shafii, L. Lass, W. Price; University of Idaho, Moscow, ID.

2:00PM - 2:30PM
139. **Prioritizing cogongrass control on Camp Shelby Training Site, MS based on conservation values and rates of spread.** L. Yager*,[1] M. Lyman[2]; [1]The Nature Conservancy, Jackson, MS, [2]The Nature Conservancy, Camp Shelby, MS.

2:30PM - 3:00PM
140. **GIS for Invasive Aquatics Management.** J. D. Madsen*; Mississippi State University, Mississippi State, MS.

3:00PM - 3:30PM
Break

3:30PM - 4:00PM
141. **The role of forest roads in plant invasions.** D. A. Mortensen*, E. Rauschert, A. N. Nord; The Pennsylvania State University, University Park, PA.

4:00PM - 4:30PM
142. **Forecasting weeds and climate change with GIS.** T. R. Davern*, C. S. Jarnevich, T. J. Stohlgren; United States Geological Survey, Fort Collins, CO.

4:30PM - 5:00PM
143. **Predicting species distributions from presence-only data.** C. Graham*; SUNY at Stony Brook, Stony Brook, NY.

TUESDAY PM, February 5
Section 1. Agronomic Crops

Location: Williford C
Chair: P. J. Porpiglia*; Kumiai America, White Plains, NY.

1:15PM - 1:30PM
144. **Weed control in organic vegetable production using organic herbicides and flame.** T. J. Breum*, T. W. Miller, C. Steen; Washington State University, Mt. Vernon, WA.

1:30PM - 1:45PM
145. **Management of Italian Ryegrass (*Lolium multiflorum*) in Wheat.** R. L. Ritter*,[1] H. Menbere[2]; [1]Plant Science and Landscape Architecture, University of Maryland, Laurel, MD, [2]Plant Science and Landscape Architecture, University of Maryland, College Park, MD.

1:45PM - 2:00PM
146. **Benefits of residual herbicides for weed control in no-till glyphosate-resistant soybean.** J. Q. Armstrong*, C. L. Sprague; Dept. of Crop and Soil Sciences, Michigan State University, East Lansing, MI.

2:00PM - 2:15PM
147. **Pre-seed applications with BAS 800H for broadleaf weed control prior to cereal and pulse crops.** M. Oostlander*,[1] S. Tan,[2] G. Forster,[3] L. Drew[4]; [1]BASF Canada, Lethbridge, AB, Canada, [2]BASF Corp., RTP, NC, [3]BASF Canada, Saskatoon, SK, Canada, [4]BASF Canada, Regina, SK, Canada.

2:15PM - 2:30PM
148. **Efficacy of BAS 800H in no-till soybean burndown and residual herbicide programs.** B. G. Young*,[1] T. D. Klinga-

man,[2] A. G. Hager,[3] W. G. Johnson,[4] S. Z. Knezevic,[5] P. H. Sikkema[6]; [1]Southern Illinois University, Carbondale, IL, [2]BASF Corporation, Mahomet, IL, [3]University of Illinois, Urbana, IL, [4]Purdue University, West Lafayette, IN, [5]University of Nebraska, Concord, NE, [6]University of Guelph, Ridgetown, ON, Canada.

2:30PM - 2:45PM
149. **Efficacy of fall and spring applications of BAS 800H on horseweed (*Conyza canadensis*) in Indiana, Illinois, and Nebraska.** W. Johnson*,[1] V. Davis,[1] B. Young,[2] S. Knezevic,[3] T. Klingaman[4]; [1]Botany and Plant Pathology, Purdue University, West Lafayette, IN, [2]Southern Illinois University, Carbondale, IL, [3]University of Nebraska, Concord, NE, [4]BASF Corporation, Mahommet, IL.

2:45PM - 3:00PM
150. **Dicot weed control with pyrasulfotole in wheat and spring barley.** M. D. Paulsgrove*,[1] K. B. Thorsness,[2] D. M. Maruska,[3] M. A. Anderson,[4] D. R. Christie[5]; [1]Product Development, Bayer CropScience, RTP, NC, [2]Technical Service, Bayer CropScience, Fargo, ND, [3]Field Development, Bayer CropScience, Argyle, MN, [4]Field Development, Bayer CropScience, Spokane, WA, [5]Technical Service, Bayer CropScience, Spokane, WA.

3:00PM - 3:30PM
Break

3:30PM - 3:45PM
151. **Fall Burndown Control of Winter Annuals with BAS 800H as Influenced by the Type of Adjuvant.** S. Knezevic*,[1] J. Scott,[1] L. Charvat[2]; [1]UNL, Concord, NE, [2]BASF Corporation, Lincoln, NE.

3:45PM - 4:00PM
152. **Evaluation of herbicide programs for the management of glyphosate-resistant waterhemp (*Amaranthus rudis*) in soybean.** T. R. Legleiter*, K. W. Bradley; University of Missouri, Columbia, Columbia, MO.

4:00PM - 4:15PM
153. **Evaluation of Weed Control Programs in Glyphosate-Resistant Sugar Beet.** S. R. King*; Reseach Centers, Montana State University, Huntley, MT.

4:15PM - 4:30PM
154. **Common ragweed (*Ambrosia artemisiifolia*) with resistance to multiple herbicide sites of action.** J. M. Stachler*, M. M. Loux, A. F. Dobbels; Horticulture and Crop Science, The Ohio State University, Columbus, OH.

4:30PM - 4:45PM
155. **Molecular methods to study glyphosate-resistant Palmer amaranth (*Amaranthus palmeri*).** T. Gaines*,[1] P. Westra,[1]

J. Leach,[1] S. Chisholm,[1] D. Shaner,[2] C. Preston,[3] A. S. Culpepper,[4] T. Gray,[4] T. Webster,[5] W. Vencill,[6] P. Tranel[7]; [1]Colorado State University, Fort Collins, CO, [2]USDA-ARS, Fort Collins, CO, [3]University of Adelaide, Adelaide, Australia, [4]University of Georgia, Tifton, GA, [5]USDA-ARS, Tifton, GA, [6]University of Georgia, Athens, GA, [7]University of Illinois, Urbana, IL.

TUESDAY PM, February 5
Section 3. Turf and Ornamentals

Location: Marquette Room
Chair: H. Mathers*; Ohio State Univ., Columbus, OH.

1:00PM - 1:15PM
156. **Safety and efficacy of flumioxazin as a preemergence herbicide in nursery containers.** T. L. Mervosh*, J. F. Ahrens; Valley Laboratory, Connecticut Agricultural Experiment Station, Windsor, CT.

1:15PM - 1:30PM
157. **Sulfentrazone for postemergence sedge control in turfgrass.** J. Derr*; Hampton Roads AREC, Virginia Tech, Virginia Beach, VA.

1:30PM - 1:45PM
158. **Control of white clover and smooth crabgrass in turfgrass with wet blade technology.** J. L. Jester*,[1] S. D. Askew,[1] B. J. Brecke[2]; [1]Virginia Tech, Blacksburg, VA, [2]Univ. of Florida, Jay, FL.

1:45PM - 2:00PM
159. **Induction of antioxidant response system of three cool-season turfgrasses during cold acclimation.** D. Sarkar*,[1] P. C. Bhowmik,[1] Y. I. Kwon,[2] K. Shetty[2]; [1]Plant Soil and Insect Sciences, UMASS, Amherst, MA, [2]Dept. of Food Science, UMASS, Amherst, MA.

2:00PM - 2:15PM
160**. Cool temperatures influence on perennial ryegrass control with flazasulfuron, foramsulfuron, and trifloxysulfuron.** J. B. Willis*, S. D. Askew; Virginia Tech, Blacksburg, VA.

2:15PM - 2:30PM
161. **Flazasulfuron for Virginia buttonweed (*Diodia virginiana*) control in bermudagrass.** B. J. Brecke*, K. Hutto, B. Unruh; West Florida Research and Education Center, University of Florida, Jay, FL.

2:30PM - 2:45PM
162. **Using flazasulfuron for selective control of perennial ryegrass (*Lolium perenne*) in creeping bentgrass (*Agrostis***

***stolonifera*).** M. J. Goddard*, J. B. Willis, S. D. Askew; Virginia Tech, Blacksburg, VA.

2:45PM - 3:00PM
163. **Low-impact conversion of cool-season turf to 'Patriot' bermudagrass.** T. L. Mittlesteadt*. J. M. Goatley, S. D. Askew; Virginia Tech, Blacksburg, VA.

3:00PM - 3:15PM
Business Meeting

TUESDAY PM, February 5
Section 12. Soil and Environmental Aspects

Location: Williford B
Chair: L. J. Krutz*; SWSRU, USDA-ARS, Stoneville, MS.

