



P.V. Vara Prasad

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Brief Bio

P.V. Vara Prasad is a Distinguished Professor, R.O. Kruse Endowed Professor and Director of Feed the Future Sustainable Intensification Innovation Lab at Kansas State University. His research focuses on understanding responses of crops to changing environments and developing best management strategies to improve and protect yields. He has active research, education, and outreach activities around the world. He is passionate about human and institutional capacity building; and empowering producers and consumers to improve their lives and livelihood. He is a fellow of American Society of Agronomy; Crop Science Society of America; and American Association for the Advancement of Science. He is a former member of International Commission on Sustainable Agricultural Intensification, and former President of Crop Science Society of America. He is the current chair of the Plant Working Group and a Board Member of the Council of Agriculture Science and Technology.

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Updated: May 2024

P.V. Vara Prasad

Director, Feed the Future Innovation Lab for Collaborative Research on Sustainable Intensification (SIIL);
 University Distinguished Professor, Crop Ecophysiology and Farming Systems (Agronomy Department);
 R.O. Kruse Endowed Professor of Agriculture; and
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Google Scholar: [View Profile](#); Research Gate: [View Profile](#); ORCID: [0000-0001-6632-3361](#)**I. Education**

- | | |
|-----------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------|
| July 1999 | Ph.D. (Agriculture): Crop Ecophysiology Physiology Department of Agriculture, The University of Reading, Reading, UK. |
| Nov. 1993 | M.Sc. (Agriculture): Agronomy (Plant Nutrition Soil Fertility): First Class with a Gold Medal, Andhra Pradesh Agricultural University (APAU), Hyderabad, India. |
| July 1991 | B.Sc. (Agriculture): First Class Andhra Pradesh Agricultural University (APAU), Hyderabad, India. |

II. Employment and Professional Experience

- | | |
|------------------------|----------------------------------------------------------------------------------------------------------------|
| Oct. 2020 to present | R.O. Kruse Endowed Professor of Agriculture |
| July 2016 to present | University Distinguished Professor, Crop Ecophysiology and Farming Systems |
| Oct. 2014 to present | Director, Feed the Future Sustainable Intensification Innovation Lab |
| July 2013 to June 2016 | Professor, Crop Ecophysiology |
| July 2009 to June 2016 | Director, Great Plains Sorghum Improvement and Utilization Center |
| July 2009 to June 2013 | Associate Professor, Crop Ecophysiology |
| Aug. 2005 to June 2009 | Assistant Professor, Crop Ecophysiology, Agronomy Department, Kansas State University, Manhattan, Kansas, USA. |

Research, Leadership and Management: Conducting interdisciplinary research, knowledge sharing, and capacity building activities on sustainable intensification for improving food and nutritional security of smallholder farmers in Asia and Africa. Providing leadership and managing all activities of the Feed the Future Innovation Lab for Collaborative Research on Sustainable Intensification (SIIL).

Research and Teaching Activities: Understanding crop responses to abiotic (water, temperature, nutrient, and global change factors) and biotic stresses, and changes in genetics and crop management practices. Main emphases are on understanding principles of yield formation and improving knowledge on responses of various physiological pathways and processes at the cellular, whole-plant, and canopy levels. Teaching activities include graduate-level courses in crop physiology and in crop ecology.

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|------------------------|--------------------------------------------------------------------------------------------------------------------------------|
| Jan. 2000 to July 2005 | Post-Doctoral Research Associate, Agronomy Department, University of Florida, Gainesville, Florida, USA. (Advisor: K.J. Boote) |
|------------------------|--------------------------------------------------------------------------------------------------------------------------------|

Research Activities: Quantifying impacts of climate change factors (high temperature and elevated carbon dioxide) on physiological, growth, and yield processes of grain crops. Using and testing crop growth models to simulate the effects of climate change, disease incidence, fertilizer management, and improved crop management practices.

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|------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Nov. 1993 to Dec. 1995 | Research Associate, Department of Agronomy, APAU, Hyderabad, Andhra Pradesh, India. (Advisors: V. Satyanarayana, APAU; M.V. Potdar, International Crops Research Institute for Semi-Arid Tropics, ICRISAT) |
|------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|

Research Activities: Conducting field experiments designed to maximise yields in rice-peanut crop sequences through efficient use of resources. Designing and conducting field experiments to study the effects of nutrient deficiencies; efficient use of inputs; cropping systems; integrated nutrient management; and integrated weed management.

III. Adjunct / Honorary Positions

| | |
|-------------------|--------------------------------------------------------------------------------------------------------|
| Adjunct Professor | Tamil Nadu Agricultural University, Coimbatore, Tamil Nadu, India. |
| Adjunct Professor | SRM Institute of Science and Technology, Kattankulathur, Tamil Nadu, India. |
| Adjunct Professor | University of the Philippines Los Banos, Philippines. |
| Adjunct Professor | Sher-e-Kashmir University of Agricultural Science and Technology – Srinagar, Jammu and Kashmir, India. |
| Adjunct Professor | Royal University of Agriculture, Phnom Penh, Cambodia. |
| Adjunct Professor | Sri Konda Laxman Telangana State Horticultural University, Hyderabad, India |

IV. Fellowships

| | |
|-------------------------------|-------------------------------------------------------------|
| Elected Fellow (2016) | American Association for the Advancement of Science (AAAS). |
| Elected Fellow (2015) | Crop Science Society of America (CSSA). |
| Elected Fellow (2014) | American Society of Agronomy (ASA). |
| Elected Foreign Fellow (2022) | Indian Society of Plant Physiology. |
| Elected Pravasi Fellow (2024) | National Academy of Agricultural Science (India). |

V. Scholarships, Awards and Recognitions

| | |
|---------------------------------------------|----------------------------------------------------------------------------------------|
| Chair, Plant Working Group (2024) | The Council of Agricultural Science and Technology, USA. |
| Board Member (2024) | The Council of Agricultural Science and Technology, USA. |
| K.K. Nanda Memorial Lecture Award (2023) | Indian Society of Plant Physiology, India. |
| Lifetime Achievement Award (2023) | Nutrihub, Indian Institute of Millet Research, India. |
| Highly Cited Researcher – Top 1% (2023) | Clarivate / Web of Science / Scopus. |
| Distinguished Service Award (2023) | Crop Science Society of America, USA. |
| International Crop Science Award (2023) | Crop Science Society of America, USA. |
| Global Scientist (2023) | Agricultural & Environmental Technology Develop. Soc., India. |
| Working Group Member (2022 – 2023) | National Climate Change Roadmap Horizon Scan Working Group, USA. |
| Highly Cited Researcher – Top 1% (2022) | Clarivate / Web of Science / Scopus. |
| Outstanding Unit Award (2022) | International Programs, Kansas State University, USA. |
| L.R. Ahuja Ag. Syst. Modeling Award (2022) | Soil Science Society of America, USA. |
| Board Representative (2022 – 2025) | The Council for Agricultural Science and Technology, USA. |
| Honour Award (2021) | International Agronomy Congress, Indian Society of Agronomy. |
| Iconic Professor (2021) | International Multidisciplinary Research Foundation. |
| President (2021) | Crop Science Society of America, USA. |
| President (2021 – 2022) | University Distinguished Professors Group, KSU. |
| President (2021 – 2022) | Sigma Xi, KSU – Chapter. |
| R.O. Kruse Professorship (2020) | Endowed Professorship in Agriculture, KSU. |
| International Agronomy Award (2020) | American Society of Agronomy, USA. |
| Commissioner (2020 – 2021) | International Commission on Sustainable Agricultural Intensification (Co-SAI). |
| Professorial Performance Award (2019) | Kansas State University. |
| FSLI – Fellow Cohort 13 (2017 – 2019) | Food Systems Leadership Institute, Association of Public Land-Grant Universities, USA. |
| Irvin E. Youngberg Award (2017) | Higuchi Research Achievement Award, University of Kansas. |
| Martin & Ruth Massengale Lectureship (2017) | Crop Science Society of America, USA. |
| Distinguished Faculty Award (2017) | Gamma Sigma Delta, The Honor Society of Agriculture, KSU. |
| Outstanding Scientist Award (2017) | Sigma Xi, The Scientific Research Society, KSU. |

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|-------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------|
| Invited Expert (2016 – 2017) | Challenge for Change Commission, Association of Public and Land-Grant Universities (APLU), USA. |
| Outstanding Faculty Award (2016) | Dr. Ron and Rae Iman Award, KSU. |
| IMRF Excellence Award (2016) | International Multidisciplinary Research Foundation, India. |
| Outstanding Associate Editor (2016) | Crop Science, Crop Science Society of America, USA. |
| Distinguished Graduate Faculty (2015) | Commerce Bank and W.T. Kemper Foundation Award, KSU. |
| Graduate Teaching Award (2015) | Excellence in Teaching, College of Agriculture, KSU. |
| LEAD 21 – Class X (2015) | Leadership for the 21 st Century, Land Grant Universities. USA. |
| International Educator Award (2013) | Office of International Programs, KSU. |
| Outstanding Agricultural Scientist (2013) | Association of Agricultural Scientists of Indian Origin, USA. |
| Outstanding Research Award (2012) | Gamma Sigma Delta, The Honor Society of Agriculture, KSU. |
| President (2010 – 2012) | Association of Agricultural Scientists of Indian Origin, USA. |
| Early Career Award (2009) | Gamma Sigma Delta, The Honor Society of Agriculture, KSU. |
| Young Scientist Award (2006) | Association of Agricultural Scientists of Indian Origin, USA. |
| Arthur Hosier Award (1998) | Travel Award, The University of Reading, United Kingdom. |
| Felix Scholarship (1996 – 1999) | Fully funded competitive scholarship for Ph.D., offered at the University of Reading (6 students selected from India). |
| ICAR – Scholarship (1995) | Research Scholarship, Indian Council of Agricultural Research. |
| NET Certificate (1995) | National Eligibility Test, Certified Agronomist/Teacher, ICAR. |
| PPIC Gold Medal (1994) | Potash and Phosphate Institute of Canada - Gold Medal for Best MSc research at Andhra Pradesh Agricultural University, India. |
| ICRISAT Scholarship (1991 – 1993) | Scholarship for M.Sc. (Ag) from International Crops Research Institute for the Semi-Arid Tropics (ICRISAT), India. |
| Government Scholarship (1991) | Government of Andhra Pradesh for M.Sc. (Ag). |
| ICAR – Merit Scholarship (1987) | Indian Council of Agricultural Research (ICAR) for B.Sc. (Ag). |

VI. Professional Memberships

American Society of Agronomy (Since 1998); Crop Science Society of America (Since 2000); Soil Science Society of America (Since 2000); American Association for the Advancement of Science (Since 2011); Gamma Sigma Delta (Since 2006); Sigma Xi (Since 2009); Rotary International – Manhattan, Kansas (Since 2017); International Society of Agricultural Meteorology (Life Member); Society for Millets Research (Life Member); World Association of Soil and Water Conservation (Life Member); Association of Agricultural Scientists of Indian Origin (Life Member); Academy of Natural Resource Conservation and Management – India (Life Member); Society of Agricultural Research on Abiotic Stresses – India (Life Member); Indian Society of Plant Physiology (Life Member); Society for Agriculture Research Management – India (Life Member).

VII. Editing and Reviewing of International Journals and Reviewing Grant Proposals

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|-----------------------------------|------------------------------------------------------|
| Editorial Board (2014 – 2024) | Journal of Agronomy and Crop Science |
| Associate Editor (2011 – 2018) | Journal of Crop Improvement |
| Associate Editor (2016 – present) | International Journal of Agricultural Sustainability |
| Associate Editor (2016 – 2022) | Frontiers in Plant Science – Abiotic Stress |
| Guest Editor (2019 – 2021) | International Journal of Molecular Sciences |
| Editorial Board (2020 – 2023) | BMC Plant Biology |
| Associate Editor (2009 – 2018) | Agronomy Journal |
| Editorial Board: (2009 – 2014) | African Journal of Crop Science |
| Editorial Board: (2006 – 2014) | African Journal of Agricultural Research |
| Associate Editor (2009 – 2016) | Crop Science |
| Guest Editor (2022 – 2023) | Frontiers in Sustainable Food Systems |
| Guest Editor (2021 – 2022) | Frontiers in Genetics |

Manuscript Reviewer: Reviewed >500 manuscripts for >75 different international peer-reviewed journals. Selected list of international peer-reviewed journals is given below:

Advances in Agronomy; African Journal of Agricultural Research; African Journal of Biotechnology; Agricultural and Forest Meteorology; Agriculture Ecosystems and Environment; Agronomy Journal; American Journal of Botany; American Journal of Horticultural Science; Annals of Botany; Australian Experimental Agriculture; Australian Journal of Agricultural Research; Biological Letters; Biologia Plantarum; Brazilian Journal of Plant Physiology; Carbohydrate Research; Crop Science; Current Opinion in Plant Biology; Communication in Biometry and Crop Science (CBCS); European Journal of Agronomy; Euphytica; Experimental and Environmental Botany; Field Crops Research; Functional Plant Biology; Global Change Biology; Indian Journal of Agronomy; Indian Journal of Plant Physiology; Journal of Plant Research; Indian Journal of Agricultural Sciences; International Journal of Plant Sciences; Irrigation Science; Japanese Journal of Agricultural Meteorology; Journal of Agricultural Science; Journal of Agronomy and Crop Science; Journal of Crop Improvement; Journal of Crop Production; Journal of Experimental Botany; Journal of New Seeds; Journal of Plant Nutrition; Nature (Climate Change); New Phytologist; Physiologia Plantarum; Planta; Plant and Soil; Plant Biology; Plant Breeding; Plant Cell and Environment; Plant Physiology; Plant Science; Proceedings of National Academy of Science; Science; Science Asia; Theoretical and Applied Genetics; World Journal of Agricultural Sciences; and more.

Manuscripts were reviewed for the following institutions: United States Department of Agriculture – Agriculture Research Service in Manhattan, Kansas; Gainesville, Florida; Bushland, Texas; Beltsville, Maryland; Fort Collins, Colorado; Athens, Georgia.

Grant Reviewer: Reviewed >100 proposals for >10 different national and international funding agencies, including:

United States Department of Agriculture (USDA); National Institute of Food and Agriculture, USDA – USA; National Science Foundation – USA; United States Agency for International Development (USAID) – USA; Bill and Melinda Gates Foundation – USA; McKnight Foundation – USA; National Science Foundation – Chile; US – Israel, Binational Agricultural Research and Development Fund; UK – Biotechnology and Biological Sciences Research Council (BBSRC); National Science Foundation – Republic of Georgia; Indian Council for Agricultural Research – India.

VIII. Committees / Professional Services

National and International Organizations

Crop Science Society of America (CSSA) / American Society of Agronomy (ASA) / Alliance of Crop, Soil, and Environmental Science Societies (ACSESS) / Agronomy, Crops and Soils (ACS) / United States Department of Agriculture (USDA) / American Association for the Advancement of Science (AAAS) / Society for the Advancement of Chicanos/Hispanics and Native Americans in Science (SACNAS) / Council of Agriculture Science and Technology (CAST).

1. CAST – Plant Working Group, Chair 2024
2. CAST – Board Representative (Plants Group) 2024
3. CSSA – Special Awards Committee 2023 – 2024
4. CAST – Plant Working Group – Vice Chair 2023
5. CAST – Board Representative for CSSA 2022 – 2025
6. Chair – CSSA Fellows Committee 2022
7. Chair – CSSA Policy Committee 2022
8. Chair – CSSA Special Awards Committee – Chair 2022
9. International Committee – CSSA 2022
10. Communication Committee – CSSA 2022
11. Past President – CSSA 2022
12. ACS – Golden Opportunity Scholars – Committee 2022
13. CSSA – Organization, Policy and Bylaws Committee – Chair 2022
14. CSSA – Betty Klepper Endowed Lectureship Committee 2022
15. President – CSSA 2021

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| 16. ACS – SACNAS Working Group | 2021 |
| 17. ACS – Task Force on International Activities | 2021 – 2022 |
| 18. ACSESS – Operations and Policy Committee | 2021 – 2022 |
| 19. ACSESS – Budget, Finance and Audit Committee | 2021 – 2022 |
| 20. AAAS Consortium of Affiliates – Liaison | 2021 |
| 21. CSSA – Nominations for President-Elect Committee – Chair | 2021 |
| 22. Liaison on Council of Scientific Society of Presidents | 2020 – 2022 |
| 23. Science Policy Committee | 2020 – 2022 |
| 24. Board of Director – CSSA | 2020 – 2022 |
| 25. ACS – Annual Meeting Planning Committee | 2020 |
| 26. President Elect – CSSA | 2020 |
| 27. Communication Committee – CSSA – Chair | 2020 |
| 28. Budget and Finance Committee – CSSA – Member | 2020 |
| 29. CSSA – Executive Committee – Member | 2020 |
| 30. CSSA – Program Planning Committee – Chair | 2020 |
| 31. Betty Klepper Endowed Lectureship Committee – Chair | 2020 |
| 32. Board of Directors – CSSA | 2020 – 2022 |
| 33. Search Committee for ACSESS – Chief Executive Officer | 2019 |
| 34. Annual Meeting Planning Committee (ACS) Member | 2019 |
| 35. Incoming President Elect | 2019 |
| 36. Member – CSSA Fellow Committee | 2019 – 2020 |
| 37. Chair – Sustainable Intensification Community of ASA | 2018 |
| 38. Chair Elect – Sustainable Intensification Community of ASA | 2017 |
| 39. Past Chair – Crop Physiology (C-2) Division of CSSA | 2016 |
| 40. Chair – Crop Physiology (C-2) Division of CSSA | 2015 |
| 41. Chair – Nomination Committee for C-2 Division Officers | 2015 |
| 42. Member – Nomination Committee for C-2 Division | 2015 – 2017 |
| 43. Member – Nomination for President Elect Committee | 2015 |
| 44. Chair Elect – Crop Physiology Division | 2014 |
| 45. Chair – Martin & Ruth Massengale Lectureship – CSSA | 2014 |
| 46. Member – Diversity in Agronomy, Crops and Soils | 2006 – 2009 |
| 47. Member – Poster / Oral Student Presentation Awards | 2008; 2009; 2010; 2013 |
| 48. Session Chair – Crop Physiology | 2007 – 2014 |
| 49. Session Chair – Sustainable Agriculture | 2012 |
| 50. Member – National Committee USDA – Photosynthesis | 2006 – present |

Association of Agricultural Scientists of Indian Origin

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|----------------------------------|--------------------------|
| 1. Member – Advisory Board | 2013 – 2014 |
| 2. Past President | 2013 |
| 3. President | 2010 – 2012 |
| 4. Member – Nomination Committee | 2012 |
| 5. Member – Awards Committee | 2005 – 2007; 2009 – 2013 |

Other Universities and International Organizations

| | |
|---------------------------------------------------------|------------|
| 1. Doctoral Thesis Evaluator – University of Sydney | 2017 |
| 2. Doctoral Thesis Evaluator – University of Queensland | 2012, 2014 |

3. Doctoral Thesis Evaluator – Bhahayddin Zakaria University 2010, 2012
4. Doctoral Thesis Evaluator – University of Faisalabad 2010, 2011
5. Doctoral Thesis Evaluator – Sindh Agricultural University 2011
6. Doctoral Thesis Evaluator – Andhra University 2010
7. Doctoral Thesis Evaluator – Gomal University 2009
8. Doctoral Thesis Evaluator – Osmania University 2009
9. Member – International Society of Agricultural Meteorology 2005 – 2007
10. Member – Guide for Agricultural Meteorology Program 2007 – 2009

Kansas State University

Department of Agronomy – Kansas State University

1. Crop Production – Search Committee 2012
2. Cropping Systems – Search Committee 2012
3. Sorghum Geneticist – Search Committee 2012
4. Plant Physiologist (USDA) – Search Committee 2011
5. Sorghum Breeder – Search Committee 2010
6. Weed Physiologist – Search Committee 2009
7. Sorghum Breeder – Search Committee 2007
8. Sorghum Geneticist – Search Committee 2005
9. Promotion and Tenure Committee 2012 – 2015
10. Faculty Mentoring Committee 2009 – 2015
11. Computer Network and Web Advisory Committee 2009 – 2012
12. Agronomy Seminar Committee 2005 – 2012
13. Kids Field Day Committee 2005 – 2012
14. Graduate Scholarship Committee 2005 – 2015
15. Safety Committee 2005 – 2015
16. Harvey County Experiment Field Advisory Committee 2005 – 2012

College of Agriculture (CoA) / Kansas State University (KSU)

1. Member – University Distinguished Professor Committee 2024
2. Member – Dean, CoA, 5-Evaluation Committee 2024
3. Past President – University Distinguished Professor Group 2022 – 2023
4. Past President – Sigma Xi – KSU Chapter 2022 – 2023
5. Member – Vice President – Admin. & Fin. Search Committee 2022
6. President – University Distinguished Professor Group 2021 – 2022
7. President – Sigma Xi – KSU Chapter 2021 – 2022
8. Vice President – University Distinguished Professors 2020 – 2021
9. Vice President – Sigma Xi – KSU Chapter 2020 – 2021
10. Secretary – University Distinguished Professors 2019 – 2020
11. Member – Dean / Director, CoA, Search Committee 2019
12. Member – University Distinguished Professor Committee 2019
13. Member – UDP Graduate Student Award Committee 2019; 2021
14. Member – Higuchi Research Achievement Award Comm. 2018, 2019
15. Member – Distinguished Graduate Faculty Award Comm. 2016 – 2020
16. Member – International Educator Award Committee 2014 – 2018, 2019 – 2022
17. Member – Graduate Council 2013 – 2015

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|-----------------------------------------------------------|--------------------------|
| 18. Member – Graduate Student Committee | 2013 – 2015 |
| 19. Member – Executive Committee - Sigma Xi – KSU Chapter | 2013 – 2015; 2020 – 2023 |
| 20. Member – Graduate Student Award Committee | 2014 |
| 21. Member – African Agricultural Forum (Symposium) | 2010 |

IX. Teaching, and Student Mentoring/Training

Courses Taught: AGRON 840, Crop Physiology (3 credits)
 AGRON 950, Advanced Crop Ecology (3 credits)
 AGRON 600, Problem in Crop Science (variable credits)
 AGRON 960, Topics in Crop Physiology and Ecology (variable credits)

Teaching Evaluation Scores: Scores in parentheses are out of a maximum of 5.0

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|--------------------|------------------------------------------------------------------------------------|
| Crop Physiology: | Teaching Effectiveness: 2007 (4.7); 2009 (4.4); 2011 (4.7); 2013 (4.8); 2023 (4.8) |
| | Amount Learned: 2007 (4.5); 2009 (4.3); 2011 (4.4); 2013 (4.5); 2023 (4.7) |
| Adv. Crop Ecology: | Teaching Effectiveness: 2008 (4.5); 2010 (4.8); 2012 (4.8); 2014 (5.0) |
| | Amount Learned: 2008 (4.8); 2010 (5.0); 2012 (4.7); 2014 (5.0) |

Graduate Students and Research Scholars: Mentoring, Advising and Training

Total: >210 [>80 Graduate Students (Major Advisor or Committee Member), >50 Research Scholars, >70 Undergraduate Researchers + >10 Faculty/Staff]

Major Advisor / Supervisor / Mentor:

Current Faculty / Postdoctoral Associates / Research Associates / Visiting Scientists:

1. Dr. Araya Berhe, Crop Simulation Modelling, Kansas State University, USA.
2. Dr. Uday Jha, Crop Breeding and Genetics, Kansas State University, USA.
3. Dr. Yared Assefa, Cropping Systems, Kansas State University, USA.
4. Mr. Naveenraj Shanmugam, Kansas State University, USA.
5. Mr. Williams Mohanavel, Kansas State University, USA.

