

P.V. Vara Prasad

108 Waters Hall, 1603 Old Claflin Place
 Kansas State University, Manhattan, Kansas 66506, USA.
 Tel: + 1 (785) 532 3746 (office); + 1 (785) 341 2840 (mobile/cell)
 E-mail: vara@ksu.edu; Skype: varakstate; Web: www.ksu.edu/siil
 X: @SIIL_KSU; Facebook: SIILKSU

ORCID: [0000-0001-6632-3361](https://orcid.org/0000-0001-6632-3361); Google Scholar: [View Profile](#); Research Gate: [View Profile](#)

Brief Bio

P.V. Vara Prasad is a Distinguished Professor, R.O. Kruse Endowed Professor, Director of Feed the Future Sustainable Intensification Innovation Lab, and Director of the Center for Crops, Climate and Communities 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.

Contents of the Curriculum Vitae

I. Education.....	2
II. Employment and Professional Experience	2
III. Adjunct / Honorary Positions	3
IV. Fellowships	3
V. Scholarships, Awards and Recognitions	3
VI. Professional Memberships.....	4
VII. Editing and Reviewing of International Journals and Reviewing Grant Proposals.....	4
VIII. Committees / Professional Services	5
IX. Teaching, and Student Mentoring/Training.....	8
X. Research and Education Grants; and Gifts	13
XI. Selected Research Accomplishments	14
Innovations (Basic and Applied):.....	14
Ten Selected Papers (Original Research Articles) as First Author:.....	15
Scholarship in Research, Development and Outreach in an International Context:.....	16
XII. Professional Contributions	17
Specific Research Contributions:	17
Specific Teaching / Training Contributions:.....	17
Specific Service and Leadership Contributions:.....	18
XIII. Impact of Research.....	18
XIV. Complete List of Publications	19
XV. Complete List of Competitive Grants Funded	71

Updated: 08 July 2024

P.V. Vara Prasad

Director, Feed the Future Innovation Lab for Collaborative Research on Sustainable Intensification (SIIL);
 Director, Center for Crops, Climate and Communities (College of Agriculture)
 University Distinguished Professor, Crop Ecophysiology and Farming Systems (Agronomy Department);
 R.O. Kruse Endowed Professor of Agriculture; and
 108 Waters Hall, 1603 Old Claflin Place, Kansas State University, Manhattan, Kansas 66506, USA.
 Tel: + 1 (785) 532 3746 (office); + 1 (785) 341 2840 (cell)

E-mail: vara@ksu.edu; Web: www.ksu.edu/siil

X: @SIIL_KSU; Facebook: SIILKSU

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

Jun. 2024 to present	Director, Center for Crops, Climate and Communities (C4)
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.

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.

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

Visionary Scientist for African Agriculture (2024)	ASA, CSSA and SSSA – OCP North America, USA.
Certificate of Appreciation (2024)	Royal University of Agriculture, Cambodia.
Lifetime Achievement Award (2024)	Bihar Agricultural Univ. & Excellent Vision Foundation, India.
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.
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); Council of Agricultural Science and Technology (Life Member); 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

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 |
| 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

- | | |
|----------------------------------|--------------------------|
| 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 |
| 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

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. Yared Assefa, Cropping Systems, Kansas State University, USA.
3. Mr. Naveenraj Shanmugam, Kansas State University, USA.
4. Mr. Williams Mohanavel, Kansas State University, USA.
5. Thamizh Arinarayanasamy, 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
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

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):

1. Dr. Uday Jha, Senior Scientist, Indian Institute of Pulse Research-ICAR (1 year)
2. Ms. Sadia Shafi, Scholar, Sher-e-Kashmir University of Agric. Science & Technology (90 days).
3. Dr. Gurumurthy Shekharappa, Senior Scientist ICAR, India (3 months).
4. Dr. Prakash Jha, Assistant Professor, Mississippi State University (3 years 7 months).
5. Dr. Gurjeet Singh, Geospatial Modeler, Michigan State University, USA (12 months).
6. Dr. Hardeep Singh, Assistant Professor, University of Florida, USA (15 months).
7. Dr. Aditi Kumari, Consultant, Private Industry, USA (5 months).
8. Dr. Balaji Pandian, Herbicide Trait Development, Enko Chem, USA (9 months).
9. Dr. Zach Stewart, Production Systems Technical Advisor, USAID, USA (4 years).
10. Dr. Suresh Kumar, Agricultural Extension, Acharya N.G. Ranga Agric. Univ., India (2 months).
11. Dr. Hamidou Traore, Director General, INERA, Burkina Faso (10 days).
12. Dr. Yonil Jibril, Weed Scientist, INERA, Burkina Faso (15 days).
13. Dr. Maduraimuthu Djanaguiraman, Crop Physiologist, Tamil Nadu Agric. Univ., India (3 years).
14. Dr. Patrick Kilby, Australian National University (Fulbright Scholar), Senior Lecturer, Canberra, Australia (6 months).
15. Dr. Jintian Song, Agric. Economist, Huazhong Agric. Univ., Wuhan, China (6 months).
16. Dr. Ai-Qing Sun, College of Agronomy, Shandong Agricultural University (1 year), Shandong, China. (Co-Advisor Krishna Jagadish).
17. Dr. John Sunoj, Postdoctoral Scholar, Texas A and M University, USA. (2 years).
18. Dr. Hanafey F. Maswada, Assistant Professor, Faculty of Agriculture, Tanta University (Visiting Scholar: 6 months), Tanta, Egypt. (Co-Advisor Krishna Jagadish).

19. 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).
20. Ms. Vinutha Kanaganahalli, International Crop Research Institute for the Semi-Arid Tropics, India (60 days), Research Scholar, Sorghum Breeding, Hyderabad, India.
21. Winthrop Professor Zed Rengel, University of Western Australia (Senior Fulbright Scholar; 6 months), Professor, University of Western Australia, Perth, Australia.
22. Ms. Cheryl Quinones, International Rice Research Institute (6 months); Crop Physiologist, International Rice Research Institute, Manila, Philippines.
23. Ms. Laavanya Rayaprolu, International Crop Research Institute for the Semi-Arid Tropics, India (60 days), Sorghum Breeding, Hyderabad, India.
24. Dr. Utharasu Subramaniam, Tamil Nadu Agricultural University, India (1 year). Assistant Professor, Tamil Nadu Agricultural University, India.
25. Ms. Vimala Kanagarethinam, Crop Physiology, India (1 year).
26. Dr. Rakesh Pandey, Indian Agricultural Research Institute, India (3 months). Senior Scientist – Wheat Physiology, Indian Agricultural Research Institute, New Delhi, India.
27. Dr. Parvez Sofi, Sher-e-Kashmir University, Jammu, India (Borlaug Fellow, 3 months). Associate Professor – Bean Breeding, Sher-e-Kashmir University, Jammu, India.
28. Dr. Arti Bhatia, Indian Agricultural Research Institute, India (15 days); Principal Scientist – Agricultural Climatology, Indian Agricultural Research Institute, New Delhi, India.
29. Dr. Sanjana Reddy, Directorate of Sorghum Research (15 days); Senior Scientist, Sorghum Breeding, Directorate of Sorghum Research, Hyderabad, India.
30. Dr. Tara Satyavathi, Indian Agricultural Research Institute, India (3 months); Principal Scientist, Millet Breeding, Indian Agricultural Research Institute, New Delhi, India.
31. 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.
32. Dr. Le Loan: (3 months, Borlaug Fellow). Lecturer, Nong Lam University, Vietnam.
33. Dr. Leena Diwakar: K-State (6 months); Researcher, Kansas State University, USA.
34. Dr. Satheesh Subramaniam, Tamil Nadu Agricultural University, India (1 year). Assistant Professor, University.
35. Dr. Sarma Mallabothala: Harvest Plus, Canada (6 months); Private Industry, Canada.
36. Dr. Roger Kanton: Savanna Agricultural Research Institute, Ghana (30 days); Associate Director, Savanna Agricultural Research Institute, Ghana.
37. Dr. Rachel Opole: Kenyan Agricultural Research Institute (Borlaug Fellow); Agronomist, Kenyan Agricultural Research Institute, Kenya.
38. Dr. Jianming Fu: USDA - ARS, Manhattan, USA (6 months); Plant Physiologist, USDA-ARS.
39. Mr. Amit Pradhan: Research Scholar, Mata Vaishnav Devi University, India (1 year); Scholar, Private Company, India.
40. Dr. Savanam S. Rao: Directorate of Sorghum Research, Hyderabad, India (4 months); Principal Scientist, Crop Physiology, Directorate of Sorghum Research, Hyderabad, India.
41. Dr. Gautam P. Pradhan: Crop Physiologist, Nepal (1 year); Agronomist, North Dakota State University, USA.
42. Mr. Mohammed Mustafa, Kansas State University (1 year), Scholar, Private Company.
43. Mr. Abdoul Wahab Toure: Institute of Economic and Rural Development, Mali (2 months); Agronomist, Institute of Economics and Rural Development, Mali.
44. Ms. Eva Erdayani: Indonesian Institute of Sciences, Indonesia (3 months, Borlaug Fellow); Doctoral Student, Washington State University, USA.
45. 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.
46. 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.

