

## SPAR - Invited Presentations

### Invited Presentations:

1. Reddy, V.R., D. Fleisher, D. Timlin and K.R. Reddy. 2010. Climate information, crop modeling and sectoral perceptions on food security. **GTZ & Colombo meeting, Colombo**, 6-11 June 2010, Sri Lanka.
2. Reddy, K.R. 2010. Controlled environmental facilities for sweetpotato plant process quantification, crop modeling, and climate change. **USDA-SCRI Sweetpotato Project**. Wyndham Orlando Resort, 5 February, 2010, Orlando, Florida, USA.
3. Reddy, V.R., D. Fleisher, D. Timlin, V. Ambumozhi, K.R. Reddy, and Y. Yang. 2009. Monitoring the vulnerability and the need for adaptation planning for food security, **Regional Workshop on Mainstreaming Climate Change Adaptation into Developmental Planning**, 14-17 April 2009, Asian Development Bank Institute, Tokyo, Japan.
4. Reddy, K.R. 2009. Increasing US cotton competitiveness through genomics – Physiological responses, **USDA-CSREES Program Committee**, 25<sup>th</sup> February, 2009, Life Sciences and Biotechnology Institute, Mississippi State University, Mississippi State, MS, USA.
5. Reddy, K. R. 2009. Climate change and crop productivity: what is at stake? **Students and faculty, Department of Agriculture, Alcorn State University**, 23 February, 2009, Alcorn State, MS, USA.
6. Reddy, K.R. 2009. Controlled environment facilities for plant process quantification and modeling, **Southern Association of Agricultural Scientists – Biochemistry and Biotechnology Division**, 31<sup>st</sup> January to 3<sup>rd</sup> February, 2009, The Westin Peachtree Plaza, Atlanta, GA, USA.
7. Reddy, K.R. 2009. An approach to increase corn yield and quality under rainfed conditions in Mississippi by foliar applications of glycine betaine to alleviate drought and high temperature stresses and aflatoxin accumulation, **Mississippi Corn Promotion Board Members**, 28 January, 2009, Bost Building, Mississippi State University, Mississippi State, MS, USA.
8. Reddy, K.R. and V.G. Kakani. 2008. Searching for genotypic variability among crops to global environmental change: Challenges and opportunities. **Golden Jubilee Conference on Challenges and Emerging Strategies for Improving Plant Productivity, Indian Society for Plant Physiology**, 12-15 November, 2008, New Delhi, India.

9. Reddy, K. R. Climate change and crop productivity: What is at stake? **Students and faculty, Birsa Agricultural University**, 14 November, 2008, Ranchi, Jharkhand, India.
10. Reddy, K.R. 2008. Climate change and crop productivity: Challenges and opportunities. **Students and faculty, Sri Venkateswara Agricultural College, 19 November, 2008**, Tirupati, India.
11. Reddy, K.R. 2008. Crop responses global climate change: Challenges and opportunities. **Students and faculty, Tamil Nadu Agricultural University, 23<sup>rd</sup> November, 2008**, Coimbatore, TN, India.
12. Reddy, K.R. 2008. Controlled environment facilities for plant process quantification, global change, and crop modeling. **Students and faculty, Tamil Nadu Agricultural University, 23<sup>rd</sup> November, 2008**, Coimbatore, TN, India.
13. Reddy, K.R. 2008. Crop productivity in changing world: Challenges and opportunities. **Students and faculty, Acharya N.G. Ranga Agricultural University, 4<sup>th</sup> December**, Rajendra Nagar, Hyderabad, India.
14. Reddy, K.R. Crop responses to abiotic responses: Tools and methods. **Crop Genetics and Production Research Unit, USDA-ARS**, 30 May 2008, Stoneville, Mississippi, USA.
15. Kakani, V.G., K.R. Reddy, K.J. Boote and D.J. Lang. 2008. Leaf and canopy photosynthesis and biomass of big bluestem and bahiagrass in response to temperature. **The Pan American Congress on Plants and Bioenergy**, June 22-25, 2008, Merida, Mexico.
16. Reddy, K.R. 2007. Climate change and crop productivity: Challenges and opportunities. **The Digital Biology Learning Community (DBLC)**, John Gresham Room, Mississippi State University Library, 11 September 2007, Mississippi State, MS, USA.
17. Reddy, K.R. and V.R. Reddy. 2007. Controlled environment facilities for plant process quantification and modeling: Advantages and limitations. **The ASA-CSSA-SSSA International Annual Meetings**, 4-8 November 2007, New Orleans, Louisiana, USA.
18. Reddy, K. R. 2007. Cotton growth, development and physiology as affected by nitrogen nutrition and elevated carbon dioxide: Developing functional algorithms for modeling. 37<sup>th</sup> Biological Systems Simulation Conference, April 17-19, 2007, Beltsville, Maryland, USA.

