

Section 1. Agronomic Crops

- 1. Critical Period For Weed Control In Conventionally Established Glyphosate-resistant Alfalfa.** B. L. Dillehay*, W. S. Curran, M. H. Hall, D. A. Mortensen; Penn State University, University Park, PA.
- 2. Establishment Systems for Glyphosate-Resistant Alfalfa.** D. E. Hillger*, A. McCordick, R. H. Leep, J. J. Kells; Crop and Soil Sciences, Michigan State University, East Lansing, MI.
- 3. Effect Of Mesosulfuron Rate And Formulation On Wild Oat (*Avena fatua*) Control And Malt Barley (*Hordeum vulgare*) Injury And Yield.** S. R. King*; Reseach Centers, Montana State University, Huntley, MT.
- 4. Transgenic Canola Along Transportation Routes And Port Of Vancouver In Western Canada.** H. J. Beckie*,¹ Y. Yoshimura,² K. Matsuo²; ¹Agriculture and Agri-Food Canada, Saskatoon, SK, Canada, ²National Institute for Agro-Environmental Sciences, Tsukuba, Japan.
- 5. Control of Wirestem Muhly in Corn.** P. H. Sikkema,¹ J. J. Kells,² D. Hillger,² C. Kramer,¹ J. D. Vyn,¹ N. Soltani*¹; ¹University of Guelph Ridgetown Campus, Ridgetown, ON, Canada, ²Michigan State University, East Lansing, MI.
- 6. Spatial Pattern Effect On Corn-weeds Competition.** H. A. Acciaresi*,¹ M. S. Zuluaga²; ¹CIC, Fac. Cs. Agr. y Ftales (UNLP). Tecnología Agropecuaria y Forestal., La Plata, Argentina, ²Tecnología Agropecuaria y Forestal., Fac. Cs. Agr. y Ftales (UNLP), La Plata, Argentina.
- 7. Assessment of Glyphosate Drift on Corn (*Zea mays*) Utilizing Multispectral Aerial Imagery.** D. M. Dodds*, J. T. Irby, J. A. Huff, D. B. Reynolds; Plant and Soil Sciences, Mississippi State University, Mississippi State, MS.
- 8. Stale Seedbed Management for Roundup Ready Corn.** B. J. Williams*, R. K. Godara, A. B. Burns; Northeast Research Station, Louisiana State Univerisity Agricultural Center, Saint Joseph, LA.
- 9. Effects Of Simulated 2,4-D And Dicamba Drift On Cotton Growth, Yield , And Fiber Quality.** J. D. Everitt*, W. Keeling, M. Batla; Weed/Herbicide Research, Texas Agricultural Experiment Station, Lubbock, TX.
- 10. Effects Of Tillage, Planting Date, Rye Cover Crop, And Herbicide Programs On Browntop Millet Control In Glyphosate-Tolerant Cotton.** W. T. Molin*; Southern Weed Science Research Unit, USDA-ARS, Stoneville, MS.

11. **Efficacy, Environmental Acceptability And Economic Feasibility Of Weed Management In Dry Beans With Reduced Rates Of Imazethapyr In Combination With Dimethenamid.** N. Soltani*, L. L. Van Eerd, R. Vyn, C. Shropshire, P. H. Sikkema; University of Guelph Ridgetown Campus, Ridgetown, ON, Canada.
12. **Yellow Nutsedge Control with Herbicides in Dry Bean and Corn.** M. Robinson*,¹ C. V. Ransom,¹ D. J. Tonks²; ¹Plants, Soils, and Biometeorology, Utah State University, Logan, UT, ²Country Wide Weed Management, Davenport, WA.
13. **Tolerance of Six Classes of Dry Beans and Adzuki Bean (*Vigna Angularis*) to Preemergence and Postemergence Applications of Halosulfuron.** G. E. Powell*, C. L. Sprague; Crop and Soil Sciences, Michigan State University, East Lansing, MI.
14. **Differential Morphology of Morningglory Populations from the Southern U.S.** C. T. Bryson*,¹ K. N. Reddy,¹ I. C. Bruke²; ¹SWSRU, USDA-ARS, Stoneville, MS, ²Washington State University, Pullman, WA.
15. **Critical Period of Broadleaf versus Grass Weed Interference in Peanut.** W. J. Everman*, S. B. Clewis, J. W. Wilcut; Crop Science, North Carolina State University, Raleigh, NC.
16. **ALS-Resistant Palmer Amaranth (*Amaranthus palmeri* S. Wats.) In Georgia.** A. M. Wise*,¹ T. L. Grey,¹ E. P. Prostko,¹ W. K. Vencill²; ¹Crop and Soil Science, The University of Georgia, Tifton, GA, ²Crop and Soil Science, The University of Georgia, Athens, GA.
17. **Mesotrione: A Potential New Herbicide For Annual Grass Control In Pearl Millet (*Pennisetum Glaucum*).** W. K. Vencill*; Crop & Soil Sciences, University of Georgia, Athens, GA.
18. **Clomazone Resistance in Late watergrass (*Echinochloa phyllopogon*).** A. J. Fischer, H. Yasuor*, P. L. TenBrook, J. Eckert, D. Cheetham; Department of Plant Sciences, University of California, Davis, CA.
19. **Evaluation of V-10142 for Weed Management in Drill-Seeded Rice.** R. K. Godara*, B. J. Williams, A. B. Burns; Northeast Research Station, Louisiana State University Agricultural Center, Saint Joseph, LA.
20. **Programs for Managing Alligatorweed in Drill-Seeded Rice.** A. B. Burns*, B. J. Williams, R. K. Godara; Northeast Research Station, Louisiana State University Agricultural Center, Saint Joseph, LA.

21. **Sorghum Seed Treatments with Acetolactate Synthase Inhibiting Herbicides for Controlling *Striga* Infestation in West Africa.** S. Soumana*,¹ K. Al-Khatib,¹ N. Ochanda,¹ I. Kapran,² A. Toure,³ I. Salami,² S. Dembele,³ M. Tuinstra¹; ¹Kansas State University, Manhattan, KS, ²INRAN, Niamey, Niger, ³IER, Bamako, Mali.
22. **Response Of Selected Virginia Common Lambsquarters (*Chenopodium album*) Biotypes To Glyphosate.** G. A. Hite*,¹ S. R. King,² E. S. Hagood¹; ¹Plant Pathology, Physiology, and Weed Science, Virginia Tech, Blacksburg, VA, ²Southern Ag Research Center, Montana State University, Huntley, MT.
23. **Characterizing The Response To Glyphosate Of Giant Ragweed (*Ambrosia trifida*) Biotypes From Ohio and Indiana.** J. M. Stachler*,¹ M. M. Loux,¹ W. G. Johnson,² A. M. Westhoven²; ¹Horticulture and Crop Science, The Ohio State Univ., Columbus, OH, ²Botany and Plant Pathology, Purdue Univ., West Lafayette, IN.
24. **Control Of Grasses In Glyphosate-resistant Soybean As Affected By Residual Herbicides, Row Spacing, And Planting Date.** C. H. Koger*,¹ N. W. Buehring,² M. P. Harrison²; ¹CGPRU, USDA-ARS, Stoneville, MS, ²North Mississippi Research and Extension Center, Mississippi State University, Verona, MS.
25. **Utilizing R Software Package For Dose Response Studies: The Concept And Data Analysis.** S. Knezevic*,¹ J. Streibig,² C. Ritz²; ¹UNL, Concord, NE, ²KVL, Copenhagen, Denmark.
26. **Optimizing Application Timings of *S*-metolachlor and Dimethenamid-P for Extended Weed Control in Sugarbeet (*Beta vulgaris*).** S. L. Bollman*, C. L. Sprague; Crop and Soil Sciences, Michigan State University, East Lansing, MI.
27. **Relative Herbicide Contributions To Kochia Control In Sugar Beet.** C. V. Ransom*; Plants, Soils, and Biometeorology, Utah State University, Logan, UT.
28. **Differential Sugarcane Varietal Tolerance To Herbicide Correlated With The Gst Constitutive Activities In The Plant.** R. R. Ferreira*,¹ M. Nicolai,² P. J. Christoffoleti,² A. V. O. Figueira¹; ¹Laboratory of Plant Breeding, University of São Paulo, Piracicaba, Brazil, ²Crop Science, University of São Paulo, Piracicaba, Brazil.
29. **Early Season Weed Control In Sugarcane Grown On Sandy Soils.** C. Rainbolt*,¹ L. Baucum,² I. Ezenwa³; ¹Everglades REC, University of Florida-IFAS, Belle Glade, FL, ²Extension, University of Florida-IFAS, LaBelle, FL, ³Southwest Florida REC, University of Florida-IFAS, Immokalee, FL.

30. **Italian Ryegrass Control with ACCase-Inhibiting Herbicides in Oregon.** A. Perez-Jones*, C. Cole, B. Brewster, C. Mallory-Smith; Crop and Soil Science, Oregon State University, Corvallis, OR.
31. **Response Of Winter Wheat To Postemergence Herbicides Applied In The Fall.** A. J. Chomas*, J. J. Kells, L. F. Siler, R. W. Ward; Crop and Soil Sciences, Michigan State University, East Lansing, MI.
32. **Evaluation Of Uph 103 - A Sulfosulfuron Herbicide Against Complex Weed Flora In Wheat.** S. D. Sharma*,¹ S. S. Punia,² M. Singh¹; ¹Citrus Research and Education Center, University of Florida, Lake Alfred, FL, ²Agronomy, CCS Haryana Agricultural University, Hisar, India.
33. **Potential For Crop Injury And Reduced Control Of Wild Oat In Spring Wheat (*Triticum aestivum*) When Tank Mixing Several Fungicides With Several Common Grass And Broadleaf Herbicides.** J. J. Wiersma*, B. R. Durgan, J. H. Cameron; University of Minnesota, St. Paul, MN.

Section 2. Horticultural Crops

34. **Seasonal Distribution And Relative Density Of Weeds In Fruit And Nut Nurseries Treated With Methyl Bromide And Alternate Fumigants.** A. Shrestha*,¹ G. Browne,² B. Lampinen,³ S. Schneider,⁴ L. Simon,⁵ T. Trout⁶; ¹Statewide IPM Program, University of California, Parlier, CA, ²USDA-ARS, Davis, CA, ³University of California, Davis, CA, ⁴USDA-ARS, Beltsville, MD, ⁵University of California, Berkeley, CA, ⁶USDA-ARS, Fort Collins, CO.
35. **Weed Control Efficacy And Crop Safety For Beet, Spinach And Swiss Chard Herbicides.** J. O'Sullivan*, R. Grohs, R. Riddle; Plant Agriculture, University of Guelph, Simcoe, ON, Canada.
36. **Nutsedge (*Cyperus sp.*) Control In Highbush Blueberries (*Vaccinium corymbosum*).** D. A. Boelk*, C. F. Fouche; Cooperative Extension, Univ of CA - Davis, Stockton, CA.
37. **Resistance To Foliar Herbicides In Long-term Experiments In Orchards.** R. A. Bulcke*, E. G. Mechant; Weed Science Unit, Ghent Univ., Ghent, Belgium.
38. **Three Methyl Bromide Alternatives Being Developed In Georgia.** A. S. Culpepper*,¹ A. L. Davis,¹ T. M. Webster,² A. W. MacRae,¹ D. L. Langston³; ¹Crop and Soil Sciences, University of Georgia, Tifton, GA, ²USDA-ARS, Tifton, GA, ³Plant Pathology, University of Georgia, Tifton, GA.

39. **Screening For Preemergence Herbicides For Use In Basil (*Ocimum Basilicum* L.).** L. Brandenberger*, L. Wells, B. Havener, D. Valdez; Oklahoma State University, Stillwater, OK.
40. **Identifying Weeds and Mint in Hyperspectral Images Using Spectral Vegetation Indices.** M. S. Gumz*,¹ L. L. Biehl,² S. C. Weller¹; ¹Horticulture and Landscape Architecture, Purdue University, West Lafayette, IN, ²ITaP, Purdue University, West Lafayette, IN.
41. **Response Of Seeded And Transplanted Yellow And Zucchini Squash (*Cucurbita pepo*) To S-metolachlor Applied At Planting Or Postemergence.** L. M. Sosnoskie*, A. L. Davis, A. S. Culpepper; Crop and Soil Sciences, University of Georgia, Tifton, GA.
42. **Weed Control And Tomato Yield Following Three Conservation-Tillage Cover Crop Systems.** M. Saini*,¹ A. J. Price,² T. S. Kornecki,² A. Caylor³; ¹Agronomy and Soils, Auburn University, Auburn, AL, ²USDA ARS, Auburn, AL, ³North Alabama Horticulture Substation, Cullman, AL.
43. **Weed Control In Cantaloupe, Honeydew Melon, And Watermelon With Preemergence Herbicides.** W. T. Lanini*,¹ M. E. McGiffen²; ¹Plant Sciences, University of California, Davis, Davis, CA, ²Botany and Plant Sciences, University of California, Riverside, Riverside, CA.
44. **Non-Pungent Jalapeño Peppers: Weed Control and Yields.** Charles L. Webber III*, USDA, ARS, SCARL; James W. Shrefler, Oklahoma State Univ.; and Vincent M. Russo, USDA, ARS, SCARL; Lane, OK. C. L. Webber*,¹ J. W. Shrefler,² V. M. Russo¹; ¹USDA, ARS, SCARL, Lane, OK, ²Oklahoma State Univ., Lane, OK.
45. **Influence of Purple Nutsedge Density and Time of Removal on its Interference with Watermelon.** J. Morales-Payan*; Horticulture, University of Puerto Rico, Mayaguez, Mayaguez, PR.
46. ***Cyperus rotundus* Interference with Rambutan During the Nursery Stage.** J. Morales-Payan*; Horticulture, University of Puerto Rico-Mayaguez, Mayaguez, PR.

Section 3. Turf and Ornamental Crops

47. **Herbicide Screening in a Garden Rose Field Nursery.** B. D. Hanson*; Water Management Research Unit, USDA-ARS, Parlier, CA.