47. Dr. Sarvana Pandian: Tamil Nadu Agricultural University, India (1 month); Professor, Tamil Nadu Agricultural University, India.
48. Dr. Mamadou Doumbia: Institute of Economic and Rural Development, Mali (15 days); Retired - Director, Soil Testing Laboratory, Institute of Economics and Rural Development, Mali.
49. Dr. Jesse Naab: Savanna Agricultural Research Institute, Ghana (30 days); Scientist, WASCAL, Burkina Faso.
50. Dr. Sundeep Kumar: Banaras Hindu University, India (6 months); Principal Scientist, National Bureau of Plant Genetic Resources, New Delhi, India.
51. Dr. C. Udayasoorian: Tamil Nadu Agricultural University, India (2 months); Retired - Dean, Post Graduate Studies, Tamil Nadu Agricultural University, India.
52. Dr. James Pitchai: Tamil Nadu Agricultural University, India (2 months); Retired - Vice Chancellor, Bharathiar University, India.
53. Dr. Rishi Pal Singh: Birsa Agricultural University, India (20 days); Director, Seed Science Division, Birsa Agricultural University, India.
54. Ms. Sudha Pisipati, Kansas State University (6 months); Research Scholar, Private Company.
55. 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. Mr. Troy Ostmeier (USA)	PhD (Agronomy)	Graduating 2024
4. Ms. Valentina Pereyra (Argentina)	PhD (Agronomy)	Graduating 2024
5. Mr. Sourajit Dey (India)	PhD (Agronomy)	Graduating 2027

Current MS Graduate Students:

6. Ms. Kristen Kimbrell (USA)	MS (Agronomy)	Graduating 2024
7. Mr. Luiz Pradella (Brazil)	MS (Agronomy)	Graduating 2024
8. Wagner Squizani de Arruda (Brazil)	MS (Agronomy)	Graduating 2024
9. Leonardo Bosche (Brazil)	MS (Agronomy)	Graduating 2024
10. Vydehi Gadiparthi (India)	MS (Agronomy)	Graduating 2025

Graduated PhD Students:

1. Ms. Anu Raj (India)	PhD (Grain Science)	Graduated 2024
2. Ms. Susee Sudhakar (India)	PhD (Agronomy)	Graduated 2024
3. Mr. Ignacio Massigoge (Argentina)	PhD (Agronomy)	Graduated 2024
4. Josefina Lacasa (Argentina)	PhD (Agronomy)	Graduated 2023
5. Luciana Nieto (Argentina)	PhD (Agronomy)	Graduated 2023
6. Ms. Rachel Veenstra (USA)	PhD (Agronomy)	Graduated 2022
7. Mr. Mario Secchi (Brazil)	PhD (Agronomy)	Graduated 2022
8. Mr. Javier Fernandez (Argentina)	PhD (Agronomy)	Graduated 2021
9. Mr. Adrian Correndo (Argentina)	PhD (Agronomy)	Graduated 2021
10. Dr. Santiago Tamagno (Brazil)	PhD (Agronomy)	Graduated 2019
11. Dr. Edwin Akley (Ghana)	PhD (Agronomy)	Graduated 2019
12. Dr. Anuj Chilawal (India)	PhD (Agronomy)	Graduated 2019
13. Dr. Guillermo Balboa (Argentina)	PhD (Agronomy)	Graduated 2018
14. Dr. Abhishes Lamsal (Nepal)	PhD (Agronomy)	Graduated 2017

15. Dr. Sridevi Betha	(India)	PhD (Agronomy)	Graduated 2016
16. Dr. Andrew Green	(USA)	PhD (Agronomy)	Graduated 2016
17. Dr. Sarah Battenfield	(USA)	PhD (Agronomy)	Graduated 2016
18. Dr. Iddrisu Yahaya	(Ghana)	PhD (Ag. Economics)	Graduated 2015
19. Dr. Joshua Jennings	(USA)	PhD (Agronomy)	Graduated 2015
20. Dr. Shyamal Talukder	(Bangladesh)	PhD (Agronomy)	Graduated 2013
21. Dr. Sivakumar Sukumaran	(India)	PhD (Agronomy)	Graduated 2012
22. Dr. Mary Joi Abit	(Philippines)	PhD (Agronomy)	Graduated 2010
23. Dr. Yared Assefa	(Ethiopia)	PhD (Agronomy)	Graduated 2010
24. Dr. Jung Lee	(Korea)	PhD (Plant Pathology)	Graduated 2009
25. Dr. John Frihauf	(USA)	PhD (Agronomy)	Graduated 2009
26. Dr. Kent Martin	(USA)	PhD (Agronomy)	Graduated 2009

Graduated MS Students:

27. Luke Ryan	(USA)	MS (Agronomy)	Graduated 2023
28. Mr. James Ross	(USA)	MS (Agronomy)	Graduated 2023
29. Mr. Sunil Bhandari	(India)	MS (Biol. Ag. Engg.)	Graduated 2021
30. Ms. Paula Demarco	(Argentina)	MS (Agronomy)	Graduated 2021
31. Ms. Luciana Nieto	(Argentina)	MS (Agronomy)	Graduated 2020
32. Mr. Issac Barnhart	(USA)	MS (Agronomy)	Graduated 2020
33. Mr. Osler Ortez-Amador	(Argentina)	MS (Agronomy)	Graduated 2019
34. Mr. Javier Fernandez	(Argentina)	MS (Agronomy)	Graduated 2019
35. Ana Julia Azevedo		MS (Agronomy)	Graduated 2017
36. Mr. Jonathan Broeckelman	(USA)	MS (Agronomy)	Graduated 2016
37. Ms. Bailey McHenry	(USA)	MS (Agronomy)	Graduated 2016
38. Mr. Joseph Hong	(China)	MS (Plant Pathology)	Graduated 2016
39. Ms. Randi Clark	(USA)	MS (Agronomy)	Graduated 2016
40. Mr. Edwin Akley	(Ghana)	MS (Agronomy)	Graduated 2015
41. Mr. Devin Mangus	(USA)	MS (Ag. Bio. Engg.)	Graduated 2015
42. Mr. Nathan Keep	(USA)	MS (Agronomy)	Graduated 2013
43. Mr. Bandigou Diawara	(Mali)	MS (Agronomy)	Graduated 2012
44. Mr. Hugo Remaury	(USA)	MS (Ag. Economics)	Graduated 2012
45. Mr. Frank Maulana	(Malawi)	MS (Agronomy)	Graduated 2011
46. Mr. David Cruz	(Columbia)	MS (Plant Pathology)	Graduated 2011
47. Ms. Sruthi Narayanan	(India)	MS (Agronomy)	Graduated 2011
48. Mr. Kyle Shroyer	(USA)	MS (Agronomy)	Graduated 2010
49. Mr. Kentaro Takamatsu	(Japan)	MS (Elect. Engg.)	Graduated 2009
50. Mr. Levi Walker	(USA)	MS (Agronomy)	Graduated 2009
51. Ms. Laurene Smith	(USA)	MS (Agronomy)	Graduated 2008
52. Mr. Michael Duff	(USA)	MS (Agronomy)	Graduated 2007
53. Mr. Chris Pachta	(USA)	MS (Agronomy)	Graduated 2007
54. Mr. Souley Soumana	(Niger)	MS (Agronomy)	Graduated 2007
55. Mr. Phani Mallacheruvu	(India)	MS (Civil Engg.)	Graduated 2007
56. Mr. Ganesh Nagiseti	(India)	MS (Civil Engg.)	Graduated 2007
57. 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 (>\$107 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

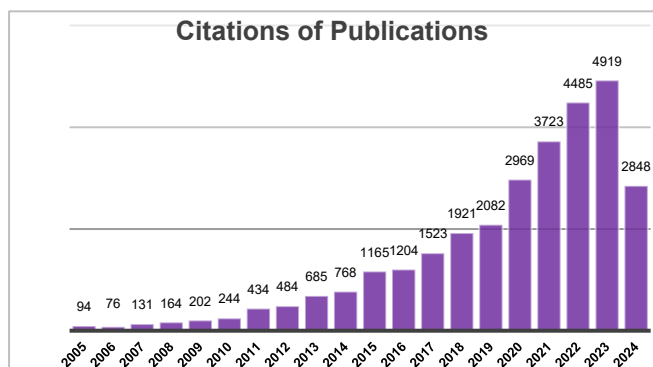
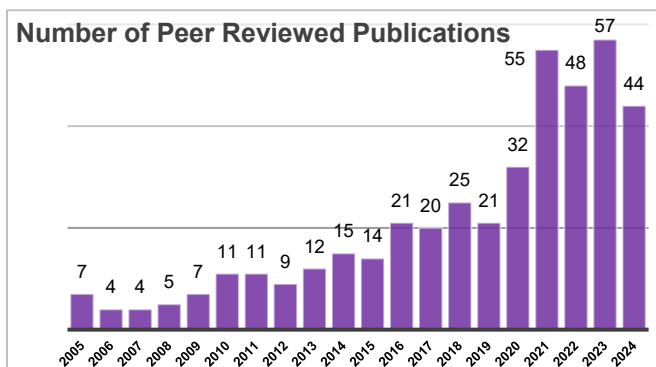
In addition to the direct impact of the research on producers and researchers, research impact is often measured by the number of citations of research articles published by an author.

Google Scholar: Total number of citations: **>30,500**; *h-index (Hirsch index): **>91**; **i-10-index:**>290**

*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 June 2024**.