19. Reddy, K. R. 2007. Searching for genotypic variability among crops to global environmental change. **104<sup>th</sup> Annual Meeting of The Southern Association of Agricultural Scientists, Biochemistry and Biotechnology Division**, Mobile Convention Center, February 5, 2007, Mobile, AL, USA.
20. Reddy, K. R. and V. G. Kakani. 2006. Quantifying the limitations of environmental factors on cotton production using environmental productivity index concept. **The 36<sup>th</sup> Biological Systems Simulation Conference**, April 11-13, 2006. Fort Collins, Colorado, USA.
21. Reddy, K. R. 2006. Climate change and crop productivity: Challenges and opportunities. **Students and faculty, Natural Resources and Ecology Laboratory and the USDA-UV-B Monitoring Program, Colorado State University**, 11 April, 2006, Fort Collins, Colorado, USA.
22. Reddy, K. R. 2006. Crop responses to changes in UV-B radiation, carbon dioxide and temperature. Workshop on **The Molecular Aspects of Plant Secondary Metabolism in Response to UV-B Radiation**. 2-3 February, San Antonio, TX, USA.
23. Reddy, K. R. 2005. Climate and crop productivity: challenges and opportunities – An agrometeorological perspective. **Students and Faculty of the Department of Meteorology, Atmospheric Sciences and General Sciences, Jackson State University**, 24 October, 2005, Jackson, Mississippi, USA.
24. Reddy, V. R., V. Anbumozhi and K. R. Reddy. 2005 (**Keynote Address**). Achieving food security and mitigating global environmental change: Is there a role for crop models in decision making? **International Agricultural Engineering Conference (IAEC)**, 6-9 December 2005, Bangkok, Thailand.
25. Reddy, K. R. 2005. Crop responses global environmental change. **Students and scientists, Division of Plant Physiology, Indian Agriculture Research Institute**, 5 July 2005, New Delhi, India.
26. Reddy, K. R. 2005. Climate change and crop productivity: Challenges and opportunities. **Students and Faculty, Sri Venkateswra University**, 18 July 2005, Tirupati, Andhra Pradesh, India.
27. Reddy, K. R. 2005. Crops and climate change: Responses from cellular to canopies. **Students and Faculty, School of Life Sciences, University of Hyderabad**, 23 July 2005, Hyderabad, Andhra Pradesh, India.
28. Reddy, K. R. and V. G. Kakani. 2005. Responses to climate change of C4 and C3 grass species native to South-central region. **National Institute of**

**Global Environmental Change, Principal Investigator Workshop**, June 16, 2005, Omni Royal Orleans Hotel, New Orleans, LA, USA.