48. **Flazasulfuron for Overseeding Safety and *Poa annua* Control.** K. C. Hutto*,¹ B. J. Brecke,¹ J. B. Unruh²; ¹Agronomy, University of Florida, Jay, FL, ²Environmental Horticulture, University of Florida, Jay, FL.
49. **Bermudagrass Control in Cool-Season Turfgrass.** J. B. Willis*, S. D. Askew; Virginia Tech, Blacksburg, VA.
50. **Absorption, Translocation, and Metabolism of Prohexadione Calcium in Annual Bluegrass (*Poa annua*), and Three Turfgrass Species.** M. J. Goddard*, J. B. Beam, S. D. Askew; Virginia Tech, Blacksburg, VA.
51. **Herbicide Alternatives for Atrazine and Simazine in Christmas Tree Plantations.** M. W. Marshall*,¹ B. H. Zandstra,¹ R. J. Richardson²; ¹Horticulture, Michigan State University, East Lansing, MI, ²Crop Science, North Carolina State University, Raleigh, NC.

Section 4. Pastures, Rangelands, Forests, and Rights-of-Way

52. **A General Phenological Growth Stage Key For Describing Trees And Woody Plants.** G. A. Finn*,¹ V. Peterson,¹ A. E. Straszewski²; ¹Product Technology, Dow AgroSciences, Indianapolis, IN, ²Proport Services, Newbury, United Kingdom.
53. **Dogfennel (*Eupatorium capillifolium*) Size At Application Impacts Herbicide Efficacy.** B. A. Sellers*,¹ J. A. Ferrell²; ¹Range Cattle Research and Education Center and Dept. of Agronomy, University of Florida, Ona, FL, ²Agronomy, University of Florida, Gainesville, FL.
54. **Comparison Of Aminopyralid And Other Herbicides On Weed Control In Grass Pasture.** D. D. Lingenfelter*, W. S. Curran; Crop and Soil Sciences, Penn State University, University Park, PA.

Section 5. Wildland and Aquatic Invasive Plants

55. **Gorse (*Ulex europaeus*) Infestations In Hawaii And New Zealand Display Similar Patterns Of Resource Exploitation From Altered Landscapes.** J. J. K. Leary*,¹ D. A. Peltzer,² N. V. Hue,³ D. Borthakur¹; ¹Molecular Biosciences and Bioengineering, University of Hawaii at Manoa, Honolulu, HI, ²Landcare Research, Lincoln, New Zealand, ³Tropical Plant and Soil Science, University of Hawaii at Manoa, Honolulu, HI.

56. **Invasive Potential of Ornamental Pear (*Pyrus calleryana*), Beefsteak Plant (*Perilla frutescens*), Asiatic Smartweed (*Polygonum caespitosum*) and Mulberry Weed (*Fatoua villosa*) in the Midwestern United States.** P. B. Trewatha*; Department of Agriculture, Missouri State University, Springfield, MO.

57. **Evaluation Of Herbicides For Phragmites Management In Connecticut Marshes.** T. L. Mervosh*,¹ D. Roach²; ¹Valley Laboratory, Connecticut Agricultural Experiment Station, Windsor, CT, ²All Habitat Services, LLC, Madison, CT.

58. **Evaluation Of Penoxsulam For Water Hyacinth [*Eichhornia crassipes* (Mart.) Solms] and Giant Salvinia (*Salvinia molesta* Mitchell) Control.** R. J. Richardson*, A. P. Gardner; Crop Science, North Carolina State Univ., Raleigh, NC.

Section 6. Regulatory Aspects

No Posters were submitted in this section.

Section 7. Education and Extension

59. **Information Discovery From Canada Thistle Control Research Data By Using Association Rule Mining.** J. Zhou*, C. G. Messersmith, J. Davidson-Harrington; North Dakota State University, Fargo, ND.

60. **WeedSOFT[®]: A Tool for Teaching IWM Principles.** L. Bills*, A. R. Martin, M. Bernards; University of Nebraska, Lincoln, NE.

61. **Grower Perceptions From Illinois, Indiana, Iowa, Mississippi, Nebraska, and North Carolina On Tillage Practices With Roundup Ready Cropping Systems.** S. B. Clewis*,¹ W. J. Everman,¹ D. L. Jordan,¹ J. W. Wilcut,¹ L. A. Farno,² W. A. Givens,² P. D. Gerard,² D. R. Shaw,² S. C. Weller,³ M. D. K. Owen,⁴ R. G. Wilson,⁵ B. G. Young⁶; ¹Crop Science, NC State University, Raleigh, NC, ²Mississippi State University, Starkville, MS, ³Purdue University, West Lafayette, IN, ⁴Iowa State University, Ames, IA, ⁵University of Nebraska, Scottsbluff, NE, ⁶Southern Illinois University, Carbondale, IL.

62. **Ecologically Based Weed Management Principles: Integrating Research and Education.** W. S. Curran*,¹ A. G. Hulting,² R. J. Hoover,¹ M. E. Barbercheck,¹ C. Reberg-Horton,³ E. R. Gallandt⁴; ¹Penn State University, University park, PA, ²Oregon State University, Corvallis, OR,

³North Carolina State University, Raleigh, NC, ⁴University of Maine, Orono, ME.

63. **Undergraduate Biology Education Can Be Enhanced Using Weed Science Principles.** C. L. Brommer*; Biology, Emory University, Atlanta, GA.

Section 8. Formulation, Adjuvant and Application Technology

64. **Efficacy Of Five Soybean Herbicides When Applied With Flat-fan And Air-induction Nozzles.** P. H. Sikkema,¹ L. Brown,¹ C. Shropshire,¹ H. Spieser,² N. Soltani*¹; ¹University of Guelph Ridgetown Campus, Ridgetown, ON, Canada, ²Ontario Ministry of Agriculture, Food and Rural Affairs, Ridgetown, ON, Canada.

65. **Effect of Mixing a Hydrophilic and Lipophilic Surfactant on the Biological Activity of a Hydrophilic and Lipophilic Herbicide.** J. M. Green*, T. Hale; DuPont Crop Protection, Newark, DE.

66. **Comparison of Ammonium Sulfate and Commercial Water Conditioners on Glyphosate Efficacy.** D. Peterson*,¹ C. Thompson²; ¹Agronomy, Kansas State University, Manhattan, KS, ²Agronomy, Kansas State University, Garden City, KS.

67. **Spectrophotometric Assessment Of Glyphosate Rainfastness With Various Surfactant Levels On Velvetleaf (*Abutilon theophrasti*) And Soybean (*Glycine max*, L.).** W. Henry*,¹ D. L. Shaner²; ¹Central Great Plains Research Station, USDA-ARS, Akron, CO, ²Water Management Unit, USDA-ARS, Ft. Collins, CO.

Section 9. Weed Biology and Ecology

68. **Competition Of Five *Amaranthus* Weed Species With Common Bean Plants.** P. J. Christoffoleti*, S. J. P. Carvalho; Crop Science, Univeristy of Sao Paulo, Piracicaba, Brazil.

69. **Factors Influencing Recruitment Of Powell Amaranth (*Amaranthus powellii*) In Annual Cropping Systems.** E. Peachey*,¹ C. Mallory-Smith²; ¹Horticulture, Oregon State University, Corvallis, OR, ²Crop and Soil Science, Oregon State University, Corvallis, OR.

70. **Prevalence And Influence Of Stalk Boring Insects On Glyphosate Activity On Indiana And Michigan Giant Ragweed (*Ambrosia trifida*).** E. J. Ott*,¹ W. G. Johnson,¹

C. K. Gerber,² D. B. Harder,³ C. L. Sprague³; ¹Department of Botany and Plant Pathology, Purdue University, West Lafayette, IN, ²Department of Agronomy, Purdue University, West Lafayette, IN, ³Department Crop and Soil Science, Michigan State University, East Lansing, MI.

71. Environmental Regulation Of Seed Phenolics And Their Implication For Seed Bank Persistence And Plant Fitness In *Avena Fatua*. R. S. Gallagher*,¹ P. Fuerst,² A. C. Kennedy,³ R. Alldredge,⁴ D. L. Pittmann,⁵ A. M. Snyder,⁵ J. V. Anderson⁶; ¹Crop and Soil Sciences, Pennsylvania State University, University Park, PA, ²Crop and Soil Sciences, Washington State University, Pullman, WA, ³USDA - ARS, Pullman, WA, ⁴Statistics, Washington State University, Pullman, WA, ⁵Crop and Soil Sciences, Washington State University, Pullman, WA, ⁶Crop and Soil Sciences, USDA - ARS, Fargo, ND.

72. Influence Of Tillage Regimen And Calcium Cyanamide Application On Seedling Recruitment And Persistence Of Seed Banks Of Selected Winter Annual Weeds. M. Asai*, T. Shibuya; National Agric. Res. Cntr., Tsukuba, Japan.

73. Characterization Of Target-site Resistance To ACCase-inhibitors In A Mexican Wild Oat (*Avena Fatua*) Biotype. J. P. Ruiz-Santaella*,¹ H. Cruz-Hipólito,¹ J. Wagner,² J. Tafoya,¹ R. De Prado¹; ¹Agricultural Chemistry and Edaphology, University of Cordoba, Córdoba, Spain, ²Weed Science, University of Hohenheim, Stuttgart, Germany.

74. The Role Of Plant-Soil Feedbacks In Native Coastal Sage Shrub Recolonization Of Exotic Annual Grasslands. S. Yelenik*, J. Levine; Ecology, Evolution, and Marine Biology, University of California, Santa Barbara, Santa Barbara, CA.

75. Interaction Of Accelerated Aging And p-Coumaric Acid On Crimson Clover Seed Germination. R. D. Williams*, P. W. Bartholomew; USDA-ARS, Oklahoma City, OK.

76. *Conyza bonariensis* and *Conyza canadensis* Seed Germination as Affected by Soil Depth and Composition, Light, and Temperature. R. A. Vidal*,¹ A. Kalsing,¹ J. P. Ruiz-Santaella,² R. De Prado,² P. J. Christoffoleti³; ¹UFRGS, Porto Alegre, Brazil, ²Agricultural Chemistry and Edaphology Department, University of Córdoba, Córdoba, Spain, ³Universidade de São Paulo, Piracicaba, Brazil.

77. Life Cycle Dynamics of Glyphosate-Resistant Horseweed (*Conyza canadensis*) in a No-till Agroecosystem. V. M. Davis*, W. G. Johnson; Botany and Plant Pathology, Purdue University, West Lafayette, IN.

78. **Growth and Phenology of Two Different Horseweed (*Conyza canadensis*) Biotypes Are Influenced by Shade in a Vineyard.** M. Alcorta,¹ A. Shrestha*,² M. W. Fidelibus,¹ K. J. Hembree³; ¹University of California, Davis, Davis, CA, ²Statewide IPM Program, University of California, Parlier, CA, ³University of California Cooperative Extension, Fresno, CA.
79. **Seedbank Dynamics of Horseweed (*Conyza canadensis*) With No-Till Soybean Production.** M. VanGessel*, B. A. Scott; Univ of Delaware, Georgetown, DE.
80. **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.
81. **Biology, Fecundity, and Response to Glyphosate of Select Indiana and Ohio Common Lambsquarters (*Chenopodium album*) Biotypes.** A. M. Westhoven*,¹ W. G. Johnson,¹ J. M. Stachler,² M. M. Loux²; ¹Botany and Plant Pathology, Purdue University, West Lafayette, IN, ²Horticulture and Crop Science, The Ohio State University, Columbus, OH.
82. **Gene Flow From Glyphosate-Resistant Creeping Bentgrass (*Agrostis stolonifera* L.): Gene Still On The Move.** M. L. Zapiola*, C. A. Mallory-Smith; Crop and Soil Science, Oregon State University, Corvallis, OR.
83. **Competitiveness of Herbicide Resistant and Susceptible Kochia (*Kochia scoparia*) Under Contrasting Management Practices.** F. D. Menalled*, R. G. Smith; Land Resources and Environmental Sciences, Montana State University, Bozeman, MT.
84. **Effects Of Temperature And Water Stress On Glyphosate Efficacy On Pitted Morningglory Biotypes.** L. A. Farno*,¹ D. R. Shaw,¹ I. C. Burke,² K. N. Reddy³; ¹Plant and Soil Sciences, Mississippi State University, Mississippi State, MS, ²Crop and Soil Sciences, Washington State University, Pullman, WA, ³USDA-ARS, SWSRU, Stoneville, MS.
85. **Sympatry and Hybridization of Canola and Birdrape Mustard (*Brassica rapa*) in Québec.** M. J. Simard*,¹ A. Légère,² S. I. Warwick³; ¹Agriculture and Agri-Food Canada (AAFC), Québec, PQ, Canada, ²AAFC, Saskatoon, SK, Canada, ³AAFC, Ottawa, ON, Canada.
86. **Stable Introgression of a Herbicide Resistance Transgene into a Birdrape Mustard (*Brassica rapa*) Population under Natural (non-experimental) Field Conditions.** S. I. Warwick,¹ A. Légère*,² M. J. Simard,³ T. James⁴; ¹Agriculture and Agri-Food Canada (AAFC), Ottawa,

ON, Canada, ²AAFC, Saskatoon, SK, Canada, ³AAFC, Québec, PQ, Canada, ⁴AAFC, Ottawa, ON, Canada.

87. **Survey Of Vegetation And Soils On Irrigation Canals In Southern New Mexico.** C. Fiore*, X. Liu, J. Schroeder, L. Murray, A. Ulery; New Mexico State Univ., Las Cruces, NM.

88. **Genotyping Of SNPs For Target-site Resistance In A Biotype Of Hood Canarygrass (*Phalaris Paradoxa*) Using The Pyrosequencing[™] Technology.** J. P. Ruiz-Santaella*,¹ J. Wagner,² R. De Prado¹; ¹Agricultural Chemistry and Edaphology, University of Cordoba, Córdoba, Spain, ²Weed Science, University of Hohenheim, Stuttgart, Germany.

89. **Weed Communities During Transition to Organic Systems Are Affected by Management Intensity and Soil Amendments.** J. B. Masiunas*, I. Rosa; Natural Resources and Environmental Sciences, University of Illinois, Urbana, IL.

90. **Identification Of Heterozygous Imazethapyr Resistant *Amaranthus Quitensis* Individuals By PCR Amplification Of Specific Alleles.** M. D. Osuna*,¹ J. Wagner,² K. Hurler,² R. De Prado³; ¹UC Davis, Davis, CA, ²University of Hohenheim, Stuttgart, Germany, ³University of Cordoba, Cordoba, Spain.