Current MS/PhD Students (Major or Co-Advisor): Country of Origin; Degree; and Graduating Year

- | | | |
|---------------------------------|--------------------|-----------------|
| 1. Ms. Akshitha Reddy (India) | MS (Agronomy) | Graduating 2026 |
| 2. Ms. Bindusri Narahariseti | MS (Grain Science) | Graduating 2026 |
| 3. Mr. Yassir Parrey (India) | MS (Agronomy) | Graduating 2025 |
| 4. Ms. Sabreena Parry (India) | MS (Agronomy) | Graduating 2025 |
| 5. Ms. Midhat Tugoo (India) | MS (Agronomy) | Graduating 2025 |
| 6. Ms. Muazzama Mushtaq (India) | MS (Agronomy) | Graduating 2025 |
| 7. Mr. Ajay Ramalingam (India) | PhD (Agronomy) | Graduating 2026 |

Graduated PhD Students (Major or Co-Advisor): Country of Origin; Degree; Year; Current Position

- | | | | | |
|-------------------------|---------|----------------|------|----------------------|
| 1. Dr. Balaji Pandian | (India) | PhD (Agronomy) | 2020 | Scientist, Industry |
| 2. Dr. Regina Enningful | (Ghana) | PhD (Agronomy) | 2019 | Scholar |
| 3. Dr. Huan Wang | (China) | PhD (Agronomy) | 2017 | Scholar, Industry |
| 4. Dr. Jason Waite | (USA) | PhD (Agronomy) | 2016 | Agronomist, USDA |
| 5. Dr. Kyle Shroyer | (USA) | PhD (Agronomy) | 2016 | Agronomist, Industry |

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|-----|----------------------|---------|----------------|------|-----------------------|
| 6. | Dr. Amal Ehtaiwesh | (Libya) | PhD (Agronomy) | 2016 | Faculty, University |
| 7. | Dr. George Mahama | (Ghana) | PhD (Agronomy) | 2015 | Scientist, Research |
| 8. | Dr. Sruthi Narayanan | (India) | PhD (Agronomy) | 2015 | Faculty, University |
| 9. | Dr. George Paul | (India) | PhD (Agronomy) | 2013 | Scientist, University |
| 10. | Dr. S. Subramanian | (India) | PhD (Agronomy) | 2013 | Research Scholar |
| 11. | Dr. Alassan Maiga | (Mali) | PhD (Agronomy) | 2012 | Scientist, Research |
| 12. | Dr. Rachel Opole | (Kenya) | PhD (Agronomy) | 2012 | Scientist, Research |
| 13. | Dr. Raymond Mutava | (Kenya) | PhD (Agronomy) | 2012 | Scientist, University |
| 14. | Dr. Troy Ocheltree | (USA) | PhD (Agronomy) | 2012 | Faculty, University |
| 15. | Dr. Gautam Pradhan | (Nepal) | PhD (Agronomy) | 2011 | Faculty, University |

Graduated MS Students (Major Advisor): Country of Origin; Degree; Year; Current Position

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|-----|----------------------|---------|---------------|------|-----------------------|
| 16. | Ms. Manogna Devi | (India) | MS (Agronomy) | 2023 | Research Scholar |
| 17. | Ms. Matti Kuykendall | (USA) | MS (Agronomy) | 2015 | Research Scholar |
| 18. | Mr. Sory Diallo | (Mali) | MS (Agronomy) | 2012 | Scientist, Research |
| 19. | Mr. George Mahama | (Ghana) | MS (Agronomy) | 2012 | Scientist, Research |
| 20. | Ms. Sruthi Narayanan | (India) | MS (Agronomy) | 2011 | Doctoral Student |
| 21. | Mr. Raymond Mutava | (Kenya) | MS (Agronomy) | 2008 | Scientist, University |
| 22. | Mr. Grant Groen | (USA) | MS (Agronomy) | 2008 | Scientist, Industry |
| 23. | Ms. Sudha Pisipati | (India) | MS (Agronomy) | 2008 | Scientist, Industry |

Postdoctoral / Visiting Scholars, Scientists, and their Current Positions (Duration at KSU):

- Ms. Sadia Shafi, Scholar, Sher-e-Kashmir University of Agricultural Science and Technology (90 days).
- Dr. Gurumurthy Shekharappa, Senior Scientist ICAR, India (3 months).
- Dr. Prakash Jha, Assistant Professor, Mississippi State University (3 years 7 months).
- Dr. Gurjeet Singh, Geospatial Modeler, Michigan State University, USA (12 months).
- Dr. Hardeep Singh, Assistant Professor, University of Florida, USA (15 months).
- Dr. Aditi Kumari, Consultant, Private Industry, USA (5 months).
- Dr. Balaji Pandian, Herbicide Trait Development, Enko Chem, USA (9 months).
- Dr. Zach Stewart, Production Systems Technical Advisor, USAID, USA (4 years).
- Dr. Suresh Kumar, Agricultural Extension, Acharya N.G. Ranga Agric. Univ., India (2 months).
- Dr. Hamidou Traore, Director General, INERA, Burkina Faso (10 days).
- Dr. Yonil Jibril, Weed Scientist, INERA, Burkina Faso (15 days).
- Dr. Maduraimuthu Djanaguiraman, Crop Physiologist, Tamil Nadu Agric. Univ., India (3 years).
- Dr. Patrick Kilby, Australian National University (Fulbright Scholar), Senior Lecturer, Canberra, Australia (6 months).
- Dr. Jintian Song, Agric. Economist, Huazhong Agric. Univ., Wuhan, China (6 months).
- Dr. Ai-Qing Sun, College of Agronomy, Shandong Agricultural University (1 year), Shandong, China. (Co-Advisor Krishna Jagadish).
- Dr. John Sunoj, Postdoctoral Scholar, Texas A and M University, USA. (2 years).
- Dr. Hanafey F. Maswada, Assistant Professor, Faculty of Agriculture, Tanta University (Visiting Scholar: 6 months), Tanta, Egypt. (Co-Advisor Krishna Jagadish).
- Dr. Shahniyar Bayramov, National Academy of Sciences of Azerbaijan (Fulbright Scholar, 6 months); Head of Laboratory, Department of Fundamental Problems Biological Productivity, Institute of Botany, Baku, Azerbaijan. (Co-Advisor Mithila Jugulam).
- Ms. Vinutha Kanaganahalli, International Crop Research Institute for the Semi-Arid Tropics, India (60 days), Research Scholar, Sorghum Breeding, Hyderabad, India.

20. Winthrop Professor Zed Rengel, University of Western Australia (Senior Fulbright Scholar; 6 months), Professor, University of Western Australia, Perth, Australia.
21. Ms. Cherryl Quinones, International Rice Research Institute (6 months); Crop Physiologist, International Rice Research Institute, Manila, Philippines.
22. Ms. Laavanya Rayaprolu, International Crop Research Institute for the Semi-Arid Tropics, India (60 days), Sorghum Breeding, Hyderabad, India.
23. Dr. Utharasu Subramaniam, Tamil Nadu Agricultural University, India (1 year). Assistant Professor, Tamil Nadu Agricultural University, India.
24. Ms. Vimala Kanagarethinam, Crop Physiology, India (1 year).
25. Dr. Rakesh Pandey, Indian Agricultural Research Institute, India (3 months). Senior Scientist – Wheat Physiology, Indian Agricultural Research Institute, New Delhi, India.
26. Dr. Parvez Sofi, Sher-e-Kashmir University, Jammu, India (Borlaug Fellow, 3 months). Associate Professor – Bean Breeding, Sher-e-Kashmir University, Jammu, India.
27. Dr. Arti Bhatia, Indian Agricultural Research Institute, India (15 days); Principal Scientist – Agricultural Climatology, Indian Agricultural Research Institute, New Delhi, India.
28. Dr. Sanjana Reddy, Directorate of Sorghum Research (15 days); Senior Scientist, Sorghum Breeding, Directorate of Sorghum Research, Hyderabad, India.
29. Dr. Tara Satyavathi, Indian Agricultural Research Institute, India (3 months); Principal Scientist, Millet Breeding, Indian Agricultural Research Institute, New Delhi, India.
30. Dr. Jyoti Kumari, National Bureau of Plant Genetic Resources, India (3 months); Senior Scientist – Wheat Breeding, National Bureau of Plant Genetic Resources, New Delhi, India.
31. Dr. Le Loan: (3 months, Borlaug Fellow). Lecturer, Nong Lam University, Vietnam.
32. Dr. Leena Diwakar: K-State (6 months); Researcher, Kansas State University, USA.
33. Dr. Sathesh Subramaniam, Tamil Nadu Agricultural University, India (1 year). Assistant Professor, University.
34. Dr. Sarma Mallabothala: Harvest Plus, Canada (6 months); Private Industry, Canada.
35. Dr. Roger Kanton: Savanna Agricultural Research Institute, Ghana (30 days); Associate Director, Savanna Agricultural Research Institute, Ghana.
36. Dr. Rachel Opole: Kenyan Agricultural Research Institute (Borlaug Fellow); Agronomist, Kenyan Agricultural Research Institute, Kenya.
37. Dr. Jianming Fu: USDA - ARS, Manhattan, USA (6 months); Plant Physiologist, USDA-ARS.
38. Mr. Amit Pradhan: Research Scholar, Mata Vaishnav Devi University, India (1 year); Scholar, Private Company, India.
39. Dr. Savanam S. Rao: Directorate of Sorghum Research, Hyderabad, India (4 months); Principal Scientist, Crop Physiology, Directorate of Sorghum Research, Hyderabad, India.
40. Dr. Gautam P. Pradhan: Crop Physiologist, Nepal (1 year); Agronomist, North Dakota State University, USA.
41. Mr. Mohammed Mustafa, Kansas State University (1 year), Scholar, Private Company.
42. Mr. Abdoul Wahab Toure: Institute of Economic and Rural Development, Mali (2 months); Agronomist, Institute of Economics and Rural Development, Mali.
43. Ms. Eva Erdayani: Indonesian Institute of Sciences, Indonesia (3 months, Borlaug Fellow); Doctoral Student, Washington State University, USA.
44. Dr. K.B. Hebbar: Indian Council of Agricultural Research, India (3 months, Borlaug Fellow); Principal Scientist and Head, Division of Plant Physiology, Central Plantation Crops Research Institute, Indian Council of Agricultural Research, India.
45. Dr. K. Kannan: Indian Council of Agricultural Research, India (3 months, Borlaug Fellow); Principal Scientist, Soil and Water Management, Indian Council of Agricultural Research, India.
46. Dr. Sarvana Pandian: Tamil Nadu Agricultural University, India (1 month); Professor, Tamil Nadu Agricultural University, India.
47. Dr. Mamadou Doumbia: Institute of Economic and Rural Development, Mali (15 days); Retired - Director, Soil Testing Laboratory, Institute of Economics and Rural Development, Mali.
48. Dr. Jesse Naab: Savanna Agricultural Research Institute, Ghana (30 days); Scientist, WASCAL,

Burkina Faso.

49. Dr. Sundeep Kumar: Banaras Hindu University, India (6 months); Principal Scientist, National Bureau of Plant Genetic Resources, New Delhi, India.
50. Dr. C. Udayasoorian: Tamil Nadu Agricultural University, India (2 months); Retired - Dean, Post Graduate Studies, Tamil Nadu Agricultural University, India.
51. Dr. James Pitchai: Tamil Nadu Agricultural University, India (2 months); Retired - Vice Chancellor, Bharathiar University, India.
52. Dr. Rishi Pal Singh: Birsa Agricultural University, India (20 days); Director, Seed Science Division, Birsa Agricultural University, India.
53. Ms. Sudha Pisipati, Kansas State University (6 months); Research Scholar, Private Company.
54. Mr. A. Masterodominca: University of Sao Paulo, Brazil (6 months); Scholar, Private Company.

Member of Advisory Committee of Graduate Students:

Current PhD Graduate Students:

| | | |
|--------------------------------------|---------------------|-----------------|
| 1. Mr. Francisco Palmero (Argentina) | PhD (Agronomy) | Graduating 2025 |
| 2. Mr. Brent Christenson (USA) | PhD (Agronomy) | Graduating 2024 |
| 3. Ms. Anu Raj (India) | PhD (Grain Science) | Graduating 2024 |
| 4. Mr. Troy Ostmeyer (USA) | PhD (Agronomy) | Graduating 2024 |
| 5. Ms. Susee Sudhakar (India) | PhD (Agronomy) | Graduating 2024 |
| 6. Mr. Ignacio Massigoge (Argentina) | PhD (Agronomy) | Graduating 2024 |
| 7. Ms. Valentina Pereyra (Argentina) | PhD (Agronomy) | Graduating 2024 |
| 8. Mr. Sourajit Dey (India) | PhD (Agronomy) | Graduating 2027 |

Current MS Graduate Students:

| | | |
|----------------------------------------|---------------|-----------------|
| 9. Ms. Kristen Kimbrell (USA) | MS (Agronomy) | Graduating 2024 |
| 10. Mr. Luiz Pradella (Brazil) | MS (Agronomy) | Graduating 2024 |
| 11. Wagner Squizani de Arruda (Brazil) | MS (Agronomy) | Graduating 2024 |
| 12. Leonardo Bosche (Brazil) | MS (Agronomy) | Graduating 2024 |

Graduated PhD Students:

| | | |
|--------------------------------------|---------------------|----------------|
| 1. Josefina Lacasa (Argentina) | PhD (Agronomy) | Graduated 2023 |
| 2. Luciana Nieto (Argentina) | PhD (Agronomy) | Graduated 2023 |
| 3. Ms. Rachel Veenstra (USA) | PhD (Agronomy) | Graduated 2022 |
| 4. Mr. Mario Secchi (Brazil) | PhD (Agronomy) | Graduated 2022 |
| 5. Mr. Javier Fernandez (Argentina) | PhD (Agronomy) | Graduated 2021 |
| 6. Mr. Adrian Correndo (Argentina) | PhD (Agronomy) | Graduated 2021 |
| 7. Dr. Santiago Tamagno (Brazil) | PhD (Agronomy) | Graduated 2019 |
| 8. Dr. Edwin Akley (Ghana) | PhD (Agronomy) | Graduated 2019 |
| 9. Dr. Anuj Chilawal (India) | PhD (Agronomy) | Graduated 2019 |
| 10. Dr. Guillermo Balboa (Argentina) | PhD (Agronomy) | Graduated 2018 |
| 11. Dr. Abhishes Lamsal (Nepal) | PhD (Agronomy) | Graduated 2017 |
| 12. Dr. Sridevi Betha (India) | PhD (Agronomy) | Graduated 2016 |
| 13. Dr. Andrew Green (USA) | PhD (Agronomy) | Graduated 2016 |
| 14. Dr. Sarah Battenfield (USA) | PhD (Agronomy) | Graduated 2016 |
| 15. Dr. Iddrisu Yahaya (Ghana) | PhD (Ag. Economics) | Graduated 2015 |

| | | | |
|-----------------------------|---------------|-----------------------|----------------|
| 16. Dr. Joshua Jennings | (USA) | PhD (Agronomy) | Graduated 2015 |
| 17. Dr. Shyamal Talukder | (Bangladesh) | PhD (Agronomy) | Graduated 2013 |
| 18. Dr. Sivakumar Sukumaran | (India) | PhD (Agronomy) | Graduated 2012 |
| 19. Dr. Mary Joi Abit | (Philippines) | PhD (Agronomy) | Graduated 2010 |
| 20. Dr. Yared Assefa | (Ethiopia) | PhD (Agronomy) | Graduated 2010 |
| 21. Dr. Jung Lee | (Korea) | PhD (Plant Pathology) | Graduated 2009 |
| 22. Dr. John Frihauf | (USA) | PhD (Agronomy) | Graduated 2009 |
| 23. Dr. Kent Martin | (USA) | PhD (Agronomy) | Graduated 2009 |

Graduated MS Students:

| | | | |
|------------------------------|-------------|----------------------|----------------|
| 24. Luke Ryan | (USA) | MS (Agronomy) | Graduated 2023 |
| 25. Mr. James Ross | (USA) | MS (Agronomy) | Graduated 2023 |
| 26. Mr. Sunil Bhandari | (India) | MS (Biol. Ag. Engg.) | Graduated 2021 |
| 27. Ms. Paula Demarco | (Argentina) | MS (Agronomy) | Graduated 2021 |
| 28. Ms. Luciana Nieto | (Argentina) | MS (Agronomy) | Graduated 2020 |
| 29. Mr. Issac Barnhart | (USA) | MS (Agronomy) | Graduated 2020 |
| 30. Mr. Osler Ortez-Amador | (Argentina) | MS (Agronomy) | Graduated 2019 |
| 31. Mr. Javier Fernandez | (Argentina) | MS (Agronomy) | Graduated 2019 |
| 32. Ana Julia Azevedo | | MS (Agronomy) | Graduated 2017 |
| 33. Mr. Jonathan Broeckelman | (USA) | MS (Agronomy) | Graduated 2016 |
| 34. Ms. Bailey McHenry | (USA) | MS (Agronomy) | Graduated 2016 |
| 35. Mr. Joseph Hong | (China) | MS (Plant Pathology) | Graduated 2016 |
| 36. Ms. Randi Clark | (USA) | MS (Agronomy) | Graduated 2016 |
| 37. Mr. Edwin Akley | (Ghana) | MS (Agronomy) | Graduated 2015 |
| 38. Mr. Devin Mangus | (USA) | MS (Ag. Bio. Engg.) | Graduated 2015 |
| 39. Mr. Nathan Keep | (USA) | MS (Agronomy) | Graduated 2013 |
| 40. Mr. Bandigou Diawara | (Mali) | MS (Agronomy) | Graduated 2012 |
| 41. Mr. Hugo Remaury | (USA) | MS (Ag. Economics) | Graduated 2012 |
| 42. Mr. Frank Maulana | (Malawi) | MS (Agronomy) | Graduated 2011 |
| 43. Mr. David Cruz | (Columbia) | MS (Plant Pathology) | Graduated 2011 |
| 44. Ms. Sruthi Narayanan | (India) | MS (Agronomy) | Graduated 2011 |
| 45. Mr. Kyle Shroyer | (USA) | MS (Agronomy) | Graduated 2010 |
| 46. Mr. Kentaro Takamatsu | (Japan) | MS (Elect. Engg.) | Graduated 2009 |
| 47. Mr. Levi Walker | (USA) | MS (Agronomy) | Graduated 2009 |
| 48. Ms. Laurene Smith | (USA) | MS (Agronomy) | Graduated 2008 |
| 49. Mr. Michael Duff | (USA) | MS (Agronomy) | Graduated 2007 |
| 50. Mr. Chris Pachta | (USA) | MS (Agronomy) | Graduated 2007 |
| 51. Mr. Souley Soumana | (Niger) | MS (Agronomy) | Graduated 2007 |
| 52. Mr. Phani Mallacheruvu | (India) | MS (Civil Engg.) | Graduated 2007 |
| 53. Mr. Ganesh Nagiseti | (India) | MS (Civil Engg.) | Graduated 2007 |
| 54. Mr. Corey Roozenboom | (USA) | MS (Agronomy) | Graduated 2006 |

Undergraduate Research Scholarships and Training:

Provided Scholarships to 60 Undergraduate Students from India (2 – 3 months) through funding from ICAR and World Bank from multiple universities (Acharya N.G. Ranga Agricultural University, ANGRAU; Sher-e-Kashmir University of Agricultural Science and Technology (SKUAST) – Srinagar; SKUAST – Jammu; and University of

Agricultural and Horticultural Sciences – Shivamogga). All students visited Kansas State University and worked with multiple faculties in different departments for the duration.

Research Scholarships and Training to International Graduate Students / Faculty:

Provided Scholarships and Trained 7 Graduate Students and 7 Faculty from Royal University of Agriculture in Cambodia (15 to 60 days) through funding from the World Bank. All students visited Kansas State University and worked with multiple faculties in different departments.

X. Research and Education Grants; and Gifts

Secured **>\$150 million in grants (>\$82 million as Principal Investigator, PI)** and **\$8 million in donations**.

Number of Total Grants Funded: >200 (>\$120 million). Complete list available at the end of this CV.

Number of Grants Funded as PI: >90 (~85% success).

Selected 12 Large Grants (>\$300,000) Funded from National and International Research Projects as PI.

1. **Prasad PVV**, Pierzynski GM, Lilja N. Sustainable Intensification Innovation Lab (SIIL). Feed the Future Collaborative Research on Sustainable Intensification. USAID. Amount: \$50,000,000; 2014 – 2019.
2. **Prasad PVV**, Lilja N. Sustainable Intensification Innovation Lab (SIIL). Feed the Future Collaborative Research on Sustainable Intensification. USAID. Amount: \$25,000,000; 2019 – 2024.
3. **Prasad PVV**, Middendorf BJ. Guatemala – Scaling, Coordination of Agricultural Technologies (G-SCAT). USAID-Guatemala Mission. Amount: \$6,000,000; 2024 – 2029.
4. **Prasad PVV**, Middendorf BJ. Haiti Agricultural University Partnership – Center of Excellence on Mitigation, Adaptation, and Resilience to Climate-Change in Haiti (CEMARCH). USAID-Haiti Mission. Amount: \$12,000,000; 2021 – 2026.
5. **Prasad PVV**, Lilja N, Middendorf BJ, Reyes M. Center of Excellence on Sustainable Agricultural Intensification and Nutrition. USAID-Cambodia Mission. Amount: \$7,000,000; 2019 – 2026.
6. **Prasad PVV**, Middendorf BJ. Innovation in Research, Education, Advisory Coordination Hub (iREACH). USAID. Amount: \$5,000,000; 2021 – 2026.
7. **Prasad PVV**, Middendorf BJ. Innovation in Research, Education, Advisory Coordination Hub (iREACH). USAID. Amount: \$6,000,000; 2024 – 2029.
8. **Prasad, PVV**, Staggenborg SA, Minton E, Baltensperger D and Misra S. Great Plains Sorghum Improvement and Utilization Center (GPSIUC). USDA – CSREES. Amount: \$1,412,796; 2009 – 2011.
9. **Prasad PVV**, Staggenborg SA, Dalton TJ, Dhuyvetter K, Rice CW, Presley D, Garrett K, Jumpponen A, Selfa T, and Lilja N. Sustainable Agricultural and Natural Resource Management (SANREM) – Collaborative Research Support Program, USAID – SANREM. Amount: \$1,350,000; 2009 – 2015.
10. **Prasad PVV** and Staggenborg SA. Integrated research in Mali – Decrue sorghum; and integrated graduate training in Mali. USAID – Mali Mission. Amount: \$723,420; 2008 – 2013.
11. **Prasad PVV**. Improving barley and wheat germplasm for changing environments. USDA – NIFA. KSU Portion Lead and Amount: \$730,000; 2010 – 2015.
12. **Prasad PVV**, Staggenborg SA and Mengel DB. Integrated soil, water and crop management for improving productivity in sorghum and millet-based systems. International Sorghum, Millet and Other Grains (INTSORMIL) – Collaborative Research Support Program, USAID. Amount: \$348,500; 2007 – 2012.

Gifts (Donations): \$8 million – Harold and Olympia Lonsinger Sustainability Research Farm (2017) – White Paper Authors: P.V.V. Prasad and G.M. Pierzynski (with KSU Foundation and College of Agriculture).

XI. Selected Research Accomplishments

Innovations (Basic and Applied):

Main research accomplishments include (a) quantified impacts of abiotic stresses (particularly drought, high temperature stress, and elevated carbon dioxide) on grain crops (e.g., rice, wheat, sorghum, millets, soybean, dry bean, and peanut); (b) improved understanding of mechanisms associated with abiotic stress tolerance; (c) identified physiological tools to determine drought and high temperature tolerance; (d) screened germplasm collections for tolerance to drought and/or high temperature stress; and (e) developed and extended sustainable crop production practices for improving resource use efficiency and productivity of grain crops. More specific items are listed below:

Sorghum:

Knowledge: Characterized sorghum germplasm for traits related to drought and heat tolerance (Mutava et al. 2011. *Field Crop Res.* 123:10-18) and improved the understanding of the physiological basis of variation (Gholipour et al. 2010. *Field Crop Res.* 119: 85-90; Ocheltree et al. 2014. *Funct. Plant Biol.* 41:25-36; Djanaguiraman et al. 2014. *Environ. Exp. Bot.* 100: 43-54; Riar et al. 2015. *Environ. Exp. Bot.* 115: 58-62; Prasad et al. 2015. *Front. Plant Sci.* 8: 820).

Impact/Outcome: Improved understanding of drought and heat stress and opportunities to breed for tolerance.