1:15PM - 1:30PM
164**. Detecting Shifts in Soil Microbial Community Structure and Herbicide Degrading Function Post Landspread of Manure Containing Antimicrobial Chemicals.** S. A. Clay*,[1] K. Lehnert,[1] V. Brozel,[2] S. Gibson,[2] A. Hoese[1]; [1]Plant Science, South Dakota State University, Brookings, SD, [2]Biology/Microbiology, South Dakota State University, Brookings, SD.

1:30PM - 1:45PM
165**. Effects of irrigation with treated wastewater on the efficacy and fate of soil applied herbicides in cotton.** Y. Sagiv*,[1] B. Rubin,[1] B. Chefetz[2]; [1]Plant Sciences and Genetics in Agriculture, The Hebrew University of Jerusalem, Rehovot, Israel, [2]Soil and Water Sciences, The Hebrew University of Jerusalem, Rehovot, Israel.

1:45PM - 2:00PM
166. **Comparative mineralization and fate of gyphosate and bromoxynil in a Dundee silt loam under different tillage management.** R. M. Zablotowicz*,[1] C. Accinelli,[2] L. J. Krutz,[1] K. N. Reddy[1]; [1]SWSRU, USDA-ARS, Stoneville, MS, [2]Dept. of Agro-Environmental Science & Technology, Univeristy of Bologna, Bologna, Italy.

2:00PM - 2:15PM
167. **Efficacy of BAS 800H as influenced by soil properties.** A. C. Hixson*,[1] J. B. Weber,[1] F. H. Yelverton,[1] K. E. Keller[2]; [1]Crop Science, North Carolina State University, Raleigh, NC, [2]BASF Corporation, Research Triangle Park, NC.

2:15PM - 2:30PM
168. **Historic atrazine transport parameters are altered in soils exhibiting enhanced degradation.** L. Krutz*,[1] D. L. Shaner,[2] C. Accinelli,[3] R. M. Zablotowicz,[1] W. Henry[4];

[1]SWSRU, USDA-ARS, Stoneville, MS, [2]WMRU, USDA-ARS, Fort Collins, CO, [3]Agro-Environmental Science and Technology, University of Bologna, Bologna, Italy, [4]CPHRU, USDA-ARS, Starkville, MS.

2:30PM - 2:45PM
Business Meeting

WEDNESDAY AM, February 6
POSTER SESSION

Location: Northwest Hall

7:30AM – 9:30 AM
AUTHORS OF AGRONOMIC CROPS, HORTICULTURAL CROPS, WILDLANDS AND AQUATIC INVASIVES, REGULATORY ASPECTS, TEACHING & EXTENSION, FORMULATION, ADJUVANT & APPLICATION TECHNOLOGY, BIOCONTROL OF WEEDS, SOIL AND ENVIRONMENTAL ASPECTS, AND INTEGRATED WEED MANAGEMENT POSTERS WILL BE PRESENT

WEDNESDAY AM, February 6
Glyphosate Resistance Mechanisms: Current Understanding and New Insights

Location: Waldorf Room
Chair: V. Nandula*; Mississippi State University, Stoneville, MS.

9:30AM - 10:00AM
169. **The role of absorption and translocation as a mechanism of resistance to glyphosate.** D. Shaner*; USDA-ARS, Fort Collins, CO.

10:00AM - 10:30AM
170. **Metabolic degradation of glyphosate as a mechanism of resistance.** S. O. Duke*; USDA, ARS, University, MS.

10:30AM - 11:00AM
171.**Glyphosate toxicity and translocation in glyphosate-resistant *Amaranthus spp*.** R. D. Sammons*, A. Herr, M. Faletti, D. Gustafson; Monsanto, St. Louis, MO.

11:00AM - 11:30AM
172. **A decade of glyphosate resistant *Lolium* around the world: mechanisms, genes, fitness and agronomic management.** C. Preston*,[1] A. M. Wakelin,[1] F. Dolman,[1] P. Boutsalis,[1] J. Baker,[1] S. B. Powles[2]; [1]University of

Adelaide, Glen Osmond, SA, Australia, [2]University of Western Australia, Crawley, WA, Australia.

11:30AM - 12:00PM
173. **New glyphosate and multiple herbicide-resistant crops for effective weed management in row crops.** J. M. Green*; Pioneer Hi-Bred International, Newark, DE.

WEDNESDAY AM, February 6
Section 6. Regulatory Aspects

Location: Marquette Room
Chair: R. G. Westbrooks*; U.S. Geological Survey, Whiteville, NC.

9:30AM - 9:45AM
174. **Overview of a New Training Course for Invasive Species Prevention Specialists in Developing Countries.** S. Manning*,[1] R. M. Westbrooks,[2] R. G. Westbrooks[2]; [1]Invasive Plant Control, Inc., Nashville, TN, [2]Southeastern Community College, Whiteville, NC.

9:45AM - 10:00AM
175. **"Nothing new under the sun?" Comparing weed risk assessment and screening tools for the United States and Australia.** B. Caton*; Plant Epidemiology and Risk Analysis Laboratory, USDA-APHIS-PPQ, Raleigh, NC.

10:00AM - 10:15AM
176. **Interception and identification of Federal Noxious Weeds at U.S. Ports of Entry, 2006.** M. L. Smither-Kopperl*; USDA-APHIS, SeaTac, WA.

10:15AM - 10:30AM
177. **Data Management Challenges in Regulatory Weed Programs.** M. A. Bravo*; Weed Science Department, Penn State University/ Pennsylvana Department of Agriculture, Harrisburg, PA.

10:30AM - 10:45AM
178. **Summary results for a web-based, Invasive Plant Electronic Discussion hosted by USDA-APHIS.** C. L. Ramsey*, P. P. Lehtonen, D. R. Prokrym, S. M. Talley; CPHST Lab Fort Collins, CO, USDA-APHIS, Fort Collins, CO.

10:45AM - 11:00AM
179. **Early detection and rapid response and the Federal Incident Command system.** A. V. Tasker*; Plant Protection & Quarantine, Emergency & Domestic Programs, USDA Animal & Plant Health Inspection Service, Riverdale, MD.

11:00AM - 11:15AM
180. **The Federal Noxious Weed Program in FY 2007 in the Western States, an Overview.** D. R. Givens*; USDA, APHIS, PPQ, Fort Collins, CO.

11:15AM - 11:30AM
181. **Status of the witchweed (*Striga asiatica*) eradication program in North and South Carolina.** R. Iverson*; Plant Industry Division, North Carolina Dept. of Agriculture, Raleigh, NC.

11:30AM - 11:45AM
182. **New approaches for eradication of giant salvinia (*Salvinia molesta*) from small isolated infestations in eastern North Carolina through interagency partnering - 2002–2007.** R. G. Westbrooks*,[1] W. Batten[2]; [1]U.S. Geological Survey, Biological Resources Discipline, Whiteville, NC, [2]Pender County Cooperative Extension Service, Burgaw, NC.

11:45AM - 12:00PM
Business Meeting

WEDNESDAY AM, February 6
Section 9. Weed Biology and Ecology

Location: Williford C
Chair: A. Dille*; Agronomy, Kansas State University, Manhattan, KS.

9:45AM - 10:00AM
183. **Is Invasive Plant Monitoring Worth The Effort?** B. D. Maxwell*,[1] L. J. Rew,[1] E. Lehnhoff[2]; [1]Land resources and Environmental Science, Montana State University, Bozeman, MT, [2]Land Resources and Environmental Science, Montana State University, Bozeman, MT.

10:00AM - 10:15AM
184. **Allelopathy and plant invasions.** I. Singh*; University of Delhi, Delhi, India.

10:15AM - 10:30AM
185. **Allelopathy as a Corollary Effect of Resource Acquisition Mechanism: a Case Study with Centaurea diffusa.** N. Tharayil*,[1] P. C. Bhowmik,[1] P. Alpert[2]; [1]Plant, Soil, & Insect Sciences, University of Massachusetts Amherst, Amherst, MA, [2]Biology Department, University of Massachusetts Amherst, Amherst, MA.

10:30AM - 10:45AM
186. **Hormesis in joint action studies with phytotoxins from *Parthenium hysterophorus* L.** R. G. Belz*; Dept. of Weed Science, Univ. of Hohenheim, Stuttgart, Germany.

10:45AM - 11:00AM

187. **Biodiversity of weedy rice in the southern U.S. and its implications on crop-weed ecology and management.** N. R. Burgos*,[1] V. K. Shivrain,[1] M. A. Sales,[1] D. R. Gealy,[2] R. C. Scott,[3] K. L. Smith[4]; [1]Crop, Soil, and Environmental Sciences, University of Arkansas, Fayetteville, AR, [2]USDA-ARS, Dale Bumpers National Rice Research Center, Stuttgart, AR, [3]Crop, Soil, and Environmental Sciences, Arkansas Cooperative Extension Service, Lonoke, AR, [4]Crop, Soil, and Environmental Sciences, Arkansas Cooperative Extension Service, Monticello, AR.