91. **Genetic Diversity Of Sulfonylurea-resistant And -susceptible *Monochoria vaginalis* Populations In Japan.** T. Imaizumi*,¹ G. X. Wang,¹ T. Ohsako,² T. Tominaga¹; ¹Kyoto Univ., Kyoto, Japan, ²Kyoto Prefectural Univ., Kyoto, Japan.

92. **Population Structure of Putative Rice-Red Rice Hybrid Derivatives in the Southern U.S.** D. R. Gealy*,¹ H. A. Agrama,² L. E. Estorninos,² G. C. Eizenga¹; ¹DBNRRC, USDA-ARS, Stuttgart, AR, ²Rice Research and Extension Center, University of Arkansas, Stuttgart, AR.

93. **Effect Of Cultivars And Growth Stages On The Allelopathic Activity Of Rye (*Secale cereale L.*).** H. Zourraïdi, G. D. Leroux*, S. Buhler; Laval University, Québec, PQ, Canada.

94. **Investigation Of Weed Suppression Potential Of Polymer-Induced Soil Crusting.** J. D. Valletta*, C. M. Boerboom, E. C. Luschei; University of Wisconsin Madison, Madison, WI.

95. **Soil History Mediates Weed Abundance and Crop Productivity.** R. G. Smith*,¹ F. D. Menalled,¹ M. F. Rollins,² B. D. Maxwell,¹ C. A. Zabinski¹; ¹Land Resource-

es and Environmental Sciences, Montana State University, Bozeman, MT, ²Montana State University, Bozeman, MT.

96. **The Strength and Direction of Weed and Crop-soil Feedbacks Vary with Fertilizer and Soil Pasteurization.** M. F. Rollins,¹ R. G. Smith*,² F. D. Menalled²; ¹Montana State University, Bozeman, MT, ²Land Resources and Environmental Sciences, Montana State University, Bozeman, MT.

97. **Non-Indigenous Species And Community Richness, Diversity And Stability: A Case Study With Leafy Spurge (*Euphorbia esula*).** L. J. Rew*, B. D. Maxwell; Land Resources & Environmental Sciences, Montana State University, Bozeman, MT.

98. **The Weed Control Value Of Lateral Root Segmentation In Canada Thistle (*Cirsium Arvense*).** R. Crow, N. Goeser*, E. Luschei; Agronomy, University of Wisconsin, Madison, WI.

99. **Many Tendrils And Vines Use Adhesives In Lieu Of Or In Addition To Twining Or Coiling.** K. C. Vaughn*, A. Bolling, C. G. Meloche; Southern Weed Science Research Unit, USDA-ARS, Stoneville, MS.

100. **Survival and Performance of the Invasive Vine Pale Swallow-wort (*Vincetoxicum rossicum*) Under Two Light Environments and Originating From Seeds of Different Polyembryonic Class.** E. E. Hotchkiss,¹ A. DiTommaso*,¹ D. C. Brainard,² C. L. Mohler¹; ¹Crop and Soil Sciences, Cornell University, Ithaca, NY, ²Horticulture, Cornell University, Ithaca, NY.

101. **Effect Of Caryopses Postion Within The Spikelet On Competition Between Jointed Goatgrass (*Aegilops cylindrica* Host.) And Winter Wheat.** M. P. Quinn*, J. B. Cannon, C. A. Mallory-Smith; Cop Science, Oregon State University, Corvallis, OR.

Section 10. Biocontrol of Weeds

102. **Trichothecene Detection in Cultures of the Bioherbicide *Myrothecium verrucaria*, and in Plant Tissues Treated with Trichothecenes using ELISA.** R. E. Hoagland*, M. A. Weaver, C. D. Boyette; SWSRU, USDA-ARS, Stoneville, MS.

103. **Viability Of The Bioherbicide *Myrothecium verrucaria* In Tank-mix Suspensions: Effect Of Herbicide Formulation, Rate And Suspension Time.** M. A. Weaver*,¹ M. E. Lyn,² C. D. Boyette,¹ R. E. Hoagland¹; ¹Southern Weed Science

Research Unit, USDA ARS, Stoneville, MS, ²USDA ARS, Stoneville, MS.

Section 11. Physiology

104. **A Bioassay For Evaluating Herbicide Volatility From Soil.** D. Penner*, J. Michael; Crop and Soil Sciences, Michigan State University, East Lansing, MI.

105. **Glyphosate-resistant And -susceptible Soybean And Canola Dose-response And Metabolism Relationships With Glyphosate.** V. K. Nandula*,¹ K. N. Reddy,² A. R. Rimando,³ S. O. Duke,³ D. H. Poston¹; ¹Mississippi State University, Stoneville, MS, ²USDA ARS SWSRU, Stoneville, MS, ³USDA ARS NPURU, University, MS.

106. **Flowering Genes: New Tools For Studying Bud Dormancy And Flowering In Perennial Weeds.** D. P. Horvath*, W. S. Chao, J. V. Anderson, M. E. Foley; Plant Science Unit, USDA/ARS/Bioscience Research Lab, Fargo, ND.

107. **Glyphosate Resistance In Several Populations Of *Lolium Spp* From Spain.** H. E. Cruz-Hipólito*, M. A. Diaz, J. P. Ruiz-Santaella, R. A. De Prado, J. Menendez, R. Vidal; Química Agrícola, University of Córdoba, Córdoba, Spain.

108. **Fate Of Bensulfuron-methyl In Biotypes Of *Scirpus Mucronatus* L. Collected In Chilean Paddy Fields.** R. A. De Prado*, M. A. Diaz, J. P. Ruiz-Santaella, M. Aguilar; Química Agrícola, University of Córdoba, Córdoba, Spain.

109. **Penoxsulam Faces Metabolic Resistance In California's Late Watergrass.** M. D. Osuna*,¹ M. Montes,² J. M. Fontanilla,² N. E. Saldain,³ J. W. Eckert,¹ R. De Prado,² A. J. Fischer¹; ¹Department of Plant Sciences, University of California, Davis, CA, ²Departamento de Química Agrícola y Edafología, Universidad de Córdoba, Córdoba, Spain, ³Programa de Arroz, INIA, Treinta y Tres, Uruguay.

110. **Defining the Rate Requirements for Synergism Between Mesotrione and Atrazine in Redroot Pigweed (*Amaranthus retroflexus*).** J. A. Hugie*, G. A. Bollero, P. J. Tranel, D. E. Riechers; Crop Sciences, University of Illinois, Urbana, IL.

111. **Examining The Difference In Tolerance Of Some Weeds To Glyphosate.** M. Singh*, S. D. Sharma; Citrus Research and Education Center, University of Florida, Lake Alfred, FL.

112. **Physiology, Growth, And Swainsonine Content Response To Water-deficit Stress In Woolly Loco (*Astragalus mollissimus*) And Silky Crazyweed (*Oxytropis sericea*).** T. M. Sterling*, A. D. Vallotton; EPPWS, New Mexico State Univ., Las Cruces, NM.

113. **Glyphosate Resistant Weeds in South America: an Historic Perspective.** R. A. Vidal*,¹ R. De-Prado,² J. P. Ruiz-Santaella,² M. Villa-Ayub,³ M. De-La-Vega⁴; ¹UFRGS, Porto Alegre, Brazil, ²University of Cordoba, Cordoba, Spain, ³University Of Buenos Aires, Buenos Aires, Argentina, ⁴University of Tucuman, Tucuman, Argentina.

114. **Mechanism of Glyphosate Resistance in Johnsongrass: Shikimate Accumulation.** M. De La Vega,¹ A. Mamani,¹ D. Fadda,¹ R. A. Vidal*,² M. Argañaraz,¹ M. Villa-Ayub³; ¹Universidad Nacional de Tucuman, San Miguel de Tucuman, Argentina, ²UFRGS, Porto Alegre, Brazil, ³Universidad de Buenos Aires, Buenos Aires, Argentina.

Section 12. Soil and Environment

115. **A Rapid Assay To Detect Enhanced Atrazine Degradation In Soil.** D. Shaner*,¹ B. Henry,² B. Hanson,³ J. Krutz⁴; ¹ARS, USDA, Fort Collins, CO, ²ARS, USDA, Akron, CO, ³ARS, USDA, Parlier, CA, ⁴ARS, USDA, Stoneville, MS.

116. **Mitigation Of Atrazine And Fluometuron In Runoff Through A Constructed Wetland.** M. A. Locke*,¹ M. A. Weaver,² R. M. Zablotowicz,² R. W. Steinriede,³ R. F. Cullum¹; ¹Water Quality & Ecology, USDA-ARS-NSL, Oxford, MS, ²Southern Weed Science, USDA-ARS, Stoneville, MS, ³Water Quality & Ecology, USDA-ARS-NSL, Stoneville, MS.

117. **Glyphosate Reduces the Effect of Residual Herbicides.** R. A. Vidal*,¹ A. L. Nunes,¹ M. M. Trezzi²; ¹UFRGS, Porto Alegre, Brazil, ²Universidade Tecnologica Federal do Paraná, Pato Branco, Brazil.

118. **Accelerated Solvent Extraction of Fluometuron from Selected Soils.** S. Lancaster*, S. Senseman, K. Carson; Department of Soil and Crop Sciences, Texas Agricultural Experiment Station - Texas A&M University System, College Station, TX.

Section 13. Integrated Weed Management

119. **Effect of Sweetclover Cultivars and Management Practices on Weed Infestations and Wheat Yield.** R. E.

Blackshaw*, J. R. Moyer; Sustainable Production Systems, Lethbridge Research Centre, Lethbridge, AB, Canada.

120. **Influence Of Cover Crops On Pest Management In Peanut.** D. L. Jordan,¹ B. L. Robinson*,¹ G. G. Wilkerson,¹ B. B. Shew,² R. L. Brandenburg³; ¹Crop Science, North Carolina State University, Raleigh, NC, ²Plant Pathology, North Carolina State University, Raleigh, NC, ³Entomology, North Carolina State University, Raleigh, NC.

121. **Sweet Corn Hybrid Influences Outcomes of Wild Proso Millet Suppression with Sethoxydim.** M. M. Williams*,¹ R. A. Boydston²; ¹Invasive Weed Management, USDA-ARS, Urbana, IL, ²Vegetable and Forage Crops Research, USDA-ARS, Prosser, WA.

122. **Herbicide and Insect Resistant Traits in Michigan Corn.** K. Schirmacher*,¹ J. J. Kells,¹ C. D. DiFonzo²; ¹Crop and Soil Sciences, Michigan State University, East Lansing, MI, ²Entomology, Michigan State University, East Lansing, MI.

123. **“Digital Sampling”: Mapping Weed Presence in Fallow Fields.** L. J. Wiles*,¹ R. Waltermire,² T. Giles³; ¹Water Management Research Unit, USDA-ARS, Fort Collins, CO, ²USGS, Fort Collins Science Center, Fort Collins, CO, ³Artic Slope Region Corporation Management Services, Fort Collins, CO.

National Research Initiative Projects

124. **Increased Genetic Variation And Evolutionary Potential Drive The Invasion Of An Invasive Grass.** J. Molofsky*, S. Lavergne; Plant Biology, University of Vermont, Burlington, VT.

125. **Predicting Invasion Versus Naturalization In Plant Communities.** M. J. Eppstein*,¹ J. Molofsky²; ¹Computer Science, University of Vermont, Burlington, VT, ²Plant Biology, University of Vermont, Burlington, VT.

126. **Brazilian Pepper, Fire, And The Invasibility Of Pine Savannas: Exploring Nonlinear Effects Through Simulation.** B. Beckage*, C. Ellingwood; Plant Biology, University of Vermont, Burlington, VT.

127. **After The Bottleneck: Rapid Adaptation Of An Invasive Grass To Serpentine Soil Habitats.** K. J. Rice*,¹ H. Meimberg,¹ J. McKay²; ¹Plant Sciences, University of California, Davis, CA, ²Bioagricultural Sciences & Pest Management, Colorado State University, Ft. Collins, CO.

128. **A Landscape-Genetic Approach to the Management of Feral Swine in South Texas.** J. Delgado-Acevedo*, R. W. DeYoung, T. A. Campbell; Wildlife Management, Texas A & M - Kingsville, Kingsville, TX.
129. **Importance Of Past Land Use And Native Seed Limitation On Invasive Plant Abundance And The Maintenance Of Exotic-dominated Rangelands.** B. A. Endress*,¹ S. R. Radosevich,² C. G. Parks³; ¹Forest Science, Oregon State University, La Grande, OR, ²Forest Science, Oregon State University, Corvallis, OR, ³USDA Forest Service, Pacific Northwest Research Station, La Grande, OR.
130. **Developing Density-Dependent Models of Herbivore Effects on Population Dynamics in Carolina Horsenettle (*Solanum carolinense*).** S. L. Halpern*,¹ N. Underwood²; ¹Biology, Pacific University, Forest Grove, OR, ²Biological Sciences, Florida State University, Tallahassee, FL.
131. **Invasion Dynamics of False Brome in the Pacific Northwest.** M. Cruzan*, A. Ramakrishnan, D. Rosenthal, T. Dobberstein; Biology, Portland State University, Portland, OR.
132. **Patterns Of Genotypic And Phenotypic Variation In An Invasive Mustard (*Isatis tinctoria*) Across Its Introduced Range.** H. L. Simpson*, D. L. Marshall; Department of Biology, University of New Mexico, Albuquerque, NM.
133. **Understanding and Limiting the Effects of Invasive Shrubs in Early-Successional Habitats.** J. A. Litvaitis*, T. D. Lee, S. D. Frey; Natural Resources, University of New Hampshire, Durham, NH.
134. **Contribution of Fungal Pathogens to Velvetleaf (*Abutilon theophrasti*) Suppressiveness of Eastern Nebraska Soils.** J. A. Okalebo*,¹ J. L. Lindquist,¹ G. Yuen,² R. Drijber,¹ E. Blankenship³; ¹Department of Agronomy and Horticulture, University of Nebraska, Lincoln, NE, ²Department of Plant Pathology, University of Nebraska, Lincoln, NE, ³Department of Statistics, University of Nebraska, Lincoln, NE.
135. **Site-variability In Canada Thistle (*Cirsium arvense*) Performance And Impact Of Native Insect Herbivores.** L. Qvarnemark*,¹ S. Louda,¹ L. Russell²; ¹School of Biological Sciences, University of Nebraska - Lincoln, Lincoln, NE, ²Biological Sciences, Wichita State University, Wichita, KS.
136. **Developing An Invasive Plant Atlas For The Midsouth.** J. D. Madsen*,¹ G. N. Ervin²; ¹GeoResources Institute, Mississippi State University, Mississippi State, MS, ²Department of Biological Sciences, Mississippi State University, Mississippi State, MS.