Wheat:

Knowledge: Identified genetic variability in wheat and wild species for high temperature stress and drought stress, identified tolerant sources and developed understanding of the mechanisms of tolerance (Pradhan et al., 2012. *Crop Sci.* 52:292-304; *Funct. Plant Biol.* 39:51-59). Wheat lines with increased expression of EF-Tu protein showed higher temperature tolerance (Ristic et al. 2008. *J. Plant Physiol.* 165:192-202; Bukovnik et al. 2009. *Funct. Plant Biol.* 36:234-241; Ristic et al. 2009. *J. Exp. Bot.* 60: 4003-4014; Prasad et al. 2011. *J. Agron. Crop Sci.* 197: 430-441; Pradhan et al. 2012. *Crop Sci.* 52: 292-304; Pradhan et al. 2012. *Funct. Plant Biol.* 39: 51-59; Kumar et al. 2012. *Euphytica* 186: 265-276; Prasad and Djanaguiraman 2014. *Funct. Plant Biol.* 41: 1261-1269; Pradhan and Prasad 2015. *PLoS One* 10: e0116620; Narayanan et al. 2015. *J. Agron. Crop Sci.* 201: 206-218; Narayanan et al. 2016a. *Plant Cell Environ.* 39: 608-617; Narayanan et al. 2016b. *Plant Cell Environ.* 39: 878-803).

Impact/Outcome: Identified opportunities for improving high temperature tolerance and gene transfer.

Soybean:

Knowledge: High temperature caused premature leaf senescence leading to decreased photosynthesis and seed mass (Djanaguiraman et al. 2010. *Funct. Plant Biol.* 37:1071-1084). High temperature stress caused oxidative damage, leaf, chloroplast and pollen structural/anatomical changes, leading to lower photosynthesis and contributing to lower pod set (Djanaguiraman et al. 2011. *Exp. Environ. Bot.* 70:51-57; Djanaguiraman et al. 2011. *Crop Sci.* 51:2125-2131; Djanaguiraman et al. 2013. *Crop Sci.* 53:1594-1604; Djanaguiraman et al. 2013. *J. Agron. Crop Sci.* 199:171-177; Keep et al. *Crop Sci.* 56: 122-131).

Impact/Outcome: Improved understanding of high temperature stress response.

High Temperature Tolerant Genotypes:

Knowledge: Identified genotypes that were tolerant to high temperature stress in groundnut (Craufurd et al. 2003. *Field Crop Res.* 80:63-77; Kakani et al. 2002. *Plant Cell Environ.* 25:1651-1661), rice (Prasad et al. 2006. *Field Crop Res.* 95:398-411), wheat (Ristic et al. 2008. *J. Plant Physiol.* 165:192-202), and sorghum (Djanaguiraman et al. 2014. *Environ. Exp. Bot.* 100:43-54).

Impact/Outcome: Identified genotypes can be used for breeding for high temperature tolerance.

Interactions of High Temperature and Carbon Dioxide:

Knowledge: Quantified season-long effects of high temperature stress at ambient and elevated carbon dioxide concentrations in dry bean (Prasad et al. 2002. *Global Change Biol.* 8:710-721), peanut (Prasad et al. 2003. *Global Change Biol.* 9:1775-1778), and sorghum (Prasad et al. 2006. *Agric. For. Meteorol.* 139:237-251). Demonstrated that there are no beneficial effects of elevated carbon dioxide on reproductive processes and yield at high temperatures.

Impact/Outcome: Improved understanding of interactions and opportunities to refine response functions in crop simulation models.

Ten Selected Papers (Original Research Articles) as First Author:

1. **Prasad PVV**, Boote KJ, Allen LH Jr., Sheehy JE, Thomas JMG. 2006. Species, ecotype and cultivar differences in spikelet fertility and harvest index of rice in response to high temperature stress. *Field Crops Research* 95: 398-411.
Knowledge: This was the first paper to compare various species of rice and show their relative tolerances to high temperature stress.
2. **Prasad PVV**, Boote KJ, Allen LH Jr, Thomas JMG. 2006. Adverse high temperature effects on pollen viability, seed-set, seed yield and harvest index of grain sorghum (*Sorghum bicolor* L.) are more severe at elevated carbon dioxide due to high tissue temperatures. *Agriculture and Forest Meteorology*. 139: 237-251.
Knowledge: This was the first paper looking at the responses of a short statured sorghum hybrid to season-long exposure to the interaction of high temperatures and elevated carbon dioxide.
3. **Prasad PVV**, Pisipati SR, Momcilovic I, Ristic Z. 2011. Independent and combined effects of high temperature and drought stress during grain filling on plant yield and chloroplast EF-Tu expression in spring wheat. *Journal of Agronomy and Crop Science* 197: 430-441.
Knowledge: The paper quantified and demonstrated that combined effects were more damaging than individual effects on physiology and yield.
4. **Prasad PVV**, Boote KJ, Allen LH Jr., Thomas JMG. 2002. Effects of elevated temperature and carbon dioxide on seed-set and yield of kidney bean (*Phaseolus vulgaris* L.). *Global Change Biology* 8: 710-721.
Knowledge: This paper showed that elevated temperature decreased pollen viability, seed-set, and grain yield of dry beans under both ambient and elevated carbon dioxide levels.
5. **Prasad PVV**, Pisipati SR, Mutava RN, Tuinstra MR. 2008. Sensitivity of grain sorghum to high temperature stress during reproductive development. *Crop Science* 48: 1911-1917.
Knowledge: This paper identified most sensitive stages to high temperature stress in sorghum.
6. **Prasad PVV**, Pisipati SR, Ristic Z, Bukovnik U, Fritz AK. 2008. Impact of high nighttime temperature on growth and yield of spring wheat. *Crop Science* 48: 2372-2380.
Knowledge: The paper quantified the impact of high nighttime temperature on spikelet fertility, grain number, grain weight, and grain yield.
7. **Prasad PVV**, Craufurd PQ, Summerfield RJ. 1999. Fruit number in relation to pollen production and viability in groundnut exposed to short episodes of heat stress. *Annals of Botany* 84: 381-386.
Knowledge: This paper showed that there were strong negative relations between temperatures (day and/or night) and most reproductive traits (flower numbers, fruit-set, pollen production, and pollen viability).
8. **Prasad PVV**, Boote KJ, Allen LH Jr., Thomas JMG. 2003. Super-optimal temperatures are detrimental to reproductive processes and yield of peanut under both ambient and elevated carbon dioxide. *Global Change Biology* 9: 1775-1787.
Knowledge: This paper showed that elevated temperature decreased pollen viability, seed-set, and grain yield of dry beans under both ambient and elevated carbon dioxide levels.
9. **Prasad PVV**, Craufurd PQ, Summerfield RJ, Wheeler TR. 2000. Effects of short episodes of high temperature on flower production and seed set of peanut (*Arachis hypogaea* L.). *Journal of Experimental Botany* 51: 777-781.
Knowledge: This paper was the first to demonstrate that high temperatures during the first half of the day were more critical for fruit-set in groundnut.
10. **Prasad PVV**, Djanaguiraman. Response of floret fertility and individual grain weight of wheat to high temperature stress: sensitive stages and thresholds for temperature and duration. *Functional Plant Biology* 28: 1261-1269.
Knowledge: This paper was the first to quantify temperature responses (timing, intensity and duration) of wheat.

Scholarship in Research, Development and Outreach in an International Context:

Africa: Conducted active research and education programs in several countries in West Africa (Ghana, Mali, Niger, and Mali) and East Africa (Kenya). These projects were funded through USAID Collaborative Research Support Programs (2008-2014) (now called Feed the Future Innovation Labs). These programs are focused on development, testing, and transfer of technologies that improve profitability of smallholder farmers through adoption of improved and sustainable crop, soil, and water management practices. Activities were focused on cereal (sorghum, millet, and maize) and legume (cowpea, peanut, and soybean) based cropping systems and use of sustainable agricultural practices (cover crops, crop rotation, tillage, integrated nutrient management, and residue management). Research has shown that use of tied ridges, contour ridges, and water conservation practices can improve yield by 100%. Micro-dose fertilizer increased grain yield by >70%. Crop rotations increased productivity by >30%. Minimum tillage increased net profits by >20%. Use of integrated fertilizer practices helped enhanced productivity of major cereals crops. Application of phosphorus fertilizer increased productivity of cereal and legume crops by >50%. Overall, the package of practices developed through this research increased productivity of smallholder farmers in selected villages by >50%. These research results were featured in regional news media outlets (including television and newspapers). Through a separate project funded through the USAID-Mali Mission, research was conducted on decrue sorghum (sorghum grown in receding water in lakes and rivers) in northern Mali, which is one of the poorest and most food insecure regions of the world. This crop was very important for the food security of this region. The project was implemented in remote areas of Timbuktu, Kidal, Gao, and Mopti. Research was done in farmers' fields. This was the most comprehensive research and technology transfer project conducted on decrue sorghum in the Sahel. Sorghum genotypes were identified that were suited for this region, and a package of practices was developed to enhance yield and minimize the impact of pests and diseases. Improved practices were able to double the grain yield of decrue sorghum in northern Mali.

Asia: Conducted active research programs in India funded through USAID (2014-2018) on developing climate resilient wheat genotypes with heat and drought tolerance. This project was implemented in collaboration with Washington State University and several partner institutions in India. The goal of this project was to develop and release high temperature tolerant wheat genotypes for Southeast Asia. In addition, three USAID - CGIAR and US Universities linkage grants were obtained to improve climate resiliency of millets, sorghum, and rice. Two from ICRISAT (International Crop Research Institute for the Semi-Arid Tropics, India) on aspects of high temperature and drought tolerance in pearl millet and salinity tolerance in sorghum. A third from IRRI (International Rice Research Institute, Philippines) was to understand mechanisms associated with high temperature tolerance in rice. These projects involved scientist and student exchanges.

Global: In 2014, received one of the largest single research grants (\$50 million) from USAID to Kansas State University on Sustainable Intensification (Feed the Future Sustainable Intensification Innovation Lab, SIIIL). This grant is focused on research and capacity building activities in Africa (Senegal, Burkina Faso, Tanzania, and Ethiopia) and Asia (Bangladesh and Cambodia) that deal with aspects related to sustainable intensification and food and nutrition security of smallholder farmers.

In 2016, established Center of Excellence for Sustainable Agricultural Intensification and Nutrition (CESAIN) at the Royal University of Agriculture in Cambodia with support from USAID-Cambodia Mission.

In 2016, led the understand and design for "Climate Smart Agriculture and Sustainable Intensification" in Rwanda with support from the USAID Mission.

In 2017, led and collaborated to establish SOILS Consortium in partnership with IFDC (International Fertilizer Development Center) through large surveys and summit, leading to key recommendations to address soil fertility issues in Africa.

In 2019, the SIIIL was further extended for five years (2019-2024) with additional support (\$25 million).

In 2020, established innovation Research, Education, Advisory Coordination Hub (iREACH) at CORAF (West and Central African Council for Agricultural Research and Development) in Senegal.

In 2021, received large grant focused on Haiti Agricultural University Partnership to build human and institutional capacity of six universities in Haiti and to establish Center of Excellence on Mitigation, Adaptation, and Resilience to Climate-Change in Haiti (CEMARCH) with support from USAID-Haiti Mission.

In 2022, led the efforts on "Scaling Climate Smart Agricultural Technologies/Innovations: Assessment and Priority Setting for Guatemala.

In 2023, worked with different universities in Ethiopia to form a consortium and support human and institutional capacity to conduct quality research, support quality education and show case scalable technologies to private sector, producers, and policy makers.

Since 2016, led the establishment of 7 technology parks in Cambodia; 2 technology parks in Senegal; 2 technology parks in Ghana, and one each in Niger, Burkina and Mali. These serve as one-stop shop to see innovations ready to be scaled and adopted by farmers. These also serve as training centers for students.

XII. Professional Contributions

Specific Research Contributions:

- Established an internationally reputed crop ecophysiology research and teaching program with state-of-the-art facilities (growth chambers, rain-out shelters, and heat tents), and equipment for screening genotypes for abiotic stress tolerance and understanding mechanisms associated with tolerance.
- Quantified responses to interaction of climate change factors (temperature, water, and carbon dioxide) in various crops (dry beans, peanut, sorghum, and rice).
- Quantified impact of high temperature stress on various biochemical, physiological, and yield processes in multiple grain crops. Some of these responses are being used to improve crop simulation models.
- Determined sensitive stages of crop development to high temperature stress in various crops (peanut, sorghum, wheat, pearl millet, finger millet and soybean).
- Screened several germplasm collections of wheat, sorghum, millet, soybean, and peanut for high temperature and drought tolerance and identified tolerant lines.
- Improved understanding of mechanisms associated with tolerance or susceptibility to abiotic stress (high temperature or drought) in various grain crops (wheat, rice, sorghum, pearl millet, finger millet, soybean, dry bean, peanut, and canola).
- Developed high-throughput physiological and biochemical tools to screen genotypes for drought and high temperature tolerance in grain crops under field and controlled environment conditions.
- Research featured in several national and international media out (newspapers, radio, and television).
- Principal investigator of the largest federal competitive research grant that KSU ever received (\$50 M).
- Instrumental in securing \$8 million worth in-kind donation to establish Harold and Olympia Lonsinger Sustainability Research Farm at KSU. One of the largest donations to the College of Agriculture at KSU.
- Highly successful in grant funding. Submitted >220 proposals of which >200 were funded (>100 as PI; and >90% success rate of funding).
- Gave >250 presentations at international meetings (including >150 invited talks) in 40 different countries (e.g., Ghana, Mali, Niger, Senegal, Burkina Faso, Egypt, Morocco, Kenya, Ethiopia, Rwanda, Uganda, South Africa, El-Salvador, Mexico, Indonesia, Cambodia, Thailand, Malaysia, Philippines, Vietnam, India, Australia, China, Hong Kong, United Kingdom, Netherland, Germany, Italy and more).
- Trained >220 visiting scientists from >15 different countries.
- Recruited >25 graduate students as major advisor with full funding to support their research programs.
- Graduated 23 students (15 PhD and 7 MS) as major advisor; and 60 (21 PhD and 29 MS as committee member).
- Received several awards from university, professional societies, including Fellow of the American Society of Agronomy (ASA), Fellow of the Crop Science Society of America (CSSA), and Fellow of the American Association for the Advancement of Science (AAAS).

Specific Teaching / Training Contributions:

- Developed and taught two graduate-level courses: Crop Physiology (AGRON 840) and Advanced Crop Ecology (AGRON 950).
- Average student teaching evaluations (TEVAL) of 4.7 out of 5.0 over the last nine years at KSU.
- Obtained perfect 5 out of 5 TEVAL in all categories for teaching AGRON 950 during spring 2014.
- Integrated research into teaching and developed discussion-based course (AGRON 950).
- Major Professor for a total of 23 graduate students (8 MS and 15 PhD).
- Committee member for a total of 60 graduate students (32 MS and 28 PhD).
- Trained >220 scholars from 15 countries across the world, some of them hold prominent positions.

- Mentored students to achieve career goals and achievements. All graduated students are employed in academia, national research organizations, or private industry (based on their preference).
- Several graduate students (R. Mutava, G. Pradhan, G. Paul, G. Mahama, S. Narayanan, H. Wang and M. Kuykendall) received awards for their research, oral or poster presentations (at regional, national, and international meetings/conferences/workshops, including the CSSA and ASA).
- Research of several graduate students was highlighted and featured in the CSSA – International Newsletter (for example G. Pradhan, S. Narayanan, and G. Mahama).
- Received international educator award from KSU; excellence in graduate teaching award from the College of Agriculture at KSU; and Distinguished Graduate Faculty Award (Commerce Bank) from KSU.

Specific Service and Leadership Contributions:

- Chair, Plant Working Group of the CAST
- Board of Representative on Council for Agricultural Science and Technology (CAST)
- Vice Chair, Plant Working Group of the CAST
- Served as President Crop Science Society of America
- Served as President of Sigma-Xi-Kansas State University Chapter
- Served as President of the Distinguished Professor Group at K-State
- Served on the International Commission of Sustainable Agricultural Intensification (Co-Chaired 3 different working groups – innovation investment study; investment gap study; and principles and metrics).
- Served as chair and organized several symposiums at national and international conferences and workshops (e.g., ASA; CSSA; and USAID programs).
- Serving/served on editorial boards of 9 different international journals.
- Served as Director of Great Plains Sorghum Improvement and Utilization Center (2009 – 2016).
- Served at KSU in several Departmental, College and University Committees.
- Served as President of the Association of Agricultural Scientists of Indian Origin.
- Peer-reviewed >500 manuscripts for >75 different international journals.
- Reviewed >100 grant proposals for various national and international funding agencies.
- External evaluator for >10 doctoral dissertations from four different countries.
- Led the concept of technology parks for outreach and established 13 technology parks in six countries.
- Led and chaired the team which developed the “Sustainable Intensification Assessment Framework” which can be used by researchers, practitioners and policy makers to understand trade-off and synergies between five domains of sustainable intensification (productivity, economics, environment, social and human condition).
- Judge at various international conferences for awards to students and researchers.
- Completed LEAD-21 Class X program (Leadership Program for Land Grant Universities).
- Completed FSLI – Cohort 13 program (Food Systems Leadership Institute).

XIII. Impact of Research

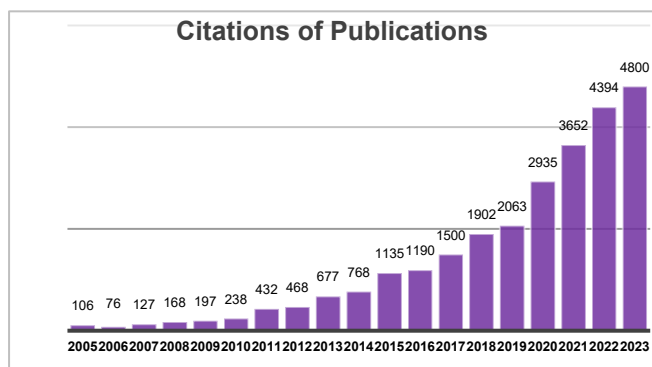
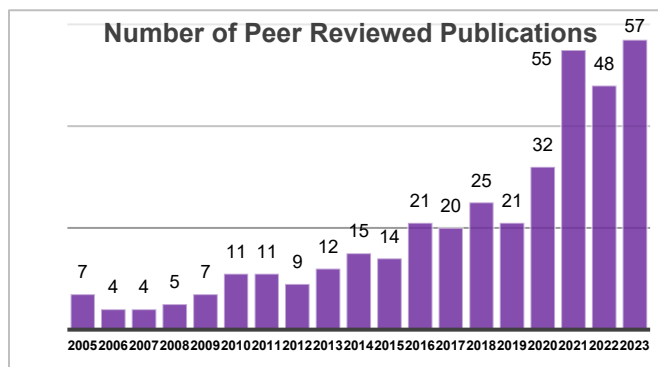
In addition to the direct impact of the research on producers and researchers, research impact is often measured by the number of citations of research articles published by an author.

Google Scholar: Total number of citations: **>30,000**; *h-index (Hirsch index): **>90**; **i-10-index:**>289**

*h-index is the largest number of papers that a scientist has that have received at least that number of citations. h-index is indicative of a researcher's productivity.

i-10-index is the number of publications with at least 10 citations.

Number of publications (journal articles and chapters) and citations from **January 2005 to December 2023**.



For recent data, follow the website links below:

Google Scholar: <https://scholar.google.com.au/citations?user=AvfPGxgAAAAJ&hl>
 Research Gate: https://www.researchgate.net/profile/P_V_Vara_Prasad
 Researcher ID: <http://www.researcherid.com/rid/B-3835-2012>
 ORCID: <http://orcid.org/0000-0001-6632-3361>

XIV. Complete List of Publications

Published: Journal Articles: >390; Book Chapters: >55; Abstracts: >300; Reports: >100; Presentations: >250 (Invited: >160)

Published Refereed Articles in International Journals (>385)

1. Djanaguiraman M, Vimala K, Sofi PA, Perumal R, **Prasad PVV**. 2024. Genetic variation for iron and zinc in the U.S. sorghum (*Sorghum bicolor* (L.) Moench] association panel. *Crop Science* (In Press).
2. Ehtaiwesh A, Sunoj J, Djanaguiraman M, **Prasad PVV**. 2024. Response of winter wheat genotypes to salinity stress under controlled environments. *Frontiers in Plant Science* (In Press).
3. Raj AS, Badgujar CM, Lollato R, **Prasad PVV**, Siliveru K. 2024. Predicting rheological properties of wheat dough from flour properties using NIR coupled with artificial neural network. *Journal of Natural Resources and Agricultural Ecosystems* (In Press).
4. Jha U, Nayyar H, Thudi M, Beena R, Siddique KHM, **Prasad PVV**. 2024. Unlocking the nutritional potential of chickpea: strategies for biofortification and enhanced multinutrient quality. *Frontiers in Plant Sciences* (In Press).
5. Siddika A, Rashid AA, Khan SN, Khatun A, Karim MM, **Prasad PVV**, Hasanuzzaman M. 2024. Harnessing plant-promoting rhizobacteria, *Bacillus subtilis* and *B. aryabhatai* to combat salt stress in rice: a study on the regulation of antioxidant defense, ion homeostasis, and photosynthetic parameters. *Frontiers in Plant Sciences* (In Press).
6. Bhardwaj S, Verma T, Kour J, Singh AD, Bhardwaj R, Sharma NR, Ansari S, Raza A, **Prasad PVV**, Thakur U, Kapoor D. 2024. Silicon and nitric oxide modulated growth attributes, antioxidant defense system and osmolytes accumulation in radish (*Raphanus sativus* L.) under arsenic toxicity. *Plant Stress* (Online). <https://doi.org/10.1016/j.stress.2024.100473>
7. Kashyap GR, Sridhara S, Majoj KN, Gopakkali P, Das B, Jha PK, **Prasad PVV**. 2024. Machine learning ensembles, neural networks, hybrid and sparse regression approaches for forecasting cotton yield. *International Journal of Biometeorology* (Online). <https://doi.org/10.1007/s00484-024-02661-1>
8. Adari MD, Pandian BA, Gaines TA, **Prasad PVV**, Jugulam M. 2024. Confirmation and characterization of the first case of acetolactate synthase (ALS)-inhibitor resistance in Japanese brome (*Bromus japonicus*) in the US. *Pest Management Science* (Online). <https://doi.org/10.1002/ps.8074>
9. Shafi S, Zaffar A, Riyaz I, Shikari AB, Najeeb S, Zargar SM, Djanaguiraman M, Gurusurthy S, **Prasad PVV**, Sofi PA. 2024. Differential drought response in deep and shallow-rooted rice genotypes: enzymatic