11:00AM - 11:15AM

188. ***qSD7–1* is the first dormancy QTL cloned from weedy rice (*Oryza sativa*).** M. E. Foley*,[1] X. Gu,[2] J. V. Anderson,[1] D. P. Horvath[1]; [1]USDA-Agricultural Research Service, Fargo, ND, [2]South Dakota State University, Brookings, SD.

11:15AM - 11:30AM

189. **Gene flow from sorghum to wild and weedy conspecifics in Africa and the USA: implications for transgenic sorghum.** A. Snow*,[1] P. Sweeney,[1] S. Su,[1] M. Reagon,[1] C. Grenier,[2] G. Ejeta,[2] I. Kapran,[3] T. Tesso,[4] J. Pedersen,[5] G. Bothma[6]; [1]Evolution, Ecology, and Organismal Biology, Ohio State University, Columbus, OH, [2]Department of Agronomy, Purdue University, West Lafayette, IN, [3]Institut National de la Recherche Agronomique du Niger, Niamey, Niger, [4]Ethiopian Institute of Agricultural Research, Nazareth, Ethiopia, [5]USDA-ARS, Lincoln, NE, [6]ARC-Roodeplaat, Pretoria, South Africa.

11:30AM - 11:45AM

190. **Preliminary estimates of pollen size and settling velocity for Amaranthus palmeri.** L. M. Sosnoskie*,[1] T. M. Webster,[2] D. Dales,[3] G. C. Rains,[3] A. S. Culpepper[1]; [1]Crop and Soil Sciences, University of Georgia, Tifton, GA, [2]Crop Protection and Management Research Unit, USDA-ARS, Tifton, GA, [3]Biological and Agricultural Engineering, University of Georgia, Tifton, GA.

11:45AM - 12:00PM

191. **Agricultural connectivity increase glyphosate-resistant horseweed spread.** J. Dauer*,[1] E. Luschei,[2] D. Mortensen[3]; [1]Botany and Plant Pathology, Oregon State University, Corvallis, OR, [2]Agronomy, University of Wisconsin, Madison, WI, [3]Crop and Soil Science, The Pennsylvania State University, University Park, PA.

WEDNESDAY AM, February 6
Section 1. Agronomic crops

Location: Williford B
Chair: P. J. Porpiglia*; Kumiai America, White Plains, NY.

10:00AM - 10:15AM
192. **Volunteer potato (*Solanum tuberosum*) interference in sugar beet (*Beta vulgaris*).** D. W. Morishita*,[1] J. Felix[2]; [1]Plant, Soil, and Entomological Science, University of Idaho, Twin Falls, ID, [2]Malheur Experiment Station, Oregon State University, Ontario, OR.

10:15AM - 10:30AM
193. **Interaction of penoxsulam and propanil on Alligatorweed (*Alternanthera philoxeroides*) control.** S. D. Willingham*, G. N. McCauley, J. M. Chandler; Soil and Crop Sciences, Texas A&M University, College Station, TX.

10:30AM - 10:45AM
194. **Weed Resistance Management in Roundup-Ready Flex Cotton.** S. B. Clewis*, W. J. Everman, D. L. Jordan, J. W. Wilcut; Crop Science, NC State University, Raleigh, NC.

10:45AM - 11:00AM
195. **Synergistic effect of PBO 30 EW on ALS-inhibiting herbicides.** A. Perez-Jones*, C. Mallory-Smith; Crop and Soil Science, Oregon State University, Corvallis, OR.

11:00AM - 11:15AM
196. **Effects of johnsongrass density and pre-harvest burning on sugarcane production.** C. D. Dalley*, E. P. Richard; Sugarcane Research Unit, USDA-ARS-SRRC, Houma, LA.

11:15AM - 11:30AM
Business Meeting

WEDNESDAY AM, February 6
Section 5. Wildlands and Aquatic Invasives

Location: Williford A
Chair: L. Nelson*; Army Corps of Engineers, Vicksburg, MS.

9:45AM - 10:00AM
197. **A Case Study in the Selective Control of Eurasian Watermilfoil (*Myriophyllum spicatum*): Five Years of Results.** J. F. Petta*,[1] M. Bellaud,[2] G. Smith,[2] M. Lennon[2]; [1]Syngenta Professional Products, Corpus Christi, TX, [2]Aquatic Control Technology, Sutton, MA.

10:00AM - 10:15AM

198. **Control of West Indian marsh grass (*Hymenachne amplexicaulis*) in Florida.** B. A. Sellers*,[1] K. Langeland,[2] C. J. Gray[3]; [1]Range Cattle Research and Education Center and Dept. of Agronomy, University of Florida, Ona, FL, [2]Agronomy, University of Florida, Gainesville, FL, [3]UPI, Peyton, CO.

10:15AM - 10:30AM

199. **Detection of herbicide injury on waterhyacinth (*Eichhornia crassipes*) using Landsat 5 TM simulated data.** W. Robles*, J. D. Madsen; Mississippi State University, Starkville, MS.

10:30AM - 10:45AM

200. **Early Detection and Rapid Response Planning for *Lagarosiphon major* and *Trapa natans* Introductions in the Western United States.** L. W. Anderson*,[1] M. D. Sytsma[2]; [1]USDA-ARS Exotic and Invasive Weed Conrol Research, Davis, CA, [2]Center for Lakes and Reservoirs, Portland State University, Portland, OR.

10:45AM - 11:00AM

201. **Analysis of exotic control efforts for shoebutton ardisia (Ardisia elliptica) infested sites in the South Dade Wetlands Management Area.** M. A. Messer*, G. M. Burzycki; Environmental Resources Management, Miami-Dade County, Miami, FL.

11:00AM - 11:15AM

202. **Qualitative influence of fire on succession in a forested wetland following herbicide treatment of shoebutton ardisia (Ardisia elliptica) in the South Dade Wetlands Management Area.** H. C. Giannini*, G. M. Burzycki; Environmental Resources Management, Miami-Dade County, Miami, FL.

11:15AM - 11:30AM

203. **Second year results for Escort, Habitat, and Journey control of common tansy (*Tanacetum vulgare*).** S. M. Talley*, C. L. Ramsey; CPHST Lab Fort Collins, CO, USDA-APHIS, Fort Collins, CO.

11:30AM - 11:45AM

204. **Invasive plants of the Cumberland Plateau and Mountain region - regional and local landscape drivers.** D. Lemke*,[1] P. Hulme,[2] J. Brown,[1] C. Schweitzer,[3] W. Tadesse,[4] Y. Wang,[4] L. Dimov[4]; [1]Mathematics and Statistics, Canterbury University, Christchurch, New Zealand, [2]National Centre for Advanced Bio-Protection Technologies, Lincoln University, Lincoln, New Zealand, [3]Southern Research Station, USDA Forest Service, Normal, AL, [4]NRES, Alabama A & M University, Normal, AL.

11:45AM - 12:00PM
Business Meeting

WEDNESDAY PM, February 6
Roundtable Discussions - New Journal on Invasive Plant Science and Management

Location: Northwest Hall
Chair: J. M. DiTomaso*; Plant Sciences, University of California, Davis, Davis, CA

12:00PM - 1:00PM

WEDNESDAY PM, February 6
Invasive Plant Species and the New Bioeconomy

Location: Williford C
Chair: A. Davis*; USDA-ARS, Urbana, IL.

1:00PM - 1:15PM
Introduction to the symposium. A. Davis*; USDA-ARS, Urbana, IL.

1:15PM - 1:45PM
205. **Adding biofuels to the invasive species fire?** D. Simberloff*; University of Tennessee, Knoxville, TN.

1:45PM - 2:15PM
206. **Arundo donax: a case study of a feedstock crop with invasive potential.** R. N. Mack*; Washington State University, Pullman, WA.

2:15PM - 3:00PM
207. **Carbon-negative biofuels from low-input high-diversity grassland biomass.** J. Hill*; University of Minnesota, St. Paul, MN.

3:00PM - 3:30PM
Break

3:30PM - 4:00PM
208. **Trait-based models for identifying potential plant invaders: an Australian experience.** R. Cousens*; University of Melbourne, Richmond, Victoria, Australia.

4:00PM - 4:30PM
209. **Benefits from, and strategies for containing, biofuel feedstock species.** D. Bransby*; Auburn University, Auburn University, AL.