137. **Using Multi-Temporal Remote Sensing Analyses to Map and Examine the Dynamics of Phenologically Distinct Weeds in California Rangelands.** C. M. Malmstrom*,¹ C. Barber,² H. S. Butterfield,³ V. Eviner,⁴ K. J. Rice,⁴ T. Robinson,¹ C. J. Stoner,¹ T. Yoshida¹; ¹Department of Plant Biology, Michigan State University, East Lansing, MI, ²South Dakota State University, Brookings, SD, ³The Nature Conservancy, San Luis Obispo, CA, ⁴University of California, Davis, CA.

138. **European And Invasive N. American Populations Of Spotted Knapweed (*Centaurea Maculosa*) Select For Different Arbuscular Mycorrhizal Communities.** D. L. Mummey*, M. C. Rillig; Biological Sciences, The University of Montana, Missoula, MT.

139. **Does Propagule Pressure Change Invasion Risk Under Different Agricultural Management Regimes?** G. R. Houseman*, B. L. Foster; Ecology & Evolutionary Biology, University of Kansas, Lawrence, KS.

140. **Seed Predation Contributes To The Success Of Weed Management In Low-external-input Cropping Systems.** M. Liebman*,¹ P. R. Westerman,¹ A. H. Heggenstaller,¹ P. M. Dixon,² R. G. Hartzler,¹ B. J. Danielson,³ D. N. Sundberg,¹ F. D. Menalled,⁴ A. S. Davis⁵; ¹Agronomy, Iowa State University, Ames, IA, ²Statistics, Iowa State University, Ames, IA, ³Ecology and Evolutionary Biology, Iowa State University, Ames, IA, ⁴Land Resources and Environmental Sciences, Montana State University, Bozeman, MT, ⁵Invasive Weed Management Unit, USDA-ARS, Urbana, IL.

141. **The Role of Arbuscular Mycorrhizal Fungi in Restoring Saltcedar (*Tamarix* spp.) Dominated Riparian Areas: Root Colonization, Soil Inoculum Potentials, and Plant-Soil Feedbacks.** V. B. Beauchamp*, J. D. Bever; Department of Biology, Indiana University, Bloomington, IN.

142. **Land-Use Disturbance And Bottom-Up Controls Of Exotic Forbs In Great Basin Rangelands.** M. J. Germino*,¹ J. Horton,² J. Hill¹; ¹Biology, Idaho State University, Pocatello, ID, ²Biology, University of North Carolina, Asheville, NC.

143. **Temperature, Height Hierarchies, And The Dynamics Of Competition: Predicting And Assessing Variable Yield Loss Outcomes In Maize.** A. J. McDonald*, S. J. Riha; EAS, Cornell University, Ithaca, NY.

144. **Modeling Patterns Of Future Plant Invasions In The New England Region.** N. LaFleur, I. Ibanez*, J. A. Silander, L. Mehrhoff; Ecology and Evolutionary Biology, University of Connecticut, Storrs, CT.

145. **Effects of Land-use History, Fragmentation, And Distance from Mainland on Invasive Plant Composition and Abundance on Reservoir Islands.** S. J. DeWalt*; Biological Sciences, Clemson University, Clemson, SC.

146. **Crossing Between Ornamental Cultivars Creates Invasive Populations In The Recently Spreading Callery Pear (*Pyrus calleryana*).** T. M. Culley*, N. A. Hardiman; Biological Sciences, University of Cincinnati, Cincinnati, OH.

147. **Developing A Genetic System To Clone Seed Dormancy Genes From Red Rice.** M. E. Foley*,¹ X. Gu,² S. F. Kianian³; ¹USDA-ARS, Fargo, ND, ²South Dakota State University, Brookings, SD, ³North Dakota State University, Fargo, ND.

148. **Functional Analysis Of Nonlinearity In Garlic Mustard Demographic Parameters.** A. S. Davis*,¹ D. Landis,² J. Evans,² S. Raghu³; ¹USDA-ARS, Urbana, IL, ²Michigan State University, East Lansing, MI, ³Illinois Natural History Survey, Champaign, IL.

149. **Canada Thistle Phenology: Emergence, Growth, Anthesis, and Death of Shoots.** F. Forcella*, D. Archer, K. Spokas; Soils Lab, USDA-ARS, Morris, MN.

TUESDAY AM, February 6

Employment Opportunities for Weed Scientists and How to Make Yourself More Marketable

Location: Rio Grande Ballroom West

Chair: J. Willis*; Virginia Tech, Blacksburg, VA

9:30 AM

150. **Academic Star Search: How Faculty Get Hired in One University System.** S. A. Senseman*; Soil and Crop Sciences, Texas A & M University, College Station, TX.

9:45 AM

151. **So You Want To Be A Weed Scientist: Thoughts From A Department Head.** N. Rhodes*; University of Tennessee, Knoxville, TN.

10:00 AM

152. **Employment Opportunities for Weed Scientists in the USDA Agricultural Research Service.** J. R. Teasdale*; Sustainable Agricultural Systems Lab, USDA-ARS, Beltsville, MD.

10:15 AM

153. **Hiring, Interviewing, and Job Responsibilities of Federal and Regulatory Organizations.** L. Van Wychen*; Weed Science Society of America, Washington, DC.

10:30 AM

154. **Behavioral Interviewing - An Interview Technique Used at Dow AgroSciences.** R. Dorich*; Dow AgroSciences, Indianapolis, IN.

10:45 AM

155. **Hiring, Interviewing, and on Job Responsibilities of Corporate Organizations - Monsanto Corporation.** M. Pete*; Monsanto Corporation, MO.

11:00 AM

Discussion.

11:15 AM

Techniques and Tips for Communicating Your Science to the Media. H. Menninger*; American Institute of Biological Sciences, Washington, DC.

11:45 AM

Discussion.

Graduate Student Luncheon and Business Meeting

Location: Rio Grande Center

12:00 Noon - 1:30 PM

Graduate Student Luncheon and Business Meeting: Employment Opportunities for Weed Scientists and How to Make Yourself More Marketable.

TUESDAY AM, February 6, 2007 Section 1. Agronomic Crops

Location: Regency East #3

Chair: I. C. Burke*; Washington State University, Pullman, WA

9:30 AM

156. **The Benefits of Using Pendemethalin and Other Residual Herbicides in Roundup Ready Cotton Weed Management.** W. B. McCloskey*; Plant Sciences, Univ. of Arizona, Tucson, AZ.

9:45 AM

157. **Horseweed (*Conyza canadensis*) Management in the Mississippi Delta Utilizing Chemical and Cultural Controls.** T. W. Eubank*,¹ D. Poston,¹ V. Nandula,¹ D. Reynolds,² D. Shaw²; ¹Mississippi State University, Stoneville, MS, ²Mississippi State University, Mississippi State, MS.

10:00 AM

158. **Evaluation of Glyphosate-Resistant Common Waterhemp (*Amaranthus rudis*) Control in Corn.** T. R. Legleiter*, N. H. Monnig, K. W. Bradley; University of Missouri, Columbia, MO.

10:15 AM

159. **Factors that Influence Field Estimates of Glyphosate-Resistant Horseweed (*Conyza canadensis*) Biotypes in Soybean Production.** V. M. Davis*, W. G. Johnson, K. D. Gibson; Botany and Plant Pathology, Purdue University, West Lafayette, IN.

10:30 AM

160. **Fall-applied Herbicides For Glyphosate-tolerant Italian Ryegrass (*Lolium Multiflorum*) Control.** D. H. Poston*, V. Nandula, T. Eubank; Delta Research and Extension Center, Mississippi State University, Stoneville, MS.

10:45 AM

161. **Field and Greenhouse Evaluations of an Experimental Class of 4-Chloropentamide Herbicides Targeting Protoporphyrinogen IX Oxidase.** G. R. Armel*, T. P. Selby, P. L. Rardon, B. Kamireddy, S. K. Rick, L. H. Hageman; Dupont Crop Protection, Newark, DE.

11:00 AM

162. **Performance Interactions Among HPPD- And ALS-inhibiting Herbicides For Control Of Annual Grasses.** A. Kaastra*, P. Sikkema, C. Hall, F. Tardif, C. Swanton; University of Guelph, Guelph, ON, Canada.

11:15 AM

Business Meeting.

TUESDAY AM, February 6

Section 5. Wildland and Aquatic Invasive Plants

Location: Regency East #2

Chair: L. W. Anderson*; USDA-ARS, Davis, CA

9:30 AM

163. **Hill Mustard (*Bunias orientalis*): An Invasive On The Move In Wisconsin.** J. D. Doll*; Agronomy, Univ. of Wisconsin, Madison, WI.

9:45 AM

164. **Clonal Structure Of Invasive Hoary Cress (*Lepidium Draba*) Infestations.** J. Gaskin*; NPARL, USDA/ARS, Sidney, MT.

10:00 AM

165. Response of Creeping River Grass (*Echinochloa polystachya*) to Rice Densities. S.L. Bottoms, E.P. Webster, and J.B. Hensley, Louisiana State University AgCenter, Baton Rouge, LA. S. L. Bottoms*, E. Webster, J. Hensley; Agronomy and Environmental Management, Louisiana State University, Baton Rouge, LA.

10:15 AM

166. Sensitivity of Wild Rice (*Zizania aquatica* L.) to the Aquatic Herbicide Triclopyr. J. D. Madsen*,¹ K. D. Getsinger,² R. M. Wersal¹; ¹GeoResources Institute, Mississippi State University, Mississippi State, MS, ²CEERD-EP-P, U.S. Army Engineer Research and Development Center, Vicksburg, MS.

10:30 AM

167. Influences Of Herbicide/fertilizer Combinations As Repeated Applications To Control Invasive Stoloniferous Kikuyu Grass (*Pennisetum Clandestinum*) In Abandoned Pastures In Hawaii. J. J. K. Leary*,¹ P. G. Scowcroft,² J. DeFrank,³ D. Borthakur¹; ¹Molecular Biosciences and Bioengineering, University of Hawaii at Manoa, Honolulu, HI, ²USDA Forest Service, Institute of Pacific Islands Forestry, Hilo, HI, ³Tropical Plant and Soil Science, University of Hawaii at Manoa, Honolulu, HI.

10:45 AM

168. Reducing Japanese Stiltgrass (*Microstegium vimenium*) Populations with Seedhead Suppression Chemicals. S. D. Askew*, J. B. Willis; Virginia Tech, Blacksburg, VA.

11:00 AM

169. Impacts of San Francisco Invasive Spartina Control Project on Native Plants: Initial Field Assessments. L. W. J. Anderson*; Exotic and Invasive Weed Research, USDA-ARS, Davis, CA.

11:15 AM

170. Controlling Reed Canarygrass Aids In The Re-establishment Of Native Broadleaf Trees In Pacific Northwest Riparian Sites. T. W. Miller*; Washington State University, Mount Vernon, WA.

11:30 AM

171. Adaptive Management Strategies for the Eagleland, Texas Section 1135 Aquatic Vegetation Restoration Project. G. O. Dick*; U.S. Army Engineers Research and Development Center-Lewisville Aquatic Ecosystem Research Facility, Lewisville, TX.

11:45 AM

Business Meeting.

TUESDAY AM, February 6
Section 8. Formulation, Adjuvant and
Application Technology

Location: Regency East #1

Chair: J. S. Sun*; Akzo Nobel Surface Chemistry, Dobbs Ferry, NY

9:30 AM

172. How Spray Particle Size and Distribution are Effected by the Various Nozzle Tips, Herbicides, and Additives. R. N. Klein*, J. A. Golus, A. S. Cox; University of Nebraska, North Platte, NE.

9:45 AM

173. Do Commercial Adjuvants Differ in Effectiveness With Herbicides - 12 Years Later? R. K. Zollinger*; Plant Sciences, North Dakota State University, Fargo, ND.

10:00 AM

Panel Discussion: Building Bridges between Industry and Academia in Formulation and Adjuvant Technology.

11:30 AM

Business Meeting.

TUESDAY PM, February 6
Using Emerging Technologies to
Study Weed Biology

Location: Regency East #1 and 2

Chair: J. Anderson*; USDA-ARS, Fargo, ND

Moderator: W. Chao*; USDA-ARS, Fargo, ND

1:00 PM

174. Introduction to a Symposium on Emerging Technologies. J. Anderson*; USDA-ARS, Fargo, ND.

1:15 PM

175. Genomics Tools and their Integration - from Sequence to Pathway to Phenotype. H. Bohnert*; Crop Sciences Dept, University of Illinois at Urbana, Urbana, IL.

2:00 PM

176. Utilization Of DNA Microarrays In Weed Science Research. P. J. Tranel*, R. M. Lee; Department of Crop Sciences, University of Illinois, Urbana, IL.

2:30 PM

177. Bioinformatics and its Relevance to Weed Science. I. M. Larrinua*; Information Management, Dow AgroSciences LLC, Indianapolis, IN.

3:00 PM

Break.

3:30 PM

178. **Real-Time PCR as a Tool to Study Weed Biology.** W. Chao*; USDA-ARS, Fargo, ND.

4:00 PM

179. **What We Know About Weeds: Insights From Genetic Markers.** T. A. B. Slotta*; University of Maryland University College, Adelphi, MD.

4:30 PM

180. **Principles and Applications of Proteomic Techniques for Weed Science Research.** D. E. Riechers*, Q. Zhang, J. A. Hugie; Crop Sciences, University of Illinois, Urbana, IL.

5:00 PM

Discussion.