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: 401; Book Chapters: 55; Abstracts: >380; Reports: >100; Presentations: >250 (Invited: >160)

Published Refereed Articles in International Journals (401)

1. Obour A, Holman J, **Prasad PVV**, Assefa Y. 2024. Winter wheat yield stability as affected by fertilizer-N, tillage and yield environment. *Agronomy Journal* (Accepted).
2. Shahzad R, Harlina PW, Khan SU, Koerniati S, Hastilestari BR, Nigrum A, Djalovic I, **Prasad PVV**. 2024. Iron oxide nanoparticles alleviates salt-alkaline stress and improves growth by modulating antioxidant defense system in cherry tomato. *Journal of Plant Interactions* (Accepted).
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. 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).
5. Ehtaiwesh A, Sunoj J, Djanaguiraman M, **Prasad PVV**. 2024. Response of winter wheat genotypes to salinity stress under controlled environments. *Frontiers in Plant Science* 15: 1396498. <https://doi.org/10.3389/fpls.2024.1396498>
6. Ratnakumar P, Chennamsetti M, Patil B, Kadirvel P, Geethanjali S, Nagaram S, Sajja S, Vennapusa AR, **Prasad PVV**, Mathur RK. 2024. Revolutionizing crop production: the imperative of speed breeding technology in modern crop improvement. *Crop Breeding, Genetics, and Genomics* 6: e240003. <https://doi.org/10.20900/cbgg20240003>
7. Riyaz I, Shafi S, Zaffar A, Wani AM, Zargar SM, Djanaguiraman D, **Prasad PVV**, Sofi PA. 2024. Differential spatial plasticity response in common bean (*Phaseolus vulgaris* L.) root architecture under water stress is driven by increased root diameter, surface area and volume at deeper layers. *Discover Plants* 1: 6. <https://doi.org/10.1007/s44372-024-00006-1>
8. Hasanuzzaman M, Raihan MRH, Siddika A, Bardhan K, Hosen MS, **Prasad PVV**. 2024. Selenium and its nanoparticles modulates the metabolism of reactive oxygen species and morpho-physiology of wheat (*Triticum aestivum* L.) to combat oxidative stress under water deficit conditions. *BMC Plant Biology* 24: 578. <https://doi.org/10.1186/s12870-024-05282-3>

9. Sharma N, Singh B, Krishnan SG, Bollinedi H, Mandal PK, Lal MK, Jha PK, Anand A, **Prasad PVV**. 2024. Higher grain filling rate in inferior spikelets of tolerant rice genotype offset grain yield loss under post-anthesis high night temperature. *Rice Science* (In Press). <https://doi.org/10.1016/j.rsci.2024.06.003>
10. 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* 15: 1391496. <https://doi.org/10.3389/fpls.2024.1391496>
11. 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* 15: 1419764. <https://doi.org/10.3389/fpls.2024.1419764>
12. Djalovic I, **Prasad PVV**, Dunderski D, Katanski S, Latkovic D, Kolaric L. 2024. Optimal plant density is key for maximizing maize yield in calcareous soil of the South Pannonian Basin. *Plants* 13: 1799. <https://doi.org/10.3390/plants13131799>
13. Sarap NB, Dakovic MZ, Djalovic I, Koliyanovic ZK, **Prasad PVV**. 2024. Application and experimental substantiation of the radioecological model for prediction in behavior ⁹⁰Sr in cultivated soil-crop system: a case study of two experimental agricultural fields. *Plants* 13: 1798. <https://doi.org/10.3390/plants13131798>
14. Hin L, Mean CM, Kim MC, Chhengven C, Bunthong B, Lor L, Sourn T, **Prasad PVV**. 2024. Development and performance assessment of sensor-mounted solar dryer for micro-climatic modeling and optimization of dried fish quality in Cambodia. *Clean Technologies* 6: 3390 (In Press).
15. 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* 12: 100473. <https://doi.org/10.1016/j.stress.2024.100473>
16. 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* 68: 1179-1197. <https://doi.org/10.1007/s00484-024-02661-1>
17. 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>
18. Shafi S, Zaffar A, Riyaz I, Shikari AB, Najeeb S, Zargar SM, Djanaguiraman M, Gurumurthy S, **Prasad PVV**, Sofi PA. 2024. Differential drought response in deep and shallow-rooted rice genotypes: enzymatic and non-enzymatic insights. *Plant Physiology Reports* 29: 294-307. <https://doi.org/10.1007/s40502-024-00788-2>
19. Diawara B, Diallo S, Traore B, Staggenborg S, **Prasad PVV**. 2024. Effect of planting date on yield and yield component of grain sorghum hybrids. *American Journal of Plant Sciences* 15: 387-402. <https://doi.org/10.4236/ajps.2024.155028>
20. 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>
21. 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>
22. 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/acsagscitech.3c00531>
23. Holman JD, Obour AK, O'Brien D, **Prasad PVV**, Assefa Y. 2024. Historic corn yield, production, and economic trends in Kansas. *Agronomy Journal* 116: 1428-1439. <https://doi.org/10.1002/agj2.21557>
24. Palmero F, Fernandez, JA, Habben JE, Schussler JR, Masek T, Weers B, Bing W, Hefley T, **Prasad PVV**, Ciampitti IA. 2024. Optimization of carbon and nitrogen partitioning in DP202216 maize hybrids. *Field Crops Research* 30: 109345. <https://doi.org/10.1016/j.fcr.2024.109345>
25. Gomez F, Carcedo A, Mean C, Reyes MR, Hok L, Tivet F, Seng V, **Prasad PVV**, Ciampitti IA. 2024. A dataset for soil organic carbon in agricultural systems for the southeast Asia region. *Scientific Data* 11: 374. <https://doi.org/10.1038/s41597-024-03213-3>

26. 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>
27. 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>
28. Massigoge I, Baral R, Cominelli S, Denson E, Helguera PG, Guareschi C, Simao LM, Rud JP, Pires C, Dille AJ, Lollato RP, Min D, Patrignani A, Ruiz Diaz DA, Hefley T, Lira S, **Prasad PVV**, Rice CW, Hatfield J, Ciampitti IA. 2024. Exploring alternative crop rotations to continuous winter wheat for agricultural intensification in the US Central Great Plains. *Agricultural Systems* 216: 103879. <https://doi.org/10.1016/j.agsy.2024.103879>
29. Djalovic I, **Prasad PVV**, Akhtar K, Paunovic A, Dugalic M, Riaz M, Katnski S, Zaheer S. 2024. Nitrogen fertilizer and cultivar interaction along climatic conditions determine maize yield and grain composition in calcareous soil. *Plants* 13: 844. <https://doi.org/10.3390/plants13060844>
30. Moller K, Nejadhashemi AP, Talha M, Chikafa M, Eeswaran R, Junior NV, Carcedo AJP, Ciampitti IA, Bizimana J-C, Diallo A, **Prasad PVV**. 2024. Unveiling the resilience of smallholder farmers in Senegal amidst extreme climate conditions. *Food and Energy Security* 13: e523. <https://doi.org/10.1002/fes3.523>
31. 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>
32. Faye A, Obour AK, Akplo TM, Stewart ZP, Min D, **Prasad PVV**, Assefa Y. 2024. Dual-purpose cowpea grain and fodder yield response to variety, nitrogen-phosphorus-potassium fertilizer, and environment. *Agroecosystems, Geosciences and Environment* 7: e204559. <https://doi.org/10.1002/agg2.20459>
33. 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>
34. Koumbem M, Pale S, Traore A, Traore H, Yonli D, Hien E, **Prasad PVV**, Middendorf BJ. 2024. Farmers perceptions of sorghum – cowpea production under cropping systems, water, organo-mineral fertilizer management in Center-West Region of Burkina Faso. *International Journal of Advanced Multidisciplinary Research* 11: 90-108. <http://dx.doi.org/10.22192/ijamr.2024.11.01.011>
35. Junior NV, Carcedo A, Min D, Diatta AA, Berhe A, **Prasad PVV**, Diallo A, Ciampitti IA. 2024. Management interventions of pearl Millet for attaining cereal self-sufficiency in Senegal. *Frontiers in Sustainable Food Systems* 7: 1281496. <https://doi.org/10.3389/fsufs.2023.1281496>
36. Abdullah FNU, Wani KI, Naeem M, Jha PK, Jha UC, Aftab T, **Prasad PVV**. 2024. Systems biology of chromium-plant interaction: insights from omics approaches. *Frontiers in Plant Science* 14: 1305179. <https://doi.org/10.3389/fpls.2023.1305179>
37. Naik S, Sudan J, Urwar U, Pakhtoon MM, Bhat B, Sharma V, Sofi PA, Shikkari AB, Bhat BA, Sofi NR, **Prasad PVV**, Zargar SM. 2024. Genome-wide SNP discovery and genotyping delineates potential QTLs underlying major yield attributing traits in Buchwheat. *The Plant Genome* e20427. <https://doi.org/10.1002/tpg2.20427>
38. Singh H, Northup BK, Omar P, Gowda PH, Baath GS, **Prasad PVV**. 2024. Moth bean and tepary bean as green nitrogen source in intensive wheat cropping systems. *Journal of Agriculture and Food Research* 15: 100938. <https://doi.org/10.1016/j.jafr.2023.100938>
39. Nowroz F, Hasanuzzaman M, Siddika A, Garcia P, Nahar K, **Prasad PVV**. 2024. Elevated tropospheric ozone and crop production: potential negative effects and plant defense mechanisms. *Frontiers in Plant Science* 14: 1244515. <https://doi.org/10.3389/fpls.2023.1244515>
40. Djalovic I, Kundu S, Bahuguna R, Pareek A, Raza A, Singla-Pareek S, **Prasad PVV**, Varshney RK. 2024. Maize and heat stress: physiological, genetic and molecular insights. *The Plant Genome* e20378. <https://doi.org/10.1002/tpg2.20378>
41. Hasanuzzaman M, Nowroz F, Raihan MRH, Siddika A, Alam MM, **Prasad PVV**. 2023. Application of biochar and humic acid improves the physiological and biochemical processes of rice (*Oryza sativa* L.) in conferring plant tolerance to arsenic-induced oxidative stress. *Environmental Science and Pollution Research* 31: 1562-1575. <https://doi.org/10.1007/s11356-023-31119-x>