4:30PM - 5:15PM
Discussion

WEDNESDAY PM, February 6
The Role, Value, and Importance of Complementary Herbicides for Weed Management in Glyphosate-Tolerant Crops

Location: Waldorf Room
Chair: D. R. Forney*; Crop Protection, DuPont, Newark, DE.

1:00PM - 1:15PM
210. **The Status and Needs of Integrated Weed Management in Glyphosate-Tolerant Crops in the U.S.** H. Coble*; USDA, Cary, NC.

1:15PM - 1:30PM
211. **Herbicide usage and trends in glyphosate tolerant crops in the U.S.** L. Gianessi*; CropLife Foundation, Washington, DC.

1:30PM - 1:45PM
212. **Weed management status and needs in glyphosate-tolerant crops in the Southeast.** A. C. York*; North Carolina State University, Raleigh, NC.

1:45PM - 2:00PM
213. **Weed management status and needs in glyphosate tolerant crops in the Delta.** D. B. Reynolds*; Mississippi State University, Mississippi State, MS.

2:00PM - 2:15PM
214. **Weed management status and needs in glyphosate-tolerant crops in the Eastern corn belt.** M. M. Loux*; The Ohio State University, Columbus, OH.

2:15PM - 2:30PM
215. **Weed management status and needs in glyphosate resistant crops in the Mid-West.** M. D. Owen*; Iowa State University, Ames, IA.

2:30PM - 2:45PM
216. **Weed management status and needs in glyphosate tolerant crops in the Western corn belt.** P. Westra*; Colorado State University, Ft. Collins, CO.

2:45PM - 3:00PM
217. **ALS herbicides - role and fit in weed management programs in glyphosate tolerant crops.** D. W. Saunders*,[1] D. R. Forney,[2] T. K. Chicoine,[1] D. D. Dawes,[3] K. A. Peeples,[2] J. M. Green[4]; [1]DuPont Crop Protection, Johnston, IA, [2]DuPont Crop Protection, Newark, DE, [3]DuPont Crop Protection, Noblesville, IN, [4]Pioneer Hi-Bred International, Newark, DE.

3:00PM - 3:30PM
Break

3:30PM - 3:45PM
218**. Photosystem II (PS II) inhibitor herbicides - Role and fit in weed management programs in glyphosate tolerant crops.** C. Foresman*, L. Glasgow, G. Hill; Syngenta Crop Protection, Inc., Greensboro, NC.

3:45PM - 4:00PM
219**. Chloroacetamide herbicides - Role and fit in weed management programs in glyphosate tolerant crops.** R. Cole*; Monsanto Company, St. Louis, MO.

4:00PM - 4:15PM
220. **PPO herbicides - Role and fit in weed management programs in glyphosate tolerant crops.** J. A. Pawlak*; Valent USA Corp., Lansing, MI.

4:15PM - 4:30PM
221. **Auxinic Herbicides: Role and Fit in Weed Management Programs in Glyphosate Tolerant Crops.** T. R. Wright*, B. C. Gerwick, R. S. Chambers, G. A. Hanger, D. Fonseca, D. M. Simpson; Dow AgroSciences, Indianapolis, IN.

4:30PM - 4:45PM
222. **HPPD herbicides - Role and fit in weed management programs in glyphosate tolerant crops.** R. Liebl*,[1] T. Seitz[2]; [1]BASF Corporation, Research Triangle Park, NC, [2]BASF AG, Ludwigshafen, Germany.

4:45PM - 5:15PM
Discussion

WEDNESDAY PM, February 6
Section 8. Formulation, Adjuvant, and Application Technology

Location: Williford B
Chair: B. Young*; Southern Illinois University, Carbondale, IL.

1:00PM - 1:15PM
223. **A novel preemergence herbicide delivery system in turfgrass establishment.** D. Penner*, B. Drzewicki, J. Michael; Crop and Soil Sciences, Michigan State University, East Lansing, MI.

1:15PM - 1:30PM
224. **Reducing ACCase antagonism using a novel adjuvant system.** R. Ramachandran*,[1] A. Shulkin,[1] M. Cordingley,[2] N. Polge,[3] P. Doyle,[1] M. Stypa[1]; [1]Syngenta Crop Protection Canada Inc., Guelph, ON, Canada, [2]Syngenta Jealotts

Hill Int., Jeallots Hill, UK, United Kingdom, [3]Syngenta Crop Protection Crop., Vero Beach, FL.

1:30PM - 1:45PM
225. **The effect of adjuvants and their concentrations on rainfast of glyphosate.** S. D. Sharma*, M. Singh; Citrus Research and Education Center, University of Florida, Lake Alfred, FL.

1:45PM - 2:00PM
226. **Spray Nozzle Tip Selection for Preemergence, Postemergence, Contact and Translocated Herbicides to Maximize Efficacy While Managing Spray Drift.** R. N. Klein*, J. A. Golus, A. S. Cox; University of Nebraska, North Platte, NE.

2:00PM - 2:30PM
227. **Current status of EPA's Pesticide Drift Reduction Technology Program and how it may impact pesticide applications.** R. E. Wolf*; Biolgical and Agricultural Engineering, Kansas State University, Manhattan, KS.

2:30PM - 3:00PM
Discussion

3:00PM - 3:30PM
Break

3:30PM - 3:45PM
Business Meeting

WEDNESDAY PM, February 6
Section 11. Physiology

Location: Marquette Room
Chair: J. D. Burton*; North Carolina State Univ, Raleigh, NC.

1:00PM - 1:15PM
228. **Genome-wide analysis of the nitrogen stress transcriptome of rice.** M. A. Sales*,[1] V. K. Shivrain,[1] N. R. Burgos,[1] K. Y. Yun,[2] B. G. de los Reyes[2]; [1]Crop, Soil, and Environmental Sciences, University of Arkansas, Fayetteville, AR, [2]University of Maine, Orono, ME.

1:15PM - 1:30PM
229. **Inhibition of Plant Enoyl (Acyl Carrier Protein) Reductase by the Natural Diphenyl Ether Cyperin.** F. E. Dayan*,[1] Z. Pan,[1] D. Ferreira,[2] Y. Wang,[2] I. Khan[2]; [1]NPURU, USDA-ARS, University, MS, [2]Univ. of Mississippi, University, MS.

1:30PM - 1:45PM
230. **Responses of late watergrass (*Echinochloa phyllopogon*) to clomazone and keto-clomazone.** H. Yasuor*, A. J.

Fischer; Plant Sciences, University of California, Davis, CA.

1:45PM - 2:00PM
231. **Chlorophyll fluorescence analyses for understanding the mechanism of mesotrione-atrazine synergism.** J. A. Hugie*,[1] J. C. Streibig,[2] X. Zhu,[3] C. P. Chen,[3] S. P. Long,[4] D. E. Riechers[1]; [1]Crop Sciences, University of Illinois, Urbana, IL, [2]Agricultural Sciences, The Royal Veterinary and Agricultural University, Taastrup, Denmark, [3]Plant Biology, University of Illinois, Urbana, IL, [4]Crop Sciences and Plant Biology, University of Illinois, Urbana, IL.

2:00PM - 2:15PM
232. **Are Variable Levels of Glyphosate Resistance in Field Populations of Horseweed Heritable?** V. M. Davis*,[1] G. R. Kruger,[1] S. C. Weller,[2] W. G. Johnson[1]; [1]Botany and Plant Pathology, Purdue University, West Lafayette, IN, [2]Horticulture and Landscape Architecture, Purdue University, West Lafayette, IN.

2:15PM - 2:30PM
233. **A molecular survey of field-evolved AHAS/ALS herbicide resistance mutations in wild radish (*Raphanus raphanistrum*) from Western Australia reveals significant diversity in allele frequency and distribution, and two new mutations.** S. Friesen*, M. Walsh, S. Powles; WAHRI, University of Western Australia, Perth, Australia.

2:30PM - 2:45PM
234. **Impact of plant and environmental factors on ALS-resistant gene transfer rate from Clearfield™ rice to red rice biotypes.** V. K. Shivrain*,[1] N. R. Burgos,[1] M. A. Sales,[1] K. L. Smith,[2] D. R. Gealy,[3] H. L. Black[3]; [1]Crop, Soil, and Environmental Sciences, University of Arkansas, Fayetteville, AR, [2]University of Arkansas, Monticello, AR, [3]Dale Bumpers National Rice Research Center, USDA-ARS, Stuttgart, AR.

2:45PM - 3:00PM
Business Meeting

WEDNESDAY PM, February 6
Section 2. Horticultural Crops

Location: Williford A
Chair: M. M. Williams*; Invasive Weed Management, USDA-ARS, Urbana, IL.