TUESDAY PM, February 6

Section 1. Agronomic Crops

Location: Regency East #3

Chair: I. C. Burke*; Washington State University, Pullman, WA

Moderator: W. J. Everman*; North Carolina State University, Raleigh, NC

1:00 PM

181. **Prevalence of a Gene Conferring Sensitivity to Nicosulfuron and Mesotrione in Sweet Corn and Field Corn.** M. M. Williams*,¹ J. K. Pataky,² D. E. Riechers²; ¹Invasive Weed Management Research, USDA-ARS, Urbana, IL, ²Department of Crop Sciences, University of Illinois, Urbana, IL.

1:15 PM

182. **Estimated Benefits Of Triazine Herbicides In Reducing Soil Erosion And Fuel Use In U. S. Corn Production.** R. S. Fawcett*; Fawcett Consulting, Huxley, IA.

1:30 PM

183. **The Emerging Problem of Glyphosate-Resistant Johnsongrass (*Sorghum halepense*) in Argentina: An Account of Detection, Initial Spread and Collaborative Action for its Prevention and Management.** B. E. Valverde*,¹ J. Gressel,² S. Passalacqua,³ J. C. Rodríguez⁴; ¹Agricultural Sciences, Royal Veterinary and Agricultural University, Copenhagen, Denmark, ²Weizmann Institute of Science, Rehovot, Israel, ³Servicio Nacional de Sanidad y Calidad Agroalimentaria (SENASA), Buenos Aires, Argentina, ⁴Compañía Agrícola y Comercial S.H., Tartagal, Argentina.

1:45 PM

184. **Landscape Level Gene Flow From Clearfield Winter Wheat to Conventional Wheats and Jointed Goatgrass.** P. Westra*,¹ P. Burns,² T. Gaines¹; ¹BSPM, Colorado State University, Ft. Collins, CO, ²Soil and Crop Sciences, Colorado State University, Ft. Collins, CO.

2:00 PM

185. **Sorghum Varieties Affect *Striga Hermonthica* Germination Differently.** J. C. Streibig*,¹ A. Nielsen²; ¹Agricultural Sciences, KVL, Taastrup, Denmark, ²Cheminova A/S, Lemvig, Denmark.

2:15 PM

186. **Agronomic Performance, Weed Control, And Mid-season Weed Communities In Glyphosate Resistant Cropping Systems.** R. Gulden*,¹ P. Sikkema,¹ A. Hamill,² F. Tardif,¹ C. Swanton¹; ¹University of Guelph, Guelph, ON, Canada, ²Agriculture and Agri-Food Canada, Harrow, ON, Canada.

2:30 PM

187. **Influence of Seeding Rate and Herbicide Programs on Weed Control, Yield, and Quality of Glyphosate-resistant Alfalfa.** K. W. Bradley*, J. D. Wait, R. L. Kallenbach; Division of Plant Sciences, University of Missouri, Columbia, MO.

2:45 PM

188. **Response of Glyphosate-Resistant and Enhanced Glyphosate-Resistant Cotton (*Gossypium hirsutum*) to Topical Applications of Glyphosate.** D. M. Dodds*, J. A. Huff, J. T. Irby, D. B. Reynolds; Plant and Soil Sciences, Mississippi State University, Mississippi State, MS.

3:00 PM

Break.

3:30 PM

189. **Weed Control In Organic Flax Production.** S. J. Shirtliffe*,¹ E. N. Johnson,² A. N. Robertson,¹ G. G. Rowland³; ¹Plant Sciences, University of Saskatchewan, Saskatoon, SK, Canada, ²Scott Research Farm, Agriculture and Agrifood Canada, Scott, SK, Canada, ³Crop Development Centre, University of Saskatchewan, Saskatoon, SK, Canada.

3:45 PM

190. **Status® (diflufenzopyr + dicamba + isoxadifen-ethyl): A New Broadleaf Herbicide for Corn.** D. E. Westberg*, C. A. Judge, N. T. Fassler, T. D. Klingaman, L. D. Charvat; BASF Corporation, Research Triangle Park, NC.

4:00 PM

191. **Pyroxsulam: A New Postemergence Herbicide For Wheat.** R. E. Gast*, M. S. Krieger, N. Simmons, N. Keeney; Dow AgroSciences, Indianapolis, IN.

4:15 PM

192. **Postemergence Grass Control with Pyroxsulam in Spring and Durum Wheat in Canada.** W. R. McGregor*, N. M. Satchivi, L. T. Juras, G. C. Turnbull, D. D. Hare, B. A. Wintonyk, G. A. Lehmann, G. R. Rawluk, V. Leuschen; Product Technology, Dow AgroSciences Canada Inc., Calgary, AB, Canada.

4:30 PM

193. **Combinations for Controlling Texasweed in Drill-Seeded Rice.** R. K. Godara*, B. J. Williams, A. B. Burns; Northeast Research Station, Louisiana State University Agricultural Center, Saint Joseph, LA.

4:45 PM

194. **Annual Grass Control in Clearfield Rice.** B. J. Williams*, R. K. Godara, A. B. Burns; Northeast Research Station, Louisiana State University Agricultural Center, Saint Joseph, LA.

5:00 PM

195. **Optimum GAT™ - New Technology for Integrated Weed Management in Row Crops.** D. R. Forney*,¹ D. W. Saunders,¹ T. K. Chicoine,¹ J. M. Green,¹ C. B. Hazel²; ¹Crop Protection, DuPont, Newark, DE, ²Pioneer HiBred International, Johnston, IA.

TUESDAY PM, February 6 **Section 10. Biocontrol of Weeds**

Location: Rio Grande Ballroom West

Chair: W. Bruckart*; USDA-ARS, Ft. Detrick, MD

1:00 PM

196. **Discovery of an *Agrobacterium* sp. Infecting Diffuse Knapweed (*Centaurea diffusa*) in Oregon.** F. M. Eskandari,¹ W. L. Bruckart*,¹ E. Postnikova,¹ A. J. Sechler,¹ N. W. Schaad,¹ E. M. Coombs²; ¹Foreign Disease-Weed Science Research Unit, USDA-ARS, Ft. Detrick, MD, ²Noxious Weed Control, Oregon Department of Agriculture, Salem, OR.

1:15 PM

197. **Exploratory Surveys in Paraguay for New Biocontrol Agents of Brazilian Peppertree, *Schinus terebinthifolius* (Anacardiaceae): Preliminary Results.** J. P. Cuda*,¹ J. C. Medal,¹ B. Garcete-Barret²; ¹Entomology & Nematology Department, University of Florida, Gainesville, FL,

²Museo Nacional de Historia Natural del Paraguay, San Lorenzo, Paraguay.

1:30 PM

198. **Efficacy, Heat-stability and Safety Studies of A Mycelial Preparation of *Drechslera gigantea*, A Bioherbicide Agent for Weedy Grasses.** S. Chandramohan*,¹ R. Charudattan²; ¹Agronomy, Univ of Florida, Belle Glade, FL, ²Plant pathology, Univ of Florida, Gainesville, FL.

1:45 PM

199. **Use of Fungal Bioherbicides and Vinegar to Control Pigweeds in South Texas.** P. J. Moran*; Beneficial Insects Reseach Unit, USDA-ARS, Weslaco, TX.

2:00 PM

200. **Occurrence of Weed-Suppressive Microorganisms in Soils of Crop Production Fields.** R. J. Kremer*,¹ S. Kim,² K. Park²; ¹Cropping Systems & Water Quality Unit, USDA-ARS, Columbia, MO, ²Soil Science, University of Missouri, Columbia, MO.

2:15 PM

201. **Suppression of Canada Thistle in Organic Cropping Systems with Sudangrass.** J. B. Masiunas*, A. Bicksler; Natural Resources and Environmental Sciences, University of Illinois, Urbana, IL.

2:30 PM

202. **Emerging Success Of Biological Control Of Saltcedar In The Western U.s.** C. J. DeLoach*,¹ P. Moran,² A. Knutson,³ D. C. Thompson,⁴ J. Michels,⁵ M. Muegge,⁶ D. Eberts,⁷ R. I. Carruthers⁸; ¹Agricultural Research Service, U.S. Department of Agriculture, Temple, TX, ²Agricultural Research Service, U.S. Department of Agriculture, Weslaco, TX, ³Texas A&M Research and Extension Center, Dallas, TX, ⁴Dept. of Entomology, Plant Pathology & Weed Science, New Mexico State University, Las Cruces, NM, ⁵Agricultural Research & Extension Center, Texas A&M Experiment Station, Bushland, TX, ⁶Texas A&M Extension Center, Ft. Stockton, TX, ⁷Bureau of Reclamation, U.S. Department of Interior, Denver, CO, ⁸Agricultural Research Service, U.S. Department of Agriculture, Albany, CA.

2:45 PM

Business Meeting.

3:00 PM

Break.

3:30 PM

203. **Melaleuca Decline And Plant Diversity Increase Following The Natural Enemy Impact On Melaleuca Stands In Florida.** M. B. Rayamajhi*, P. D. Pratt, T. K. Van, T. D.

Center; Agriculture Research Service, United States Department of Agriculture, Fort Lauderdale, FL.

3:45 PM

204. Giant Reed (*Arundo Donax*); An Invasive Weed Of The Rio Grande Basin. J. Goolsby*,¹ R. Garcia,¹ A. Kirk,² W. Jones,³ J. Everitt,¹ C. Yang,¹ P. Parker,⁴ D. Spencer,⁵ A. Pepper,⁶ J. Manhart,⁶ D. Taring,⁶ G. Moore,⁶ F. Nibling⁷; ¹USDA-ARS, Weslaco, TX, ²European Biological Control Laboratory, USDA-ARS, Montpellier, France, ³USDA-ARS, Montpellier, France, ⁴USDA-APHIS, Edinburg, TX, ⁵USDA-ARS, Albany, CA, ⁶Texas A&M University, College Station, TX, ⁷Bureau of Reclamation, US DOI, Denver, CO.

4:00 PM

S-1001 Meeting Discussion Topic: Development of Plant Pathogens as Bioherbicides for Weed Control.

TUESDAY PM, February 6 National Research Initiative Project Meeting

Location: Rio Grande Ballroom East

Chair: M. A. Bowers*; CSREES, Arlington, VA

1:15 AM

205. Population Dynamics Of Density Dependent Garlic Mustard Populations. T. Knight*,¹ E. Pardini,¹ J. Drake²; ¹Department of Biology, Washington University, St. Louis, MO, ²Institute of Ecology, University of Georgia, Athens, GA.

1:30 PM

206. Tests Of Top-down And Bottom-up Controls And Interactions On Densities Of Spotted Knapweed (*Centaurea Stoebe*). T. R. Seastedt, D. G. Knochel*; Ecology and Evolutionary Biology, Univeristy of Colorado at Boulder, Boulder, CO.

1:45 PM

207. Using Citizen Volunteers to Sample Exotic Species Occurrence in Deciduous Forests: Issues and Preliminary Results. J. G. Ehrenfeld*,¹ R. C. Jordan,¹ E. M. McGowan,² E. Goodell³; ¹Ecology, Evolution, and Natural Resources, Rutgers University, New Brunswick, NJ, ²Palisades Interstate Park Commission, Bear Mountain, NY, ³New York/New Jersey Trail Conference, Mahway, NJ.

2:00 PM

208. Non-native *Tamarix Ramosissima* Recruitment Along The Colorado River: Interactions Among Flow Regime And Geomorphology. P. J. Weisberg*,¹ L. E. Stevens,² S. G.

Mortenson,¹ G. Siemion²; ¹University of Nevada - Reno, Reno, NV, ²Grand Canyon Wildlands Council, Flagstaff, AZ.

2:15 PM

209. Improving Weed Germination Models By Incorporating Seed Microclimate And Translocation By Tillage. K. Spokas*, F. Forcella, D. Archer, D. Peterson, S. Miller; Agricultural Research Service, USDA, Morris, MN.

2:30 PM

Panel Discussion: How to make Research, Education, and Extension relevant to the management and control of weedy and invasive species.

3:00 PM

Break.

3:30 PM

NRI Project Poster Session and Discussion.

Wednesday AM, February 7 Section 2. Horticultural Crops

Location: Regency East #1

Chair: F. P. Salzman*; IR-4 Project, Princeton, NJ

10:00 AM

210. Acetic acid for Weed Control in Potato (*Solanum tuberosum*, L.). J. A. Ivany*; Agriculture and Agri-Food Canada, Charlottetown, PE, Canada.

10:15 AM

211. Preemergence Common Lambsquarters and Hairy Nightshade Control in Potato with Dimethenamid-p at Three Rates Alone or in Two-way Tank Mixtures and a Comparison of Control with Dimethenamid-p, S-metolachlor, or Metolachlor in Three-way Tank Mixtures. P. J. S. Hutchinson*, O. V. Alexandrov; PSES, University of Idaho, Aberdeen, ID.

10:30 AM

212. Nutrient Trap Intercrops For Potato Production Systems. K. A. Pfaff*, A. J. Bussan; Horticulture, University of Wisconsin-Madison, Madison, WI.

10:45 AM

213. Identifying the Best Sulfonylurea Herbicide for Weed Control and Crop Tolerance in Sulfonylurea-Resistant Chicory (*Cichorium intybus*). R. Wilson*,¹ B. Desprez,² M. T. Edwards³; ¹Dept. Agronomy & Horticulture, University of Nebraska, Scottsbluff, NE, ²Ingenieur Agronome, Florimond Desprez, Cappelle-en-Pevele,

France, ³Field Technology Representative, DuPont, Broomfield, CO.

11:00 AM

214. **New Formulations Of Pendimethalin And Oxyfluorfen Improve Onion Crop Safety In Tank Mixes With Flumioxazin.** B. H. Zandstra*, E. J. Ott; Department of Horticulture, Michigan State University, East Lansing, MI.

11:15 AM

Business Meeting.

Wednesday AM, February 7 Section 3. Turf and Ornamental Crops

Location: Regency East #3

Chair: J. S. McElroy*; University of Tennessee, Knoxville, TN

9:30 AM

215. **Evaluation of Rimsulfuron and Nicosulfuron for Perennial Ryegrass (*Lolium perenne*) Control in Bermudagrass (*Cynodon dactylon*) Golf Course Fairways.** B. W. Compton*, J. B. Willis, S. D. Askew; Virginia Tech, Blacksburg, VA.