42. Jha U, Nayyar H, Chaudhary RR, **Prasad PVV**, Parida SK, Siddique KHM. 2023. Non-coding RNAs (ncRNAs) in plants: master regulators for adapting to extreme temperature conditions. *Plant Physiology and Biochemistry* 205: 108164. <https://doi.org/10.1016/j.plaphy.2023.108164>
43. Kumam Y, Trick HN, **Prasad PVV**, Jugulam M. 2023. Transformative approaches for sustainable weed management: the power of gene drive and CRISPR-Cas9. *Genes* 14: 2176. <https://doi.org/10.3390/genes14122176>
44. 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>
45. 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>.
46. Koumbem M, Pale S, Hien E, Yonli D, Traore H, Pale G, **Prasad PVV**, Middendorf BJ. 2023. Sorghum and cowpea productivity as influenced by tillage, cropping system with soil amendment in Center-West Region of Burkina Faso. *International Journal of Frontline Research in Life Science* 2: 1-17. <https://doi.org/10.56355/ijfrls.2023.2.1.0041>
47. Devi P, Awasthi R, Jha UC, Sharma KD, **Prasad PVV**, Siddique KHM, Roorkiwal M, Nayyar H. 2023. Understanding the effect of heat stress during seed filling on nutritional composition and seed yield in chickpea (*Cicer arietinum* L.). *Scientific Reports* 13: 15450. <https://doi.org/10.1038/s41598-023-42586-0>
48. 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>
49. Akhtar K, Wang W, Djalovic I, **Prasad PVV**, Ren G, Ain N, Muhammad R, Feng Y-Z, Yang G, Wen R. 2023. Combining straw mulch with nitrogen fertilizer improves soil and plant physio-chemical attributes, physiology, and yield of maize in the semi-arid regions of China. *Plants* 12: 3308. <https://doi.org/10.3390/plants12183308>
50. Akhtar K, Ain NU, Wang W, Ren G, Feng Y, Djalovic I, **Prasad PVV**, Yang G, Wen R. 2023. Straw mulch decreased N fertilizer requirements via regulating soil moisture and temperature to improve physiology, nitrogen and water use efficiency of wheat. *Agronomy Journal* 115: 3106-3118. <https://doi.org/10.1002/agj2.21437>
51. 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>
52. Shafi S, Shafi I, Zaffar A, Zagar SM, Shikari AB, Ranjan A, **Prasad PVV**, Sofi PA. 2023. The resilience of rice under water stress will be driven by better roots: evidence from root phenotyping, physiological, and yield experiments. *Plant Stress* 10: 100211. <https://doi.org/10.1016/j.stress.2023.100211>
53. 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>
54. Zurek MB, Wirths J, Hebinck A, Crawford S, Lidder P, **Prasad PVV**, Tittonell P, Herrero M, Al-Malalha, Compton J. 2023. Principles for guiding research and innovation towards sustainable and equitable agrifood systems. *Frontiers in Sustainable Food Systems* 7: 1059063. <https://doi.org/10.3389/fsufs.2023.1059063>
55. Akplo TM, Faye A, Obour A, Stewart ZP, Min D, **Prasad PVV**. 2023. Dual-purpose for grain and fodder to improve nutrition security in the semi-arid Sub-Saharan Africa: a review. *Food and Energy Security* e492. <https://doi.org/10.1002/fes3.492>
56. Kumar R, Sagar V, Verma VC, Kumari M, Gujjar RS, Goswami S, Kumar S, Pandey H, Dubey AK, Srivastava S, Singh SP, Mall AK, Pathak AD, Singh H, Jha PK, **Prasad PVV**. 2023. Drought and salinity stresses induced physio-biochemical changes in sugarcane: an overview of tolerance mechanism and mitigating approaches. *Frontiers in Plant Sciences* 14: 1225234. <https://doi.org/10.3389/fpls.2023.1225234>

57. Veenstra RL, Hefley TJ, Berning D, Messina CD, Haag LA, **Prasad PVV**, Ciampitti IA. 2023. Predicting corn tiller development in restrictive environments can be achieved to enhance defensive management decision tools for producers. *Frontiers in Plant Sciences* 14: 1223961. <https://doi.org/10.3389/fpls.2023.1223961>
58. Massigoge I, Carcedo A, Lingenfelter J, Hefley T, **Prasad PVV**, Berning D, Lira S, Messina CD, Rice CW, Ciampitti IA. 2023. Maize planting date and maturity in the US central Great Plains: exploring windows for maximizing yields. *European Journal of Agronomy* 149: 126905. <https://doi.org/10.1016/j.eja.2023.126905>
59. Sharma D, Bharadwaj S, Raza A, Singh R, Kapoor D, Sharma NR, **Prasad PVV**. 2023. Alleviatory effects of silicon and 24-epibrassinolide in modulation of growth, osmolytes, metabolites, antioxidant defense system and gene expression in lead-exposed fenugreek (*Trigonella foenum-graecum* L.) plants. *Agronomy* 13: 1884. <https://doi.org/10.3390/agronomy13071884>
60. Akley E, Rice CW, Ahiabor B, **Prasad PVV**. 2023. Bradyrhizobium inoculants impacts on promiscuous nodulating soybean cultivars in Ghana farming systems. *Agronomy Journal* 115: 1097-1113. <https://doi.org/10.1002/agj2.21273>
61. Selladurai M, Pulivarthi MK, Raj AS, Iftikhar M, **Prasad PVV**, Siliveru K. 2023. Considerations for gluten free food – pearl and finger millet processing and market demand. *Grain and Oil Science and Technology* 6: 59-70. <https://doi.org/10.1016/j.gaost.2022.11.003>
62. Yadav RK, Purakaystha TJ, Kumar D, Jha PK, Mahala DM, Yadav DK, Khan MA, Singh S, Singh S, **Prasad PVV**. 2023. Identification of sensitive indicators and assessment of soil organic matter quality under different rotational cropping systems. *Frontiers in Environmental Sciences* 11: 1116930. <https://doi.org/10.3389/fenvs.2023.1116930>
63. Dhakar R, Nagar S, Sehgal VK, Jha PK, Singh MP, Chakraborty D, Mukherjee J, **Prasad PVV**. 2023. Balancing water and radiation productivity suggests a clue for improving yields in wheat under combined water deficit and terminal heat stress. *Frontiers in Plant Sciences* 14: 1171479. <https://doi.org/10.3389/fpls.2023.1171479>
64. **Prasad PVV**, Bhatnagar N, Bhandari V, Jacob G, Narayan K, Echiverria R, Bientema N, Cox PF, Compton J. 2023. Patters of investment in agricultural research and innovation for the global south, with a focus on innovation for sustainable agricultural intensification. *Frontiers in Sustainable Food Systems* 7: 1108949. <https://doi.org/10.3389/fsufs.2023.1108949>
65. Jha UC, Nayyar H, Chattopadhyay A, Beena R, Lone AA, Naik YD, Thudi M, **Prasad PVV**, Gupta S, Dixit GP, Siddique KHM. 2023. Major viral diseases in grain legumes: designing disease resistant legumes from plant breeding and OMICS integration. *Frontiers in Plant Sciences* 14: 1183505. <https://doi.org/10.3389/fpls.2023.1183505>
66. Perumal R, Tesso TT, Jagadish SVK, Kumar V, Aiken RM, Bean S, Smolensky D, Peiris KHS, **Prasad PVV**, Little CR. 2023. Registration of grain sorghum (A/B) and pollinator (R) parent lines for chilling and drought tolerance. *Journal of Plant Registrations* 17: 435-445. <https://doi.org/10.1002/plr2.20213>
67. Ro S, Roeurn S, Sroy C, **Prasad PVV**. 2023. Agronomic and yield performance of maize-mungbean intercropping with different mungbean seed rates under loamy sand soils of Cambodia. *Agronomy* 13: 1293. <https://doi.org/10.3390/agronomy13051293>
68. Raj AS, Siliveru K, McLean R, **Prasad PVV**, Lollato RP. 2023. Intensive management simultaneously reduces yield gaps and improves milling and baking properties of bread wheat. *Crop Science* 63: 936-955. <https://doi.org/10.1002/csc2.20906>
69. Singh H, Northup BK, **Prasad PVV**. 2023. Water storage and use efficiencies of rainfed winter wheat-summer green manure systems of the US Southern Great Plains. *European Journal of Agronomy* 146: 126818. <https://doi.org/10.1016/j.eja.2023.126818>
70. Kausar A, Zahra N, Zahra H, Hafeez MB, Zafer S, Shahzadi A, Raza A, Djalovic I, **Prasad PVV**. 2023. Alleviation of drought stress through foliar application of thiamine in two varieties of pea (*Pisum sativum* L.). *Plant Signaling and Behavior* 18. <https://doi.org/10.1080/15592324.2023.2186045>
71. Verma T, Bhardwaj S, Raja A, Djalovic I, **Prasad PVV**, Kapoor D. 2023. Mitigation of salt stress in Indian mustard (*Brassica juncea* L.) by the application of triacontanol and hydrogen sulfide. *Plant Signaling and Behavior* 18: 2189371. <https://doi.org/10.1080/15592324.2023.2189371>
72. Carcedo AJP, Junior NV, Marziotte L, Correndo AA, Araya A, **Prasad PVV**, Min D, Stewart ZP, Faye A, Ciampitti IA. 2023. The urgency of investment on local data for advancing food assessment in Africa: a