3:30PM - 3:45PM
235. **Evaluation of the effects of herbicides on baby and first-year red raspberries.** T. W. Miller*; Washington State University, Mount Vernon, WA.

3:45PM - 4:00PM
236. **Development of oxyfluorfen based weed control programs for strawberry.** S. A. Fennimore*, J. B. Weber, J. S. Rachuy; Plant Sciences, University of California Davis, Salinas, CA.

4:00PM - 4:15PM
237. **Selectivity and efficacy of BAS 800H in tree fruit and nut crops.** K. E. Keller*, P. H. Munger, L. J. Newsom, J. H. O'Barr, M. A. Landes; BASF Corporation, Research Triangle Park, NC.

4:15PM - 4:30PM
238. **Greenhouse bioassay to determine impact of mesotrione residues on vegetable crops.** R. Riddle*, J. O'Sullivan, C. J. Swanton; Plant Agriculture, University of Guelph, Guelph, ON, Canada.

4:30PM - 4:45PM
239. **Weed control in machine-harvested pickling cucumbers.** B. H. Zandstra*, E. J. Ott; Department of Horticulture, Michigan State University, East Lansing, MI.

4:45PM - 5:00PM
240. **Herbicide evaluation for crop injury and yield in mustard and turnip greens.** R. W. Wallace*, A. K. Petty; Horticultural Sciences, Texas A & M University, Lubbock, TX.

WEDNESDAY PM, February 6
WSSA Business Meeting

Location: Marquette Room
Chair: J. Schroeder*; Entomology, Plant Pathology and Weed Science, New Mexico State University, Las Cruces, NM.

5:30PM - 6:45PM
WSSA Society Business Meeting

6:45PM - 9:00PM
Reception Williford ABC

THURSDAY AM, February 7
Charting the Course for Weed Genomics

Location: Waldorf Room
Chair: P. Tranel*; University of Illinois, Urbana, IL

8:45AM - 9:00AM
Introduction to the Symposium P. Tranel*; University of Illinois, Urbana, IL

9:00AM - 9:30AM
241. **Model Weeds: An Emerging Tool for Weed Research.** D. Horvath*, W. Chao, J. Anderson, M. Foley; USDA-ARS, Fargo, ND.

9:30AM - 10:00AM
242. **Can genomics contribute to an understanding of plant-plant interactions?** S. O. Duke*; USDA, ARS, University, MS.

10:00AM - 10:30AM
Break

10:30AM - 11:00AM
243. **Non-target glyphosate resistance: how does *Conyza canadensis* do it?** C. N. Stewart*,[1] L. L. Good,[1] J. S. Yuan,[1] P. J. Tranel[2]; [1]University of Tennessee, Knoxville, TN, [2]University of Illinois, Champagne-Urbana, IL.

11:00AM - 11:30AM
244. **Genomics of an invasive model species, Brachypodium distachyon.** E. G. Bakker*, E. T. Borer, J. H. Chang, A. I. Liston, P. McEvoy, T. C. Mockler, E. Seabloom; Oregon State University, Corvallis, OR.

11:30AM - 12:00PM
245. **Evolutionary Genomics of Compositae Weeds.** L. Rieseberg*; University of British Columbia, Vancouver, BC, Canada.

12:00PM - 12:30PM
246. **Genomics are boring, but look what the data could do for weed management!** J. Gressel*; Weizmann Institute of Science, Rehovot, Israel.

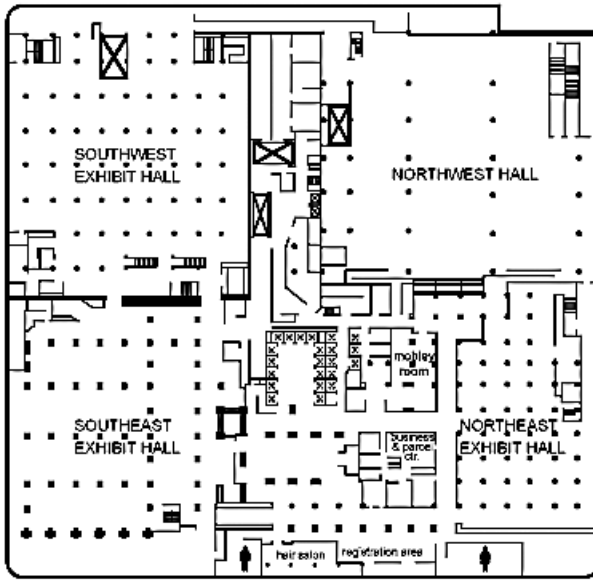
THURSDAY AM, February 7
Section 2. Horticultural Crops

Location: Williford A
Chair: M. M. Williams*; Invasive Weed Management, USDA-ARS, Urbana, IL.

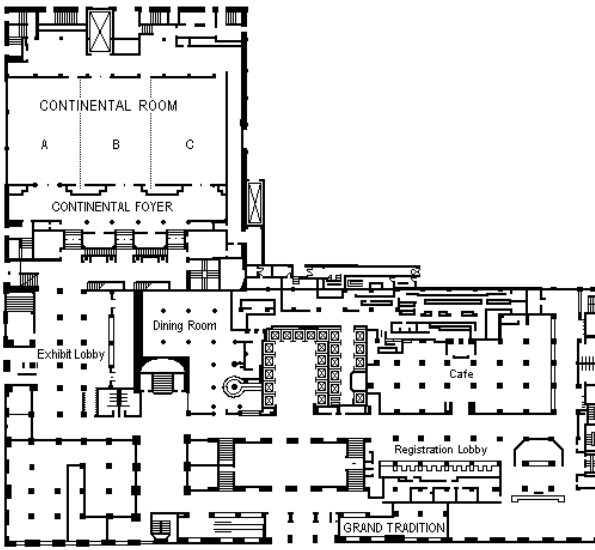
8:00AM - 8:15AM
248. **Potential new pre- and postemergence herbicides for weed control in carrots.** E. J. Ott*, B. H. Zandstra; Department of Horticulture, Michigan State University, East Lansing, MI.

8:15AM - 8:30AM
249. **Integrated management of swamp dodder (Cuscuta gronovii) in processing carrot production.** C. M. Konieczka*, J. B. Colquhoun, R. A. Rittmeyer; Horticulture, University of Wisconsin, Madison, WI.

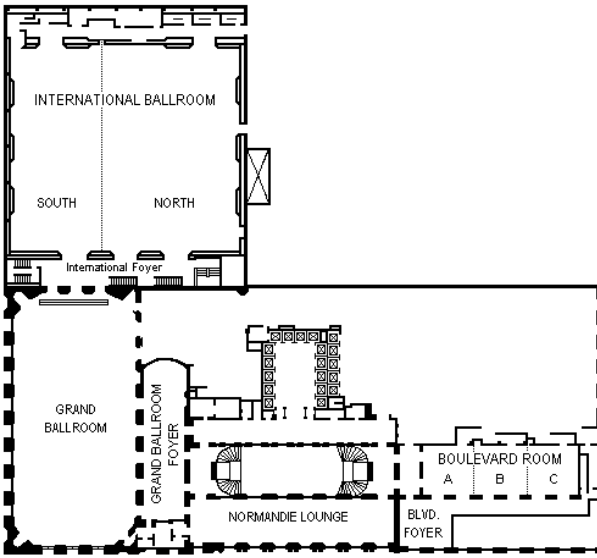
HILTON CHICAGO - LOWER LEVEL



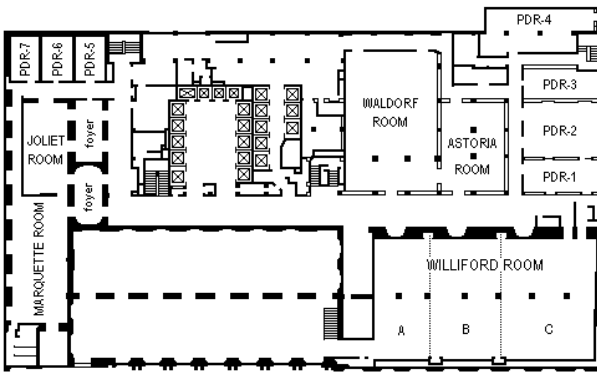
HILTON CHICAGO - LOBBY LEVEL



HILTON CHICAGO - SECOND FLOOR

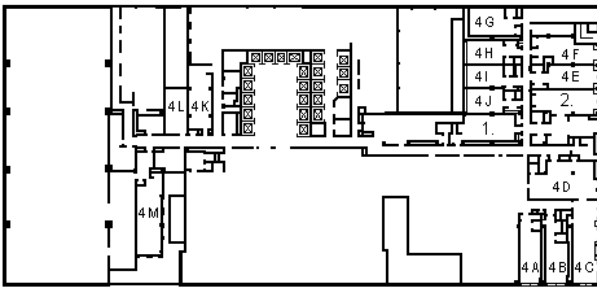


HILTON CHICAGO - THIRD FLOOR



HILTON CHICAGO - FOURTH FLOOR

CONFERENCE ROOMS



1. PULLMAN BOARDROOM 2. McCORMICK BOARDROOM

8:30AM - 8:45AM
250. **Transition Approaches and Soil Management Influence Weed Seed Banks in Organic Crops.** I. Rosa*, J. Masiunas; Natural Resources and Environmental Sciences, University of Illinois, Urbana, IL.