29. Reddy, K. R., V. G. Kakani and R. L. King. 2005. Effect of different temperatures and carbon dioxide levels on biomass accumulation and partitioning in Big Bluestem (*Andropogon gerardii*), **Third USDA Symposium on Greenhouse gases and Carbon Sequestration in Agriculture and Forestry**, March 21 - 24, 2005, Wyndham Baltimore - Inner Harbor , Baltimore, MD.
30. Reddy, K. R. 2004. Responses to climate change of C4 and C3 grass species native to South-central region. **National Institute of Global Environmental Change, Principal Investigator Workshop**, 18 June 2004, Omni Royal Orleans Hotel, New Orleans, LA, USA.
31. Reddy, K. R., V. G. Kakani, D. Zhao, S. Koti and W. Gao. 2003. Cotton crop responses to changes in UV-B radiation, carbon dioxide, and temperature. **Special Symposium on UV Effects on Terrestrial Ecosystems, 31<sup>st</sup> Annual Meeting American Society for Photobiology**, 5-9 July 2003, Baltimore Inner Harbor, Baltimore, Maryland, USA.
32. Reddy, K. R. 2003. Cotton responses to global environmental change. **100<sup>th</sup> Annual Meeting of The Southern Association of Agricultural Scientists, Biochemistry and Biotechnology Division**, Adams Mark Hotel, 3<sup>rd</sup> February 2003, Mobile, AL, USA.
33. Reddy, K. R. 2003. Climate change and crop production. **Millennium Lecture Series, Sri Venkateswara Agricultural College, N. G. Ranga Agricultural University**, 20<sup>th</sup> January 2003, Tirupathi, Andhra Pradesh, India.
34. Reddy, K. R., A. G. Richardson, V. G. Kakani, D. Zhao and K. Sailaja. 2003. Exploring the use of environmental productivity index for crop production and modeling, **2<sup>nd</sup> International Congress of Plant Physiology on Sustainable Plant Productivity under Changing Environment**, 8-12 January 2003, Indian Council of Agricultural Research, New Delhi, India.
35. Reddy, K. R. 2002. Remote sensing for cotton management. ASTA/RSTC Precision Agriculture Tour, September 10 & 11, 2002, **Black Belt Experiment Station Mississippi State University, Mississippi State, MS 39762**, USA.
36. Reddy, K.R, V. G. Kakani, Duli Zhao and Wei Gao. 2002. Cotton responses to UV-B radiation: experimentation and modeling. **The SPIE's Third International Asia-Pacific Symposium on Remote Sensing of the**

**Atmosphere, Ocean, Environment, and Space**, 23 – 27 October 2002, China.

37. Reddy, K. R. 2002. The Soil-Plant-Atmosphere-Research (SPAR) facility – A tool for plant science research and modeling. **32<sup>nd</sup> Biological Systems Simulation Work Group Symposium/Workshop on Remote Sensing and Modeling Applications for Natural Resource Management**, 10-13 March 2002, Mississippi State, MS, USA. Vol. 32: p. 43.
38. Reddy, K. R., Doma, P. Hodges, H. F. and M. Y. L. Boone. 2001. Impact of climate change on US cotton production: an analysis and assessment. **12<sup>th</sup> Global Warming International Conference, 8-11 April 2001, Cambridge, UK.**
39. Reddy, K. R. 2001. Food and agriculture impacts, reforestation and carbon sinks. Closing Plenary Session. **12<sup>th</sup> Global Warming International Conference, 8-11 April 2001, Cambridge, UK.**
40. Reddy, K. R. 2000. Soil-Plant-Atmosphere-Research (SPAR): a unique source of process-level data for environmental physiology and crop modeling. **USDA UV-B Monitoring Program, Natural Resource Ecology Laboratory, Colorado State University, Fort Collins, Colorado, 4 October 2000.**
41. Reddy, K. R. 2000. Modeling plant-environmental interactions. **USDA-ARS, Great Plains Systems Research Laboratory, Colorado, 4 October 2000.**
42. Reddy, K. R. 2000. Impacts of climate change on cotton production: Modeling methodologies and Applicability, **National Center for Atmospheric Research (NCAR), Environmental and Societal Impacts Group, Boulder, Colorado, 3 October, 2000.**
43. Reddy, K. R. 2000. Impacts of climate change on cotton production: a South-central assessment, **National Center for Atmospheric Research (NCAR), Boulder, Colorado, 3 October 2000.**
44. Reddy, K. R., H. F. Hodges, and B. A. Kimball. 1998. Climate Change and cotton growth. **First International Agronomy Congress, November 23-27, 1998, New Delhi, India.**
45. Reddy, K. R. 1998. Crop responses to the environment. **Department of Botany, Sri Venkateswara University, (Faculty, Research Scholars and Graduate Students), 2 December 1998, Tirupati - 517 502, AP, India.**