- review case study for APSIM crop modeling. *Environmental Modelling & Software* 161: 105633. <https://doi.org/10.1016/j.envsoft.2023.105633>
73. Faye A, Akplo TM, Stewart ZP, Min D, Obour AK, Assefa Y, **Prasad PVV**. 2023. Increasing millet planting density with appropriate fertilizer to enhance productivity and system resilience in Senegal. *Sustainability* 15: 4093. <https://doi.org/10.3390/su15054093>
74. Fu J, Bowden RL, Jagadish SVK, **Prasad PVV**. 2023. Genetic variation for terminal heat stress tolerance in winter wheat. *Frontiers in Plant Sciences* 14: 1132108. <https://doi.org/10.3389/fpls.2023.1132108>.
75. Secchi MA, Fernandez JA, Stamm MJ, Durrett T, **Prasad PVV**, Messina CD, Ciampitti IA. 2023. Effect of heat and drought on canola (*Brassica napus* L.) yield, oil, and protein: a meta-analysis. *Field Crops Research* 293: 108848. <https://doi.org/10.1016/j.fcr.2023.108848>
76. Tariq A, Mushtaq M, Yaquooob H, Bhat BA, Zargar SM, Raza A, Ali S, Charagh S, Mubarik MS, Zaman QU, **Prasad PVV**, Mir RA. 2023. Putting CRISPR-Cas system in action: a golden window for efficient and precise genome editing for crop improvement. *GM Crops and Food* 14: 1-27. <https://doi.org/10.1080/21645698.2023.2219111>
77. Yaquooob H, Tariq A, Bhat BA, Bhat KA, Raza A, Mir RA, Djalovic I, **Prasad PVV**. 2023. Integrating genomics and genome editing for orphan crop improvement: a bridge between orphan crop and modern agriculture system. *GM Crops and Food* 14: 1-20. <https://doi.org/10.1080/21645698.2022.2146952>
78. Mukherjee P, Suriyakumar P, Vanchinathan S, Krishnan V, Lal ML, Jha PK, Chinnusamy V, Anand A, **Prasad PVV**. 2023. Hydrogen peroxide and GA3 levels regulate the high night temperature response in pistils of wheat. *Antioxidants* 12: 342. <https://doi.org/10.3390/antiox12020342>
79. Devi J, Sagar V, Mishra GP, Jha PK, Gupta N, Dubey RK, Singh PM, Behera TK, **Prasad PVV**. 2023. Heat stress tolerance in peas (*Pisum sativum* L.): current status and way forward. *Frontiers in Plant Sciences* 13: 1108276. <https://doi.org/10.3389/fpls.2022.1108276>
80. Salehi H, Chehregani A, Raza A, Djalovic I, **Prasad PVV**. 2023. The comparative effects of manganese nanoparticles and their counterparts (bulk and ionic) in *Artemisia annua* plants via seed priming and foliar applications. *Frontiers in Plant Sciences* 13: 1098772. <https://doi.org/10.3389/fpls.2022.1098772>
81. Veenstra R, Messina CD, Berning D, Haag LA, Carter P, Hefley TJ, **Prasad PVV**, Ciampitti IA. 2023. Corn yield components can be stabilized via tillering in sub-optimal densities. *Frontiers in Plant Sciences* 13: 1047268. <https://doi.org/10.3389/fpls.2022.1047268>
82. Bayramov S, Varanasi A, **Prasad PVV**, Jugulam M. 2023. Expression of herbicide target-site and chloroplastic genes in response to herbicide application in Italian ryegrass [*Lolium multiflorum* ssp. *multiflorum* (Lam.)]. *Journal of Agricultural Science* 15: 23-39. <https://doi.org/10.5539/jas.v15n5p23>
83. Pandian BA, Varanasi A, Reddy AV, Thomason C, Tesso TT, **Prasad PVV**, Jugulam M. 2023. Identification and characterization of mesotrione-resistant grain sorghum (*Sorghum bicolor* (L.) Moench): a viable option for postemergence grass weed control. *Journal of Agricultural and Food Chemistry* 71: 1035-1045. <https://doi.org/10.1021/acs.jafc.2c05865>
84. Jha PK, Middendorf G, Faye A, Middendorf BJ, **Prasad PVV**. 2023. Lives and livelihoods in smallholder farming systems of Senegal: impacts, adaptation, and resilience to COVID-10. *Land* 12: 178. <https://doi.org/10.3390/land12010178>
85. Veenstra RL, Messina CD, Berning D, Haag L, Carter P, Hefley TJ, **Prasad PVV**, Ciampitti IA. 2023. Tiller biomass in low plan-density corn enhances transient C sink without direct harvest index detriment. *Field Crops Research* 292: 108804. <https://doi.org/10.1016/j.fcr.2022.108804>
86. Rosso LHM, de Borja Reis AE, Tamagno S, Correndo AA, **Prasad PVV**, Ciampitti IA. 2023. Temporal variation in soil N supply defines N fixation in soybeans. *European Journal of Agronomy* 144: 126745. <https://doi.org/10.1016/j.eja.2023.126745>
87. Junior NV, Carcedo AJP, Min D, Diatta AA, Araya A, **Prasad PVV**, Diallo A, Ciampitti IA. 2023. Management adaptations for water-limited pearl millet systems in Senegal. *Agricultural Water Management* 278: 108173. <https://doi.org/10.1016/j.agwat.2023.108173>
88. Kumar D, Purakayashtha TJ, Das R, Yadav RK, Shivay YS, Jha PK, Singh S, Kumari A, **Prasad PVV**. 2023. Long-term effects of organic amendments on carbon stability in clay-organic complex and its role in soil aggregation. *Agronomy* 13: 39. <https://doi.org/10.3390/agronomy13010039>
89. Umesh MR, Angadi S, Begna S, Gowda PH, **Prasad PVV**. 2023. Shade tolerance response of legumes in terms of biomass accumulation, leaf photosynthesis, and chlorophyll pigment under reduced light. *Crop Science* 63: 278-292. <https://doi.org/10.1002/csc2.20851>

90. Demarco PA, Mayor L, Messina CD, **Prasad PVV**, Morris GP, Ciampitti IA. 2023. Retrospective study in US commercial sorghum breeding: II. Nitrogen internal efficiency. *Crop Science* 63: 879-887. <https://doi.org/10.1002/csc2.20763>
91. Safiatou S, Margueritte O, Yonli D, Nikiema MP, Traore H, Traore S, Middendorf BJ, Stewart ZP, Prasad PVV. 2022. Effect of cereal-legume intercropping, water and soil fertility management on improving agricultural productivity in Eastern Burkina Faso. *Sciences Naturelles et Appliquees* 41: 213-36.
92. Akley EK, Rice CW, Adotey N, Ampim P, **Prasad PVV**, Owusu DE, Denwar NN. 2022. Residual Bradyrhizobium inoculation effects soybean performance and selected soil health parameters. *Agronomy Journal* 114: 1627-1641. <https://doi.org/10.1002/agj2.21037>
93. Belay SA, Assefa TT, Yimer A, **Prasad PVV**, Reyes MR. 2022. The cradels of adoption: perspectives from conservation agriculture in Ethiopia. *Agronomy* 12: 3019. <https://doi.org/10.3390/agronomy12123019>
94. Chaudhary S, Jha UC, Paul PJ, **Prasad PVV**, Sharma KD, Kumar S, Gupta DS, Sharma P, Singh S, Siddique KHM, Nayyar. 2022. Assessing the heat sensitivity of urdbean (*Vigna mungo* L. Hepper) genotypes involving physiological, reproductive and yield traits under field and controlled environment. *Frontiers in Plant Sciences* 13: 1042999. <https://doi.org/10.3389/fpls.2022.1042999>
95. Beye A, Diakhate PB, Diouf O, Faye A, Obour AK, Stewart ZP, Assefa Y, Miin D, **Prasad PVV**. 2022. Socio-economic constraints to adopting new cowpea varieties in three agro-ecological zones in the Senegalese Peanut Basin. *Sustainability* 14: 14550. <https://doi.org/10.3390/su142114550>
96. Djalovic I, Riaz M, Akhtar K, Bekavac G, Paunovic A, Pejanovic V, Zaheer S, **Prasad PVV**. 2022. Yield and grain quality of divergent maize cultivar under inorganic N fertilizer regimes and Zn application depend on climatic conditions in calcareous soil. *Agronomy* 12: 2705. <https://doi.org/10.3390/agronomy12112705>
97. Secchi MA, Correndo A, Bastos LM, Stamm MJ, Durrett T, **Prasad PVV**, Messina CD, Ciampitti IA. 2022. Suitability of environment for winter canola oil production in the United States. *Field Crops Research* 287: 108658. <https://doi.org/10.1016/j.fcr.2022.108658>
98. Pereyra VM, Bastos LM, Reis AFB, Melchiori RJM, Maltese NE, Appelhans SC, **Prasad PVV**, Wright Y, Brokesh E, Sharda A, Ciampitti IA. 2022. Early season plant-to-plant spatial uniformity can affect soybean yield. *Scientific Reports* 12: 17128. <https://doi.org/10.1038/s41598-022-21385-z>
99. Ahmed Z, Shew AM, Mondal MM, Yadav S, Jagadish SVK, **Prasad PVV**, Buisson MC, Das M, Bakuluzzaman M. 2022. Climate risk perceptions and perceived yield loss increases agricultural technology adoption in the polder areas of Bangladesh. *Journal of Rural Studies* 94: 271-286. <https://doi.org/10.1016/j.jrurstud.2022.06.008>
100. Chakraborty D, Saha S, Sethy BK, Singh HD, Singh N, Sharma R, Chanu AN, Walling I, Anal PR, Chowdhury S, Hazarika S, Mishra VK, Jha PK, **Prasad PVV**. 2022. Usability of weather forecast for tackling climate variability and its effect on maize crop yield in Northeastern Hill Region of India. *Agronomy* 12: 2529. <https://doi.org/10.3390/agronomy12102529>
101. Moharana PC, Meena RL, Nogiya M, Jena RK, Sharma GK, Saho S, Jha PK, Aditi K, **Prasad PVV**. 2022. Impacts of land use on pools and indices of soil organic carbon and nitrogen in the Ghaggar Flood Plains of Arid India. *Land* 11: 1180. <https://doi.org/10.3390/land11081180>
102. Manoj KN, Shekara RG, Sridhara S, Mudalagiriappa, Chikkarugi M, Gopakkali P, Jha PK, **Prasad PVV**. 2022. Carbon footprint assessment and energy budgeting of different annual and perennial forage cropping systems: a study from the semi-arid region of Karnataka, India. *Agronomy* 12: 1783. <https://doi.org/10.3390/agronomy12081783>
103. Saulic M, Oveisi M, Djalovic I, Bozic D, Pishyar A, Savic A, **Prasad PVV**, Vrbnicanin S. 2022. How do long term crop rotations influence weed population: exploring the impacts of more than 50 years of crop management in Serbia. *Agronomy* 12: 1772. <https://doi.org/10.3390/agronomy12081772s>
104. Eeswaran R, Nejadhashemi AP, Faye A, Min D, **Prasad PVV**, Ciampitti IA. 2022. Current and future challenges and opportunities for livestock farming in West Africa: Perspectives from the Case of Senegal. *Agronomy* 12: 1818. <https://doi.org/10.3390/agronomy12081818>
105. Bastos LM, Faye A, Stewart ZP, Akplo TM, Min D, **Prasad PVV**, Ciampitti IA. 2022. Variety and management selection to optimize pearl millet yield and profit in Senegal. *European Journal of Agronomy* 139: 12656. <https://doi.org/10.1016/j.eja.2022.126565>