9:45 AM

216. **Ryegrass Control In Bermudagrass (*Cynodon Dactylon* × *C.transvaalensis*) Turf Shifted From Over Seeding Fairways.** X. Guang*; East China Weed Technology Institute, Nanjing, China.

10:00 AM

217. **Weed Management in Warm-Season Turfgrass with Sulfosulfuron.** B. J. Brecke*, K. C. Hutto, J. B. Unruh; West Florida Research and Education Center, University of Florida, Jay, FL.

10:15 AM

218. **Perennial Ryegrass (*Lolium perenne*) Physiological and Visual Response to Mesotrione as Influenced by Temperature.** M. J. Goddard*, D. B. Ricker, S. D. Askew; Virginia Tech, Blacksburg, VA.

10:30 AM

219. **Pendimethalin Movement Through Container Media And Field Soil.** J. F. Derr*, L. D. Simmons; Hampton Roads AREC, Virginia Tech, Virginia Beach, VA.

10:45 AM

220. **Effects of Perennial Ryegrass (*Lolium perenne* L.) Overseeding into Kentucky Bluegrass (*Poa pratensis* L.) Athletic Turf for Weed Suppression.** E. M. A. Elford*, F. J.

Tardif, E. M. Lyons; Plant Agriculture, University of Guelph, Guelph, ON, Canada.

11:00 AM

221. Effect of Mowing on Biological and Chemical Weed Control in Turf. A. K. Watson*,¹ M. H. Abu-Dieyeh²; ¹Plant Science, McGill University, Ste-Anne-de-Bellevue, PQ, Canada, ²Biological Science and Biotechnology, Hashemite University, Zerqa, Jordan.

11:15 AM

Business Meeting.

Wednesday AM, February 7 Section 6. Regulatory Aspects

Location: Regency East #2

Chair: L. Fowler*; USDA, APHIS, PPQ, Cary, NC

9:30 AM

222. National Invasive Species Council Activities. L. C. Williams*; Dept. of the Interior, National Invasive Species Council, Washington, DC.

9:45 AM

223. The Functions and Products of a Weed Team Within USDA-APHIS-PPQ. L. Fowler*, B. Caton, A. Koop, B. Spears; USDA, APHIS, PPQ, Raleigh, NC.

10:00 AM

224. The New Pest Advisory Group Decision Process For Developing Responses To New Invasive Pest Threats. B. M. Spears*, A. L. Fowler, A. L. Koop; PERAL, USDA-APHIS-PPQ-CPHST, Raleigh, NC.

10:15 AM

225. The Federal Noxious Weed Program in FY 2006 in the Western States, an Overview. D. R. Givens*; USDA, APHIS, PPQ, Fort Collins, CO.

10:30 AM

226. Giant Hogweed Eradication in Pennsylvania and Surrounding States. M. A. Bravo*; Weed Science Department, Pennsylvania Department of Agriculture, Harrisburg, PA.

10:45 AM

227. The Caddo Lake Giant Salvinia Task Force - A Community Based Effort for Early Detection and Rapid Response to Giant Salvinia on Caddo Lake, Louisiana And Texas. R. G. Westbrooks*,¹ D. Shellman,² J. Canson²; ¹U.S. Geological Survey, Whiteville, NC, ²Caddo Lake Institute, Marshall, TX.

11:00 AM

228. **Ground/aerial Mapping Of Spread Rates For Cogon Grass (*Imperata Cylindrica*) In First And Sixth Year Timber Harvest Sites In Northwestern Florida.** C. L. Ramsey*, L. F. Kennaway; National Weed Management Lab, USDA-APHIS, Fort Collins, CO.

11:15 AM

Business Meeting.

Wednesday AM, February 7

Section 13. Integrated Weed Management

Location: Rio Grande Ballroom West

Chair: C. H. Koger*; Mississippi State University, Stoneville, MS

9:30 AM

229. **Restoration of Retired Agricultural Lands in the San Joaquin Valley, California Using Herbicides and Activated Charcoal.** K. Lair*,¹ N. Ritter,² A. Howard²; ¹Environmental Applications and Research Group, Bureau of Reclamation, USDI, Denver, CO, ²Endangered Species Recovery Program, California State Univ. - Stanislaus, Fresno, CA.

9:45 AM

230. **Biology and Management of Cut-leaved Teasel (*Dipsacus laciniatus*) in Missouri.** D. J. Bentivegna*, R. J. Smeda; Division Plant Science, University of Missouri, Columbia, MO.

10:00 AM

231. **Canola Hybrids Augment Integrated Weed Management.** K. N. Harker*,¹ J. T. O'Donovan,¹ R. E. Blackshaw,² S. Brandt,³ E. N. Johnson,³ G. W. Clayton²; ¹Agriculture & Agri-Food Canada, Lacombe, AB, Canada, ²Agriculture & Agri-Food Canada, Lethbridge, AB, Canada, ³Agriculture & Agri-Food Canada, Scott, SK, Canada.

10:15 AM

232. **Management of Giant Ragweed (*Ambrosia trifida*) Biotypes in Glyphosate-Resistant Soybean in the Eastern Cornbelt.** A. M. Westhoven*,¹ W. G. Johnson,¹ J. M. Stachler,² M. M. Loux²; ¹Botany and Plant Pathology, Purdue University, West Lafayette, IN, ²Horticulture and Crop Science, The Ohio State University, Columbus, OH.

10:30 AM

233. **Integrated Weed Management In Dry Beans.** P. H. Sikkema*, N. Soltani; University of Guelph Ridgetown Campus, Ridgetown, ON, Canada.

10:45 AM

234. **Effect Of Hairy Nightshade (*Solanum Sarrachoides*) Presence On Potato Nematode, Insect, And Disease Problems.** R. A. Boydston*, H. Mojtahedi, J. M. Crosslin, C. R. Brown, T. Anderson; USDA ARS, Prosser, WA.

11:00 AM

235. **Winter Annual Weed Management and Cropping System Effects on Soybean Cyst Nematode, the Weed Seedbank, and Crop Yield.** J. E. Creech*, W. G. Johnson, V. A. Mock, V. R. Ferris, J. Faghihi, A. Westphal; Department of Botany and Plant Pathology, Purdue University, West Lafayette, IN.

11:15 AM

Business Meeting.

**Wednesday AM, February 7
Roundtable Discussions - New Journal on
Invasive Plant Science and Management**

Location: Regency Ballroom West

11:30 AM

Roundtable Discussions - New Journal on Invasive Plant Science and Management.

**Wednesday PM, February 7
Integrated Weed Management Revisited**

Location: Rio Grande Ballroom West

Chair: D. Sanyal*; Monsanto Company, Monmouth, IL

1:00 PM

236. **Realities of IWM Concepts and Implementations: Current Status.** P. C. Bhowmik*,¹ D. Sanyal,² R. L. Anderson³; ¹Plant, Soil and Insect Sciences, University of Massachusetts, Amherst, MA, ²Monmouth Center, Monsanto Company, Monmouth, IL, ³2923 Medary Avenue, NCARL, Brookings, SD.

1:30 PM

237. **Integrated Weed Management- Knowledge Based Weed Management Systems.** C. Swanton*, K. Mahoney, R. Gulden; University of Guelph, Guelph, ON, Canada.

2:00 PM

238. **Research and Farmer Adoption of IWM on the Canadian Prairies.** R. E. Blackshaw*; Agriculture & Agri-Food Canada, Lethbridge, AB, Canada.

2:30 PM

239. **Effect Of Hairy Nightshade (*Solanum Sarrachoides*) Presence On Potato Nematode, Insect, And Disease Problems.** R. Boydston*, H. Mojtahedi, J. Crosslin, C. Brown, T. Anderson; USDA-ARS, Prosser, WA.

3:00 PM

Break.

3:30 PM

240. **Crop Diversity And No-till Improve Weed And Disease Management In The Central Great Plains.** R. L. Anderson*; USDA-ARS, Brookings, SD.

4:00 PM

241. **Impact of Herbicide Application on Plant Disease Management.** D. Sanyal*; Monsanto Company, Monmouth, IL.

4:30 PM

Discussion.

Wednesday PM, February 7

Section 9. Weed Biology and Ecology

Location: Regency East #2

Chair: J. Anderson*; USDA-ARS, Fargo, ND

1:00 PM

242. **An Alternative View Of Plant Competition.** C. Swanton*, J. Liu, P. Sikkema; University of Guelph, Guelph, ON, Canada.

1:15 PM

243. **Effects of Tillage, Cultivation, and Herbicide Rate on Spatial Aggregation of Weeds.** C. L. Mohler*, A. DiTommaso; Crop and Soil Science, Cornell University, Ithaca, NY.

1:30 PM

244. **Spatial Variability in Crop Density and its Effect on the Demography of Two Annual Weeds.** E. C. Luschei*,¹ L. Sosnoskie²; ¹Agronomy, University of Wisconsin - Madison, Madison, WI, ²Coastal Plain Experiment Station, University of Georgia, Tifton, GA.

1:45 PM

245. **Microarray Analysis Of Velvetleaf Grown In Monoculture Or In Competition With Corn.** D. P. Horvath*,¹ S. A. Clay²; ¹Plant Science Unit, USDA/ARS/Bioscience Research Lab, Fargo, ND, ²South Dakota State Univ., Brookings, SD.

2:00 PM

246. **Simulation Of Wheat-wild Radish Interference With Apsim.** S. V. Eslami*,¹ G. Gill,² J. Wish,³ B. Bellotti,⁴ G. McDonald⁵; ¹Agronomy, Birjand University, Birjand, Iran (Islamic Republic of), ²Agriculture and Animal Science, Adelaide University, Adelaide, Australia, ³Primary Industries and Fisheries, Toowoomba, Australia, ⁴Agriculture and Animal Science, Adelaide University, Adelaide, Australia, ⁵Plant and Food Science, Adelaide University, Adelaide, Australia.

2:15 PM

247. **Long-term Weed Population Changes In Wheat In Response To Cultural Practices.** R. F. Norris*; Plant Science, University of California, Davis, CA.

2:30 PM

248. **Confronting An Individual Based Plant Model With Data.** B. Maxwell*, R. Smith, E. Lehnhoff, F. Pollnac, K. Harbuck, J. Sciegienka, M. Buteler; Land resources and Environmental Science, Montana State University, Bozeman, MT.

2:45 PM

249. **Predicting Late-Season Emergence for Improved Giant Ragweed (*Ambrosia trifida*) Management in Ohio.** B. J. Schutte*,¹ E. E. Regnier,¹ S. K. Harrison,¹ J. T. Schmoll,¹ F. Forcella,² K. Spokas²; ¹Horticulture and Crop Science, The Ohio State Univ., Columbus, OH, ²USDA-ARS North Central Soil Conservation Research Laboratory, Morris, MN.

3:00 PM

Break.

3:30 PM

250. **Common Cocklebur Emergence: Impact of Tillage and Crop Canopy Development.** J. K. Norsworthy*,¹ M. J. Oliveira²; ¹Crop, Soils, and Environmental Sciences, University of Arkansas, Fayetteville, AR, ²Entomology, Soils, and Plant Sciences, Clemson University, Clemson, SC.

3:45 PM

251. **Seed Availability and Weed Cover for Birds on Different Winter Crop Stubbles in England.** E. J. P. Marshall*, T. M. West; Marshall Agroecology Ltd, Winscombe, United Kingdom.

4:00 PM

252. **Interaction Of Salt, Temperature, Light And Dormancy On Giant Foxtail (*Setaria faberii*) Seed Dormancy.** Jack Dekker And Jim Gilbert, Iowa State Univ., Ames. J.

Dekker*, J. Gilbert; Agronomy, Iowa State University, Ames, IA.

4:15 PM

253. **Increasing Minimal Winter Temperatures Linked To The Spread Of Kudzu (*pueraria Montana* (lour.) Var. *Lobata*) In North America.** L. Ziska*,¹ H. Coiner²; ¹USDA, Beltsville, MD, ²University of Toronto, Toronto, ON, Canada.

4:30 PM

254. **Effect of Sheep Rumen Digestion on Germination and Viability of Common Weed Seeds of Lebanon.** M. Haidar, C. Gharib, F.T. Sleiman, M. Sidahmed*; Faculty of Agricultural and Food Sciences, American University of Beirut, Beirut, Lebanon.

4:45 PM

255. **Evaluating the Efficiency of Different Weed Seed Extraction Methods in Soil Seed Bank Studies.** H. Rahimian Mashhadi*,¹ M. Beheshtian,¹ E. Zand²; ¹Agronomy and plant breeding, University of Tehran, Karaj, Iran (Islamic Republic of), ²Plant Pest and Diseases Inst., Tehran, Iran (Islamic Republic of).

5:00 PM

Business Meeting.

Wednesday PM, February 7 Section 11. Physiology

Location: Regency East #3

Chair: W. Chao*; USDA-ARS, Fargo, ND

Moderator: J. D. Burton*; North Carolina State Univ, Raleigh, NC

1:00 PM

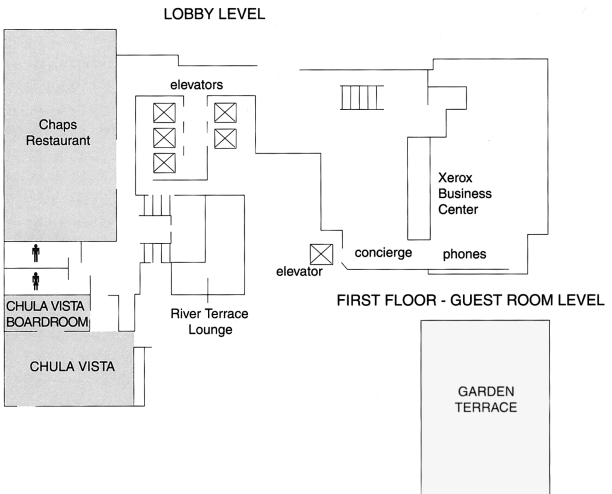
256. **Response of Wild Oat (*Avena fatua*) Acetyl-CoA Carboxylase Mutants to Pinoxaden.** M. J. Christoffers*, S. N. Pederson; Department of Plant Sciences, North Dakota State University, Fargo, ND.