8:45AM - 9:00AM
251. **Weed management practices in organic processing sweet corn and snap beans.** H. Kraiss*, J. Colquhoun, A. J. Bussan, R. Rittmeyer; Horticulture, University of Wisconsin, Madison, WI.

9:00AM - 9:15AM
252. **Crop rotation, cover crop, and weed management effects on weed seedbanks and yields in snap beans, sweet corn, and cabbage.** D. C. Brainard*,[1] R. R. Bellinder,[2] R. R. Hahn,[3] D. A. Shah[4]; [1]Horticulture, Michigan State University, East Lansing, MI, [2]Horticulture, Cornell University, Ithaca, NY, [3]Crop and Soil Sciences, Cornell University, Ithaca, NY, [4]Plant Pathology, Cornell University, Geneva, NY.

9:15AM - 9:30AM
253. **Residual weeds of sweet corn in the North Central United States.** T. L. Rabaey*,[1] M. M. Williams,[2] C. M. Boerboom[3]; [1]Agriculture Research, General Mills, LeSueur, MN, [2]USDA-ARS, Urbana, IL, [3]Univ of Wisconsin, Madison, WI.

9:30AM - 9:45AM
254. **Sweet corn (*Zea mays*) hybrid tolerance to postemergence herbicides.** J. D. Bollman*,[1] C. M. Boerboom,[1] M. J. VanGessel,[2] R. R. Bellinder,[3] G. L. Jordan,[4] R. L. Becker,[5] E. Peachey[6]; [1]Univ. of Wisconsin-Madison, Madison, WI, [2]Univ. of Delaware, Georgetown, DE, [3]Cornell Univ., Ithaca, NY, [4]A.C.D.S Research, North Rose, NY, [5]Univ. of Minnesota, St. Paul, MN, [6]Oregon State Univ., Corvallis, OR.

9:45AM - 10:00AM
255. **Inheritance of Sweet Corn Sensitivity to Tembotrione.** J. K. Pataky*,[1] M. M. Williams[2]; [1]Department of Crop Sciences, University of Illinois, Urbana, IL, [2]Invasive Weed Management, USDA-ARS, Urbana, IL.

10:00AM - 10:30AM
Break

10:30AM - 10:45AM
256. **The IR-4 Project: Update on Weed Control Projects.** F. P. Salzman*, M. Arsenovic, W. P. Barney, R. C. Leonard, D. L. Kunkel; IR-4 Project, Princeton, NJ.

10:45AM - 11:00AM
Business Meeting

THURSDAY AM, February 7
Section 9. Weed Biology and Ecology

Location: Williford C
Chair: A. Dille*; Agronomy, Kansas State University, Manhattan, KS.

8:00AM - 8:15AM
257. **Canada thistle (*Cirsium arvense* L.) wind dispersal.** M. J. Haar*,[1] R. L. Becker,[2] L. A. Stahl,[3] R. P. Miller,[4] L. D. Klossner,[1] B. D. Kinkaid[2]; [1]Southwest Research and Outreach Center, University of Minnesota, Lamberton, MN, [2]Agronomy and Plant Genetics, University of Minnesota, St. Paul, MN, [3]Extension, University of Minnesota, Worthington, MN, [4]Extension, University of Minnesota, Albert Lea, MN.

8:15AM - 8:30AM
258. **Reproductive biology and integrated management of Canada thistle (*Cirsium arvense* (L.) Scop.).** J. Sciegienka, F. Menalled*; Land Resources and Environmetal Sceinces, Montana State University, Bozeman, MT.

8:30AM - 8:45AM
259. **Summer Annual Cover Crops for Canada Thistle Management.** J. B. Masiunas*, A. Bicksler; Natural Resources and Environmental Sciences, University of Illinois, Urbana, IL.

8:45AM
260. **Evaluation of Seed Treatment as a Cultural Control Strategy for Weed Control in Organic Corn.** N. J. Goeser*, E. C. Luschei; Agronomy, University of Wisconsin - Madison, Madison, WI.

9:00AM - 9:15AM
261. **Control of weed size by compost application rate in an organic cropping system.** Charles L. Mohler, Cornell Univ., Ithaca, NY; Thomas Björkman, New York Agricultural Experiment Station, Geneva, NY; and Antonio DiTommaso, Cornell Univ., Ithaca, NY.,C. L. Mohler*,[1] T. Björkman,[2] A. DiTommaso[1]; [1]Crop and Soil Science, Cornell University, Ithaca, NY, [2]Horticultural Sciences, Cornell University, Geneva, NY.

9:15AM - 9:30AM
262. **The effect of oat seed size on tame oat competition with wild oat.** S. J. Shirtliffe*,[1] W. E. May,[2] C. J. Willenborg[3]; [1]Department of Plant Sciences, University of Saskatchewan, Saskatoon, SK, Canada, [2]Agriculture and Agrifood

Canada, Indian Head, SK, Canada, [3]Department of Plant Science, University of Manitoba, Winnipeg, MB, Canada.

9:30AM - 9:45AM
263. **Exploring the mechanisms underlying the critical period for weed control in *Zea mays* (L.).** E. R. Page*, M. T. Tollenaar, E. A. Lee, L. Lukens, C. J. Swanton; Plant Agriculture, University of Guelph, Guelph, ON, Canada.

9:45AM - 10:00AM
264. **The interaction between soil nitrogen levels and velvetleaf (*Abutilon theophrasti* Medic.) densities on glyphosate and glufosinate efficacy.** D. J. Vermey*, D. E. Robinson, C. J. Swanton; Plant Agriculture, University of Guelph, Guelph, ON, Canada.

10:00AM - 10:30AM
Break

10:30AM - 10:45AM
265. **Interaction of salt, temperature, light and dormancy affecting giant foxtail (Setaria faberi) seed germination.** J. Dekker*, J. Gilbert; Agronomy, Iowa State University, Ames, IA.

10:45AM - 11:00AM
266. **Emergence and performance of pale and black swallow-wort on two New York soils at three pH levels.** L. C. Magidow*,[1] A. DiTommaso,[1] Q. M. Ketterings,[1] L. R. Milbrath[2]; [1]Crop and Soil Sciences, Cornell University, Ithaca, NY, [2]US Plant, Soil and Nutrition Laboratory, USDA-ARS, Ithaca, NY.

11:00AM - 11:15AM
267. **Weed Emergence Patterns in Kansas Soybean as affected by Management Practices.** A. M. Ndou*, J. A. Dille, D. E. Peterson; Agronomy, Kansas State University, Manhattan, KS.

11:15AM - 11:30AM
268. **Net influence of earthworms (*Lumbricus terrestris*) on giant ragweed (*Ambrosia trifida*) seedling recruitment.** J. Liu*, E. Regnier, K. Harrison, C. Holloman, J. Schmoll, F. Diekman, D. Barker; Ohio State Univ., Colombus, OH.

11:30AM - 11:45AM
269. **What's the risk of a bio-based energy economy?** J. Barney*, J. DiTomaso; Plant Sciences, University of California, Davis, CA.

11:45AM - 12:00PM
Business Meeting

THURSDAY AM, February 7
Section 4. Pasture, Range, Forest, and Rights-of-Way

Location: Marquette Room
Chair: E. D. Dickens*; Warnell School of Forestry and Natural Resources, UGA, Statesboro, GA.

8:15AM - 8:30AM
270. **Post-Plant Banded Herbicide Treatment and Spot Application of DAP and Poultry Litter at Establishment in an Old-Field Planted Lobolly Pine Plantation.** E. D. Dickens*,[1] T. Price,[2] B. C. McElvany,[3] D. J. Moorhead[4]; [1]Warnell School of Forestry and Natural Resources, UGA, Statesboro, GA, [2]College of Agriculture and Environmental Sciences, UGA, Cordele, GA, [3]College of Agriculture and Environmental Sciences, UGA, Soperton, GA, [4]Warnell School of Forestry and Natural Resources, UGA, Tifton, GA.