106. Pale S, Yonli D, Barro A, Koumbem M, Traore H, Pale G, **Prasad PVV**, Middendorf BJ. 2022. Assessing the effect of tillage and fertilization on the accumulation of minerals in pearl millet stover. *World Journal of Advanced Research and Reviews* 15: 606-615.
107. Indraratne SP, Pierzynski GM, Baker LR, **Prasad PVV**, Arachchige PP. 2022. Pelleted-manure compost improves mine spoil properties enhancing plant growth and phyto-stabilization of toxic metals. *Canadian Journal of Soil Science* 102: 719-731. <https://doi.org/10.1139/cjss-2021-0157>
108. Devi D, Jha UC, Prakash V, Kumar S, Pardia S, Paul PJ, **Prasad PVV**, Sharma KD, Siddique KHM, Nayyar H. 2022. Response of physiological, reproductive function and yield traits in cultivated chickpea (*Cicer arietinum* L.) under heat stress. *Frontiers in Plant Sciences* 13: 880519. <https://doi.org/10.3389/fpls.2022.880519>
109. Chaudhary S, Devi P, HunumanthaRao B, Jha UC, Sharma KD, **Prasad PVV**, Kumar S, Siddique KHM, Nayyar H. 2022. Physiological and molecular approaches for developing thermotolerance in vegetable crops: a growth, yield and sustenance perspective. *Frontiers in Plant Sciences* 13: 878498. <https://doi.org/10.3389/fpls.2022.878498>
110. Jha PK, Ines AVM, Han E, Cruz R, **Prasad PVV**. 2022. A comparison of multiple calibration and ensembling methods for estimating genetic coefficient of CERES-Rice to simulate phenology and yield. *Field Crops Research* 284: 108560. <https://doi.org/10.1016/j.fcr.2022.108560>
111. Carcedo AJP, Bastos LM, Yadav S, Mondal MK, Jagadish SVK, Kamal FA, 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. *Agricultural Systems* 200: 103428. <https://doi.org/10.1016/j.agsy.2022.103428>
112. Araya A, Jha PK, Zambreski Z, Faye A, Ciampitti IA, Min D, Gowda PH, Singh U, **Prasad PVV**. 2022. Evaluating crop management options for sorghum, pearl millet and peanut to minimize risk under the projected midcentury climate scenario for different locations in Senegal. *Climate Risk Management* 36: 100436. <https://doi.org/10.1016/j.crm.2022.100436>
113. Correndo AA, Adey E, Rosso LHM, Tremblay N, **Prasad PVV**, Du J, Ciampitti IA. 2022. Footprint of maize nitrogen management on the following soybean crop. *Agronomy Journal* 114: 1475-1488. <https://doi.org/10.1002/agj2.21023>
114. Palmero F, Fernandez JA, Garcia FO, Haro RJ, **Prasad PVV**, Salvagiotti F, Ciampitti IA. 2022. A quantitative review into the contributions of biological nitrogen fixation to agricultural systems by grain legumes. *European Journal of Agronomy* 136: 126514. <https://doi.org/10.1016/j.eja.2022.126514>
115. Fernandez JA, Messina CD, Salinas A, **Prasad PVV**, Nippert J, Ciampitti IA. 2022. Kernel weight contribution to genetic gain of maize. *Journal of Experimental Botany* 73: 3597-3609. <https://doi.org/10.1093/jxb/erac103>
116. Sourn T, Pok S, Chou P, Nut N, Theng D, **Prasad PVV**. 2022. Assessment of land use and land cover changes on soil erosion using remote sensing, GIS and RULSE model: a case study of Battambang province, Cambodia. *Sustainability* 14: 4066. <https://doi.org/10.3390/su14074066>
117. Hebbar KB, Pullott AS, Veliyathukudy J, Poonchalikundil N, Santhosh A, Shil S, **Prasad PVV**. 2022. Predicting the potential suitable climate for coconut (*Cocos nucifera* L.) cultivation in India under climate change scenarios using MaxEnt model. *Plants* 11: 731. <https://doi.org/10.3390/plants11060731>
118. Yadav MR, Choudhary M, Singh J, Lal MK, Jha PK, Udawat P, Gupta NK, Rajput VD, Garg NK, Maheshwari C, Hassan M, Gupta S, Jatwa TK, Kumar R, Yadav AK, **Prasad PVV**. Impacts, tolerance, adaptation, and mitigation of heat stress on wheat under changing climates. *International Journal of Molecular Sciences* 23: 2838. <https://doi.org/10.3390/ijms23052838>
119. Singh H, Northup B, Rice CW, **Prasad PVV**. 2022. Biochar applications influence soil physical and chemical properties, microbial diversity, and crop productivity: a meta-analysis. *Biochar* 4: 8. <https://doi.org/10.1007/s42773-022-00138-1>
120. Nanje Gowda NA, Siliveru K, **Prasad PVV**, Bhatt Y, Netravati BP, Chengappa G. 2022. Modern processing of Indian millet: a perspective on changes in nutritional properties. *Food* 11: 499. <https://doi.org/10.3390/foods11040499>
121. Hota S, Mishra V, Mourya KK, Giri K, Kumar D, Jha PK, Saikia US, **Prasad PVV**, Ray SK. 2022. Land use, landform and soil management as determinants of soil physiochemical properties and microbial abundance of lower Brahmaputra valley, India. *Sustainability* 14: 2241. <https://doi.org/10.3390/su14042241>

122. Belay SA, Assefa TT, Worqlul AW, Steenhuis TS, Schmitter P, Reyes MR, **Prasad PVV**, Tilahun SA. 2022. Conservation and conventional vegetable production increase soil organic matter and nutrients in the Ethiopian highlands. *Water* 14: 476. <https://doi.org/10.3390/w14030476>
123. Sridhara S, Gopakkali P, Manoj NK, Patil KKR, Paramesh V, Jha PK, **Prasad PVV**. 2022. Identification of sustainable development priorities for agriculture through sustainable livelihood security indicators for Karnataka, India. *Sustainability* 14: 1831. <https://doi.org/10.3390/su14031831>
124. Lundberg AL, Lorenzo-Redondo R, Hultquist JF, Hawkinds CA, Ozer EA, Welch S, **Prasad PVV**, Achenbach CJ, White JI, Oehmke JF, Murphy R, Havey R, Post LA. 2022. Overlapping delta and omicron outbreaks during the COVID-19 pandemic: dynamic panel data estimates. *Journal of Medical Internet Research Public Health and Surveillance* 8: e37377. <https://doi.org/10.2196/37377>
125. Lundberg AL, Lorenzo-Redondo R, Hawkinds CA, Hultquist JF, Achenbach CJ, Ozer EA, Welch S, **Prasad PVV**, Oehmke JF, Murphy R, Havey R, Post LA. 2022. Has omicron changed the evolution of the Pandemic? *Journal of Medical Internet Research Public Health and Surveillance* 8: e35763. <https://doi.org/10.2196/35763>
126. Sita K, Sehgal A, Bhardwaj A, Bhandari K, Jha UC, **Prasad PVV**, Singh S, Kumar S, Siddique KHM, Nayyar H. 2022. Selenium supplementation to lentil (*Lens culinaris* Medik) under combined heat and drought stress improves photosynthetic ability, antioxidant systems, reproductive function and yield traits. *Plant and Soil (Online)*. <https://doi.org/10.1007/s11104-022-05310-x>
127. Hein N, Impa SM, Wagner D, Bheemanahalli R, Kumar R, Tiwari M, **Prasad PVV**, Tilley M, Wu X, Neilsen M, Jagadish SVK. 2022. Grain micronutrient composition and yield reduction in field-grown wheat are negatively impacted by high night-time temperatures. *Cereal Chemistry* 99: 615-624. <https://doi.org/10.1002/cche.10523>
128. Nget R, Aguilar EA, Sta PC, Reano CE, Sanchez PB, Reyes MR, **Prasad PVV**. 2022. Response of soybean genotypes to different nitrogen and phosphorus sources: impacts on yield components, seed yield and seed protein. *Plants* 11: 298. <https://doi.org/10.3390/plants11030298>
129. Nieto L, Houborg R, Zajdband A, Jumpasut A, **Prasad PVV**, Olsen BJSC, Ciampitti IA. 2022. Impact of high-cadence earth observation in maize crop phenology classification. *Remote Sensing* 14: 469. <https://doi.org/10.3390/rs14030469>
130. Rane J, Singh AK, Tiwari M, **Prasad PVV**, Jagadish SVK. 2022. Effective use of water in crop plants in dryland agriculture: implications of reactive oxygen species and antioxidative system. *Frontiers in Plant Sciences* 12: 778270. <https://doi.org/10.3389/fpls.2021.778270>
131. Fernandez JA, Nippert JB, **Prasad PVV**, Messina CD, Ciampitti IA. 2022. Post-silking ¹⁵N labeling reveals an enhanced nitrogen allocation to leaves in modern maize (*Zea mays*) genotypes. *Journal of Plant Physiology* 268: 153577. <https://doi.org/10.1016/j.jplph.2021.153577>
132. Pandian B, Sexton-Bowser S, **Prasad PVV**, Jugulam M. 2022. Current status and prospects of herbicide-resistant grain sorghum (*Sorghum bicolor*). *Pest Management Science* 78: 409-415. <https://doi.org/10.1002/ps.6644>
133. Middendorf BJ, Traore H, Middendorf G, Jha PK, Yonli D, Pale S, **Prasad PVV**. 2022. Impacts of the COVID-19 pandemic on vegetable production systems and livelihoods: smallholder farmers experiences in Burkina Faso. *Food and Energy Security* 11: e377. <https://doi.org/10.1002/fes3.337>
134. Veenstra RL, Berning D, Carter P, Wallace S, Legleiter M, Currie L, Messina CD, **Prasad PVV**, Hefley TJ, Haag L, Ciampitti IA. 2022. Corn tiller yield contributions are dependent on environment: a 17 site-year Kansas study. *Kansas Agricultural Experiment Station Research Reports* 8: 26-31.
135. Nieto L, Houborg R, Zajdband A, Jumpasut A, **Prasad PVV**, Olson BJSC, Ciampitti IA. 2022. How relevant is high-cadence earth observation for maize crop phenology classification? *Kansas Agricultural Experiment Station Research Reports* 8: 32-37.
136. Rane J, Singh AK, Kumar M, Boraiah KM, Meena KK, Pradhan A, **Prasad PVV**. 2021. The adaptation and tolerance of major cereals and legumes to important abiotic stresses. *International Journal of Molecular Sciences* 22: 12970. <https://doi.org/10.3390/ijms222312970>
137. Kumar R, Sinha R, Sharma PK, Ivy N, Kumar P, Kant N, Jha A, Jha PK, Gupta PK, Sharma P, Singh RK, Singh RP, Ghosh A, **Prasad PVV**. 2021. Bioaccumulation of fluoride in plants and its microbial assisted remediation: a review of biological processes and technological performance. *Processes* 9: 2154. <https://doi.org/10.3390/pr9122154>
138. Sita K, Sehgal A, Bhardwaj A, Bhandari K, Kumar S, **Prasad PVV**, Jha U, Siddique KHM, Nayyar H. 2021. Nitrous oxide secures reproductive efficiency in heat-stressed lentil (*Lens culinaris* Medik.) plants