- and non-enzymatic insights. *Plant Physiology Reports (Online)*. <https://doi.org/10.1007/s40502-024-00788-2>
10. Kumam Y, Trick HN, Sharma V, **Prasad PVV**, Jugulam M. 2024. Establishment of first protocol of hypocotyl-based regeneration and callus transformation in waterhemp (*Amaranthus tuberculatus*). *In Vitro Cellular and Development Biology – Plant (Online)*. <https://doi.org/10.1007/s11627-023-10408-7>
 11. Akhtar K, Ai N, **Prasad PVV**, Naz M, Aslam MM, Djalovic I, Riaz M, Ahmad S, Varshney R, He B, Wen R. 2024. Physiological, molecular, and environmental insights into plant nitrogen uptake, and metabolism under abiotic stresses. *The Plant Genome*: e20461. <https://doi.org/10.1002/tpg2.20461>
 12. Sudhakar S, Nakka S, Mohammad A, Trick H, **Prasad PVV**, Jugulam M. 2024. Characterization of wheat (*Triticum aestivum*) response to mesotrione, a triketone herbicide. *ACS Agricultural Science & Technology* 4: 432-439. <https://doi.org/10.1021/acscagcitech.3c00531>
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 16. Hin L, Buntong B, Mean CM, Chhoem C, **Prasad PVV**. 2024. Impacts of solar dryers on socio-economic conditions of dried fish processors in Cambodia. *Sustainability* 16: 2130. <https://doi.org/10.3390/su16052130>
 17. Sudhakar S, Nakka S, Mohammad A, Trick H, **Prasad PVV**, Jugulam M. 2024. Metabolism of tembotrione, a triketone herbicide, confers differential sensitivity in winter wheat (*Triticum aestivum* L.). *Journal of Agricultural and Food Chemistry* 72: 6931-6941. <https://doi.org/10.1021/acs.jafc.3c08852>
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 21. Nieto L, Houborg R, Tivet F, Olson BJSC, **Prasad PVV**, Ciampitti IA. 2024. Limitations and future perspectives for satellite-based soil carbon. *Environmental Challenges* 14: 100839. <https://doi.org/10.1016/j.envc.2024.100839>
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 23. Djalovic I, Grahovac N, Stojanovic Z, Durovic A, Zivancev D, Jaksic S, Jacimovic S, Tian C, **Prasad PVV**. 2024. Nutritional and chemical quality of maize hybrids from different FAO maturity groups developed and grown in Serbia. *Plants* 13: 143. <https://doi.org/10.3390/plants13010143>
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34. Bizimana J-C, Yalew BB, Assefa TT, Belay SA, Degu YM, Mabhaudhi T, Reyes MR, **Prasad PVV**, Tilahun SA. 2023. Simulating potential impacts of solar majipump on the economy and nutrition of smallholder farmers in sub-humid Ethiopia. *Water* 15: 4003. <https://doi.org/10.3390/w15224003>
35. Compton J, Echeverria RG, **Prasad PVV**, Tittonell P. 2023. Improving investment in research and innovation to transform agrifood systems in the Global South. *Frontiers in Sustainable Food Systems* 7: 1287451. <https://doi.org/10.3389/fsufs.2023.1287451>
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38. Santiago G, Carcedo A, Brown ME, Nejadhashemi AP, **Prasad PVV**, Ciampitti IA. 2023. Data integration dashboard for assessing and planning sustainable intensification interventions: a case study in Senegal. *Frontiers in Sustainable Food Systems* 7: 1208286. <https://doi.org/10.3389/fsufs.2023.1208286>
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41. Priya M, Bhardwaj A, Jha UC, Bindumadhava H, **Prasad PVV**, Sharma KD, Siddique KHM, Nayyar H. 2023. Investigating the influence of elevated temperature on nutritional and yield characteristics of mung bean (*Vigna radiata* L.) genotypes during seed filling in controlled environment. *Frontiers in Plant Sciences* 14: 1233954. <https://doi.org/10.3389/fpls.2023.1233954>
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43. Abhishek A, Phanikumar MS, Sendrowski A, Andreadis KM, Hashemi MGZ, Jayasinghe S, **Prasad PVV**, Brent RJ, Das NN. 2023. Dryspells and minimum air temperatures influence rice yields and their forecast uncertainties in rainfed systems. *Agricultural and Forest Meteorology* 341: 109693. <https://doi.org/10.1016/j.agrformet.2023.109683>
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1. **Prasad PVV**. 2023. Integration of sustainable agricultural intensification and digital tools for smallholder farmers and commercial agriculture. "Kenote Lecture", *International Conference on Frontiers in Commercial Agriculture Towards Preparedness for Future Farming*, 14 – 16 December, Rajahmundry, Andhra Pradesh, India.
2. **Prasad PVV**. 2023. Sustainable agricultural intensification for enhancing food, nutrition, climate and soil security. "Invited Lecture", *Indian Council of Agriculture Research – Central Soil Salinity Research Institute*, 11 December, Karnal, Haryana, India.
3. **Prasad PVV**. 2023. Role of plant physiology for food, nutrition and climate security: successes, gaps and opportunity. "K.K. Nanda Memorial Award Lecture", *National Conference on Plant Physiology – Physiological and Molecular Approaches for Climate Smart Agriculture*, *Indian Society of Plant Physiology*, 9 – 11 December, New Delhi, India.
4. Djanaguiraman M, **Prasad PVV**. 2023. High temperature induced decreases in photosynthetic rate of wheat is associated with lipid desaturation, oxidation, acylation, and damage of cell organelles. *National Conference on Plant Physiology – Physiological and Molecular Approaches for Climate Smart Agriculture*, *Indian Society of Plant Physiology*, 9 – 11 December, New Delhi, India.
5. **Prasad PVV**. 2023. Use of artificial intelligence innovations for sustainable agricultural intensification: trends and opportunities. "Eminent Scientist Lecture", *Indian Council of Agriculture Research – Indian Institute of Sugarcane Research*, 8 December, Lucknow, Uttar Pradesh, India.
6. **Prasad PVV**. 2023. Systems approaches for efficient management of natural resources and food security. "Keynote Lecture", *National Conference on Natural Resource Conservation and Management of Agricultural and Environmental Sustainability*, 8 – 9 December, Academy of Natural Resources Conservation and Management, Lucknow, Uttar Pradesh, India.
7. **Prasad PVV**. 2023. Sustainable agricultural intensification for enhancing food, nutrition, climate and soil security. "Invited Lecture", *Indian Council of Agricultural Research – Indian Agricultural Research Institute*, 6 December, Hazaribagh, Ranchi, Jharkhand, India.
8. **Prasad PVV**. 2023. Sustainable agricultural intensification for enhancing soil health and crop productivity. "Invited Speaker", *Celebration of World Soils Day*, 5 December, Bihar Agricultural University, Sabour, Bihar, India.
9. **Prasad PVV**. 2023. Use of artificial intelligence innovations for sustainable agricultural intensification: trends and opportunities. "Invited Speaker", *Brainstorming Workshop on Trends in Application of Artificial Intelligence for Sustainable Agriculture*, 29 November, Coimbatore, Tamil Nadu, India.
10. **Prasad PVV**. 2023. Harnessing the diversity of millets for promoting health, climate resilient and sustainability. "Keynote Speaker", *International Nutri Cereal Convention (INCC) 5.0*, 27 – 28 November, Hyderabad, Telangana, India.
11. **Prasad PVV**. 2023. Sustainable agricultural intensification and home gardens for food, nutrition, biodiversity and climate security. "Keynote Speaker", *2nd International Conference on School-plus-Home Gardens cum Biodiversity Enhancement and Enterprise (SHGBEE2)*, 14 – 17 November, Kabankalan

- City, Negro Occidental, Philippines.
12. Perumal R, **Prasad PVV**, Satyavathi R, Govindraj M, Tendouano A. 2023. Pearl millet: a resilient cereal crop for food, nutrition and climate security. *Annual Meeting of ASA-CSSA-SSSA*, 29 October – 1 November, St. Louis, Missouri, USA.
 13. Massigoge I, Hefley T, Lingenfelter JE, Lira S, **Prasad PVV**, Hatfield JL, Ciampitti IA. 2023. Comparison of maize and soybean in the US corn belt: a Bayesian approach. *Annual Meeting of ASA-CSSA-SSSA*, 29 October – 1 November, St. Louis, Missouri, USA.
 14. Massigoge I, Baral R, Cominelli S, Denson E, Helguera MPG, Guareschi CA, Simoa LM, Peraza J, Pires CB, Dille JA, Lollato RP, Min D, Patrignan A, Ruiz-Diaz DA, Hefley T, Lira S, **Prasad PVV**, Rice CW, Ciampitti IA. 2023. Investigating alternative crop rotations for agricultural intensification in the US central great plains. *Annual Meeting of ASA-CSSA-SSSA*, 29 October – 1 November, St. Louis, Missouri, USA.
 15. Marziotte L, Carcedo AJP, Mayor ML, **Prasad PVV**, Peraza J, Ciampitti IA. 2023. Re-thinking sorghum in rotation. *Annual Meeting of ASA-CSSA-SSSA*, 29 October – 1 November, St. Louis, Missouri, USA.
 16. Ramalingam AP, Muthurajan R, **Prasad PVV**, Perumal R. 2023. Pilot-scale genome-wide association mapping in diverse sorghum germplasm. *Annual Meeting of ASA-CSSA-SSSA*, 29 October – 1 November, St. Louis, Missouri, USA.
 17. Middendorf BJ, Jha PK, Faye A, **Prasad PVV**. 2023. Lives and livelihood of smallholder farming systems of Senegal: impacts, adaptation and resilience to COVID-19. *Annual Meeting of ASA-CSSA-SSSA*, 29 October – 1 November, St. Louis, Missouri, USA.
 18. Gomez F, Carcedo JP, Mean M, Suguiura L, Reyes R, Tivet F, Seng V, **Prasad PVV**, Ciampitti IA. 2023. Soil organic carbon in southeast Asia. *Annual Meeting of ASA-CSSA-SSSA*, 29 October – 1 November, St. Louis, Missouri, USA.
 19. Ramalingam AP, Serba DD, **Prasad PVV**, Perumal R. 2023. Drought tolerance in diversified pearl millet parental lines. *Annual Meeting of ASA-CSSA-SSSA*, 29 October – 1 November, St. Louis, Missouri, USA.
 20. Obour AK, Faye A, Moriaque AT, Min D, Assefa Y, **Prasad PVV**. 2023. Cowpea grain and fodder yield response to variety, fertilizer, and environment. *Annual Meeting of ASA-CSSA-SSSA*, 29 October – 1 November, St. Louis, Missouri, USA.
 21. **Prasad PVV**, Middendorf BJ, Stewart ZP, Glover JD. 2023. Sustainable agricultural intensification (SAI): a systems approach to address food and nutrition security. *Annual Meeting of ASA-CSSA-SSSA*, 29 October – 1 November, St. Louis, Missouri, USA.
 22. **Prasad PVV**. 2023. The role of millets for food, nutrition, health and wellbeing of people and ecosystem: international perspectives. “*Invited Speaker*”, *Millets for Food and Nutritional Security: Celebrating International Year of Millets*, 17 October, National Academy of Agricultural Sciences (India) and World Food Prize Foundation, New Delhi, India.
 23. **Prasad PVV**. 2023. Current research in agriculture: challenges and contributions of Bharat. “*Invited Speaker*”, *Global Indian Scientists and Technocrats USA Meet*, 14 – 15 October, Groveland, Florida, USA.
 24. **Prasad PVV**. 2023. The role of millets for climate resilience, nutrition and health. “*Invited Speaker*”, *National Seminar on Abiotic Stress Management for Sustainable Millet Based Production Systems*, 22 – 23 August, Baramati, Maharashtra, India.
 25. **Prasad PVV**. 2023. Impact of climate change factors (temperature and carbon dioxide) on peanut: 11 key questions and answers. “*Invited Speaker*”, *55th American Peanut Research and Education Society*, 11 – 13 July, Savannah, Georgia, USA.
 26. **Prasad PVV**. 2023. Food and nutrition security through sustainable agricultural intensification (SAI) and millets: local solutions for global challenges. “*Invited G-20 and Y-20 Lecture*”, *Rani Lakshmi Bai Central Agricultural University*, 20 June, Jhansi, Madhya Pradesh, India.
 27. **Prasad PVV**. 2023. Global challenges and local solutions: “*Lecture*”, *Indian Council of Agricultural Research – Central Agroforestry Research Institute*, 20 June, Jhansi, Madhya Pradesh, India.
 28. **Prasad PVV**. 2023. Food and nutrition security through sustainable agricultural intensification (SAI) and millets: local solutions for global challenges. “*Invited G-20 and Y-20 Lecture*”, *Rajmata Vijayaraje Scindia Krishi Vishwa Vidyalaya*, 19 June, Gwalior, Madhya Pradesh, India.
 29. **Prasad PVV**. 2023. Food and nutrition security through sustainable agricultural intensification (SAI) and millets: local solutions for global challenges. “*Invited G-20 and Y-20 Lecture*”, *Banaras Hindu University*,

- 13 June, Varanasi, Uttar Pradesh, India.
30. **Prasad PVV.** 2023. Food and nutrition security through sustainable agricultural intensification (SAI) and millets: local solutions for global challenges. “*Invited G-20 and Y-20 Lecture*”, Aligarh Muslim University, 12 June, Aligarh, Uttar Pradesh, India.
 31. **Prasad PVV.** 2023. Impacts of high temperature stress on horticultural crops. “*Invited Lecture*”, Indian Council of Agricultural Research – Indian Institute of Vegetable Research, 10 June, Varanasi, Uttar Pradesh, India.
 32. **Prasad PVV.** 2023. Impacts of high temperature stress on horticultural crops. “*Invited Lecture*”, Indian Council of Agricultural Research – Central Institute of Temperature Horticulture, 9 June, Srinagar, Jammu and Kashmir, India.
 33. **Prasad PVV.** 2023. Climate change: causes, impacts and solutions. “*Keynote Speaker*”, 5th International Conference on Climate Change and Its Impacts, 9 – 11 June, Srinagar, Jammu and Kashmir, India.
 34. **Prasad PVV.** 2023. Food and nutrition security through sustainable agricultural intensification (SAI) and millets: local solutions for global challenges. “*Invited G-20 and Y-20 Lecture*”, Center for Rural Development and Technology, Indian Institute of Technology, 7 June, New Delhi, India.
 35. **Prasad PVV.** 2023. Food and nutrition security through sustainable agricultural intensification (SAI) and millets: local solutions for global challenges. “*Invited G-20 and Y-20 Lecture*”, Galgotias University, 6 June, Greater Noida, Uttar Pradesh, India.
 36. **Prasad PVV.** 2023. Role of millets in promoting health, well-being and resilience to climate change. “*Invited Y-20 Lecture*”, All India Institute of Medical Research, 5 June, New Delhi, India.
 37. **Prasad PVV.** 2023. Global challenges – local solutions: youth engagement. “*Invited Speaker*”, Global Indian Young Scientists Research and Innovation Conference, 31 May – 2 June, New Delhi, India.
 38. **Prasad PVV.** 2023. Global challenges – local solutions: specific examples. “*Invited Speaker*”, Global Indian Young Scientists Research and Innovation Conference, 31 May – 2 June, New Delhi, India.
 39. Perumal R, Ramalingam AP, Muthurajan R, **Prasad PVV.** 2023. Pilot-scale genome-wide association mapping in diverse sorghum germplasm identified novel genetic loci linked to major agronomic, stomatal and root traits. *Sorghum in the 21st Century: Global Sorghum Conference: Resilience and Sustainability in the Face of Climate Change*, 5 – 9 June, Montpellier, France.
 40. **Prasad PVV.** 2023. Abiotic stress and millets: impacts, genetic variability and approaches to enhance resilience and productivity. “*Invited Speaker*”, International Millets Conference and Futuristic Food Expo, 24 – 26 April, Coimbatore, Tamil Nadu, India.
 41. **Prasad PVV.** 2023. Sustainable agricultural intensification (SAI): pathway for food and nutrition security. “*Invited Speaker*”, International Conference on Biodiversity, Food Security, Sustainability and Climate Change, 25 – 28 April, Assam Agricultural University, Jorhat, Assam, India.
 42. **Prasad PVV.** 2023. Sustainable agricultural intensification: pathways for food, nutrition and climate security. “*Invited Webinar*”, Plant Science Symposium, 31 March, University of Minnesota, Minnesota, USA.
 43. **Prasad PVV.** 2023. Climate stresses (heat and drought): sensitive stages, impacts, mechanisms, management, and breeding. “*Invited Speaker*”, International Conference on Environmental Education and Climate Change Adaptation: Science of Pollution Tolerant and Climate Resilient Plants, 28 March, Council of Scientific and Industrial Research – National Botanical Research Institute, Lucknow, India.
 44. **Prasad PVV.** 2023. Millets under abiotic stress: impacts, genetic variability and breeding to enhance resilience and productivity. “*Invited Speaker*”, International Conference on Enhancing Productivity and Value Addition in Millets, 19 March, New Delhi, India.
 45. **Prasad PVV.** 2023. Role of sustainable agricultural intensification to address food, nutrition and climate security. “*Invited Webinar*”, Association of Agricultural Scientists of Indian Origin, 8 March, USA.
 46. **Prasad PVV.** 2023. Abiotic stresses and crop yields: impacts, evaluation, management, and opportunities. “*Invited Speaker*”, National Training Program on Management and Utilization of Plant Genetic Resources, 1 – 21 February, National Bureau of Plant Genetics Resources, New Delhi, India.
 47. **Prasad PVV.** 2023. Impact of heat/drought stress on soybean; and role of crop physiology in addressing food and nutrition security. “*Invited Speaker*”, 2023 Soybean Breeders Workshop, 13 – 15 February, St. Louis, Missouri, USA.
 48. **Prasad PVV.** 2023. Climate change and agri-food systems: impacts, solutions and opportunities. “*Invited Speaker*”, 1st International Conference About COP27, Climate Change and Food Security, 14 –

- 15 February, Rawalpindi, Pakistan.
49. **Prasad PVV**. 2023. Impact of high temperature stress on grain crops, weed growth and herbicide efficiency. *"Invited Speaker"*, 63rd Annual Meeting of Weed Science Society of America, 30 January – 2 February, Arlington, Virginia, USA.
 50. **Prasad PVV**. 2023. Impact of high temperature stress of horticultural and grain crops: case studies – tomato, pepper, coconut and grains. *"Invited Lecture"*, Sri Konda Laxman Telangana State Horticultural University, 12 January, Hyderabad, Telangana, India.
 51. **Prasad PVV**. 2023. Sustainable agricultural intensification (SAI): pathway for food and nutrition security. *"Invited Lecture"*, 6 – 9 January, National Agricultural Biotechnology Institute, Mohali, Punjab, India.
 52. **Prasad PVV**. 2022. Enhancing stress tolerance in rainfed ecologies for improving crop productivity: overview. *"International Conference on Reimagining Rainfed Agro-ecosystems: Challenges and Opportunities"*, 22 – 24 December, Center Research Institute for Dryland Agriculture, Hyderabad, India.
 53. **Prasad PVV**. 2022. Sustainable agricultural intensification and climate smart agricultural practices for improved food and climate security. *"International Conference on System of Crop Intensification for Climate-Smart Livelihood and Nutrition Security"*, 12 – 14 December, Indian Institute of Rice Research, Hyderabad, India.
 54. Adari MD, Pandian BA, **Prasad PVV**, Jugulam M. 2022. Confirmation and characterization of ALS-inhibitor resistance in Japanese brome. North Central Weed Science Society of America, Annual Meeting, Dec 5 – 8, St. Louis, Missouri, USA.
 55. Sudhakar S, Nakka S, Mohammad S, Trick H, **Prasad PVV**, Jugulam M. 2022. Differential sensitivity of winter wheat HPPD inhibitors. North Central Weed Science Society of America, Annual Meeting, Dec 5 – 8, St. Louis, Missouri, USA.
 56. Kumam Y, Trick H, **Prasad PVV**, Jugulam M. 2022. Water hemp (*Amaranthus tuberculatus*) regeneration from callus culture: a step forward to genome editing in weed management. North Central Weed Science Society of America, Annual Meeting, Dec 5 – 8, St. Louis, Missouri, USA.
 57. **Prasad PVV**. 2022. Climate smart agricultural practices – platform and examples. *"Circular Bioeconomy Systems for Urban-Rural Co-Prosperity"*, 30 November – 02 December, Buenos Aires, Argentina.
 58. Ndiaye JAP, Faye A, Mariaque AT, Stewart ZP, Min D, **Prasad PVV**. 2022. Improving food and nutrition security through the integration of dual-purpose cowpea varieties in the agro-pastoral farming system in Senegal. *Annual Meeting of ASA-CSSA-SSSA*, 6 – 9 Nov., Baltimore, Maryland, USA.
 59. Carcedo A, Bastos LM, Yadav S, Mndal M, Jagadish K, Makal F, Sutradhar A, **Prasad PVV**, Ciampitti IA. 2022. Assessing impact of salinity and climate scenarios on dry season field crops in the coastal region of Bangladesh. *Annual Meeting of ASA-CSSA-SSSA*, 6 – 9 Nov., Baltimore, Maryland, USA.
 60. Veenstra RL, Hafley T, Berning D, Messina CD, Haag LA, **Prasad PVV**, Ciampitti IA. 2022. Predicting corn tiller densities with key E x M factors. *Annual Meeting of ASA-CSSA-SSSA*, 6 – 9 Nov., Baltimore, Maryland, USA.
 61. Jajoo A, Jha PK, **Prasad PVV**. 2022. Developing web-based drought monitoring portal for Senegal. *Annual Meeting of ASA-CSSA-SSSA*, 6 – 9 Nov., Baltimore, Maryland, USA.
 62. Fu J, Bowden RL, Jagadish SVK, **Prasad PVV**. 2022. Response of terminal heat stress in winter wheat. *Annual Meeting of ASA-CSSA-SSSA*, 6 – 9 Nov., Baltimore, Maryland, USA.
 63. **Prasad PVV**. 2022. Feed the Future Lab for Collaborative Research on Sustainable Intensification – Overview. *"Appropriate Scale Mechanization Consortium – Summit Strategies and Prioritization"*, 11 – 12 October, Theis, Senegal.
 64. **Prasad PVV**. 2022. Sustainable agricultural intensification – systems approach towards addressing food, nutrition and climate security. *"Climate Change and Food Security Workshop"*, 28 September, Indian Institute of Soil and Water Conservation, Udhagamandalam, Tamil Nadu, India.
 65. **Prasad PVV**. 2022. Current status of climate change and sustainable agricultural intensification – synthesis and analysis. *"Invited Seminar"*, 27 September, Tamil Nadu Agricultural University, Coimbatore, Tamil Nadu, India.
 66. **Prasad PVV**. 2022. Current status and impacts of climate change and sustainable agricultural intensification on food, nutrition and climate security. *"Invited Seminar"*, 22 September, SRM Institute and Technology, Kattankulathur, Chennai, Tamil Nadu, India.
 67. **Prasad PVV**. 2022. Key researchable issues in while plant/crop physiology. *"Brainstorming Session on: Exploring Researchable Issue in Plant Physiology"*, 13 September, Tamil Nadu Agricultural University,

- Coimbatore, Tamil Nadu, India.
68. **Prasad PVV.** 2022. Impact of climate change factors on crops and role of climate smart practices to enhance productivity, nutrition and resilience. *“Invited Seminar”*, 18 July, Mohali, Punjab, India.
 69. **Prasad PVV.** 2022. Importance and contributions of human, institutional, and social capital in addressing food, nutrition and climate security. *“International Conference on Harnessing Indian Agriculture for Domestic and Global Prosperity”*, 22 – 23 July, New Delhi, India.
 70. **Prasad PVV.** 2022. Sustainable agriculture intensification practices to enhance productivity, nutrition and resilience of smallholder farmers under climate change: global perspective and examples. *“Sustainable Agricultural Intensification and Nutrition 3rd International Conference”*, 28 – 31 June, Siem Reap, Cambodia.
 71. **Prasad PVV.** 2022. Welcome and overview of SIIL *“Sustainable Intensification Innovation Lab – Annual Meeting”*, 23 – 25 June, Phnom Penh, Cambodia.
 72. **Prasad PVV.** 2022. Central goals of our disciplines and contributions – Crop Science Society of America, American Society of Agronomy, Soil Science Society of America. *“Building Interdisciplinary Collaborations to Transform Food and Agriculture into Circular Systems”*, 6 – 8 June, Kansas City, Missouri, USA.
 73. **Prasad PVV.** 2022. Sustainable agriculture intensification practices to enhance productivity, nutrition and resilience of smallholder farmers under climate change: global perspective and examples. *“Association of Nepalese Agricultural Professionals of America (NAPA)”*, 27 – 29 May, Atlanta, Georgia, USA.
 74. **Prasad PVV.** 2022. Impact of high temperatures (heat) stress on wheat: the complete story – summary. *“Sustainable Global Wheat Production Under Climate Change”*, 9 May, University of Agriculture, Faisalabad, Pakistan.
 75. **Prasad PVV.** 2022. Improving abiotic stress tolerance and productivity of sorghum and millets: way forward. *“Millets – Way Forward”*, 29 April, Indian Institute Millet Research, Rajendranagar, Hyderabad, India.
 76. **Prasad PVV.** 2022. Impact of climate change factor on crops and opportunities to enhance resilience of agri-food systems. 15 April, Sher-e-Kashmir University of Agricultural Sciences and Technology, Srinagar, Jammu and Kashmir, India.
 77. **Prasad PVV.** 2022. Kansas State University – Overview of College of Agriculture. Sher-e-Kashmir University of Agricultural Sciences and Technology, 13 April, Srinagar, Jammu and Kashmir, India.
 78. **Prasad PVV.** 2022. Sustainable agricultural practices to enhance productivity, nutrition and resilience of smallholder farmers under climate change: global perspective and examples. *“International Seminar”, Phytomics – The Botanical Society*, Bhaskaracharya College of Applied Science, 10 April, New Delhi, India.
 79. **Prasad PVV.** 2022. Feed the Future program and overview of Sustainable Intensification Innovation Lab. *“Agricultural Rural Development – Annual Meeting”*, 3 April, Atlanta, Georgia, USA.
 80. **Prasad PVV.** 2022. Sustainable agricultural intensification for food, nutrition and climate security – systems approach for a carbon neutral economy. *“Brainstorming Session on: Towards Carbon Neutrality in Farming – Implications”*, 15 March, Kerala Agricultural University, Thrissur, Kerala, India.
 81. **Prasad PVV.** 2022. Global climate change: role of crop ecophysiology in transdisciplinary research. *“Webinar on Food Production – Physiological Perspective”*, 10 March, Virtual, Jorhat, Assam, India.
 82. **Prasad PVV.** 2022. Climate smart agricultural practices to enhance productivity, nutrition and resilience of smallholder farmers: global perspective and examples. *National Online Training on Soil and Water Conservation Technologies for Climate Smart Agriculture in the Context of Extreme Events*, 24 Jan. – 04 Feb, Virtual, Udthagamandalam, Tamil Nadu, India.
 83. **Prasad PVV.** 2022. Impact of climate change factors on crops and opportunities to enhance resilience of agri-food systems. *University of Florida Plant Science Symposium*, 26 Jan., Virtual, Gainesville, Florida, USA.
 84. **Prasad PVV.** 2021. Commission on sustainable agricultural intensification (Co-SAI) – USAID case study. *Research Community of Practice, Seminar – Bureau of Resilience and Food Security, United States Agency for International Development*, 15 Dec., Virtual, Washington DC, USA.
 85. **Prasad PVV.** 2021. Climate smart agricultural practices to enhance productivity, nutrition and resilience of agri-food systems. *National Conference of Plant Physiology on Frontiers in Plant Physiology for*