8:30AM - 8:45AM
271. **Chopper+GLYFOS PRO or INC-109+GLYFOS PRO for the preparation of loblolly pine sites.** J. L. Yeiser*; Forestry, Stephen F. Austin State University, Nacogdoches, TX.

8:45AM - 9:00AM
272. **Efficacy of chemical site preparation for first-year competition control in oak plantations.** A. B. Self*, A. W. Ezell; Forestry, Miss. State Univ., Miss. State, MS.

9:00AM - 9:15AM
273. **Loblolly pine seedling performance from herbaceous weed control with Oust Extra.** J. L. Yeiser,[1] A. W. Ezell,[2] T. Corbett*[1]; [1]Forestry, Stephen F. Austin State University, Nacogdoches, TX, [2]Forestry, Mississippi State University, Mississippi State, MS.

9:15AM - 9:30AM
274. **Hemp dogbane (*Apocynum cannabinum* L.) control using broadcast applications or a rope-wick.** R. S. Wright*, J. D. Byrd; Mississippi State University, Mississippi State, MS.

9:30AM - 9:45AM
275. **Aminopyralid–a new option for managing woody and herbaceous weeds when establishing slash (P elliottii) and loblolly (P taeda) pine plantations.** J. L. Yeiser*; Forestry, Stephen F. Austin State Univ., Nacogdoches, TX.

9:45AM - 10:00AM
276. **Effect of different surfactants on herbicide efficacy in brush control treatments for rights-of-way.** A. W. Ezell*; Forestry, Miss. State Univ., Miss. State, MS.

10:00AM - 10:30AM
Break

10:30AM - 10:45AM
277. **Yellow starthistle root growth, distribution, and water use patterns.** J. M. DiTomaso*, S. L. Young, V. P. Claassen; Plant Sciences, University of California, Davis, Davis, CA.

10:45AM - 11:00AM
278. **Efficacy of Aminopyralid on Glyphosate Resistant *Conyza* Species.** V. F. Peterson*,[1] R. L. Smith,[2] J. A. Nelson,[3] S. D. Wright,[4] M. W. Melichar,[2] D. J. Maxwell[5]; [1]Dow AgroSciences, Mulino, OR, [2]Dow AgroSciences, Indianapolis, IN, [3]Dow AgroSciences, Calgary, AB, Canada, [4]University of California, Tulare, CA, [5]University of Illinois, Urbana-Champaign, IL.

11:00AM - 11:15AM
279. **Management strategies to reduce tall ironweed (*Vernonia altissima*) populations in cool-season grass pastures interseeded with legumes.** J. D. Green*, W. W. Witt; Plant and Soil Sciences, University of Kentucky, Lexington, KY.

11:15AM - 11:30AM
280. **Control of herbaceous weeds and subsequent pine seedling performance: a comparison of Oust Extra, SFM Extra, Arsenal AC+Oust XP and 4SL+SFM 75.** J. L. Yeiser*; Forestry, Stephen F. Austin State Univ., Nacogdoches, TX.

11:30AM - 11:45AM
Business Meeting

THURSDAY AM, February 7
Section 7. Teaching and Extension

Location: Williford B
Chair: E. P. Prostko*; Department of Crop & Soil Sciences, The University of Georgia, Tifton, GA.

11:15AM - 11:30AM
281. **The Attitudes, Beliefs and Preferences of Scientists and Farmers about Weeds and Weed Management.** R. Wilson*,[1] M. Tucker,[2] N. Hooker,[1] J. LeJeune,[3] D. Doohan[3]; [1]The Ohio State University, Columbus, OH, [2]Purdue University, West Lafayette, IN, [3]The Ohio State University, Wooster, OH.

11:30AM - 11:45AM
282. **Herbicide-resistant weeds in the United States and their impact on extension.** M. VanGessel*, B. Scott; University of Delaware, Georgetown, DE.

11:45AM - 12:00PM
283. **Using Articulate™ to Develop Distance Education Training Modules for Pesticide Certification.** J. Ferrell*, F. Fishel; University of Florida, Gainesville, FL.

THURSDAY PM, February 7
Charting the Course for Weed Genomics

Location: Waldorf Room
Chair: P. Tranel*; University of Illinois, Urbana, IL
1:00PM - 1:30PM

247. **Genomics meets weed science: How molecular knowledge can advance weed management.** C. A. Mallory-Smith*, A. Perez-Jones, E. Sanchez; Oregon State Univ., Corvallis, OR.

1:30PM – 1:45PM
284, **Obtaining funding for weed genomics research: an insider's perspective.** M. A. Bowers*; Cooperative State Research, Education & Extension Service-USDA, Washington, DC.

1:45PM - 5:00PM
Discussion

THURSDAY PM, February 7
Section 13. Integrated Weed Management

Location: Williford A
Chair: D. Jordan*; NC State Unversity, Raleigh, NC.

1:00PM - 1:15PM
285. **Farmers Training On Weed Management In Developing Countries.** R. E. Labrada Romero*; Plant Production & Protection, FAO, UN, Rome, Italy.

1:15PM - 1:30PM
286. **The Risk Posed by The Spread of African Tulip Tree (*Spathodea campanulata*) in Central America and the Caribbean.** R. E. Labrada Romero*; Plant Production & Protection, FAO, UN, Rome, Italy.

1:30PM - 1:45PM
287. **The effect of tillage timing on emergence of various weed species.** A. Mousavi Nik*, H. Rahimian Mashhadi, A. Jodakhanloo; Agronomy, Tehran univ. Iran, Karaj, Iran (Islamic Republic of).

1:45PM - 2:00PM

288. **Investigating barley (*Hordeum vulgare* L.) competiveness with weeds: an analysis of phenotypic variation and the critical period of weed control.** D. A. Van Dam*, C. J. Swanton; Plant Agriculture, University of Guelph, Guelph, ON, Canada.

2:00PM - 2:15PM

289. **Influence of winter annual weed removal timings on soybean cyst nematode population densities.** V. A. Mock*,[1] J. E. Creech,[2] W. G. Johnson[1]; [1]Botany and Plant Pathology, Purdue University, West Lafayette, IN, [2]University of Nevada, Fallon, NV.

2:15PM - 2:30PM

290. **Purple Deadnettle (*Lamium purpureum*) and Soybean Cyst Nematode (*Heterodera glycines*) Response to Cold Temperature Regimes.** J. E. Creech*,[1] V. A. Mock,[2] W. G. Johnson[2]; [1]University of Nevada Cooperative Extension, Fallon, NV, [2]Purdue University, West Lafayette, IN.

2:30PM - 2:45PM

291. **An evaluation of a low-cost UAV approach to noxious weed mapping.** B. T. Jones*, M. Jackson; Geography, Brigham Young University, Provo, UT.

2:45PM - 3:00PM

292. **Accuracy of weed maps obtained by kriging.** L. Longchamps*,[1] B. Panneton,[2] M. Brouillard,[2] G. D. Leroux[1]; [1]Phytology, Laval University, Quebec, QC, Canada, [2]CRDH, Agriculture and Agrifood Canada, St-Jean-sur-Richelieu, QC, Canada.

3:00PM - 3:30PM

Break

3:30PM - 3:45PM

293. **Fate of weed seedbank pools during the transition to an organic feed grain crop rotation in Pennsylvania.** A. G. Hulting*,[1] D. A. Mortensen,[2] M. Barbercheck[3]; [1]Crop and Soil Science, Oregon State University, Corvallis, OR, [2]Crop and Soil Science, The Pennsylvania State University, University Park, PA, [3]Entomology, The Pennsylvania State University, University Park, PA.

3:45PM - 4:00PM

294. **Optimal agronomic practices substantially augment wild oat (*Avena fatua*) management.** K. Harker*,[1] J. O'Donovan,[1] K. Turkington,[1] B. Irvine,[2] G. Clayton[3]; [1]Agriculture & Agri-Food Canada, Lacombe, AB, Canada, [2]Agriculture & Agri-Food Canada, Brandon, MB, Canada, [3]Agriculture & Agri-Food Canada, Lethbridge, AB, Canada.

4:00PM - 4:15PM
295. **Weed impact on corn and soybean yield in long-term organic and conventional cropping systems.** J. R. Teasdale*, M. A. Cavigelli; Sustainable Agricultural Systems Lab, USDA-ARS, Beltsville, MD.

4:15PM - 4:30PM
296. **Weed Management in Peanut with Combinations of Cultivar, Row Pattern, and Herbicide Input.** G. Place, D. Jordan*, C. Rheberg-Horton; Crop Science, NC State Unversity, Raleigh, NC.

4:30PM - 4:45PM
Business Meeting

THURSDAY PM, February 7
Section 7. Teaching and Extension

Location: Williford B
Chair: E. P. Prostko*; Department of Crop & Soil Sciences, The University of Georgia, Tifton, GA.