- by enhancing carbon fixation and assimilation ability to improve yield traits. *Physiology and Molecular Biology of Plants* 27: 2549-2566. <https://doi.org/10.1007/s12298-021-01098-9>
139. Correndo AA, Tremblay N, Coulter JA, Ruiz-Diaz D, Franzen D, Nafziger E, **Prasad PVV**, Rosso LHM, Steinke K, Du J, Messina CD, Ciampitti IA. 2021. Unraveling uncertainty drivers of the maize yield response to nitrogen: a Bayesian and machine learning approach. *Agricultural and Forest Meteorology* 311: 108668. <https://doi.org/10.1016/j.agrformet.2021.108668>
 140. Faye A, Stewart ZP, Diome K, Edward C-T, Fall D, Ganyo DKK, Akplo TM, **Prasad PVV**. 2021. Single application of biochar increases fertilizer efficiency, C sequestration, and pH over the long-term in sandy soils of Senegal. *Sustainability* 13: 11817. <https://doi.org/10.3390/su132111817>
 141. Rani A, Kian A, Sharma KD, **Prasad PVV**, Jha UC, Siddique KHM, Nayyar H. 2021. Cold tolerance during the reproductive phase in chickpea (*Cicer arietinum* L.) is associated with superior cold acclimation ability involving antioxidants and cryoprotective solutes in anthers and ovules. *Antioxidants* 10: 1693. <https://doi.org/10.3390/antiox10111693>
 142. Hernandez CM, Faye A, Ousseynou L, Stewart ZP, **Prasad PVV**, Bastos LM, Nieto L, Carcedo AJP, Ciampitti IA. 2021. Soil and climate characterization to define environments for summer crops in Senegal. *Sustainability* 13: 11739. <https://doi.org/10.3390/su132111739>
 143. Sourn T, Pok S, Chou P, Nut N, Theng D, Rath P, Reyes MR, **Prasad PVV**. 2021. Evaluation of land use and land cover change and its drivers in Battambang Province, Cambodia from 1998-2018. *Sustainability* 13: 11170. <https://doi.org/10.3390/su132011170>
 144. Kumar R, Sharma P, Verma A, Jha PK, Singh P, Gupta PK, Chandra R, **Prasad PVV**. 2021. Effect of physical characteristics and hydrodynamic microplastics in riverine ecosystems. *Water* 13: 2710. <https://doi.org/10.3390/w13192710>
 145. Ramalingam AP, Mohanavel W, Premnath A, Mutturajan R, **Prasad PVV**, Perumal R. 2021. Large-scale non-target metabolomics reveals antioxidant, nutraceutical and therapeutic potentials of sorghum. *Antioxidants* 10: 1511. <https://doi.org/10.3390/antiox10101511>
 146. Barnhart I, Demarco P, **Prasad PVV**, Mayor L, Jugulam M, Ciampitti IA. 2021. High-resolution unmanned aircraft systems imagery for stay-green characterization in grain sorghum (*Sorghum bicolor* L.). *Journal of Applied Remote Sensing* 15: 044501. <https://doi.org/10.1117/1.JRS.15.044501>
 147. Correndo AA, Fernandez JA, **Prasad PVV**, Ciampitti IA. 2021. Do water and nitrogen management impact grain quality in maize. *Agronomy* 11: 1851. <https://doi.org/10.3390/agronomy11091851>
 148. Prasad VBR, Govindraj M, Djanaguiraman M, Djalovic I, Shailani A, Rawat N, Singla-Pareek SL, Pareek A, **Prasad PVV**. 2021. Drought and high temperature stress in sorghum: physiological, genetic and molecular insights, and breeding approaches. *International Journal of Molecular Sciences* 22: 9826. <https://doi.org/10.3390/ijms22189826>
 149. Vasiljevic S, Djalovic I, Miladinovic J, Xu N, Sui X, Wang Q, **Prasad PVV**. 2021. Winter pea mixture with triticale and oat for biogas and methane production in the semiarid conditions of the South Pannonian Basin. *Agronomy* 11: 1800. <https://doi.org/10.3390/agronomy11091800>
 150. Kumar R, Verma A, Shome A, Sinha R, Sinha S, Jha PK, Kumar R, Kumar P, Shubham, Das S, Sharma P, **Prasad PVV**. 2021. Impacts of plastic pollution on ecosystem services, sustainable development goals and need for focus on circular economy and policy interventions. *Sustainability* 13: 9963. <https://doi.org/10.3390/su13179963>
 151. Manoj KN, Shekara BG, Sridhara S, Jha PK, **Prasad PVV**. 2021. Biomass quantity and quality from different year-round cereal-legume cropping systems as forage or fodder for livestock. *Sustainability* 13: 9414. <https://doi.org/10.3390/su13169414>
 152. Nut N, Mihara M, Jeong J, Ngo B, Sigua G, **Prasad PVV**, Reyes MR. 2021. Land use and land cover changes and its impact on soil erosion in Stung Sangkae catchment of Cambodia. *Sustainability* 13: 9276. <https://doi.org/10.3390/su13169276>
 153. Nieto L, Schwalbert R, **Prasad PVV**, Olson BJSC, Ciampitti IA. 2021. An integrated approach of field, weather, and satellite data for monitoring maize phenology. *Scientific Reports* 11: 15711. <https://doi.org/10.1038/s41598-021-95253-7>
 154. Bhardwaj A, Devi P, Chaudhary S, Rani A, Jha UC, Kumar S, Bindumadhava H, **Prasad PVV**, Sharma KD, Siddique KHM, Nayyar H. 2021. Role of 'omics' approaches for developing combined drought and heat tolerance in food crops. *Plant Cell Reports*. <https://doi.org/10.1007/s00299-021-02742-0>