- Climate Resilient Agriculture*, 09 – 11 Dec., Virtual, Baramati, Pune, Maharashtra, India.
86. **Prasad PVV**. 2021. Sustainable agricultural intensification systems research: global perspectives and examples. *International Conference on Integrated Agriculture, Natural Farming, Biodiversity Conservation and Rural Bio-Entrepreneurship under Changing Climate Scenarios*. 7 – 9 Dec., Shillong, Meghalaya, India.
 87. **Prasad PVV**. 2021. Sustainable agricultural intensification to combat food security and climate security. *Fifth International Agronomy Congress on Agri-Innovations to Combat Food and Nutritional Challenges*, 23 – 27 Nov., Hyderabad, Telangana, India.
 88. Vaneestra RL, Messina CS, Berning D, Haag LA, Carter PR, Hefley T, **Prasad PVV**, Ciampitti IA. 2021. Yield impact of corn tillers: evaluating plasticity trait potential. *Annual Meeting of ASA-CSSA-SSSA*, 7 – 10 Nov., Salt Lake City, Utah, USA.
 89. Middendorf BJ, Traore H, Middendorf G, Jha PK, Yonli D, Pale S, **Prasad PVV**. 2021. Impacts of COVID-19 pandemic on vegetable production systems and livelihoods: smallholder farmer experience in Burkina Faso. *Annual Meeting of ASA-CSSA-SSSA*, 7 – 10 Nov., Salt Lake City, Utah, USA.
 90. Jha PK, **Prasad PVV**, Stewart ZP, Jajoo A, Rajawat G. 2021. Sitooklit: a mobile application for sustainable intensification assessment framework in agriculture. *Annual Meeting of ASA-CSSA-SSSA*, 7 – 10 Nov., Salt Lake City, Utah, USA.
 91. Fernandez JA, Messina CD, Salinas A, **Prasad PVV**, Nippert J, Ciampitti IA. 2021. Kernel weight and kernel-filling parameters of US maize hybrids over a century of breeding. *Annual Meeting of ASA-CSSA-SSSA*, 7 – 10 Nov., Salt Lake City, Utah, USA.
 92. Demarco P, Mayor L, Messina CD, **Prasad PVV**, Morris GP, Ciampitti IA. 2021. Nitrogen internal efficiency improved over past six decades of US sorghum hybrids. *Annual Meeting of ASA-CSSA-SSSA*, 7 – 10 Nov., Salt Lake City, Utah, USA.
 93. Correndo AA, Tremblay N, Coulter JA, Ruiz Dias DA, Franzen DW, Nafziger E, **Prasad PVV**, Rosso LM, Steinke K, Du J, Messina CD, Ciampitti IA. 2021. Disentangling corn yield response to nitrogen with Bayesian and machine learning models. *Annual Meeting of ASA-CSSA-SSSA*, 7 – 10 Nov., Salt Lake City, Utah, USA.
 94. Singh H, Northup B, **Prasad PVV**. 2021. Productivity and water use in intensified forage-wheat cropping systems of the US Southern Great Plains. *Annual Meeting of ASA-CSSA*, 7 – 10 Nov., Salt Lake City, Utah, USA.
 95. Singh H, Northup B, Rice CW, **Prasad PVV**. 2021. Biochar applications influences soil physical and chemical properties, microbial diversity and crop productivity: a meta-analysis. *Annual Meeting of ASA-CSSA-SSSA*, 7 – 10 Nov., Salt Lake City, Utah, USA.
 96. Izaurrealde RC, Jones CD, Varaprasad B, Chambers RG, Ochsner TE, Patrignani A, Rice CW, Ciampitti IA, Lambert D, Lollato RP, Northup B, Arnell DB, **Prasad PVV**, Warren JG. 2021. Whole-farm evaluation of productivity, resource use efficiency, and soil health. *Annual Meeting of ASA-CSSA-SSSA*, 7 – 10 Nov., Salt Lake City, Utah, USA.
 97. Akely EL, Ampim PAY, Hettiarachchi GM, Obeng E, **Prasad PVV**, Rice CW. 2021. Impact of tillage and cover cropping system on sorghum production and soil quality in Northern Ghana. *Annual Meeting of ASA-CSSA-SSSA*, 7 – 10 Nov., Salt Lake City, Utah, USA.
 98. Ostmeyer TJ, Hein N, Cook L, Asebedo AR, Dhillon R, **Prasad PVV**, Jagadish SVK. 2021. Grain sorghum yield and protein under split N application using aerial sensor technology. *Annual Meeting of ASA-CSSA-SSSA*, 7 – 10 Nov., Salt Lake City, Utah, USA.
 99. **Prasad PVV**. 2021. Climate change impact on grain crops. *Advanced Plant Science Seminar Series, University of Manitoba*, 14 Oct., Winnipeg, Manitoba, Canada.
 100. **Prasad PVV**. 2021. Sustainable agricultural systems research: impact on crops. *University and Industry Consortium, Fall 2021 International Conference*, 5 – 7 Oct., Saskatoon, Saskatchewan, Canada.
 101. **Prasad PVV**. 2021. Climate resilient crops for abiotic stress tolerance and nutrition. *International Conference on Future Challenges and Prospects in Plant Breeding*, 6 – 7 Oct., Coimbatore, Tamil Nadu, India.
 102. **Prasad PVV**. 2021. Sustainable agricultural intensification for food, nutrition and climate security. *International e-Conference on Applied Biosciences for Sustainable Development*. 3 – 4 Sep., Hyderabad, Telangana, India.
 103. **Prasad PVV**. 2021. Sustainable agricultural intensification for global food security, nutritional security

- and climate resilience. *First International Conference on Life Sciences: Contemporary Approaches in Biological Sciences for Food, Health Nutrition Security and Conservation of Biodiversity*, 26 – 28 Aug., Chennai, Tamil Nadu, India.
104. **Prasad PVV**. 2021. Impact of climate change on productivity of food grain crops. *Celebrating Platinum Jubilee of Professor Jayashankar Telangana State Agricultural University, Lecture*, 22 Aug., Hyderabad, Telangana, India.
 105. **Prasad PVV**. 2021. Sustainable agricultural intensification for improving food security and climate resilience. *Celebrating 75 Years of India's Independence: Azadi Ka Amrut Mahotsav. Lecture*. 13 Aug., New Delhi, India.
 106. **Prasad PVV**. 2021. Agri-food systems: Advancing circular systems and convergence science. *American Society of Agricultural and Biological Engineering Annual Meeting*, 12 – 16 Jul., Virtual, USA.
 107. **Prasad PVV**. 2021. Innovations in sustainable agricultural intensification to address climate change, food security, nutritional and resilience. *Tri-Society (Canadian Society of Agronomy; Canadian Society of Horticultural Sciences; and Canadian Phytopathological Society) Virtual Conference on Innovations in Plant Science and Agricultural Resilience*, 5 – 9 Jul., Virtual, Canada.
 108. **Prasad PVV**. 2021. Response of food grain crops to climate change factors. *International Symposium on Advances in Plant Biotechnology and Genome Editing: 42nd Annual Meeting of Plant Tissue Culture Association*, 8 – 10 April, Ranchi, Jharkhand, India.
 109. **Prasad PVV**. 2021. Impact of high temperature stress on crops: case study of wheat – complete summary. *International Webinar on Translating Physiological Tools to Augment Crop Breeding*, 19 March, Karnal, Haryana, India.
 110. **Prasad PVV**. 2021. Modeling climate change impact on crop production and food security: experiments and crop simulation models. *International Plant Physiology Virtual Symposium on Physiological Interventions for Climate Smart Agriculture*, 11 March, Coimbatore, Tamil Nadu, India.
 111. **Prasad PVV**. 2021. Opportunities to improve water productivity to enhance crop yields in the semi-arid tropics: focused on smallholder farmers and peri-urban vegetable gardens. *Water and Waste Management – 3rd International Conference and Expo*, 24 – 26 February, India.
 112. **Prasad PVV**. 2020. Sustainable intensification research approaches for impact: case studies from Africa and Asia. *Virtual Annual Meeting of ASA-CSSA-SSSA*, 9 – 13 Nov., Virtual, USA.
 113. Dixon J, **Prasad PVV**, Stewart ZP. 2020. Sustainable and resilient intensification of farming systems across Asia in a post-COVID-19 era. *Virtual Annual Meeting of ASA-CSSA-SSSA*, 9 – 13 Nov., Virtual, USA.
 114. Middendorf BJ, Faye A, Middendorf G, Stewart ZP, Jha PK, **Prasad PVV**. 2020. Smallholder farmer perceptions about the impact of COVID-19 on agriculture and livelihoods of Senegal. *Virtual Annual Meeting of ASA-CSSA-SSSA*, 9 – 13 Nov., Virtual, USA.
 115. Rice CW, **Prasad PVV**, Ciampitti IA. 2020. Challenges and opportunities for improving dryland farming systems. *Virtual Annual Meeting of ASA-CSSA-SSSA*, 9 – 13 Nov., Virtual, USA.
 116. Jha PK, Ines AVM, **Prasad PVV**. 2020. Estimation and validation of remotely sensed evapotranspiration for the development of crop coefficients and irrigation scheduling for maize. *Virtual Annual Meeting of ASA-CSSA-SSSA*, 9 – 13 Nov., Virtual, USA.
 117. Jha PK, Araya A, Stewart ZP, Faye A, Traore H, Middendorf BJ, **Prasad PVV**. 2020. Projecting potential impact of COVID-19 on major cereal crops in Senegal and Burkina Faso using crop simulation models. *Virtual Annual Meeting of ASA-CSSA-SSSA*, 9 – 13 Nov., Virtual, USA.
 118. Araya A, **Prasad PVV**, Ciampitti IA, Rice CW. 2020. Projected impact of climate change and management practices on wheat yields in northern Ethiopia using a crop simulation model. *Virtual Annual Meeting of ASA-CSSA-SSSA*, 9 – 13 Nov., Virtual, USA.
 119. **Prasad PVV**. 2020. Impacts and approaches to improve high temperature stress tolerance in crops. *International Colloquium on Crop Physiology*, 26 – 27 Nov., Virtual, Coimbatore, Tamil Nadu, India.
 120. **Prasad PVV**. 2020. Sustainable intensification: holistic and systems approach to address climate change and food security. *Vaishwik Bharatiya Vaigyanik Summit – working group on Climate Change Impacts, Adaptation and Mitigation Technologies (Agro Economy and Food Security)*, 08 Oct., Virtual, New Delhi, India.
 121. **Prasad PVV**. 2020. Humanity at crossroads with wicked problems of global pandemics, climate change and food security. *Professor Jayashankar Telangana State Agricultural University 6th Foundation Day*,

- 3 Sep., Virtual, Hyderabad, Telengana, India.
122. **Prasad PVV**. 2020. Focus on sustainable agricultural intensification and small-scale agriculture for achieving zero hunger. *Achieving Zero Hunger by 2030 – Critical Role of Agriculture and Allied Sector*, 21 Aug., Virtual, Srinagar, Kashmir, India.
 123. **Prasad PVV**. 2020. Impacts of climate change factors on productivity of food grain crops and potential key traits. *International Lecture Series on Physiological Approaches for Enhancing the Crop Productivity Under Climate Change*, 13 March, Coimbatore, Tamil Nadu, India.
 124. **Prasad PVV**. 2020. Sustainable intensification for food and nutritional security: global problems and local solutions. *International Workshop – National Agricultural Higher Education Projects*, 12 March, Coimbatore, Tamil Nadu, India.
 125. Stewart ZP, Djanaguiraman, M, **Prasad PVV**. 2019. The contentious nature connecting soil, plant and grain nutrients status for a modified one health approach. *Annual Meeting of ASA-CSSA-SSSA*, 10 – 13 Nov., San Antonio, TX, USA.
 126. Veenstra RL, Messina CD, Haag LA, **Prasad PVV**, Ciampitti IA. 2019. Water-limited corn yields as influenced by tiller biomass and leaf area at varying planting densities. *Annual Meeting of ASA-CSSA-SSSA*, 10 – 13 Nov., San Antonio, TX, USA.
 127. Demarco P, Mayor La, Tamagno S, Fernandez JA, **Prasad PVV**, Rotundo JL, Messina CD, Ciampitti IA. 2019. Physiological changes across historical sorghum hybrids released between 1963 and 2013. *Annual Meeting of ASA-CSSA-SSSA*, 10 – 13 Nov., San Antonio, TX, USA.
 128. Lacasa J, Schwalbert R, Carter PR, Hinds M, Jeschke M, Gasper A, Berning D, **Prasad PVV**, Otegui ME, Ciampitti IA. 2019. Corn yield response to planting density: a Bayesian approach. *Annual Meeting of ASA-CSSA-SSSA*, 10 – 13 Nov., San Antonio, TX, USA.
 129. Barnhart I, **Prasad PVV**, Ciampitti IA. 2019. Characterizing grain sorghum senescence patterns using unmanned aviation and high-resolution multispectral imaging. *Annual Meeting of ASA-CSSA-SSSA*, 10 – 13 Nov., San Antonio, TX, USA.
 130. Nieto L, Ciampitti IA, Schalbert, Olsen B, **Prasad PVV**. 2019. Deep neural network for corn phenology prediction. *Annual Meeting of ASA-CSSA*, 10 – 13 Nov., San Antonio, TX, USA.
 131. Ortez O, Tamagno S, Salvagiotti F, **Prasad PVV**, Ciampitti IA. 2019. Soybean nitrogen sources and demand during seed-filling period. *Annual Meeting of ASA-CSSA-SSSA*, 10 – 13 Nov., San Antonio, TX, USA.
 132. **Prasad PVV**. Middendorf BJ, Reyes MR. 2019. Global challenges and local solutions: Sustainable Intensification Innovation Lab – overview. *International Soil Water Assessment Tool (SWAT) Conference*, 24 – 25 October, Siem Reap, Cambodia.
 133. **Prasad PVV**. 2019. Response of food grain crops to changing environment: experiments and use of crop simulation model (DSSAT). *International Soil Water Assessment Tool (SWAT) Conference*, 24 – 25 October, Siem Reap, Cambodia.
 134. **Prasad PVV**. 2019. Global challenges and local solutions: sustainable intensification for food and nutritional security. *SEARCA Agriculture and Development Seminar, University of Philippines*, 2 August, Los Banos, Philippines.
 135. **Prasad PVV**. 2019. Physiology of reproductive development in plants under stress: high temperature stress on vegetable and grain crops. *XVII International Vegetable Physiology*, 9 – 12 June, Cuiaba, Brazil.
 136. **Prasad PVV**. 2019. Global challenges and local solutions: sustainable intensification for food and nutritional security. *Plant Stress Biology and Food Security Workshop, International Center for Genetic Engineering and Biotechnology*, 18 -20 April, New Delhi, India.
 137. **Prasad PVV**. 2019. Abiotic stress tolerance and sustainable agricultural intensification to enhance global food and nutritional security. *Sensing and Signaling in Plant Stress Response - India – EMBO Symposium. Jawaharlal Nehru University; and International Center for Genetic Engineering and Biotechnology*, 15-17 April, New Delhi, India.
 138. **Prasad PVV**. 2019. Sustainable Intensification Innovation Lab's Soils Vision: Launch on SOILS Consortium. *Annual Meeting of SSSA*, 6 – 9 Jan., San Diego, CA, USA.
 139. **Prasad PVV**. 2018. Concepts of sustainable intensification for improved food and nutritional security. *International Conference on Climate Change, Biodiversity and Sustainable Agriculture*, 13 – 16 December, Jorhat, Assam, India.

140. **Prasad PVV**. 2018. Impact of climate change factors on productivity of food grain crops. *4th International Plant Physiology Congress*, 2 – 5 December, Lucknow, India.
141. Djanaguiraman M, **Prasad PVV**, Kumari J, Rengel Z. Drought tolerance mechanisms of winter- and spring wheat genotypes associated with root length, lipid composition, and lipid saturation levels. *4th International Plant Physiology Congress*, 2 – 5 December, Lucknow, India.
142. Araya A, Gowda PH, **Prasad PVV**, Sharda V, Kisekka I, Andales A. 2018. Assessing corn (*Zea mays*) yield and water productivities as affected by irrigation frequency under variable allowable soli water irrigation triggers. *Ogallala Water Annual Meeting*, 29 November, Santa Fe, New Mexico, USA.
143. **Prasad PVV**. 2018. Role of land grant and public universities in addressing global food and nutritional security: approaches to enhance excellence in research, education, learning and grantsmanship. *Indian Agricultural Universities Association Gold Jubilee International Conference: Agricultural Education – Sharing Global Experiences*, 25 November, New Delhi, India.
144. Stewart ZP, Faye A, Ganyo DK, Diome K, Pierzynski GM, **Prasad PVV**. 2018. Improving soil organic carbon and fertility in Senegal with biochar. *Annual Meeting of ASA-CSSA*, 04 – 07 Nov., Baltimore, MD, USA.
145. Pierzynski GM, Stewart ZP, **Prasad PVV**, Middendorf BJ, Vipham JL. 2018. Prioritizing biophysical and socioeconomic factors enhancing soil fertility in sub-saharan Africa. *Annual Meeting of ASA-CSSA*, 04 – 07 Nov., Baltimore, MD, USA.
146. Stewart ZP, Pierzynski GM, Middendorf BJ, **Prasad PVV**. 2018. Prioritizing biophysical and socioeconomic factors for enhancing soil fertility in sub-saharan Africa – survey and summit results *Annual Meeting of ASA-CSSA*, 04 – 07 Nov., Baltimore, MD, USA.
147. Pierzynski GM, Stewart ZP, **Prasad PVV**, Vipham JL, Middendorf BJ. 2018. Healthy soils, healthy plants, healthy people: micronutrients. *Annual Meeting of ASA-CSSA*, 04 – 07 Nov., Baltimore, MD, USA.
148. Middendorf BJ, **Prasad PVV**, Pierzynski GM. 2018. Participatory techniques to enhance international stakeholder engagement in research development. *Annual Meeting of ASA-CSSA*, 04 – 07 Nov., Baltimore, MD, USA.
149. Narayanan S, **Prasad PVV**, Welti R. 2018. Effect of high temperature stress on wheat lipidome during dark period of diurnal cycle. *Annual Meeting of ASA-CSSA*, 04 – 07 Nov., Baltimore, MD, USA.
150. **Prasad PVV**, Djanaguiraman M, Stewart ZP, Araya A, Reyes M. 2018. Opportunities to improve water productivity to enhance crop yields and resilience of farming systems in semi-arid tropics. *Global Water Security Conference for Agricultural and Natural Resources*, 3 – 6 October, Hyderabad, India.
151. Djanaguiraman M, **Prasad PVV**. 2018. Selenium nanoparticles decreases high temperature induced oxidative damage in sorghum leading to higher photosynthesis and grain yield. University of Kansas, Posdoc Research Day, 14 September, Lawrence, Kansas, USA.
152. Stewart ZP, Pierzynski GM, Middendorf BJ, **Prasad PVV**. 2018. Prioritizing biophysical and socioeconomic factors for enhancing soil fertility in sub-Saharan Africa – survey results *21st World Congress of Soil Sciences*, 14 – 16 Aug., Rio de Janeiro, Brazil.
153. Stewart ZP, Pierzynski GM, Middendorf BJ, **Prasad PVV**. 2018. Prioritizing biophysical and socioeconomic factors for enhancing soil fertility in sub-Saharan Africa – summit results *21st World Congress of Soil Sciences*, 14 – 16 Aug., Rio de Janeiro, Brazil.
154. Lwehabura J, Stewart ZP, Rubyogo JC, **Prasad PVV**, Ghosh A, Mason N, Snapp S, Uyole A. 2018. Geospatial analysis to spur technology adoption for increasing bean productivity in Tanzania. *Foss4G Conference*, 29 August, Dar es Salaam, Tanzania.
155. Narayanan S, Welti R, **Prasad PVV**. 2018. Alterations in wheat leaf and pollen lipidomes under high temperature stress. *Annual Congress in Plant Science and Biosecurity Conference*, 12-14 July, Valencia, Spain.
156. Faye A, Stewart ZP, **Prasad PVV**. 2018. Closing Senegal's millet yield gap through site-specific fertilizer and plant population recommendations modeled across precipitation and soil fertility gradients. *International Sustainable Agricultural Intensification and Nutrition Conference*, 11 Jan, Phnom Penh, Cambodia.
157. Traore H, Barro A, Yonli D, Stewart ZP, **Prasad PVV**. 2018. Evaluation of integrated soil, water, nutrient and crop management for improving sorghum yield in central Burkina Faso. *International Sustainable Agricultural Intensification and Nutrition Conference*, 11 Jan. Phnom Penh, Cambodia.