46. Reddy, K. R. and V. R. Reddy. 1998. Cotton Phenology and Growth Processes: Model Development. **World Cotton Research Conference - 2, 6-12 September 1998, Athens, Greece.**
47. Reddy, V. R. and K. R. Reddy. 1998. Soil-Plant-Atmosphere-Research (SPAR) Facility - A unique source of data for process-level crop modeling. **International Agricultural and Engineering Conferences, 7-10 December 1998, Bangkok, Thailand.**
48. Reddy, V. R. and K. R. Reddy. 1997. Developing suitable database for comprehensive simulation models. **Laboratory of Tropical Agriculture, Graduate School of Agriculture, 22 September 1997, Kyota University, Kyota, Japan.**
49. Reddy, K. R. 1997. Plant responses to environmental factors. **Wes Watkins Agricultural and Experimental Station, 9 September 1997, Lane, Oklahoma State University and USDA Scientists at Lane, OK.**
50. Reddy, K. R. 1997. Cotton responses to environmental factors. **Department of Horticulture and Environmental Sciences, 9 September 1997, Lane, Oklahoma State University and USDA Scientists at Lane, OK.**
51. Reddy, K. R., H. F. Hodges and J. M. McKinion. 1997. Water and Nutrient Deficits, Crop Yields and Climate Change. **8<sup>th</sup> International Global Warming Conferences and Expo, 27 - 30 May 1997, Columbia University, New York, NY, USA.**
52. Reddy, K. R. 1997. Climate change and crop productivity. **Department of Biological Sciences, Mississippi State University, (Faculty and Graduate Students), 14 February, Mississippi State, MS.**
53. Reddy, K. R. and H. F. Hodges. 1997. Soil-Plant-Atmosphere-Research Facility: A data acquisition resource for processes-level crop modeling. **Workshop on International Collaboration on cotton modeling research, USDA-ARS Crop Simulation Research Unit, Department of Agricultural and Biological Engineering, Mississippi State University and CIRAD-CA-URSC, France, 13-17 January 1997.**
54. Reddy, K. R. 1996. Modeling techniques. **Department of Botany, Sri Venkateswara University, (Faculty, Research Scholars and Graduate Students), 28 November, Tirupati - 517 502, AP, India.**
55. Reddy, V. R and K. R. Reddy. 1997. Cotton responses to nitrogen nutrition, carbon dioxide and temperature. **XIII International Plant Nutrition Colloquium, September 13-19, Tokyo, Japan.**

56. Reddy, K. R. 1996. Food and fiber production in the 21st century: Are we ready? **Mississippi State University, Plant and Soil Sciences Department, (Faculty and Graduate Students), September 9, Mississippi State, MS, USA.**
57. Reddy, K. R. 1996. Plant responses to environmental variables. **Biology Department, Savannah State University, Savannah, GA, (Faculty and Students), August 5, Savannah, GA, USA.**
58. Reddy, K. R. 1996. Demonstration of cotton crop simulation model, GOSSYM/COMAX. **Biology Department, Savannah State University, (Faculty and Students), August 5, Savannah, GA, USA.**
59. Reddy, K. R. 1996. Demonstration of cotton crop simulation model, GOSSYM/COMAX. **School of Public and Environmental Affairs, SPEA Building, Indiana University, (Faculty and Graduate Students), June 10 1996, Bloomington, IN, USA.**
60. Reddy, K. R. and H. F. Hodges. 1996. Determining the impact of global climate change on food and fiber production. **National Institute of Global Environmental Change (NIGEC) Interregional Climate Change Conference, May 30 1996, Tuscaloosa, Alabama, USA.**
61. Reddy, K. R. H. F. Hodges, and J. M. McKinion. 1996. Food and agriculture in the 21st century. **The 7th Global Warming International Conference and Expo. April 1-3, Vienna, Austria.**
62. Hodges, H. F. and K. R. Reddy. 1995. Temperature effects on cotton growth and development. **Fifth Brazilian Congress of Plant Physiology, July 16-20, Lavras, Minas Gerais, Brazil.**
63. Reddy, K. R. and H. F. Hodges. 1995. Impact of climate change on flower and fruit production in cotton. **National Institute of Global Environmental center, South Central Regional Center Conference, October 12, Tulane University, New Orleans, LA, USA.**
64. Reddy, K. R. 1995. Plant responses to global climate change variables. **Department of Botany, Osmania University, (Faculty, and Graduate Students), February 5, Hyderabad - 500 007, AP, India.**
65. Reddy, K. R. 1995. Demonstration of cotton crop simulation model, GOSSYM/COMAX. **Department of Botany, Osmania University, (Faculty, and Graduate Students), February 5, Hyderabad - 500 007, AP, India.**