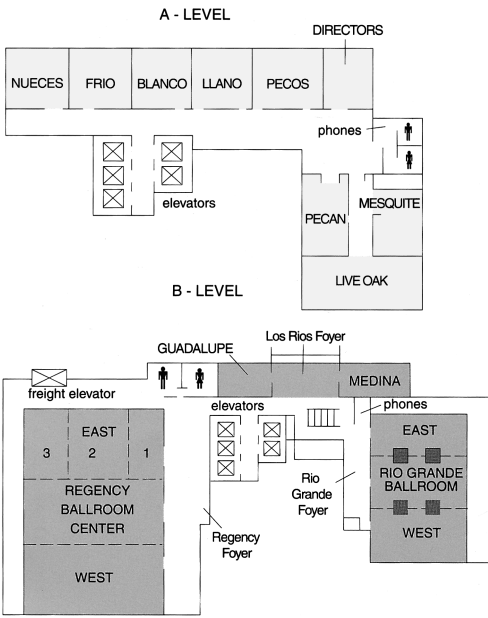
1:15 PM

257. **Response Of Glyphosate-resistant (roundup Ready[®]) Crops To Glyphosate.** H. Yasuor*, J. Riov, B. Rubin; R. H. Smith Institute of Plant Sciences and Genetics in Agriculture, Rehovot, Israel.

1:30 PM

258. **Assessment of Acetyl-CoA Carboxylase Mutations Using Partial Gene Replacement in Yeast.** A. V. Kandikonda*, M. J. Christoffers; North Dakota State University, Fargo, ND.





1:45 PM

259. **Resistance to Acetohydroxyacid Synthase Inhibitors in Giant Foxtail (*Setaria faberii*).** J. Laplante*, O. Guerra Peraza, I. Rajcan, F. J. Tardif; Plant Agriculture, University of Guelph, Guelph, ON, Canada.

2:00 PM

260. **Weed Resistance to Herbicides in Brazil: an Overview one Decade Later.** R. A. Vidal*,¹ A. Merotto,¹ J. P. Ruiz-Santaella,² R. De Prado²; ¹UFRGS, Porto Alegre, Brazil, ²Agricultural Chemistry and Edaphology Department, University of Córdoba, Córdoba, Spain.

2:15 PM

261. **The Use of Gene Expression to Investigate Maize/Velvetleaf Interactions.** S. A. Clay*,¹ D. Horvath,² R. Gulden³; ¹Plant Science, South Dakota State University, Brookings, SD, ²USDA-ARS, Fargo, ND, ³Univ. Guelph, Guelph, ON, Canada.

2:30 PM

262. **Global Analysis Of Gene Expression In Auxinic Herbicide-resistant *Kochia Scoparia*.** W. E. Dyer*, B. A. Keith, E. Kalinina; Department of Plant Sciences and Plant Pathology, Montana State University, Bozeman, MT.

2:45 PM

263. **Glutathione *S*-Transferase Proteins *TtGSTU1* and *TtGSTU2* on Chromosome 6DS Confer Safener-Induced Tolerance to Dimethenamid in Cultivated Wheat.** Q. Zhang*, D. E. Riechers; Crop Sciences, University of Illinois at Urbana-Champaign, Urbana, IL.

3:00 PM

Break.

3:30 PM

264. **Fate of Nicosulfuron and Rimsulfuron in Green Foxtail (*Setaria viridis*) when Applied in Combination with Mesotrione.** C. L. Schuster*, K. Al-Khatib, J. Dille; Agronomy, Kansas State University, Manhattan, KS.

3:45 PM

265. **Arkansas Glyphosate-resistant Common ragweed.** C. Brewer*, L. Oliver; University of Arkansas, Fayetteville, AR.

4:00 PM

266. **Elucidating the Physiological Mechanism for Mesotrione-Atrazine Synergism in Triazine-Sensitive and Triazine-Resistant Redroot Pigweed (*Amaranthus Retroflexus*).** J. A. Hugie*, D. E. Riechers; Crop Sciences, University of Illinois, Urbana, IL.

4:15 PM

267. **Biosynthesis Of The Allelochemical Sorgoleone In Isolated Secretary Root Hairs Of *S. Bicolor*.** F. E. Dayan*,¹ S. B. Watson,¹ D. Nanayakkara²; ¹NPURU, USDA-ARS, University, MS, ²NCNPR, Univ. of Mississippi, University, MS.

4:30 PM

268. **An Enzyme Assay and GIS as Tools to Characterize and Determine the Spatial Distribution of Glyphosate-Resistant Horseweed (*Conyza canadensis*) in the San Joaquin Valley of California.** B. D. Hanson*,¹ A. Shrestha,² K. C. Pelham,³ D. L. Shaner⁴; ¹USDA-ARS, Parlier, CA, ²University of California, Kearney Agricultural Center, Parlier, CA, ³California State University, Fresno, CA, ⁴USDA-ARS, Fort Collins, CO.

4:45 PM

269. **Physiological Response of Glyphosate-Resistant Palmer Amaranth (*Amaranthus palmeri*).** J. B. Haider*,¹ W. K. Vencill,¹ S. Culpepper,² T. L. Grey²; ¹Crop & Soil Sciences, University of Georgia, Athens, GA, ²Crop & Soil Sciences, University of Georgia, Tifton, GA.

5:00 PM

Business Meeting.

Wednesday PM, February 7 WSSA Society Business Meeting

Location: Regency East #1

5:15 PM

WSSA Society Business Meeting.

Thursday AM, February 8 Nursery Stock vs Invasive Plant: Which is it, and why do we care?

Location: Regency East #2 and 3

Chair: A. V. Tasker*; USDA APHIS, Riverdale, MD

Chair: N. Jackson*; Consultant, Corona, CA

8:00 AM

270. **The Nursery Trade and the Invasive Plant Issue: Overview.** N. E. Jackson*; Invasive Weed Awareness Coalition, Corona, CA.

8:30 AM

271. **The Revision of Quarantine 37; Addressing the Risks Associated with the Importation of Plants for Planting.** P. P.

Lehtonen*, A. T. Tschanz; Plant Protection and Quarantine, APHIS, USDA, Riverdale, MD.

9:00 AM

272. Weed Smuggling, Permit Compliance, and Enforcement Issues-USDA's Smuggling and Trade Compliance (SITC) and Investigative and Enforcement Services (IES) Roles. C. Mueller*,¹ C. Armiger²; ¹PPQ, USDA-APHIS, Riverdale, MD, ²IES, USDA-APHIS, Riverdale, MD.

9:30 AM

273. Plant Inspection System and the Impact of State Noxious and Invasive Plants Law on the Nursery Industry in Texas. A. P. Bhatkar*; Plant Quality Programs, Regulatory Division, Texas Department of Agriculture, Austin, TX.

10:00 AM

Break.

10:30 AM

274. The Pulling Together Initiative: A Texas-sized Partnership to Manage Invasive Species. D. E. Waitt*; Lady Bird Johnson Wildflower Center, Austin, TX.

11:00 AM

275. The Voluntary Codes of Conduct Project: What Have We Learned So Far. V. Vartanian*; Missouri Botanical Gardens & The Nature Conservancy, St. Louis, MO.

11:30 AM

Discussion.

THURSDAY PM, February 8 Nursery Stock vs Invasive Plant: Which is it, and why do we care?

Location: Regency East #2 and 3

1:00 PM

276. The Codes Of Conduct: Issues For The Nursery Industry. C. Regelbrugge*; American Nursery & Landscape Assoc., Washington, DC.

1:30 PM

277. The Codes of Conduct for Botanic Gardens: The University of Washington Experience. S. H. Reichard*; University of Washington Botanic Gardens, University of Washington, Seattle, WA.

2:00 PM

278. California Horticultural Invasives Prevention (cal-hip): A State-wide Model For Voluntary Action. T. Kempton*; Cal-HIP, Sustainable Conservation, San Francisco, CA.

2:30 PM

279. **If You Don't Know It, Don't Grow It.** P. Cox*; San Antonio Botanical Garden, San Antonio, TX.

3:00 PM

Break.

3:30 PM

280. **When Getting Wet and Going Wild is Totally Inappropriate.** M. Meyers*; Pet Industry Joint Advisory Council, Washington, DC.

4:00 PM

281. **A Green Industry Perspective on Invasive Species.** B. Brown*, T. Wyatt; Texas Nursery & Landscape Assoc, Austin, TX.

4:30 PM

Discussion.

Thursday AM, February 8 Section 2. Horticultural Crops

Location: Rio Grande Ballroom East

Chair: F. P. Salzman*; IR-4 Project, Princeton, NJ

8:30 AM

282. **Season-long Interference Of American Black Nightshade (*Solanum americanum*) With Watermelon.** C. A. Gilbert, W. M. Stall*, C. A. Chase, R. Charudattan; Horticultural Sciences Dept., University of Florida, Gainesville, FL.

8:45 AM

283. **Tolerance of Transplant Cantaloupe and Watermelon Grown on Bareground and LDPE Plastic Mulch to Preplant Applications of Fomesafen and Terbacil.** A. W. MacRae*,¹ A. S. Culpepper,¹ J. K. Phillips,² K. L. Lewis³; ¹Crop and Soil Sciences, University of Georgia, Tifton, GA, ²Southwest District - CES, University of Georgia, Wilcox Co., GA, ³Southwest District-CES, University of Georgia, Tifton, GA.

9:00 AM

284. ***Amaranthus dubius* Interference with Direct-seeded Watermelon.** J. Morales-Payan*; Horticulture, University of Puerto Rico, Mayaguez, Mayaguez, PR.

9:15 AM

285. **Differential Sensitivity Of Processing Spinach Varieties To Clopyralid Tank-mixes.** R. W. Wallace*,¹ A. K. Petty²; ¹Dept. of Horticultural Sciences, Texas A & M University,

Lubbock, TX, ²Texas Agricultural Experiment Station, Texas A & M University, Lubbock, TX.

9:30 AM

286. **Weed Control and Western Pecan Tree Tolerance to Flumioxazin, Oxyfluorfen, and Pendamethalin.** R. J. Rector*, W. B. McCloskey; Plant Science, Univ. of Arizona, Tucson, AZ.

9:45 AM

287. **Weed Control Possibilities And Harvest Strategies For The Omega-3 Fatty Acid Producing Crop Common Purslane (*Portulacca oleracea* var. *sativa*).** W. Henry*,¹ D. C. Nielsen,¹ J. G. Foster,² F. C. Calderon,¹ M. F. Vigil¹; ¹Central Great Plains Research Station, USDA-ARS, Akron, CO, ²Appalachian Farming Systems Research Center, USDA-ARS, Beckley, WV.

10:00 AM

Break.

10:30 AM

288. **Sweet Corn (*Zea mays*) Hybrid Tolerance to Mesotrione, Nicosulfuron, and Foramsulfuron.** J. D. Bollman*,¹ C. M. Boerboom,¹ D. W. Morishita,² M. J. VanGessel,³ R. R. Bellinder,⁴ G. L. Jordan,⁵ W. Cooley,⁶ R. L. Becker⁷; ¹Department of Agronomy, University of Wisconsin-Madison, Madison, WI, ²University of Idaho, Twin Falls, ID, ³University of Delaware, Georgetown, DE, ⁴Cornell University, Ithaca, NY, ⁵A.C.D.S. Research, North Rose, NY, ⁶Colorado State University, Delta, CO, ⁷University of Minnesota, St. Paul, MN.

10:45 AM

289. **Evaluation of a Machine-guided Cultivator to Improve Herbicide and Hoeing Efficiency in Vegetables.** S. A. Fennimore*,¹ R. F. Smith,² L. J. Tourte,³ J. S. Rachuy¹; ¹Plant Sciences, University of California Davis, Salinas, CA, ²Monterey County, University of California Cooperative Extension, Salinas, CA, ³Santa Cruz County, University of California Cooperative Extension, Watsonville, CA.

11:00 AM

290. **Integrating Nonchemical Options to Manage Purple Nutsedge (*Cyperus rotundus*) in Organic Vegetable Production.** C. A. Chase*, R. L. Koenig, J. E. Pack, C. L. Brinton; Horticultural Sciences Department, University of Florida, Gainesville, FL.

11:15 AM

291. **Injury Symptoms from Simulated Drift to Oak Species and Hackberries.** J. B. Masiunas*, J. Samtani, J. Appleby;

Natural Resources and Environmental Sciences, University of Illinois, Urbana, IL.

11:30 AM

292. **The IR-4 Project: Update of Weed Control Projects.** F. P. Salzman*, M. Arsenovic, D. L. Kunkel; IR-4 Project, Princeton, NJ.

Thursday AM, February 8
Section 4. Pastures, Rangelands,
Forests and Right-of-Ways

Location: Regency East #1

Chair: E. D. Dickens*; UGA, Statesboro, GA

8:00 AM

293. **Aminopyralid Efficacy on Canada Thistle (*Cirsium arvense*) and Soil Mobility in North Dakota.** L. W. Samuel*, R. G. Lym; Plant Sciences, North Dakota State University, Fargo, ND.

8:15 AM

294. **Impact of Application Timing on Bush-Type Blackberry Control.** J. Ferrell*,¹ B. Sellers²; ¹Agronomy, University of Florida, Gainesville, FL, ²Agronomy, University of Florida, Ona, FL.

8:30 AM

295. **Disturbance Size and Propagule Pressure Influence Colonization Success of Yellow Toadflax (*Linaria vulgaris*).** Erik A. Lehnhoff*, Bruce D. Maxwell and Lisa J. Rew, Montana State Univ., Bozeman. E. A. Lehnhoff*; Montana State University, Bozeman, MT.

8:45 AM

296. **Using Sulfometuron, Terbacil, and Chlorsulfuron for Herbaceous Weed Control Over Recently Planted Oak Seedlings.** A. W. Ezell*; Forestry, Miss. State Univ., Miss. State, MS.

9:00 AM

297. **Split-season Herbaceous Weed Treatments On Three E. Texas Loblolly Pine Sites.** Jimmie L. Yeiser, Stephen F. Austin State University, Nacogdoches, Tx. J. L. Yeiser*; Forestry, Stephen F. Austin State University, Nacogdoches, TX.