158. Lwehabura J, Stewart ZP, Rubyogo JC, **Prasad PVV**, Ghosh A, Mason N, Snapp S, and Uyole A. 2018. Increasing technology adoption and scaling through mother-baby trials paired with geospatial analysis of enabling biophysical and socioeconomic conditions. *International Sustainable Agricultural Intensification and Nutrition Conference*, 11 January, Phnom Penh, Cambodia.
159. **Prasad PVV**. 2017. Sustainable intensification for improved food and nutritional security of smallholder farmers in Africa. *University of Western Australia Seminar Series*, 27 Nov., The University of Western Australia, Perth, Australia.
160. **Prasad PVV**, Dixon J. 2017. Systems approaches for sustainable intensification: lessons learned and opportunities. *TropAg*, 20 – 22 Nov., Brisbane, Queensland, Australia.
161. Bheemanahalli R, Hechanova S, Jena KK, **Prasad PVV**, Jagadish SVK. 2017. Root-leaf continuum traits to improve resilience of rice to water deficit. *Annual Meeting of ASA-CSSA-SSSA*, 22 – 25 Oct., Tampa, Florida, USA.
162. Shetty NJ, Somayanda, IM, **Prasad PVV**, Jagadish SVK. 2017. Mechanistic basis for high night temperature induced carbon imbalance and yield loss in winter wheat. *Annual Meeting of ASA-CSSA-SSSA*, 22 – 25 Oct., Tampa, Florida, USA.
163. Chilual A, Kanaganahalli V, Perumal R, **Prasad PVV**, Jagadish SVK. 2017. Unraveling mechanisms inducing heat stress resilience in sorghum during flowering. *Annual Meeting of ASA-CSSA-SSSA*, 22 – 25 Oct., Tampa, Florida, USA.
164. Shetty NJ, Somayananda IM, Bheemanahalli R, Fritz A, **Prasad PVV**, Jagadish SVK. 2017. Water deficit stress induced root morphological and anatomical plasticity in *Triticum dicocoides*. *Annual Meeting of ASA-CSSA-SSSA*, 22 – 25 Oct., Tampa, Florida, USA.
165. Chilual A, Bheemanahalli R, Asebedo R, Shetty N, Perumal R, **Prasad PVV**, Jagadish SVK. 2017. Cold stress resilience at early seedling sorghum determined by integrating aerial imagery and destructive phenotyping. *Annual Meeting of ASA-CSSA-SSSA*, 22 – 25 Oct., Tampa, Florida, USA.
166. Akley EK, Ahiabor BDK, Rice CW, Teye JK, **Prasad PVV**. 2017. Impact of integrated application of fertilizer and compost on soil quality and yield in norther Ghana's cropping systems. *Annual Meeting of ASA-CSSA-SSSA*, 22 – 25 Oct., Tampa, Florida, USA.
167. Akley EK, Rice CW, Ahiabor BDK, **Prasad PVV**. 2017. Rhizosphere microbial community structure of promiscuous soybean cultivars in the Guinea Savanna zone of Ghana. *Annual Meeting of ASA-CSSA-SSSA*, 22 – 25 Oct., Tampa, Florida, USA.
168. Bheemanahalli R, Sunoj VSJ, Saripalli S, **Prasad PVV**, Gill KS, Jagadish SVK. 2017. Effect of heat stress on reproductive success and grain yield in spring wheat. *Annual Meeting of ASA-CSSA-SSSA*, 22 – 25 Oct., Tampa, Florida, USA.
169. Chilual A, Bheemanahalli R, Asebedo R, Shetty N, Perumal R, **Prasad PVV**, Jagadish SVK. 2017. Cold stress resilience at early seedling in sorghum determined by integrating aerial imagery and destructive phenotyping. *Annual Meeting of ASA-CSSA-SSSA*, 22 – 25 Oct., Tampa, Florida, USA.
170. Pierzynski GM, **Prasad PVV**, Stewart ZP, Vipham J, Middendorf JB. 2017. Soil chemistry and agronomic biofortification for improved human health. *Annual Meeting of ASA-CSSA-SSSA*, 22 – 25 Oct., Tampa, Florida, USA.
171. Pierzynski GM, **Prasad PVV**, Stewart ZP, Vipham J, Middendorf JB. 2017. Soil chemistry, food security and human health: Overview. *Annual Meeting of ASA-CSSA-SSSA*, 22 – 25 Oct., Tampa, Florida, USA.
172. **Prasad PVV**, Middendorf JB, Stewart ZP, Pierzynski GM. 2017. Accelerating increases in sustainable agricultural productivity. *Annual Meeting of ASA-CSSA-SSSA*, 22 – 25 Oct., Tampa, Florida, USA.
173. **Prasad PVV**. 2017. Responses of food grain crops to changing environments. *Annual Meeting of ASA-CSSA-SSSA*, 22 – 25 Oct., Tampa, Florida, USA.
174. **Prasad PVV**, Djanaguiraman M, Rengel Z, Siddique KHM. 2017. Roots traits for enhancing drought tolerance in wheat: genetic diversity and mechanisms. *International Conference on Roots and Rhizosphere Interactions*, 9-13 October, Yangling, China.
175. **Prasad PVV**. 2017. Overview of feed the future innovation labs, strategic partnerships and future opportunities. *3rd World University Network Workshop – Climate Resilient Open Partnership for Food Security Annual Meeting*, 7 – 8 October, Amherst, Massachusetts, USA.
176. **Prasad PVV**. 2017. Impact of high temperature stress on horticultural crops: case study of tomato and pepper. *Food and Agricultural Organization*, 26 July, Rome, Italy.
177. Djanaguiraman M, Belliraj N, Bossmann SH, **Prasad PVV**. 2017. Biological effects of selenium

- nanoparticles on grain sorghum growth under high temperature stress. *International Conference on Biogeochemistry of Trace Elements*, 16-20 July, Zurich, Switzerland.
178. Djanaguiraman M, Vimala K, **Prasad PVV**. 2017. Variation in sorghum germplasm for micronutrients in grain: potential for biofortification. *International Conference on Biogeochemistry of Trace Elements*, 16-20 July, Zurich, Switzerland.
179. Pierzynski GM, **Prasad PVV**, Stewart ZP, Vipham J, Middendorf JB. 2017. Sustainable intensification for meeting human micronutrients needs. *International Conference on Biogeochemistry of Trace Elements*, 16-20 July, Zurich, Switzerland.
180. **Prasad PVV**, Pierzynski GM, Stewart ZP, Vipham J, Djanaguiraman M, Middendorf JB. 2017. Role of sustainable intensification for food and nutritional security: opportunities and linkages. *N-8, AgriFood Sustainable Food Production Conference*, 11-13 July, Durham, UK.
181. **Prasad PVV**. 2016. Sustainable intensification for improved food and nutritional security of smallholder farmers in Africa. *Norman E Borlaug Institute for International Agricultural Seminar Series*, 2 Dec., Texas A & M University, College Station, Texas, USA.
182. **Prasad PVV**, Djanaguiraman M, Schapaugh WT, Nguyen HT, Fritschi F, Nayyar H, Siddique KHM. 2017. Impact of high temperature stress on pulses and legumes: case study of mung bean and soybean. *World University Network Symposium cum Research Summit on Impacts of Grain Legume Research and Development in Developing Countries*, 8 – 17 June, Hong Kong, China, USA.
183. Somayananda IM, John Sunoj VS, Sun A, **Prasad PVV**, Jagadish SVK. 2016. High night temperature induced alterations in post flowering carbon balance and its impact on yield in winter wheat. *Annual Meeting of ASA-CSSA-SSSA*, 6 – 9 Nov., Phoenix, Arizona, USA.
184. Anuj C, Kanaganahalli V, John Sunoj VS, Sun A, Somayananda IM, Jagadish SVK, **Prasad PVV**. 2016. Is sorghum truly tolerant or an efficient escaper of heat stress during flowering? *Annual Meeting of ASA-CSSA-SSSA*, 6 – 9 Nov., Phoenix, Arizona, USA.
185. Narayanan S, Welti R, **Prasad PVV**. 2016. Effect of high temperature stress on pollen lipid profile of wheat. *Annual Meeting of ASA-CSSA-SSSA*, 6 – 9 Nov., Phoenix, Arizona, USA.
186. Wang H, Lorence A, Newsum A, **Prasad PVV**, Asebedo R. 2016. Comparison of modified camera, multispectral camera and active optical sensor in estimating in-season biomass and grain yield in winter wheat. *Annual Meeting of ASA-CSSA-SSSA*, 6 – 9 Nov., Phoenix, Arizona, USA.
187. Wang H, Newsum A, Asebedo R, **Prasad PVV**. 2016. 2D orthomosaic and 3D modeling application in winter wheat high-throughput phenotyping. *Annual Meeting of ASA-CSSA-SSSA*, 6 – 9 Nov., Phoenix, Arizona, USA.
188. **Prasad PVV**. 2016. Impacts of extreme temperature and drought on yield of food crops: data and opportunities for modeling. *Annual Meeting of ASA-CSSA-SSSA*, 6 – 9 Nov., Phoenix, Arizona, USA.
189. **Prasad PVV**, Jagadish SVK. 2016. State of the art in stress physiology: current understanding and future opportunities. *Annual Meeting of ASA-CSSA-SSSA*, 6 – 9 Nov., Phoenix, Arizona, USA.
190. John Sunoj SV, Somayananda IM, Chilawal A, **Prasad PVV**, Perumal R, Jagadish SVK. 2016. Impact of heat stress on pollen germination and post flowering responses in diverse sorghum genotypes under field conditions. *Annual Meeting of ASA-CSSA-SSSA*, 6 – 9 Nov., Phoenix, Arizona, USA.
191. Enningful R, Somayananda IM, John Sunoj SV, **Prasad PVV**, Jagadish SVK. 2016. Morphological and anatomical adaptability of sorghum roots exposed to water deficit conditions during vegetative stage. *Annual Meeting of ASA-CSSA-SSSA*, 6 – 9 Nov., Phoenix, Arizona, USA.
192. Enningful R, John Sunoj SV, Somayananda IM, **Prasad PVV**, Jagadish SVK. 2016. Characterizing parents of sorghum mapping populations exposed to water-deficit conditions during vegetative stage. *Annual Meeting of ASA-CSSA-SSSA*, 6 – 9 Nov., Phoenix, Arizona, USA.
193. **Prasad PVV**, Jagadish SVK. 2016. Impact of high temperature stress - current knowledge and learning from other cereals. *International Workshop to Develop Climate Resilient Cereals: USAID – Feed the Future Innovation Lab for Climate Resilient Wheat*, 2 – 5 Nov., Ludhiana, Punjab, India.
194. Jagadish SVK, **Prasad PVV**. 2016. Response of wheat genotypes to high temperature stress – pollen viability and nighttime respiration. *International Workshop to Develop Climate Resilient Cereals: USAID – Feed the Future Innovation Lab for Climate Resilient Wheat*, 2 – 5 Nov., Ludhiana, Punjab, India.
195. **Prasad PVV**. 2016. Climate change and climate variability – impact of high temperature stress on field crops. *Jawahar Lal Nehru University Seminar*, 31 Oct., New Delhi, India.
196. **Prasad PVV**. 2016. Climate change and climate variability – impact of high temperature stress on field

- crops. *University of Stellenbosch Seminar*, 24 Oct., Stellenbosch, South Africa.
197. **Prasad PVV**. 2016. Sustainable intensification for improved climate resiliency and food security. *ASABE Global Initiative Conference*, 24 – 27 Oct., Stellenbosch, South Africa.
198. Nayyar H, Gaur P, Kumar S, Bindumadhava H, Nair RM, **Prasad PVV**, Siddique KHM. 2016. How heat stress affects the physiology and reproductive biology of summer and winter-season food legume crops? *Legume for a Sustainable World. Second International Legume Society Conference*, 11 – 14 Oct., Troia, Portugal.
199. **Prasad PVV**. 2016. Concepts of sustainable intensification for addressing food and nutritional security of smallholder farmers. *International Conference on Microbiology, Agriculture and Environmental Sciences*, 1 – 2 Sep., Hyderabad, Telangana, India.
200. **Prasad PVV**. 2016. Impact of climate change and climate variability on productivity of grain crops. *International Conference on Microbiology, Agriculture and Environmental Sciences*, 1 – 2 Sep., Hyderabad, Telangana, India.
201. Sofi P, Rehman K, Djanaguiraman M, **Prasad PVV**. 2016. Combined use of root architecture, biomass partitioning and canopy temperature depression for screening drought response in common bean (*Phaseolus vulgaris* L.). *International Conference on Microbiology, Agriculture and Environmental Sciences*, 1 – 2 Sep., Hyderabad, Telangana, India.
202. **Prasad PVV**. 2016. Response of pearl millet to high temperature stress: thresholds, genetic variability and relative sensitivity of pollen and pistil. *World University Network 2nd workshop of CROP-FS – Climate Resilient Open Partnership for Food Security*, 28 – 30 Sep., Zhejiang University, Hangzhou, China.
203. Enningful R, Sunoj JSV, Impa SM, **Prasad PVV**, Jagadish SVK. 2016. Characterizing parents of sorghum mapping populations exposed to water-deficit. *Sorghum Improvement Conference of North America*, 19 – 21 Sep., Manhattan, Kansas, USA.
204. **Prasad PVV**. 2016. Sustainable agriculture intensification for improved food and nutritional security. *Annual Meeting of ASABE*, 17 – 19 Jul., Orlando, Florida, USA.
205. Narayanan S, **Prasad PVV**, Welti R. 2016. Wheat leaf lipid composition under high day and night temperature stress. *American Society of Plant Biology Annual Meeting*, 9 – 13 Jul., Austin, Texas, USA.
206. McHenry B, Adey E, Kimball J, **Prasad PVV**, Ciampitti IA. 2016. Balanced nutrition and crop production practices for closing sorghum yield gaps. *Kansas Agricultural Experiment Station Research Report*. 2
207. **Prasad PVV**. 2016. Improving food and nutritional security of smallholder farmers using concepts of sustainable intensification. *University of Massachusetts, Stockbridge School of Agriculture Seminar*, 25 April, Amherst, Massachusetts, USA.
208. **Prasad PVV**, Nayyar H, Siddique KHM. 2016. Impact of high temperature stress on pulses. *International Conference on Pulses*, 18 – 20 April, Marrakesh, Morocco.
209. **Prasad PVV**. 2016. Increasing climate resiliency of crop production systems for food security. *2016 Global Food Security Consortiums Spring Symposium*, 13 – 14 April, Iowa State University, Ames, Iowa, USA.
210. **Prasad PVV**. 2016. Sustainable intensification research for global food security. *World University Network 1st workshop of CROP-FS – Climate Resilient Open Partnership for Food Security*, 2 – 3 April, University of Leeds, Leeds, United Kingdom.
211. Varanasi A, Thompson CR, **Prasad PVV**, Jugulam M. 2016. Identification of a HPPD tolerant sorghum genotypes from a diversity panel. *Annual Meeting of Weed Science Society of America*, 8 – 11 Feb., San Juan, Puerto Rico, USA.
212. Ehtaiwesh A, **Prasad PVV**, Kirkham MB, Fritz AK, Park S. 2015. The combined effect of salinity and high temperature on winter wheat at booting. *Annual Meeting of ASA-CSSA-SSSA*, 15 – 18 Nov., Minneapolis, Minnesota, USA.
213. Rao SS, Talwar HS, Rayudu BS, Kanna Babu N, Aruna C, Rao TNG, Prabhakar, Prasad PVV, Mishra JW. 2015. Sorghum improvement for abiotic stress adaptation and climate change resilience in dryland conditions. *3rd International Plant Physiology Congress*, 11 – 14 Dec., New Delhi, India.
214. John Sunoj VS, Shroyer KJ, Jagadish SVK, **Prasad PVV**. 2015. Diurnal temperature amplitude alters physiological and biochemical response of maize during the vegetative stage. *Annual Meeting of ASA-CSSA-SSSA*, 15 – 18 Nov., Minneapolis, Minnesota, USA.
215. Narayanan S, Welti R, **Prasad PVV**. 2015 High day and night temperature stress results in lipid alternations in wheat pollen. *Annual Meeting of ASA-CSSA-SSSA*, 15 – 18 Nov., Minneapolis,

- Minnesota, USA.
216. Narayanan S, Welti R, **Prasad PVV**. 2015 High day and night temperatures results in major lipid alterations in wheat and co-occurring lipid represents groups that are explained by coordinated metabolism. *Annual Meeting of ASA-CSSA-SSSA*, 15 – 18 Nov., Minneapolis, Minnesota, USA.
 217. McHenry B, Ciampitti I, **Prasad PVV**, Adee EA. 2015. Balanced nutrition and crop production practices for closing grain sorghum yield gaps. *Annual Meeting of ASA-CSSA-SSSA*, 15 – 18 Nov., Minneapolis, Minnesota, USA.
 218. Varela S, **Prasad PVV**, Balboa GR, Griffin T, Ferguson A, Ciampitti I. 2015. Spatial-temporal evaluation of plant phenotypic traits via imagery collected by unmanned aerial systems (UAS). *Annual Meeting of ASA-CSSA-SSSA*, 15 – 18 Nov., Minneapolis, Minnesota, USA.
 219. Aiken RA, Shroyer KJ, **Prasad PVV**. 2015. Managing wheat cultivars to enhance water productivity in semi-arid cropping systems. *Annual Meeting of ASA-CSSA-SSSA*, 15 – 18 Nov., Minneapolis, Minnesota, USA.
 220. Boote KJ, Hartwell LH Jr., **Prasad PVV**, Baker JT 2015. Physiological mechanisms affecting seed-set, seed growth, and yield of grain crops to elevated extreme temperatures. *Annual Meeting of ASA-CSSA-SSSA*, 15 – 18 Nov., Minneapolis, Minnesota, USA.
 221. Broeckelman J, Ciampitti I, Kluitenberg G, Cramer G, Roozeboom K, Newell T, Adee E, **Prasad PVV**, Schlegel A, Holman J. 2015. Grain sorghum response to water supply and environment. *Annual Meeting of ASA-CSSA-SSSA*, 15 – 18 Nov., Minneapolis, Minnesota, USA.
 222. **Prasad PVV**. 2015. Cropping Systems Models as Platforms for Integration. *Transitioning Cereal System to Adapt to Climate Change* 13 – 14 November, Minneapolis, Minnesota, USA.
 223. **Prasad PVV**. Overview and summary of impact of high temperature stress on wheat. *International Workshop to Develop Climate Resilient Cereals: USAID – Feed the Future Innovation Lab for Climate Resilient Wheat*, 29-30 Oct., G.B. Pant Agricultural University, Pantnagar, Uttar Pradesh, India.
 224. **Prasad PVV**. 2015. Sustainable intensification of farming systems. *World Food Prize – Side Event on “Small Farmer Empowerment and Resilience: The Reality and Potential of Crop Intensification*, 14 October, Des Moines, Iowa, USA.
 225. **Prasad PVV**. 2015. Small Farmer Empowerment and Resilience: The Potential and Reality of Crop Intensification. *2015 Borlaug Dialogue Side Event* 12 October – 15 October, Des Moines, Iowa, USA.
 226. Varanasi A, Thompson CR, **Prasad PVV**, Jugulam M. 2015. Identification of sorghum germplasm with HPPD-inhibitor tolerance. *Annual Sorghum Improvement Conference of North America Meeting*, 1 – 3 September, Manhattan, Kansas, USA.
 227. **Prasad PVV**. 2015. Physiological response of grain sorghum to temperature and drought stress: opportunities and challenges for yield improvement. *Annual Sorghum Improvement Conference of North America Meeting*, 1 – 3 September, Manhattan, Kansas, USA.
 228. Enniful R, John Sunoj VS, **Prasad PVV**, Jagadish SVK. 2015. Physiological and anatomical characterization of sorghum NAM founder lines under water deficit stress. *Annual Sorghum Improvement Conference of North America Meeting*, 1 – 3 September, Manhattan, Kansas, USA.
 229. Hughes A, Aiken RM, **Prasad PVV**, Price K, Merwe DV, Tesso T, Perumal R. 2015. Remote sensing screening tools for sorghum breeding programs. *Annual Sorghum Improvement Conference of North America Meeting*, 1 – 3 September, Manhattan, Kansas, USA.
 230. Hu Z, Perumal R, Mbacke B, Gueye MC, Seye O, Bouchet S, **Prasad PVV**, Morris GP. 2015. Population genomics of pearl millet (*Pennisetum glaucum* L): comparative analysis of global accessions and Senegalese landraces. *Annual Sorghum Improvement Conference of North America Meeting*, 1 – 3 September, Manhattan, Kansas, USA.
 231. **Prasad PVV**. 2015. Concepts of sustainable intensification – Learnings from West Africa. *Water Technology Research and Education Center Seminar* 20 June, Udhagamandalam, Tamil Nadu, India.
 232. **Prasad PVV**. 2015. Response of field crops to climate change factors. *Tamil Nadu Agricultural University, Special Seminar* 18 June, Coimbatore, Tamil Nadu, India.
 233. **Prasad PVV**. 2015. Feed the Future Innovation Lab for Collaborative Research on Sustainable Intensification (SIIL): Current research and future opportunities. *Auburn University - Department of Entomology and Plant Pathology Seminar* 27 April, Auburn, Alabama, USA.
 234. **Prasad PVV**. 2015. Feed the Future Innovation Lab for Collaborative Research on Sustainable Intensification (SIIL): Current research and future opportunities. *Oklahoma State University Department*

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349. Jain M, Funk A, **Prasad PVV**, Allen LH, Boote KJ, Chourey PS. 2006. Effects of elevated high temperature growth conditions on sugar-to-starch metabolism in developing microspores in sorghum [*Sorghum bicolor* L. (Moench)]. *Annual Meeting of American Society of Plant Biology*, 5 – 9 August, Boston, Massachusetts, USA.
350. Ristic Z, Momcilovic I, Fu J, Bukovnik U, Fritz AK, Baber MA, **Prasad PVV**. 2006. Heat tolerance and relative levels of chloroplast protein synthesis elongation factor EF-Tu in wheat under heat stress conditions. *Annual Meeting of American Society of Plant Biology*, 5 – 9 Aug., Boston, Massachusetts, USA.
351. **Prasad PVV**, Vu JCV, Boote KJ, Allen LH Jr. 2006. Impact of water and temperature stress at ambient and elevated carbon dioxide levels on leaf photosynthesis and dry matter production in sorghum. *Biological Systems Simulation Conference*, 11 – 13 April 2006, Fort Collins, Colorado, USA.
352. **Prasad PVV**, Vu JCV, Boote KJ, Allen LH Jr. 2005. Effects of elevated carbon dioxide and temperature on leaf gas exchange, photosynthetic enzyme activities and growth of grain sorghum. *Annual Meeting of American Society of Agronomy*, 6 – 10 November, Salt Lake City, Utah, USA.
353. **Prasad PVV**, Vu JCV, Boote KJ, Allen LH Jr. 2006. Impact of water and temperature stress at ambient and elevated carbon dioxide levels on leaf photosynthesis and dry matter production in sorghum. *Biological Systems Simulation Conference*, 11 – 13 April 2006, Fort Collins, Colorado, USA.
354. Naab JB, **Prasad PVV**, Boote KJ, Jones JW. 2005. Response of early and late maturity peanut cultivars to sowing densities and fungicide application in Ghana. *Annual Meeting of American Society of Agronomy*, 6 – 10 November, Salt Lake City, Utah, USA. Abstract No: 329a.
355. **Prasad PVV**, Vu JCV, Boote KJ, Allen LH Jr. 2005. Effects of elevated carbon dioxide and temperature on leaf gas exchange, photosynthetic enzyme activities and growth of grain sorghum. *Annual Meeting of American Society of Agronomy*, 6 – 10 November, Salt Lake City, Utah, USA. Abstract No: 241-6.
356. Boote KJ, **Prasad PVV**, Allen LH Jr. 2005. Testing elevated temperature responses of the CROPGRO-Peanut model with data from sunlit controlled-environment chambers. *Annual Meeting of American Society of Agronomy*, 6 – 10 November, Salt Lake City, Utah, USA. Abstract No: 132-4.
357. Allen LH Jr, Boote KJ, **Prasad PVV**, Thomas JMG, Vu JCV. 2005. Hazards of temperature on food availability in changing environments (Hot-Face): global warming could cause failure of seed yields of major crops. *Proceedings of the 7th International Carbon Dioxide Conference*, 25 – 30 September 2005, Washington DC, USA.
358. **Prasad PVV**, Vu JCV, Boote KJ, Allen LH Jr. 2005. Enhancement in leaf photosynthesis and up-regulation of Rubisco in the C₄ plant sorghum under elevated growth CO₂ and temperature occurs at early stages of leaf ontogeny. *American Society of Plant Biologists Annual Meeting*, 16 – 20 July 2005, Seattle, Washington, USA. Abstract No: 35.
359. Jain M, **Prasad PVV**, Allen LH Jr, Boote KJ, Chourey PS. 2005. Gene expression analyses of sucrose-to-starch metabolism during micro-sporogenesis in sorghum grown under high temperature conditions. *American Society of Plant Biologists Annual Meeting*, 16 – 20 July 2005, Seattle, Washington, USA. Abstract No: 162.
360. Allen LH Jr, Boote KJ, **Prasad PVV**, Baker JT, Gesch RW, Snyder AM, Pan D, Thomas JMG. 2005. Food security and agriculture: Impact of elevated temperature and carbon dioxide on pollination and yield of globally important seed grain crops. *The 16 Global Warming and International Conference & Expo (GWXVI)*, 19 – 21 April, New York, USA.
361. **Prasad PVV**, Boote KJ, Allen LH Jr. 2004. Impact of elevated temperature and carbon dioxide enrichment on growth, reproductive processes and yield of grain sorghum. *Annual Meeting of American Society of Agronomy*, 31 October – 04 November, Seattle, Washington, USA.
362. Naab JB, **Prasad PVV**, Boote KJ, Jones JW. 2004. Effects of fungicide and phosphorus application on