1:00PM - 1:15PM
297. **Herbicide Trade Names: Can'm and Confuse'm.** T. C. Mueller*,[1] L. E. Steckel,[2] M. McGlamery[3]; [1]University of Tennessee, Knoxville, TN, [2]University of Tennessee, Jackson, TN, [3]University of Illinois, Retired, Urbana, IL.

1:15PM - 1:30PM
298. **Weed Management Practices Utilized by Top Peanut Producers in Georgia (2005–2006).** E. P. Prostko*, J. P. Beasley; Department of Crop & Soil Sciences, The University of Georgia, Tifton, GA.

1:30PM - 1:45PM
299. **Assessing the long-term viability of Roundup Ready® cropping systems.** S. C. Weller*,[1] W. G. Johnson,[2] G. R. Kruger,[2] M. D. Owen,[3] D. R. Shaw,[4] J. W. Wilcut,[5] D. L. Jordan,[5] R. G. Wilson,[6] B. G. Young[7]; [1]Horticulture & Landscape Architecture, Purdue University, West Lafayette, IN, [2]Botany and Plant Pathology, Purdue University, West Lafayette, IN, [3]Iowa State Univ., Ames, IA, [4]Mississippi State Univ., Mississippi State, MS, [5]North Carolina State Univ., Raleigh, NC, [6]Univ. of Nebraska, Scottsbluff, NE, [7]Southern Illinois Univ., Carbondale, IL.

1:45PM - 2:00PM
300. **Assessing long-term viability of glyphosate-resistant technology as a foundation for cropping systems - on-farm comparisons of weed management efficacy.** R. G. Wilson*,[1] W. G. Johnson,[2] S. C. Weller,[2] M. D. Owen,[3] D. R. Shaw,[4] J. W. Wilcut,[5] D. L. Jordan,[5] B. G. Young[6]; [1]Dept.

Agronomy & Horticulture, Univ. of Nebraska, Scottsbluff, NE, [2]Purdue Univ., West Lafayette, IN, [3]Iowa State Univ., Ames, IA, [4]Mississippi State Univ., Mississippi State, MS, [5]North Carolina State Univ., Raleigh, NC, [6]Southern Illinois Univ., Carbondale, IL.

2:00PM - 2:15PM

301. **Assessing Long-Term Viability of Glyphosate-Resistant Technology as a Foundation for Cropping Systems - On-Farm Economic Comparisons of Management Systems.** J. W. Weirich*,[1] D. R. Shaw,[1] W. A. Givens,[1] J. A. Huff,[1] W. J. Everman,[2] D. L. Jordan,[2] W. G. Johnson,[3] S. C. Weller,[3] M. K. Owen,[4] R. G. Wilson,[5] B. G. Young[6]; [1]Plant and Soil Sciences, Mississippi State University, Mississippi State, MS, [2]Plant and Soil Sciences, North Carolina State University, Raleigh, NC, [3]Plant and Soil Sciences, Purdue, West Lafayette, IN, [4]Plant and Soil Sciences, Iowa State University, Ames, IA, [5]Plant and Soil Sciences, University of Nebraska, Scottsbluff, NE, [6]Plant and Soil Sciences, Southern Illinios University, Carbondale, IL.

2:15PM - 2:30PM

302. **U.S. grower perspectives on glyphosate resistance management and alternative weed management practices.** W. G. Johnson*,[1] S. C. Weller,[2] G. R. Kruger,[1] M. D. Owen,[3] D. R. Shaw,[4] J. W. Wilcut,[5] D. L. Jordan,[5] R. G. Wilson,[6] B. G. Young[7]; [1]Botany and Plant Pathology, Purdue Univ., West Lafayette, IN, [2]Purdue Univ., West Lafayette, IN, [3]Iowa State Univ., Ames, IA, [4]Mississippi State Univ., Mississippi State, MS, [5]North Carolina State Univ., Raleigh, NC, [6]Univ. of Nebraska, Scottsbluff, NE, [7]Southern Illinois Univ., Carbondale, IL.

2:30PM - 12:45PM

303. **Problematic weeds: perception versus reality for U. S. growers.** G. R. Kruger*,[1] W. G. Johnson,[1] S. C. Weller,[2] M. D. Owen,[3] D. R. Shaw,[4] J. W. Wilcut,[5] D. L. Jordan,[5] R. G. Wilson,[6] B. G. Young[7]; [1]Botany and Plant Pathology, Purdue Univ., West Lafayette, IN, [2]Purdue Univ., West Lafayette, IN, [3]Iowa State Univ., Ames, IA, [4]Mississippi State Univ., Mississippi State, MS, [5]North Carolina State Univ., Raleigh, NC, [6]Univ. of Nebraska, Scottsbluff, NE, [7]Southern Illinois Univ., Carbondale, IL.

2:45PM - 3:00PM

304. **University Versus Grower Weed Management Input Impacts on Weed Species Density and Diversity in Southern Cropping Systems.** W. J. Everman*,[1] S. B. Clewis,[1] D. L. Jordan,[1] J. W. Wilcut,[1] W. G. Johnson,[2] S. C. Weller,[2] M. D. Owen,[3] D. R. Shaw,[4] R. G. Wilson,[5] B. G. Young[6]; [1]Crop Science, North Carolina State University, Raliegh, NC, [2]Purdue University, West Lafayette, IN, [3]Iowa State University, Ames, IA, [4]Mississippi State University, Stark-

ville, MS, [5]University of Nebraska, Scottsbluff, NE, [6]Southern Illinois University, Carbondale, IL.

3:00PM - 3:30PM
Break.

3:30PM - 3:45PM
305. **Diversity of weed management strategies implemented by growers in three glyphosate-resistant cropping systems.** B. G. Young*,[1] J. L. Matthews,[1] R. G. Wilson,[2] M. D. Owen,[3] D. R. Shaw,[4] J. W. Wilcut,[5] D. L. Jordan,[5] S. C. Weller,[6] W. G. Johnson[6]; [1]Southern Illinois University, Carbondale, IL, [2]University of Nebraska, Scottsbluff, NE, [3]Iowa State University, Ames, IA, [4]Mississippi State University, Mississippi State, MS, [5]North Carolina State University, Raleigh, NC, [6]Purdue University, West Lafayette, IN.

3:45PM - 4:00PM
306. **How did weed species known to be confirmed glyphosate-resistant respond to various cropping systems?** M. D. Owen*,[1] W. G. Johnson,[2] S. C. Weller,[2] D. R. Shaw,[3] J. W. Wilcut,[4] D. L. Jordan,[4] B. G. Young,[5] R. G. Wilson,[6] D. J. Gibson,[5] K. L. Gage[5]; [1]Agronomy Department, Iowa State University, Ames, IA, [2]Purdue University, West Lafayette, IN, [3]Mississippi State University, Mississippi State, MS, [4]North Carolina State University, Raleigh, NC, [5]Southern Illinois University, Carbondale, IL, [6]University of Nebraska, Scottsbluff, NE.

4:00PM - 4:15PM
307. Ecological **response of weed communities to glyphosate-resistant cropping systems.** K. L. Gage*,[1] D. J. Gibson,[1] J. L. Matthews,[2] B. G. Young,[2] M. D. Owen,[3] R. G. Wilson,[4] S. C. Weller,[5] W. G. Johnson,[5] D. R. Shaw,[6] D. L. Jordan[7]; [1]Plant Biology, Southern Illinois University, Carbondale, IL, [2]Plant, Soil and Agricultural Systems, Southern Illinois University, Carbondale, IL, [3]Iowa State University, Ames, IA, [4]University of Nebraska, Scottsbluff, NE, [5]Purdue University, West Lafayette, IN, [6]Mississippi State University, Mississippi State, MS, [7]North Carolina State University, Raleigh, NC.

4:15PM - 4:30PM
308. **Assessing the sustainability of glyphosate-resistant cropping systems using an alternative approach.** A. M. Westhoven*, V. M. Davis, G. R. Kruger, V. A. Mock, W. G. Johnson; Botany and Plant Pathology, Purdue University, West Lafayette, IN.

4:30PM - 4:45PM
309. **Low glyphosate rates rapidly lead to evolution of glyphosate resistance in ryegrass (L*olium rigidum*).** R. Busi, S. Powles*; University Western Australia, Crawley, Australia.

4:45PM - 5:00PM
Business Meeting.

THURSDAY PM, February 7
Vegetable Roundtable Discussion

Location: Marquette Room
Co-Chair: F. P. Salzman*; IR-4 Project, Princeton, NJ.
Co-Chair: R. W. Wallace*; Horticultural Sciences, Texas A & M University, Lubbock, TX.
1:00PM - 4:00PM