9:15 AM

298. **Six Year Survival And Growth Of An Old-field Planted Longleaf Pine (*Pinus Palustris*) Stand Following Various Herbaceous Weed Control Treatments And Timing.** E. D. Dickens*,¹ B. C. McElvany,¹ D. J. Moorhead²; ¹Warnell

School of Forestry and Natural Resources, UGA, Statesboro, GA, ²Warnell School of Forestry and Natural Resources, UGA, Tifton, GA.

9:30 AM

Business Meeting.

Thursday AM, February 8
Section 9. Weed Biology and Ecology

Location: Rio Grande Ballroom West

Chair: J. Anderson*; USDA-ARS, Fargo, ND

Moderator: D. Horvath*; USDA/ARS/Bioscience Research Lab, Fargo, ND

8:00 AM

299. **Flowering Synchrony And Intraspecific Gene Flow Between Cropped And Volunteer Wheat (*Triticum Aestivum* L.).** C. J. Willenborg*,¹ R. C. Van Acker²; ¹Plant Science, University of Manitoba, Winnipeg, MB, Canada, ²Plant Agriculture, University of Guelph, Guelph, ON, Canada.

8:15 AM

300. **Detectable Gene Flow in Commercial Rice Fields and Impact of Clearfield Technology on Red Rice Infestation.** N. R. Burgos*,¹ R. C. Scott,² J. B. Guice³; ¹Crop, Soil, and Environmental Sciences, University of Arkansas, Fayetteville, AR, ²Crop, Soil, and Environmental Sciences, Arkansas Cooperative Extension Service, Fayetteville, AR, ³BASF Corp., Research Triangle, NC.

8:30 AM

301. **Gene Transfer Rate From CL Rice To Diverse Red Rice Biotypes.** V. K. Shivrain*,¹ N. R. Burgos,¹ K. L. Smith,² D. R. Gealy,³ H. L. Black³; ¹Crop, Soil, and Environmental Sciences, University of Arkansas, Fayetteville, AR, ²University of Arkansas, Monticello, AR, ³USDA-ARS, Stuttgart, AR.

8:45 AM

302. **Genomic Variation and Genetic Relationships Among Pitted Morningglory (*Ipomoea lacunosa* L.) Accessions.** I. C. Burke*,¹ J. Shultz,² J. Ray,² C. T. Bryson,³ K. N. Reddy³; ¹Department of Crop and Soil Sciences, Washington State University, Pullman, WA, ²Crop Genetics and Production Research Unit, USDA-ARS, Stoneville, MS, ³Southern Weed Science Research Unit, USDA-ARS, Stoneville, MS.

9:00 AM

303. **Differences In Relative Tolerance To Glyphosate In Eleven Pitted Morningglory Accessions.** K. N. Reddy*,¹ I. C. Burke,² C. T. Bryson¹; ¹Southern Weed Science

Research Unit, USDA-ARS, Stoneville, MS, ²Department of Crop and Soil Sciences, Washington State University, Pullman, WA.

9:15 AM

304. **Glyphosate-resistance In *Conyza canadensis* And *C. bonariensis* In Brazil.** P. J. Christoffoleti*, M. S. Moreira, M. Nicolai, S. J. P. Carvalho; Crop Science, Univeristy of Sao Paulo, Piracicaba, Brazil.

9:30 AM

305. **Ozone X Glyphosate Interaction In Glyphosate-tolerant and -resistant Horseweed (*Conyza canadensis*) In California.** D. A. Grantz*, A. Shrestha, H. Vu; Kearney Agricultural Center, University of California, Parlier, CA.

9:45 AM

306. **Quantifying the Proportion of *C. canadensis* Seed Escaping a Field.** J. Dauer*,¹ D. Mortensen,¹ E. Shields,² M. VanGessel³; ¹Crop and Soil Science, The Pennsylvania State University, University Park, PA, ²Entomology, Cornell University, Ithaca, NY, ³Crop and Soil Science, University of Delaware, Georgetown, DE.

10:00 AM

Break.

10:30 AM

307. **Competitiveness of Protox-resistant Common Waterhemp (*Amaranthus rudis*).** M. G. Duff*, K. Al-Khatib, D. Peterson; Agronomy, Kansas State University, Manhattan, KS.

10:45 AM

308. **Goosegrass (*Eleusine Indica*): First Report Of Target Site Resistance To Accase Inhibitors In A Brazilian Biotype.** J. P. Ruiz-Santaella*,¹ R. Vidal,² J. Wagner,³ R. De Prado¹; ¹Agricultural Chemistry and Edaphology, University of Cordoba, Córdoba, Spain, ²Plant Sciences, Federal University of Rio Grande do Sul, Porto Alegre, Brazil, ³Weed Science, University of Hohenheim, Stuttgart, Germany.

11:00 AM

309. **Resistance To Accase Inhibitors In A Biotype Of Hedgehog Dogtail (*Cynosurus Echinatus*) Is Due To A Reduced Sensitivity At The Target Site Level.** J. P. Ruiz-Santaella*,¹ J. Wagner,² J. Díaz,³ N. Espinoza,³ R. De Prado¹; ¹Agricultural Chemistry and Edaphology, University of Cordoba, Córdoba, Spain, ²Weed Science, University of Hohenheim, Stuttgart, Germany, ³INIA, Temuco, Chile.

11:15 AM

310. **Phytoavailability of Allelochemicals as Affected by Companion Compounds in Soil-Microbial Systems.** N. Tharayil*, P. C. Bhowmik, B. Xing; Plant, Soil, & Insect Sciences, University of Massachusetts Amherst, Amherst, MA.

11:30 AM

311. **Is Catechin a “Novel Weapon” of *Centaurea maculosa*?** S. O. Duke*,¹ A. C. Blair,² R. D. Johnson,¹ K. Meepagala,¹ D. Cook,¹ S. J. Nissen,² R. A. Hufbauer,² G. R. Brunk²; ¹NPURU, USDA, ARS, University, MS, ²Dept. Bioagricultural Sci. & Pest Manag., Colorado State Univ., Ft. Collins, CO.

11:45 AM

312. **Differences Between Sites in the Tumbling Dispersal of Diffuse Knapweed (*Centaurea diffusa* Lam.) may be Attributable to Biotic Causes.** D. V. Baker*, K. G. Beck; Colorado State University, Fort Collins, CO.

Thursday AM, February 8 Section 12. Soil and Environment

Location: Regency East #1

Chair: W. Mersie*; Virginia State Univ, Stoneville, MS

10:30 AM

313. **Environmental Fate of Glyphosate in Modern Agricultural Systems.** C. Accinelli*,¹ W. C. Koskinen,² M. J. Sadowsky,³ J. M. Becker,² A. Vicari¹; ¹Department of Agro-Environmental Science and Technology, Univ. of Bologna, Bologna, Italy, ²Soil and Water Management Research Unit, USDA-ARS, St. Paul, MN, ³Department of Soil, Water, and Climate and BioTechnology Institute, Univ. of Minnesota, St. Paul, MN.

10:45 AM

314. **Determination Of Sulfosulfuron Residues In Soil Under Wheat Crop By A Novel And Cost Effective Method And Evaluation Of Its Carryover Effect.** S. B. Singh*, G. Kulshrestha; IARI, New Delhi , INDIA, Delhi, India.

11:00 AM

315. **Enhanced Atrazine Degradation In The Mississippi Delta: Development, Maintenance, And Impact On Weed Control.** L. J. Krutz*,¹ R. M. Zablutowicz,¹ I. C. Burke,² K. N. Reddy,¹ C. H. Koger,³ M. A. Weaver¹; ¹SWSRU, USDA-ARS, Stoneville, MS, ²Crop and Soil Science, Washington State University, Pullman, WA, ³CGPRU, USDA-ARS, Stoneville, MS.

11:15 AM

316. **Enhanced Degradation of Atrazine in Mississippi Delta soils: Effects of Glufosinate and Ammonium Sulfate on Atrazine Mineralization.** R. M. Zablotowicz*, L. J. Krutz, M. A. Weaver, K. N. Reddy; SWSRU, USDA-ARS, Stoneville, MS.

11:30 AM

Business Meeting.

Thursday PM, February 8 Section 2. Horticultural Crops

Location: Rio Grande Ballroom East

Chair: F. P. Salzman*; IR-4 Project, Princeton, NJ

1:00 PM

Herbicide Vegetable Roundtable.

3:00 PM

Break.

3:30 PM

Herbicide Vegetable Roundtable.

Thursday PM, February 8 Section 7. Teaching and Extension

Location: Rio Grande Ballroom West

Chair: D. Jordan*; NC State University, Raleigh, NC

1:00 PM

317. **Eliminating a Good Field for Peanut Weed Control Research Through Poor Resistance Management.** D. Jordan*, B. Robinson; NC State University, Raleigh, NC.

1:15 PM

318. **Assessing Long-Term Viability of Roundup Ready Technology as a Foundation for Cropping Systems.** D. R. Shaw*,¹ W. A. Givens,¹ P. D. Gerard,¹ L. A. Farno,¹ J. W. Wilcut,² B. G. Young,³ R. G. Wilson,⁴ M. D. K. Owen,⁵ S. C. Weller,⁶ W. G. Johnson⁶; ¹Plant & Soil Sciences, Mississippi State University, Mississippi State, MS, ²Crop Sciences, North Carolina State University, Raleigh, NC, ³Agriculture, Southern Illinois University, Carbondale, IL, ⁴Agronomy, University of Nebraska, Lincoln, NE, ⁵Agronomy, Iowa State University, Ames, IA, ⁶Crop Sciences, Purdue University, West Lafayette, IN.

1:30 PM

319. Grower Perceptions Of Glyphosate Resistant Weeds: Awareness Of Resistance Management Strategies And Obstacles To Their Implementation. M. S. Gumz*,¹ S. C. Weller,¹ W. G. Johnson,² M. D. K. Owen,³ D. R. Shaw,⁴ L. A. Farno,⁴ J. W. Wilcut,⁵ R. G. Wilson,⁶ B. G. Young⁷; ¹Horticulture and Landscape Architecture, Purdue Univ., West Lafayette, IN, ²Botany and Plant Pathology, Purdue Univ., West Lafayette, IN, ³Agronomy, Iowa State Univ., Ames, IA, ⁴Plant and Soil Sciences, Mississippi State Univ., Mississippi State, MS, ⁵Crop Science, North Carolina State Univ., Raleigh, NC, ⁶Agronomy and Horticulture, Univ. of Nebraska, Scottsbluff, NE, ⁷Plant, Soil and Agricultural Systems, Southern Illinois Univ., Carbondale, IL.

1:45 PM

320. Grower Assessments Of Long-Term Viability Of Roundup Ready Technology As A Foundation For Cotton Production. S. B. Clewis*,¹ W. J. Everman,¹ D. L. Jordan,¹ J. W. Wilcut,¹ L. A. Farno,² W. A. Givens,² P. D. Gerard,² D. R. Shaw,² B. G. Young,³ R. G. Wilson,⁴ M. D. K. Owen,⁵ S. C. Weller⁶; ¹Crop Science, NC State University, Raleigh, NC, ²Mississippi State University, Starkville, MS, ³Southern Illinois University, Carbondale, IL, ⁴University of Nebraska, Scottsbluff, NE, ⁵Iowa State University, Ames, IA, ⁶Purdue University, West Lafayette, IN.

2:00 PM

321. Grower Surveys to Assess Weed Management Practices Associated with the Adoption of Roundup Ready Corn or Soybean Systems. G. R. Kruger*,¹ S. C. Weller,² W. G. Johnson,¹ M. D. K. Owen,³ D. R. Shaw,⁴ L. A. Farno,⁴ J. W. Wilcut,⁵ R. G. Wilson,⁶ B. G. Young⁷; ¹Botany and Plant Pathology, Purdue University, West Lafayette, IN, ²Horticulture, Purdue University, West Lafayette, IN, ³Agronomy, Iowa State University, Ames, IA, ⁴Plant and Soil Sciences, Mississippi State University, Mississippi State, MS, ⁵Crop Science, North Carolina State University, Raleigh, NC, ⁶Agronomy and Horticulture, University of Nebraska, Scottsbluff, NE, ⁷Plant, Soil and Agricultural Systems, Southern Illinois University, Carbondale, IL.

2:15 PM

322. Temporal Aspects of Weed Populations in over 15 Roundup Ready Continuous Cotton Fields in North Carolina and Mississippi. W. J. Everman*,¹ S. B. Clewis,¹ D. L. Jordan,¹ J. W. Wilcut,¹ W. A. Givens,² L. A. Farno,² P. D. Gerard,² D. R. Shaw,² B. G. Young,³ R. G. Wilson,⁴ M. D. K. Owen,⁵ S. C. Weller⁶; ¹Crop Science, North Carolina State University, Raleigh, NC, ²Mississippi State University, Starkville, MS, ³Southern Illinois University, Carbondale, IL, ⁴University of Nebraska, Scottsbluff, NE, ⁵Iowa

State University, Ames, IA, ⁶Purdue University, West Lafayette, IN.

2:30 PM

323. Glyphosate Resistant Weeds And Resistance Management Strategies: An Indiana Grower Perspective. W. G. Johnson*, K. Gibson; Botany and Plant Pathology, Purdue University, West Lafayette, IN.

2:45 PM

Discussion.

3:00 PM

Break.

3:30 PM

324. Farm Level Profitability of Weed and Insect Management Strategies in Transgenic and Nontransgenic Corn. K. Schirmacher*,¹ S. M. Swinton,² J. J. Kells,¹ C. D. DiFonzo³; ¹Crop and Soil Sciences, Michigan State University, East Lansing, MI, ²Agricultural Economics, Michigan State University, East Lansing, MI, ³Entomology, Michigan State University, East Lansing, MI.

3:45 PM

325. Canada Thistle (*Cirsium Arvense* L.) Control On Conservation Reserve Program Land. J. A. Fawcett*, L. G. Brenneman; Johnson County Extension, Iowa State University, Iowa City, IA.

4:00 PM

326. Using The Weed Contest Concept To Train Georgia County Extension Agents. E. P. Prostko*, A. S. Culpepper; Department of Crop & Soil Sciences, The University of Georgia, Tifton, GA.

4:15 PM

327. Electronic Manuscript Review: Faster, Easier, and More Helpful with a Tablet PC. M. G. Burton*, J. W. Wilcut, D. L. Jordan; Crop Science, NC State University, Raleigh, NC.

4:30 PM

Business Meeting.