- peanut yields in on-station and on-farm trials in northern Ghana. *Annual Meeting of American Society of Agronomy*, 31 October – 04 November, Seattle, Washington, USA.
363. Boote KJ, Allen LH Jr., **Prasad PVV**, Baker JT, Gesch RW, Snyder AM, Pan D, Thomas JMG. 2004. Elevated temperature and CO₂ impacts on pollination, reproductive growth and yield of several globally important crops. *International Symposium on Food Production and Environmental Conservation in the Face of Global Environmental Deterioration*, 07 – 11 Sep. 2004, Fukuoka, Japan.
364. **Prasad PVV**, Boote KJ, Allen LH Jr. 2004. Temperature sensitivity of pollen viability, seed-set and seed yield of grain-sorghum (*Sorghum bicolor* L.) is adversely affected by growth at elevated carbon dioxide. *American Society of Plant Biologists Annual Meeting*, 24 – 28 July 2004, Orlando, Florida, USA.
365. **Prasad PVV**, Boote KJ, Waliyar F, Craufurd PQ. 2004. A mechanistic approach to predict pre-harvest aflatoxin incidence in peanut using CROPGRO-peanut model. *Biological Systems Simulation Group Conference Annual Meeting*, 8 – 10 Mar. 2004. University of Florida, Gainesville, Florida, USA. p. 2-3.
366. Naab JB, Tsigbey F, **Prasad PVV**, Boote KJ, Bailey JE, Brandenburg RL. 2004. Quantifying yield losses caused by leafspot disease on peanut in Ghana: a crop modelling analysis. *Biological Systems Simulation Group Conference Annual Meeting*, 08 – 10 March 2004, University of Florida, Gainesville, Florida, USA. p. 56-57.
367. Adomou M, **Prasad PVV**, Boote KJ. 2004. CROPGRO-Peanut model a tool to simulate growth and yield losses due to foliar diseases on peanut in Benin. *Biological Systems Simulation Group Conference Annual Meeting*, 08 – 10 March 2004, University of Florida, Gainesville, Florida, USA. p. 63-64.
368. **Prasad PVV**, Boote KJ, Allen LH Jr, Thomas JMG. 2003. Impact of elevated temperature and carbon dioxide on reproductive processes and yield of peanut. *Annual Meeting of American Society of Agronomy*, 2 – 6 November 2003, Denver, Colorado, USA.
369. Murthy VRK, **Prasad PVV**. 2003. Influence of tillage practices on seedling emergence of pigeon pea, soybean and castor. *Annual Meeting of American Society of Agronomy*, 2 – 6 November 2003, Denver, Colorado, USA.
370. **Prasad PVV**, Boote KJ, Thomas JMG, Allen LH Jr. 2003. Influence of soil temperatures on seedling emergence of peanut cultivars. *Proceedings of American Peanut Research and Educational Society Annual Meeting*, 07 – 11 July 2003, Clearwater, Florida, USA. Vol 35: 88.
371. Craufurd PQ, **Prasad PVV**, Kakani VG, Wheeler TR, Nigam SN. 2003. Heat tolerance in groundnut. *Proceedings of American Peanut Research and Educational Society Annual Meeting*, 07 – 11 July 2003, Clearwater, Florida, USA. Vol 35: 68-69.
372. Wheeler TR, Challinor A, **Prasad PVV**, Kakani VG, Craufurd PQ. 2003. Impact of change in mean temperature and variability on annual crops. *Promise Meeting on Monsoon Environments: Agricultural and Hydrological Impacts of Seasonal Variability and Climate Change*, 24 – 28 Mar 2003, International Center for Theoretical Physics, Italy.
373. **Prasad PVV**, Boote KJ, Allen LH Jr, Sheehy JE, Thomas JMG. 2002. Effect of elevated temperature and spikelet fertility and harvest index of rice genotypes. *Annual Meeting of American Society of Agronomy*, 10 – 14 November 2002, Indianapolis, USA.
374. **Prasad PVV**, Murthy VRK, Boote KJ, Jones JW. 2002. Simulating growth and yield of peanut under present and future climate in Andhra Pradesh, India. *Biological Systems Simulation Group Conference / Workshop on Remote Sensing and Modelling Application in Natural Resource Management*, 10 – 13 March 2002, Mississippi State University, Starkville, USA. Report. p. 30.
375. Thomas JMG, **Prasad PVV**, Boote KJ, Allen LH. 2002. Seed germination and seedling vigor of kidney bean seed produced under elevated temperature and CO₂. *Sixty Second Annual Meeting of Soil and Crop Science Society of Florida*, 22 – 24 May 2002, Clearwater Beach, Florida, USA.
376. Boote KJ, Beg-Susich DM, Bennett JM, **Prasad PVV**. 2002. Evaluating CERES-Maize model for ability to predict growth and nitrogen uptake response to N fertilization. *Sixty Second Annual Meeting of Soil and Crop Science Society of Florida*, 22 – 24 May 2002, Clearwater Beach, Florida, USA.
377. **Prasad PVV**, Boote KJ, Allen LH Jr, Vu JCV, Thomas JMG. 2001. Effects of elevated temperature and carbon dioxide on photosynthetic and reproductive processes of kidney bean. *Annual Meeting of American Society of Agronomy*, 20 – 25 October 2001, Charlotte, North Carolina, USA.
378. Adomou M, Detongnon J, **Prasad PVV**, Boote KJ. 2000. Simulating growth and yield of peanut in Benin as affected by planting date, cultivar and disease. *Annual Meeting of American Society of Agronomy*, 5 – 9 November 2000, Minneapolis, Minnesota, USA. *Abstracts*. p. 62.
379. **Prasad PVV**, Boote KJ, Craufurd, PQ, Kakani, VG. 2000. Impact of high temperature stress on

- reproductive development and yield of peanut. *Annual Meeting of American Society of Agronomy*, 5 – 9 November 2000, Minneapolis, Minnesota, USA. *Abstracts*. p. 124.
380. **Prasad PVV**, Craufurd PQ, Kakani VG, Wheeler TR. 2000. Effect of high air temperature on fruit-set in peanut. *3rd International Crop Science Congress*, 17 – 22 August 2000, Hamburg, Germany.
381. Craufurd PQ, **Prasad PVV**, Kakani, Wheeler TR 2000. Tolerance of high soil and air temperature in peanut. *3rd International Crop Science Congress*, 17 – 22 August 2000, Hamburg, Germany.
382. Kakani VG, **Prasad PVV**, Craufurd PQ, Wheeler TR, Summerfield RJ. 2000. Pollen responses to temperature in peanut. *3rd International Crop Science Congress*, 17 – 22 August 2000, Hamburg, Germany.
383. **Prasad PVV**, Craufurd PQ, Summerfield RJ, Wheeler TR. 1998. Sensitivity of fruit-set to heat stress in groundnuts (*Arachis hypogaea* L.). *Annual Meeting of the Society of Experimental Biology*, 22 – 27 March 1998, York, England. *Journal of Experimental Botany* 49: 30.
384. **Prasad PVV**, Craufurd, PQ, Summerfield RJ, Wheeler, TR. 1998. Effects of hot soil and air temperature on pod yield of groundnut. *Annual Meeting of American Society of Agronomy*, 18 – 22 October 1998, Baltimore, Maryland, USA. *Abstracts*, 75.
385. **Prasad PVV**, Craufurd, PQ, Summerfield RJ, Wheeler TR. 1998. Sensitivity of fruit-set to high temperature stress in groundnut. *Annual Meeting of American Society of Agronomy, Abstracts*, 18 – 22 October 1998, Baltimore, Maryland, USA. *Abstracts*, 291.
386. **Prasad PVV**, Craufurd PQ, Summerfield RJ, Wheeler TR. 1998. Effects of hot air and soil temperature on pod yield of groundnut. p. 65-66. In: *Proceedings of First International Agronomy Congress, Environment and Food Security for 21st Century* (Eds I.P.S. Ahlawat and Surender Singh), 23 – 27 November 1998, Indian Society of Agronomy, Indian Agricultural Research Institute, New Delhi, India.
387. **Prasad PVV**, Satyanarayana V, Potdar MV. 1994. Integrated crop management strategies for correction of iron chlorosis in groundnut in Andhra Pradesh. p. 43 In: *National Symposium on Integrated Input Management for Efficient Crop Production*, 22 – 25 February 1994, Indian Society of Agronomy, New Delhi, India.
388. **Prasad PVV**, Shanti M. 1994, Rao PC. Increase in oilseed productivity through integrated weed management systems in Andhra Pradesh. p. 436-437. In: *Proceedings of National Seminar on Oilseed Research and Development in India - Status and Strategies*, 2 – 6 August 1993. Hyderabad, India.
389. **Prasad PVV**, Sharma SHK, Shanti M, Rao PC. 1992. Nutrient economy through weed management in crops in Andhra Pradesh. p. 12-13. In: *Proceedings of National Seminar on Development in Soil Science, 57th Annual Convention of Indian Society of Soil Science*, 26 – 29 November 1992, Central Research Institute for Dryland Agriculture, Hyderabad, India.

XV. Complete List of Competitive Grants Funded

Summary of Competitive Funds Received:

Grand Total: ~ 122 million (~ 90 million as Principal Investigator, PI)

Year 2006: \$ 166,500 (7 grants, 5 as PI)

Year 2007: \$ 607,442 (11 grants, 7 as PI)

Year 2008: \$ 984,420 (17 grants, 12 as PI)

Year 2009: \$ 2,200,973 (15 grants, 10 as PI)

Year 2010: \$ 3,051,560 (19 grants, 12 as PI)

Year 2011: \$ 1,239,721 (16 grants, 11 as PI)

Year 2012: \$ 1,483,691 (17 grants, 13 as PI)

Year 2013: \$ 1,144,742 (12 grants, 10 as PI)

Year 2014: \$ 50,400,000 (11 grants, 9 as PI) – (Five Years)

Year 2015: \$ 265,000 (6 grants, 1 as PI)

Year 2016: \$ 1,000,000 (8 grants)

Year 2017: \$ 507,672 (9 grants, 3 as PI); + \$ 8,000,000 (Donation)

Year 2018: \$ 430,000 (8 grants, 4 as PI)

Year 2019: \$ 26,848,071 (13 grants, 7 as PI) – (Five Years)

Year 2020: \$ 1,256,000 (10 grants, 5 as PI)

Year 2021: \$ 17,374,859 (7 grants, 3 as PI) – (12,000,000; Five Years)

Year 2022: \$ 5,016,130 (8 grants, 5 as PI)

Year 2023: \$ 1,273,580 (7 grants; 4 as PI)

Year 2024: \$ 6,000,000 (1 grant; 1 as PI)

Year 2006 (7)

1. **Prasad PVV**, Tuinstra MR, Kofoid KD, Aiken RM. 2006. Screening sorghum germplasm for drought and heat tolerance. Kansas Grain Sorghum Commission. Amount: \$23,000.
2. **Prasad PVV**, Tuinstra MR, Kofoid KD, Aiken RM. 2006. Assessing drought tolerance in grain sorghum. USDA – CSREES. Center for Sorghum Improvement. Amount: \$34,000.
3. **Prasad PVV**, Fritz AK, Martin TJ. 2006. Sprout resistance in hard white wheat. Kansas Wheat Commission. Amount: \$10,000.
4. **Prasad PVV**, Fritz AK, Martin TJ. 2006. Sprout resistance in hard white wheat. Kansas Crop Improvement Association. Amount: \$10,000.
5. Tuinstra MR, Claassen M, Gordon WB, Kofoid KD, **Prasad PVV**. 2006. Kansas Grain Sorghum Commission. Amount: \$67,500.
6. Aiken RM, **Prasad PVV**, Kofoid KD. 2006. Physiological basis for seed-set in grain sorghum under pre-flowering drought stress. USDA – CSREES: Ogallala Initiative. Amount: 20,000.
7. **Prasad PVV**. 2006. Faculty development awards. Multiple Sources. Amount: 2,000.

Year 2007 (11)

8. **Prasad PVV**, Tuinstra MR, Kofoid KD, Aiken RM. 2007. Screening sorghum germplasm for drought and heat tolerance. Kansas Grain Sorghum Commission. Amount: \$23,000.
9. **Prasad PVV**, Tuinstra MR, Kofoid KD, Aiken RM. 2007. Assessing drought tolerance in grain sorghum. USDA – CSREES, Center for Sorghum Improvement. Amount: \$32,942.
10. **Prasad PVV**, Fritz AK, Martin TJ. 2007. Sprout resistance in hard white wheat. Kansas Wheat Commission. Amount: \$11,000.
11. **Prasad PVV**, Fritz AK, Martin TJ. 2007. Sprout resistance in hard white wheat. Kansas Crop Improvement Association. Amount: \$11,000.

12. **Prasad PVV**, Staggenborg SA, Mengel DB. 2007. Integrated soil, water, crop management for improving productivity in sorghum and millet based cropping systems. USAID – INTSORMIL. Amount: \$348,500. (Five Years).
13. **Prasad PVV**, Staggenborg SA, Gowda P, Aiken R. 2007. Comparative performance of finger millet for improving forage quality for dairy livestock in water-limited Ogallala aquifer region. USDA – CSREES: Ogallala Initiative. Amount: \$26,000.
14. Tuinstra MR, **Prasad PVV**, Claassen M, Gordon WB. 2007. Breeding grain sorghum for drought and heat tolerance. Kansas Grain Sorghum Commission. Amount: \$73,000.
15. Yu J, Tuinstra MR, **Prasad PVV**. 2007. Improving drought tolerance in sorghum through association mapping. Kansas Sorghum Commission. Amount: \$30,000.
16. Staggenborg SA, **Prasad PVV**, Gowda P. 2007. Understanding climate variability for improving management decisions. USDA – CSREES: Ogallala Initiative. Amount: \$35,000.
17. **Prasad PVV**, Stamm M, Godsey CD. 2007. Examining shatter resistance and effects of spring re-growth in winter canola. USDA-CSREES – US Canola Growers Association. Amount: \$12,000.
18. Tuinstra MR, **Prasad PVV**. 2007. Corn evaluation studies. Monsanto. Amount: \$5,000.

Year 2008 (17)

19. Little CR, **Prasad PVV**, Presley D, Roozeboom K. 2008. Influence of soils, nutrition and water relations upon charcoal rot disease process in Kansas. Kansas Soybean Commission. Amount: \$34,758.
20. **Prasad PVV**, Roozeboom K, Vadlani P, Yu J. 2008. Screening sorghum germplasm for abiotic stress tolerance and biofuel production. Kansas Grain Sorghum Commission. Amount: \$33,000.
21. **Prasad PVV**, Fritz AK. 2008. Drought and heat tolerance in wheat. Kansas Wheat Commission. Amount: \$28,000.
22. Yu J, **Prasad PVV**. 2008. Improving drought tolerance in sorghum through association mapping. Kansas Grain Sorghum Commission. Amount: \$60,000.
23. Price K, **Prasad PVV**, Staggenborg SA. 2008. Developing real-time crop sensing system to enhance stress tolerance screening. Kansas Grain Sorghum Commission. Amount: \$5,000.
24. Kofoid KD, Aiken RA, **Prasad PVV**. 2008. Breeding sorghum with higher yield and improved drought and cold tolerance. Kansas Grain Sorghum Commission. Amount: \$65,000.
25. **Prasad PVV**, Staggenborg SA, Gowda P. 2008. Understanding climate variability for improving management decisions. USDA – CSREES: Ogallala Initiative. Amount: \$47,000
26. **Prasad PVV**, Staggenborg SA. 2008. Integrated systems research in Mali – Decrue Sorghum. USAID – INTSORMIL Associate Award - Mali. Amount: \$ 451,420. (Five Years).
27. **Prasad PVV**, Staggenborg SA. 2008. Integrated systems research in Mali – Decrue Sorghum. USAID – INTSORMIL Associate Award – Mali – Training Component. Amount: \$ 30,000.
28. **Prasad PVV**, Yu J. 2008. Assessing drought tolerance and biofuel traits in sorghum. USDA – CSREES. Center for Sorghum Improvement. Amount: \$32,942.
29. **Prasad PVV**, Staggenborg SA, Vadlani PV. 2008. Characterization of bioenergy sorghum. KSU – Center for Sustainable Energy. Amount: \$12,500.
30. **Prasad PVV**, Fritz AK. 2008. Drought and heat tolerance in wheat. Kansas Crop Improvement Association. Amount: \$7,000.
31. **Prasad PVV**. 2008. USDA – Foreign Agricultural Service. Borlaug Scholarship. Amount: \$23,000.
32. **Prasad PVV**. 2008. Agronomy Research Gift. Valent Seeds. Amount: \$7,800.
33. **Prasad PVV**, Al-Khatib. 2008. Crop Physiology Gift. Agrofresh. Amount: \$ 120,000.
34. **Prasad PVV**. 2008. Visiting scholarship. Tamil Nadu Agricultural University. Amount: \$15,000.
35. **Prasad PVV**. 2008. International student support. College of Agriculture. Amount: \$20,000.

Year 2009 (15)

36. **Prasad PVV**, Staggenborg SA, Minton E. 2009. Great Plains Sorghum Improvement and Utilization Center. USDA – Special Grant. Amount: \$480,128.
37. **Prasad PVV**, Roozeboom K, Vadlani P, Yu J. 2009. Screening sorghum germplasm for abiotic stress

- tolerance and biofuel production. Kansas Grain Sorghum Commission. Amount: \$33,000.
38. **Prasad PVV**, Fritz AK. 2008. Drought and heat tolerance in wheat. Kansas Crop Improvement Association. Amount: \$7,000.
 39. **Prasad PVV**, Staggenborg SA, Vadlani PV. 2009. Characterization of bioenergy sorghum. KSU – Center for Sustainable Energy. Amount: \$12,500.
 40. **Prasad PVV**. 2009. Breeding and testing of new switchgrass cultivars for increased biomass production in Oklahoma, Texas, Arkansas and Kansas. US Department of Transportation. Amount: \$12,000.
 41. **Prasad PVV**, Aiken RM, Xin Z. 2009. Enhancing crop productivity and water use efficiency of sorghum. USDA – CSREES: Ogallala Initiative. Amount: \$48,000.
 42. Aiken RM, **Prasad PVV**, Burke J. 2009. USDA – CSREES: Ogallala Initiative. Amount: \$35,000.
 43. Little CR, **Prasad PVV**, Presley D, Roozeboom K. 2009. Influence of soils, nutrition and water relations upon charcoal rot disease process in Kansas. Kansas Soybean Commission. Amount: \$34,758.
 44. Yu J, **Prasad PVV**. 2009. Improving drought tolerance in sorghum through association mapping. Kansas Grain Sorghum Commission. Amount: \$60,000.
 45. Ristic Z, **Prasad PVV**. 2009. Heat tolerance in genetically modified wheat. Kansas Wheat Commission. Amount: \$28,000.
 46. Roozeboom KL, **Prasad PVV**. 2009. Update publication on growth, development and nutrient update of grain sorghum. United Sorghum Checkoff. Amount: \$26,590.
 47. **Prasad PVV**. 2009. Agronomy Research Gift. Valent Seeds. Amount: \$4,000.
 48. **Prasad PVV**. 2009. Agronomy Research Gift. Valent Bio Science. Amount: \$20,000.
 49. **Prasad PVV**, Mengel DB. 2009. Center for Sorghum Improvement. Kansas Grain Sorghum Commission. Amount: \$50,000.
 50. **Prasad PVV**, Staggenborg SA, Dalton TJ, Dhuyvetter K, Rice CW, Presley D, Garrett K, Jumponnen A, Selfa T, Lilja N. 2009. Improving soil quality and crop productivity through farmers tested and recommended conservation agricultural practices in cropping systems of West Africa. USAID – SANREM CRSP. Amount: \$1,350,000. (Five Years).

Year 2010 (19)

51. **Prasad PVV**, Staggenborg SA, Minton E. 2010. Great Plains Sorghum Improvement and Utilization Center. USDA – Special Grant. Amount: \$930,668.
52. **Prasad PVV**, Yu J, Tesso T. 2010. Screening sorghum germplasm for abiotic stress tolerance and biofuel production. Kansas Grain Sorghum Commission. Amount: \$52,000.
53. **Prasad PVV**, Fritz AK. 2010. Drought and heat tolerance in wheat. Kansas Crop Improvement Association. Amount: \$7,000.
54. **Prasad PVV**, Staggenborg SA, Vadlani PV. 2010. Characterization of bioenergy sorghum. KSU – Center for Sustainable Energy. Amount: \$12,500.
55. **Prasad PVV**. 2010. Breeding and testing of new switchgrass cultivars for increased biomass production in Oklahoma, Texas, Arkansas and Kansas. US Department of Transportation. Amount: \$3,094.
56. **Prasad PVV**, Staggenborg SA, Gowda PH. 2010. Statistical and spectral approaches to automate hot and cold pixel for selection for surface energy balance based evapotranspiration mapping. USDA – CSREES: Ogallala Initiative. Amount: \$45,000.
57. Yu J, Tesso T, **Prasad PVV**. 2010. Improving drought tolerance in sorghum through association mapping. Kansas Grain Sorghum Commission. Amount: \$60,000.
58. Staggenborg SA, Roozeboom KL, **Prasad PVV**. Development of forage harvester for research plots. Kansas Grain Sorghum Commission. Amount: \$10,000.
59. Tesso T, Yu, T, **Prasad PVV**. 2010. Breeding grain sorghum for improved dryland production. Kansas Grain Sorghum Commission. Amount: \$69,800.
60. **Prasad PVV**, Fu J. 2010. Heat tolerance in genetically modified wheat. Kansas Wheat Commission. Amount: \$28,000.
61. Shroyer JP, **Prasad PVV**, Staggenborg SA. 2010. Applied wheat research to improve cropping efficiency. Kansas Wheat Commission. Amount: \$24,191.
62. Roozeboom KL, **Prasad PVV**. 2010. Update publication on growth, development and nutrient update of

- grain sorghum. United Sorghum Checkoff. Amount: \$26,590.
63. Tesso T, Mengel DB, **Prasad PVV**. 2010. Study of genetic and physiological characteristics associated with improved nitrogen use efficiency and drought tolerance. United Sorghum Checkoff. Amount: \$41,500.
 64. **Prasad PVV**, Staggenborg SA. 2010. Integrated systems research in Mali – Decrue Sorghum. USAID – INTSORMIL Associate Award – Mali – Training Component. Amount: \$ 53,059.
 65. **Prasad PVV**. 2010. Borlaug Fellowship Southeast Asia (Indonesia). United States Department of Agriculture. Amount: \$24,937.
 66. **Prasad PVV**. 2010. Hosting Foreign Climate Change Scientists - Borlaug Program (India). United States Department of Agriculture. Amount: \$27,825.
 67. Akhunov E, **Prasad PVV**. 2010. Improving barley and wheat germplasm for changing environments. United States Department of Agriculture - National Institute for Food and Agriculture. Amount: \$1,460,395. (Five Years).
 68. **Prasad PVV**. 2010. Enhancing research facilities. Multiple Sources. Amount: \$125,000.
 69. **Prasad PVV**, Mengel DB. 2010. Center for Sorghum Improvement. Kansas Grain Sorghum Commission. Amount: \$50,000.