66. Reddy, K. R. 1995. Crop responses to global climate change. **Department of Crop Physiology, University College of Agricultural Sciences, GKVK Campus, (Faculty, and Graduate Students), February 2, Bangalore - 560 065, Karnataka, India.**
67. Reddy, K. R. 1995. Simulation models as technology transfer - Demonstration. **Department of Crop Physiology, University College of Agricultural Sciences, (Faculty, and Graduate Students), February 2, GKVK Campus, Bangalore - 560 065, Karnataka, India.**
68. Reddy, K. R. 1995. Climate change and crop growth. **Department of Botany, Zoology, Chemistry and Physics, Sri Venkateswara Arts College, (Faculty and Graduate Students), February 17, Tirupati - 517 502, AP, India.**
69. Reddy, K. R. 1995. Plant responses to a changing environment. **Department of Botany, Sri Venkateswara University, (Faculty, Research Scholars and Graduate Students), January 27, Tirupati - 517 502, AP, India.**
70. Reddy, K. R. 1995. Demonstration of GOSSYM/COMAX crop simulation model. **Department of Botany, Sri Venkateswara University, (Faculty, Research Scholars and Graduate Students), January 27, Tirupati - 517 502, AP, India.**
71. Reddy, K. R. 1994. Plant responses to environmental factors. **Plant and Soil Science, A & M University, August 26, as part of the series of lectures on "Exploring the Use of Crop Models in Teaching and Research". Normal, AL, USA.**
72. Reddy, K. R., H. F. Hodges and J. M. McKinion. 1993. High temperature stress on cotton fruit retention. **Gordon Research Conference on Temperature Stress in Plants. February 1-5, Oxnard, CA, USA.**
73. Reddy, K. R., H. F. Hodges and J. M. McKinion. 1992. Cotton crop responses to global climate change. **Global Warming - A Call for International Coordination, 3rd Annual International Conference on the Scientific and Policy Issues Facing All Governments, April 6-9, Chicago, IL, USA.**
74. McKinion, J. M., K. R. Reddy and H. F. Hodges. 1992. Alleviation of global climate change impact via simulation-based decision support systems in agriculture. **Global Warming - A Call for International Coordination, 3rd Annual International Conference on the Scientific and Policy Issues Facing All Governments, April 6-9, Chicago, IL, USA.**



75. Reddy, K. R. 1992. Effects of aldicarb (TEMIK) on growth, development and photosynthesis of cotton. **Agronomy Department, Mississippi State University, (Staff and Students), Fall-1992, Mississippi State, MS, USA.**
76. Reddy, K. R., H. F. Hodges and J. M. McKinion. 1992. Cotton crop responses to a changing environment. **American Society of Agronomy, 1992 Annual Meetings, November 1-6, Minneapolis, MN, USA.**
77. Reddy, V. R., H. F. Hodges and K. R. Reddy. 1992. Streamlining - agricultural information from the scientist to the economic users through simulation models. 1990. **International Conference and Exhibition, December 3-6, Bangkok, Thailand.**