Year 2011 (16)

70. **Prasad PVV**, Fritz AK. 2011. Drought and heat tolerance in wheat. Kansas Crop Improvement Association. Amount: \$7,000.
71. **Prasad PVV**, Yu J, Tesso T. 2011. Screening sorghum germplasm for abiotic stress tolerance and biofuel production. Kansas Grain Sorghum Commission. Amount: \$104,000.
72. **Prasad PVV**, Fu J. 2011. Heat tolerance in genetically modified wheat. Kansas Wheat Commission. Amount: \$28,000.
73. **Prasad PVV**. 2011. Breeding and testing of new switchgrass cultivars for increased biomass production in Oklahoma, Texas, Arkansas and Kansas. US Department of Transportation. Amount: \$3,094.
74. **Prasad PVV**. 2011. Borlaug Fellowship LEAP. United States Department of Agriculture. Amount: \$20,000.
75. **Prasad PVV**, Staggenborg SA. 2011. Integrated systems research in Mali – Decrue Sorghum. USAID – INTSORMIL Associate Award – Mali – Training Component. Amount: \$ 103,000.
76. **Prasad PVV**, Staggenborg SA. 2011. Integrated systems research in Mali – Decrue Sorghum. USAID – INTSORMIL Associate Award – Mali – Research Component. Amount: \$ 94,436.
77. Yu J, Tesso T, **Prasad PVV**. 2011. Improving drought tolerance in sorghum through association mapping. Kansas Grain Sorghum Commission. Amount: \$120,000.
78. Tesso T, Yu, T, **Prasad PVV**. 2011. Breeding grain sorghum for improved dryland production. Kansas Grain Sorghum Commission. Amount: \$69,800.
79. Tesso T, Yu, T, **Prasad PVV**. 2011. Breeding grain sorghum for improved dryland production. Kansas Grain Sorghum Commission. Amount: \$81,200.
80. Mengel DB, Tesso T, **Prasad PVV**, Yu J. 2011. Study of genetic and physiological characteristics associated with improved nitrogen use efficiency and drought tolerance. United Sorghum Checkoff. Amount: \$100,000.
81. Shroyer JP, **Prasad PVV**, Staggenborg SA. 2011. Applied wheat research to improve cropping efficiency. Kansas Wheat Commission. Amount: \$24,191.
82. **Prasad PVV**. 2011. Enhancing research facilities. Multiple Sources: Amount: \$60,000.
83. **Prasad PVV**. 2011. Enhancing research facilities. K-State Research and Extension. Amount: \$85,000.
84. **Prasad PVV**. 2011. Center for Sorghum Improvement. K-State Research and Extension. Amount: \$180,000.
85. **Prasad PVV**, Mengel DB. 2012. Center for Sorghum Improvement. Kansas Grain Sorghum Commission. Amount: \$50,000.

Year 2012 (17)

86. **Prasad PVV** and Fritz AK. 2012. Drought and heat tolerance in wheat. Kansas Crop Improvement Association. Amount: \$7,000.
87. **Prasad PVV**, Fu J. 2012. Heat tolerance in genetically modified wheat. Kansas Wheat Alliance. Amount: \$37,500.
88. **Prasad PVV**, Yu J, and Tesso T. 2012. Screening sorghum germplasm for abiotic stress tolerance and biofuel production. Kansas Grain Sorghum Commission. Amount: \$52,000.
89. **Prasad PVV**. 2012. Breeding and testing of new switchgrass cultivars for increased biomass production in Oklahoma, Texas, Arkansas and Kansas. US Department of Transportation. Amount: \$3,094.
90. **Prasad PVV**, Steward D, and Gowda PH. 2012. Developing database for ET in Kansas. USDA – CSREES: Ogallala Initiative. Amount: \$62,450.
91. **Prasad PVV** and Staggenborg SA. 2012. Integrated systems research in Mali – Decrue Sorghum. USAID – INTSORMIL Associate Award – Mali – Training Component. Amount: \$ 74,000.
92. **Prasad PVV**, and Schapaugh WT. 2012. Development of soybean lines with improved drought and heat tolerance. United Soybean Board. Amount: \$243,640.
93. **Prasad PVV**, Tesso T, and Yu J. 2012. Enhancing drought and heat tolerance in sorghum. United Sorghum Checkoff Program. Amount: \$122,500.
94. **Prasad PVV**, Mengel DB, and Jugulam M. 2012. Integrated systems research in Mali – Decrue Sorghum. USAID – INTSORMIL. Amount: \$ 75,000.
95. Anandhi A, Rice CW, **Prasad PVV**, and Gowda PH. 2012. Analyses of extreme events in Western Kansas (Ogallala Aquifer Program) and its impact on agricultural production. USDA – CSREES: Ogallala Initiative. Amount: \$46,848.
96. Tesso T, Yu, T and **Prasad PVV**. 2012. Breeding grain sorghum for improved dryland production. Kansas Grain Sorghum Commission. Amount: \$83,200.
97. Yu J, Tesso T and **Prasad PVV**. 2012. Improving drought tolerance in sorghum through association mapping. Kansas Grain Sorghum Commission. Amount: \$57,250.
98. Rice CW and **Prasad PVV**. 2012. Hosting Foreign GRA - Borlaug Program (Vietnam). USDA – Foreign Agricultural Service. Amount: \$28,209.
99. **Prasad PVV**. 2012. Enhancing research facilities. Multiple Sources: Amount: \$386,000.
100. **Prasad PVV**. 2012. Center for Sorghum Improvement. K-State Research and Extension. Amount: \$150,000.
101. **Prasad PVV**. 2012. Agronomy Research Gift. Chromatin. Amount: \$5,000.
102. **Prasad PVV**, Mengel DB. 2012. Center for Sorghum Improvement. Kansas Grain Sorghum Commission. Amount: \$50,000.

Year 2013 (12)

103. **Prasad PVV**, Fu J. 2013. Exploring wheat germplasm for drought and heat tolerance. Kansas Wheat Alliance. Amount: \$30,000.
104. **Prasad PVV**. 2013. Understanding mechanisms of physiological and root traits for screening for drought tolerance in common bean. USDA - Borlaug Program (India). Amount: \$31,350.
105. **Prasad PVV**, and Schapaugh WT. 2013. Drought, heat and flood tolerant varieties for Midwest and south: Building on success. United Soybean Board. Amount: \$134,142.
106. **Prasad PVV**, Gupta SK. 2013. Heat-tolerant pearl millet for increased and stable production in warmer environment. USAID - ICRISAT. Amount: \$20,000.
107. **Prasad PVV**, Yu J, and Tesso T. 2013. Improving yield potential of grain sorghum through drought and heat tolerance. Kansas Grain Sorghum Commission. Amount: \$52,000.
108. Vadlani P, **Prasad PVV**. 2013. Production of advanced biofuels from salinity tolerant brown midrib sorghum genotypes. USAID - ICRISAT. Amount: \$45,000.
109. Tesso T, **Prasad PVV**, Jugulam M. 2013. Developing genomic tools to facilitate drought tolerance and ALS resistance breeding in sorghum. Kansas Grain Sorghum Commission. Amount: \$57,250.
110. **Prasad PVV**, Jagadish SVK. 2013. Improving heat tolerance in rice. USAID - IRRI. Amount: \$20,000.

111. **Prasad PVV**, Fritz AK, Mengel DB. 2013. Developing and enhancing heat tolerance in wheat using genomics, molecular and physiological tools. USAID. Amount: \$460,000. (Five Years).
112. **Prasad PVV**. 2013. Enhancing research facilities. Multiple Sources: Amount: \$120,000.
113. **Prasad PVV**. 2013. Center for Sorghum Improvement. K-State Research and Extension. Amount: \$125,000.
114. **Prasad PVV**. 2013. Center for Sorghum Improvement. Kansas Grain Sorghum Commission. Amount: \$50,000.

Year 2014 (11)

115. **Prasad PVV**, Fu J. 2014. Exploring wheat germplasm for drought and heat tolerance. Kansas Wheat Alliance. Amount: \$45,000.
116. **Prasad PVV**, Yu J, and Tesso T. 2014. Improving yield potential of grain sorghum through drought and heat tolerance. Kansas Grain Sorghum Commission. Amount: \$52,000.
117. **Prasad PVV**, Upadhyaya HD, Vadez V. 2014. High temperature tolerance and association mapping in finger millet. USAID – ICRISAT. Amount: \$60,000.
118. **Prasad PVV**, Lilja N. 2014. BHEARD – Ghana – PhD Student. USAID. Amount: \$176,000.
119. **Prasad PVV**. 2014. Measuring morpho-physiological traits related to drought tolerance under field and conditions. USDA – FAS – Borlaug Program (India). Amount: \$29,890.
120. Morris G, Perumal R, Tesso T, **Prasad PVV**. 2014. Improved genomic mapping and marker assisted selection for cold tolerance in grain sorghum. Kansas Grain Sorghum Commission. Amount: \$79,000.
121. Jugulam M, **Prasad PVV**, Thompson C. 2014. Evaluation of sorghum genotypes for herbicide tolerance. Kansas Grain Sorghum Commission. Amount: \$60,000.
122. **Prasad PVV**. 2014. Enhancing research facilities. Multiple Sources: Amount: \$120,000.
123. **Prasad PVV**. 2014. Center for Sorghum Improvement. K-State Research and Extension. Amount: \$75,000.
124. **Prasad PVV**. 2014. Center for Sorghum Improvement. Kansas Grain Sorghum Commission. Amount: \$50,000.
125. **Prasad PVV**, Pierzynski GM, Lilja N. Sustainable Intensification Innovation Lab. Feed the Future Collaborative Research on Sustainable Intensification. USAID. Amount: \$50,000,000; 2014 – 2019 (Five Years).

Year 2015 (6)

126. Jagadish SVK, Fritz AK, **Prasad PVV**. 2015. Strategies to develop wheat genotypes to beat post-flowering heat and drought stress. Kansas Wheat Commission. Amount: \$45,000.
127. Falalu H, Jagadish SVK, **Prasad PVV**. 2015. Improving pearl millet productivity for smallholder resilience to climate change in Niger. USAID – ICRISAT. Amount: \$30,000.
128. Jugulam M, **Prasad PVV**, Thompson C. 2015. Evaluation of sorghum genotypes for herbicide tolerance. Kansas Grain Sorghum Commission. Amount: \$30,000.
129. Jugulam M, **Prasad PVV**, Thompson C. 2015. Evaluation of sorghum genotypes for herbicide tolerance. United Sorghum Checkoff Program. Amount: \$30,000.
130. Jagadish SVK, **Prasad PVV**, Morris G, Perumal R. 2015. Physiological and genetic characterization of grain sorghum for enhancing terminal heat and drought stress resilience. Kansas Grain Sorghum Commission. Amount: \$55,000.
131. **Prasad PVV**, Pierzynski GM, Lilja N. 2015. Climate smart and sustainable intensification assessment of Rwanda. USAID – Rwanda – Mission. Amount: \$75,000.

Year 2016 (8)

132. Jagadish SVK, Fritz AK, **Prasad PVV**. 2016. Strategies to develop wheat genotypes to beat post-flowering heat and drought stress. Kansas Wheat Commission. Amount: \$45,000.
133. Falalu H, Jagadish SVK, **Prasad PVV**. 2016. Improving pearl millet productivity for smallholder resilience to climate change in Niger. USAID – ICRISAT. Amount: \$30,000.

134. Jugulam M, **Prasad PVV**, Thompson C. 2016. Evaluation of sorghum genotypes for herbicide tolerance. Kansas Grain Sorghum Commission. Amount: \$30,000.
135. Jugulam M, **Prasad PVV**, Thompson C. 2016. Evaluation of sorghum genotypes for herbicide tolerance. United Sorghum Checkoff Program. Amount: \$30,000.
136. Jagadish SVK, **Prasad PVV**, Morris G, Perumal R. 2016. Physiological and genetic characterization of grain sorghum for enhancing terminal heat and drought stress resilience. Kansas Grain Sorghum Commission. Amount: \$55,000.
137. Ciampitti I, et al.**Prasad PVV**. 2016. Corn management decision guiding website and mobile app. Kansas Corn Commission. Amount: \$39,350.
138. Rice, CW, **Prasad PVV**, Golden W, Lin X, Kisekka I, Schlegel A, Sanderson M, Aguilar J, Rogers D. 2016. WATER: Sustaining southern high plains agriculture through adaptive management to a declining Ogallala aquifer and changing climates. USDA – NIFA. Amount: \$650,000 (Four Years: 2016 – 2020).
139. Reyes M, **Prasad PVV**. 2016. Scaling up drip irrigation, conservation agriculture and rainwater harvesting for commercial vegetable home gardens to specially benefit women and youth. USAID – Guatemala – Mission. Amount: \$107,800.

Year 2017 (9)

140. **Prasad PVV**, Pierzynski GM, Stewart Z, Middendorf BJ. 2017. Sustainable Soil Fertility Prioritization for Sub-Saharan Africa. International Fertilizer Development Center. Amount: \$200,000.
141. **Prasad PVV**, Pierzynski GM, Stewart Z, Middendorf BJ. 2017. Research Uptake Study. USAID. Amount: \$346,831.
142. **Prasad PVV**, Pierzynski GM, Lilja N. 2017. Center for Sustainable Agricultural Intensification and Nutrition. USAID – Cambodia – Mission. Amount: \$500,000.
143. Reyes M, **Prasad PVV**. 2017. Scaling up drip irrigation, conservation agriculture and rainwater harvesting for commercial vegetable home garden to specially benefit women and youth. USAID – Horticultural Innovation Lab. Amount: \$138,322.
144. Jagadish SVK, Fritz AK, **Prasad PVV**. 2017. Strategies to develop wheat genotypes to beat post-flowering heat and drought stress. Kansas Wheat Commission. Amount: \$45,000.
145. Jugulam M, **Prasad PVV**, Thompson C. 2017. Evaluation of sorghum genotypes for herbicide tolerance. Kansas Grain Sorghum Commission. Amount: \$30,000.
146. Jagadish SVK, **Prasad PVV**, Morris G, Perumal R. 2017. Physiological and genetic characterization of grain sorghum for enhancing terminal heat and drought stress resilience. Kansas Grain Sorghum Commission. Amount: \$55,000.
147. Ciampitti IA, et al. **Prasad PVV**. 2017. Crop management decision guiding website and mobile app. Kansas Corn Commission. Amount: \$39,350.
148. KSU – Foundation, **Prasad PVV**, Pierzynski GM, Flores J, Minton EJ, Gillen B. 2017. College of Agriculture, Harold and Olympia Lonsinger Sustainability Research Farm. Land Donation (2300 Acres). Value: \$8,000,000.

Year 2018 (8)

149. **Prasad PVV**, Pierzynski GM, Stewart Z, Middendorf BJ. 2018. Sustainable Opportunities for Improving Livelihoods with Soils (SOILS) Consortium. International Fertilizer Development Center. Amount: \$200,000.
150. **Prasad PVV**, Pierzynski GM, Lilja N. 2018. Center for Sustainable Agricultural Intensification and Nutrition. USAID – Cambodia – Mission. Amount: \$500,000.
151. **Prasad PVV**, Reyes M, Stewart Z. 2018. Developing a highly productive and sustainable conservation agriculture production system for Cambodia and Myanmar. International Fertilizer Development Center. Amount: \$100,000.
152. **Prasad PVV**, Lilja N. 2018. Policy Research Consortium. USAID. Amount: \$2,100,000.
153. Middendorf BJ, **Prasad PVV**, Shuman C. 2018. International network-to-network (N2N) stakeholder collaboration workshop: solutions to accelerate research, leverage resources, and maximize synergies. National Science Foundation. Amount: \$100,000.

154. Reyes M, **Prasad PVV**. 2018. Center of Excellence – Reasmey Sophornna High School Undergraduate Scholarship - Cambodia. United Service Foundation Amount: \$10,000.
155. Reyes M, **Prasad PVV**. 2018. Promoting the adoption of conservation agriculture with trees in Guatemala. United Service Foundation Amount: \$15,000.
156. Stewart Z, **Prasad PVV**, Reyes M. 2018. CE SAIN Scholars: Increasing opportunities for Cambodian youth to pursue careers in agricultural extension. Epsilon Sigma Phi. Amount: \$5,000.

Year 2019 (13)

157. **Prasad PVV**, Lilja N. 2019. Center for Sustainable Agricultural Intensification and Nutrition. USAID – Cambodia – Mission. Amount: \$500,000.
158. **Prasad PVV**, Stewart Z, Middendorf BJ. 2019. Sustainable Opportunities for Improving Livelihoods with Soils (SOILS) Consortium. International Fertilizer Development Center. Amount: \$200,000.
159. **Prasad PVV**, Lilja N. 2019. Policy Research Consortium. USAID. Amount: \$800,000.
160. **Prasad PVV**, Stewart Z. 2019. Sustainable Opportunities for Improving Livelihoods with Soils (SOILS) Consortium. IFDC. Amount: \$100,000.
161. **Prasad PVV**, Middendorf BJ. 2019. Capacity Building Grant from Acharya N.G. Ranga Agricultural University (India). ICAR. Amount: \$180,180.
162. **Prasad PVV**, Middendorf BJ, Reyes M. 2019. Commercialization of Aquaculture for Sustainable Trade (CAST) Cambodia. American Soybean Association. Amount: \$1.83 M.
163. Reyes M, **Prasad PVV**. 2019. Center of Excellence – Reasmey Sophornna High School Undergraduate Scholarship - Cambodia. United Service Foundation Amount: \$12,857.
164. Reyes M, **Prasad PVV**. 2019. Promoting the adoption of conservation agriculture with trees in Guatemala. United Service Foundation Amount: \$12,210.
165. Reyes M, **Prasad PVV**. 2019. Scaling up drip irrigation, conservation agriculture and rainwater harvesting for commercial vegetable home garden to specially benefit women and youth. USAID – Horticultural Innovation Lab. Amount: \$107,806.
166. Stewart Z, **Prasad PVV**, Faye A. 2019. Enhancing Resilience and Nutrition in the Peanut Basin of Senegal through Integration of Newly Released Improved Cowpea Varieties. Feed the Future Innovation Lab for Legumes Systems. Amount: \$50,000.
167. Stewart Z, **Prasad PVV**, Reyes M. 2019. CE SAIN Scholars: Increasing opportunities for Cambodian youth to pursue careers in agricultural extension. Epsilon Sigma Phi. Amount: \$5,000.
168. Rice CW, Ciampitti IA, **Prasad PVV**. 2019. Ogallala Water CAP. UDSA-NIFA. Amount: \$50,000.
169. **Prasad PVV**, Lilja N. 2019. Sustainable Intensification Innovation Lab. USAID. Amount: \$23,000,000.

Year 2020 (10)

170. **Prasad PVV**, Lilja N. 2020. Center for Sustainable Agricultural Intensification and Nutrition. USAID – Cambodia – Mission. Amount: \$500,000.
171. **Prasad PVV**, Lilja N. 2019. Policy Research Consortium. USAID. Amount: \$100,000.
172. Stewart, Z, Obour A, **Prasad PVV**, Faye A. 2020. Sustainable intensification of dual-purpose cowpea for enhanced food and fodder in Senegal. Feed the Future Innovation Lab for Legumes Systems. Amount: \$204,700.
173. **Prasad PVV**, Stewart Z. 2020. Sustainable Opportunities for Improving Livelihoods with Soils (SOILS) Consortium. IFDC. Amount: \$100,000.
174. **Prasad PVV**, Middendorf BJ. 2020. Innovation (i) Research, Extension, Advisory Coordination Hub. USAID – DC. Amount: \$200,000.
175. Reyes M, **Prasad PVV**. 2020. Capacity building of university scholarships for Guatemala and the Philippines. United Service Foundation Amount: \$90,000.
176. Reyes M, **Prasad PVV**. 2020. Scholarships and summer travel – 2020. United Service Foundation Amount: \$40,000.
177. Reyes M, Middendorf BJ, **Prasad PVV**. 2020. Development of bighead catfish (*Clarias macrocephalus*) culture for sustainable agriculture in Cambodia. Fish Innovation Lab: \$16,900.

178. **Prasad PVV**, Middendorf BJ. 2020. Capacity building of students from SKUAST-Kashmir (India) at Kansas State University. ICAR. Amount: \$55,500.
179. Rice CW, Northup B, Ochsner T, Izaurralde...**Prasad PVV**. 2020. The rainfed agriculture innovation network. USDA-NIFA. Amount: \$250,000.

Year 2021 (7)

180. **Prasad PVV**, Lilja N. 2021. Center for Sustainable Agricultural Intensification and Nutrition. USAID – Cambodia – Mission. Amount: \$500,000.
181. **Prasad PVV**, Middendorf BJ. 2021. Haiti Agricultural University Partnership – Center for Excellence on Mitigation, Adaptation, Resilience for Climate Change in Haiti (CEMARCH). USAID – DC. Amount: \$12.6 M. (Year 1: 5.3 M)/
182. **Prasad PVV**, Middendorf BJ. 2021. Innovation (i) Research, Extension, Advisory Coordination Hub. USAID – DC. Amount: \$300,000.
183. Obour A, **Prasad PVV**, Faye A. 2021. Sustainable intensification of dual-purpose cowpea for enhanced food and fodder in Senegal. Feed the Future Innovation Lab for Legumes Systems. Amount: \$115,384.
184. Reyes M, **Prasad PVV**. 2021. CESAIN scholarships for Cambodians to pursue the agricultural profession. United Service Foundation Amount: \$18,500.
185. Reyes M, **Prasad PVV**. 2021. Scholarships and summer travel – 2020. United Service Foundation Amount: \$40,000.
186. Reyes M, Middendorf BJ, **Prasad PVV**. 2021. Development of bighead catfish (*Clarias macrocephalus*) culture for sustainable agriculture in Cambodia. Fish Innovation Lab: \$16,359.

Year 2022 (8)

187. **Prasad PVV**, Lilja N. 2022. Center for Sustainable Agricultural Intensification and Nutrition (CESAIN). USAID – Cambodia – Mission. Amount: \$500,000.
188. **Prasad PVV**, Middendorf BJ. 2022. Innovation (i) Research, Extension, Advisory Coordination Hub. USAID – DC. Amount: \$1,000,000.
189. **Prasad PVV**, Middendorf BJ. 2022. Climate Smart Agriculture in Guatemala. Amount: \$300,000.
190. **Prasad PVV**, Middendorf BJ, Reyes M, Ciampitti IA, Sharda A. 2022. Enhancing the education of the faculty of Agronomy and Agricultural Engineering at Royal University of Agriculture (RUA), Cambodia. RUA-World Bank. Amount: \$198,756.
191. Reyes M, **Prasad PVV**. 2022. CESAIN Scholarship for Cambodians to Pursue the Agricultural Profession – Cambodia. United Service Foundation Amount: \$30,000.
192. **Prasad PVV**, Middendorf BJ. 2022. Capacity Building Grant from Acharya N.G. Ranga Agricultural University, Andhra Pradesh, India. World Bank and Indian Council of Agricultural Research (ICAR). Amount: \$86,130.
193. Ciampitti IA, Sharda A, **Prasad PVV**. 2022. Experimental prototype farm for tomorrow (EPFOT). Global Food Systems Seed Grant Program, Kansas State University. Amount: \$99,999.
194. Reyes M, **Prasad PVV**. 2021. CESAIN scholarships for Cambodians to pursue the agricultural profession. United Service Foundation Amount: \$30,000.

Year 2023 (7)

195. **Prasad PVV**, Lilja N. 2023. Center for Sustainable Agricultural Intensification and Nutrition (CESAIN). USAID – Cambodia – Mission. Amount: \$500,000.
196. **Prasad PVV**, Middendorf BJ. 2022. Innovation (i) Research, Extension, Advisory Coordination Hub. USAID – DC. Amount: \$500,000.
197. **Prasad PVV**, Middendorf BJ. 2023. Capacity Building Grant from University of Agricultural and Horticultural Science, Shimoga, Karnataka, India. World Bank and Indian Council of Agricultural Research (ICAR). Amount: \$25,740.

198. **Prasad PVV**, Middendorf BJ. 2023. Capacity Building Grant from Sher-E-Kashmir University of Agricultural Science and Technology – Jammu, Jammu and Kashmir, India. World Bank and Indian Council of Agricultural Research (ICAR). Amount: \$47,840.
199. Reyes M, **Prasad PVV**. 2023. CESAIN Scholarship for Cambodians to Pursue the Agricultural Profession – Cambodia. United Service Foundation Amount: \$75,000
200. Reyes M, **Prasad PVV**. 2023. Kansas State University – South East Asian Regional Center for Graduate Study and Research in Agriculture – CESAIN School plus Home Gardens cum Biodiversity Enhancement Enterprise. United Service Foundation. Amount: \$25,000.
201. Rice CW, **Prasad PVV**, Patrignani A, Sanderson M, Ifft J, Olsen K, Moore T, Swilley E, Nowlin E, Haub MD, Obour A, Ruiz-Diaz D, Jha G, Seglin L, Veenstra R, Lollata R, Lin X, Santos E. 2023. Regenerative Agriculture for Circular Bioeconomy. Game-changing Research Initiation Program – Kansas State University. Amount: \$100,000.

Year 2024 (1)

202. **Prasad PVV**, Middendorf BJ. 2024. Guatemala – Scaling and Coordination Agricultural Technologies. USAID – Guatemala. Amount: \$6,000,000.