155. Demarco PA, Mayor L, **Prasad PVV**, Messina CD, Ciampitti IA. 2021. Sorghum grain filling and dry down dynamics for hybrids released over the past six decades in the US. *Kansas Agricultural Station Research Reports* 7 (5). <https://doi.org/10.4148/2378-5977.8076>
156. Serba DD, Meng X, Schnable J, Bashir E, Michaud JP, **Prasad PVV**, Perumal R. 2021. Comparative transcriptome analysis reveals genetic mechanisms of sugarcane aphid resistance in grain sorghum. *International Journal of Molecular Sciences* 22: 7129. <https://doi.org/10.3390/ijms22137129>
157. Danakumara T, Kumari J, Singh AK, Sinha SK, Pradhan AK, Sharma S, Jha SK, Kumar S, Jha GK, Yadav MC, **Prasad PVV**. 2021. Genetic dissection of seedling root system architectural traits in diverse panel of hexaploid wheat through multi-locus genome-wide association mapping for improving drought tolerance. *International Journal of Molecular Sciences* 22: 7188. <https://doi.org/10.3390/ijms22137188>
158. Welch SB, Kulasekera DA, **Prasad PVV**, Moss CB, Murphy RL, Achenbach CJ, Ison MG, Resnick D, Singh L, White J, Issa TZ, Culler K, Faber JMM, Boctor MJ, Mason M, Oehmke JF, Post LA. 2021. The interplay between policy and COVID-19 outbreaks in South Asia: longitudinal trend analysis of surveillance data. *Journal of Medical Internet Research Public Health and Surveillance* 7: e24251. <https://doi.org/10.2196/24251>
159. Yilman AY, Assefa TT, Sishu FK, Tilahun SA, Reyes MR, **Prasad PVV**. 2021. Estimating surface and groundwater irrigation potential under different conservation agricultural practices and irrigation systems in the Ethiopian highlands. *Water* 13: 1645. <https://doi.org/10.3390/w13121645>
160. Veenstra RL, Messina CD, Berning D, Haag LA, Carter P, Hefley T, **Prasad PVV**, Ciampitti IA. 2021. Effect of tiller on corn yield: exploring trait plasticity in unpredictable environments. *Crop Science* 61: 3660-3674. <https://doi.org/10.1002/csc2.20576>
161. Dixon J, Weerahewa J, Hellin J, Rola-Rubzen MF, Huang J, Kumar S, Das A, Qureshi ME, Krupnik TJ, Shideed K, Jat ML, **Prasad PVV**, Yadav S, Irshad A, Asanaliev A, Abuglieva A, Karimov A, Bhattarai B, Balgos CQ, Benu F, Ehara H, Pant J, Sarmiento JMP, Newby JC, Pretty J, Tokuda H, Weyerhaeuser H, Digal L, Li L, Sarkar MAR, Abedin MZ, Schreinemachers P, Grafton Q, Sharma RC, Saidzoda S, Lopez-Ridaura S, Coffey S, Kam SP, Win SS, Praneetvatakul S, Maraseni T, Touch V, Wei-li L, Saharawat YS, Timsina J. 2021. Response and resilience of Asian agrifood systems to COVID-19: An assessment across twenty-five countries and four regional farming and food system. *Agricultural Systems* 193: 103168. <https://doi.org/10.1016/j.agsy.2021.103168>
162. Bhardwaj A, Sita K, Sehgal A, Bhandari K, Kumar S, **Prasad PVV**, Jha U, Kumar J, Siddique KHM, Nayyar H. 2021. Heat priming of lentil (*Lens culinaris* Medik.) seeds and foliar treatment with γ -aminobutyric acid (GABA), confers protection to reproductive function and yield under high-temperature stress environments. *International Journal of Molecular Sciences* 22: 5825. <https://doi.org/10.3390/ijms22115825>
163. Vennapusa A, Assefa Y, Sebela D, Somayanda I, Perumal R, Riechers DE, **Prasad PVV**, Jagadish SVK. 2021. Safener improve early-stage chilling stress tolerance in sorghum. *Journal of Agronomy and Crop Science* 207: 705-716. <https://doi.org/10.1111/jac.12503>
164. Indraratne S, Pierzynski GM, Baker LR, **Prasad PVV**. 2021. Nano-oxides immobilize Cd, Pb, and Zn in mine spoils and contaminated soils facilitating plant growth. *Canadian Journal of Soil Science* 101: 543-554. <https://doi.org/10.1139/CJSS-2020-0127>
165. Adotey RE, Patrignani A, Bergkamp B, Kluitenberg GJ, **Prasad PVV**, Jagadish SVK. 2021. Water-deficit stress alters intra-panicle number in sorghum. *Crop Science* 61: 2680-2695. <https://doi.org/10.1002/csc2.20532>
166. Ippolito T, Herrick JE, Dossa EL, Garba M, Ouattara M, Singh U, Stewart ZP, **Prasad PVV**, Oumarou IA, Neff JC. 2021. A comparison of approaches to regional land use capability analysis for agricultural land planning. *Land* 10: 458. <https://doi.org/10.3390/land10050458>
167. Araya A, **Prasad PVV**, Gowda PH, Djanaguiraman M, Gebretsadkan Y. 2021. Modeling the effect of crop management on food barley production under midcentury future climate in northern Ethiopia. *Climate Risk Management* 32: 100308. <https://doi.org/10.1016/j.crm.2021.100308>
168. Nget R, Aguilar EA, Cruz PCS, Reano CE, Sanchez PB, Reyes MR, **Prasad PVV**. 2021. Overview of farmers perceptions of current status and constraints to soybean production in Ratanakiri province of Cambodia. *Sustainability* 13: 4433. <https://doi.org/10.3390/su13084433>
169. Sofi PA, Rehman K, Gull M, Kumari J, Djanaguiraman M, **Prasad PVV**. 2021. Integrating root architecture and physiological approaches for improving drought tolerance in common bean (*Phaseolus vulgaris* L.). *Plant Physiology Reports* 26: 4-22. <https://doi.org/10.1007/s40502-021-00570-8>

170. Barnhart I, Chaudhari S, Pandian BA, **Prasad PVV**, Ciampitti IA, Jugulam M. 2021. Use of high resolution unmanned aerial systems imagery and machine learning to evaluate grain sorghum tolerance to mesotrione. *Journal of Applied Remote Sensing* 15: 014516-1. <http://dx.doi.org/10.1117/1.JRS.15.014516>
171. Ro S, Chea L, Ngoun S, Stewart ZP, Roern S, Theam P, Lim S, Sor R, Kosal M, Roern M, Dy KS, **Prasad PVV**. 2021. Response of tomato genotypes under different high temperatures in field and greenhouse conditions. *Plants* 10: 449. <https://doi.org/10.3390/plants10030449>
172. Impa SA, Raju BR, Hein NT, Sandhu J, **Prasad PVV**, Walia H, Jagadish SVK. 2021. High night temperature effects on wheat and rice – current status and way forward. *Plant Cell and Environment* 44: 2049-2065. <https://doi.org/10.1111/pce.14028>
173. Jha PK, Araya A, Stewart ZP, Faye A, Traore H, Middendorf BJ, **Prasad PVV**. 2021. Projecting potential impact of COVID-19 on major cereal crops in Senegal and Burkina Faso using crop simulation models. *Agricultural Systems* 190: 103107. <https://doi.org/10.1016/j.agsy.2021.103107>
174. Middendorf BJ, Faye A, Middendorf G, Stewart ZP, Jha PK, **Prasad PVV**. 2021. Smallholder farmers perceptions about the impact of COVID-19 on agriculture and livelihoods of Senegal. *Agricultural Systems* 190: 103108. <https://doi.org/10.1016/j.agsy.2021.103108>
175. Barretto R, Buenavista RM, Rivera JL, Wang S, **Prasad PVV**, Siliveru K. 2021. Teff (*Eragrostis tef*) processing, utilization, and future opportunities: a review. *International Journal of Food Science and Technology* 56: 3125-3137. <https://doi.org/10.1111/ijfs.14872>
176. Pandian BA, Sathishraj R, **Prasad PVV**, Jugulam M. 2021. A single gene inherited trait confers metabolic resistance to chlorosulfuron in grain sorghum (*Sorghum bicolor*). *Planta* 253: 48. <https://doi.org/10.1007/s00425-020-03563-3>
177. Araya A, **Prasad PVV**, Gowda PH, Sharda V, Rice CW, Ciampitti IA. 2021. Evaluating optimal irrigation strategies for maize in Western Kansas. *Agricultural Water Management* 246: 106677. <https://doi.org/10.1016/j.agwat.2020.106677>
178. Araya A, **Prasad PVV**, Ciampitti IA, Jha PK. 2021. Using crop simulation model to evaluate influence of water management practices and multiple cropping systems on crop yields: a case study for Ethiopian highlands. *Field Crops Research* 260: 108004. <https://doi.org/10.1016/j.fcr.2020.108004>
179. Assefa Y, Yadav S, Mondal MK, Bhattacharya J, Parvin R, Sarker SR, Rahman M, **Prasad PVV**, Bhandari H, Jagadish SVK. 2021. Crop diversification in rice-based systems in the Polders of Bangladesh: yield stability, profitability, and associated risk. *Agricultural Systems* 187: 102986. <https://doi.org/10.1016/j.agsy.2020.102986>
180. Araya A, **Prasad PVV**, Gowda PH, Zambreski Z, Ciampitti IA. 2021. Management options for mid-century maize (*Zea mays* L.) in Ethiopia. *Science of the Total Environment* 758: 143635. <https://doi.org/10.1016/j.scitotenv.2020.143635>
181. Bharucha ZP, Attwood S, Badiger S, Balamatti A, Bawden R, Bentley JW, Bhattacharya A, Chander M, Chary GR, Davis L, Dixon L, Dixon J, D'Souza M, Flora CB, Gopinath KA, Green M, Joshi D, Komarek AM, DcDermind LR, Mathijs E, Rola AC, Patnaik S, Pattanyak S, Pingali P, Pinto Y, **Prasad PVV**, Rabbinge R, Ramanjeneyulu GV, Ravindranath NH, Sage C, Saha A, Ceccarelli S, Saxena L, Singh C, Smith P, Srinidhi A, Sugam R, Thomas R, Uphoff N, Pretty J. 2021. The top 100 questions for the sustainable intensification of agriculture in India's rainfed dryland. *International Journal of Agricultural Sustainability* 19: 106-127. <https://doi.org/10.1080/14735903.2020.1830530>
182. Perumal R, Tesso TT, Morris GP, Jagadish SVK, Little CR, Bean SR, Yu J, **Prasad PVV**, Tuinstra TR. 2021. Registration of the sorghum nested association mapping (NAM) population in RTx430 background. *Journal of Plant Registration* 15: 395-402. <https://doi.org/10.1002/plr2.20110>
183. Jordan N, Gutknecht J, Bybee-Finley KA, Hunter M, Krupnik T, Pittelkow CM, **Prasad PVV**, Snapp S. 2021. To meet grand challenges, agricultural scientists must engage in the politics of constructive collective action. *Crop Science* 61: 24-31. <https://doi.org/10.1002/csc2.20318>
184. Assefa TT, Adametie TF, Yimam AY, Belay SA, Degu YM, Hailemeskel ST, Tilahun SA, Reyes MR, **Prasad PVV**. 2021. Evaluating irrigation and farming systems with solar MajiPump in Ethiopia. *Agronomy* 11: 17. <https://doi.org/10.3390/agronomy11010017>
185. Araya A, Gowda PH, Rouhi Rad M, Ariyaratne CB, Ciampitti IA, Rice CW, **Prasad PVV**. 2021. Evaluating optimal irrigation for potential yield and economic performance of major crops in southwestern Kansas. *Agricultural Water Management* 244: 106536. <https://doi.org/10.1016/j.agwat.2020.106536>
186. Maswada HF, Sunoj VSJ, **Prasad PVV**. 2021. A comparative study on the effect of seed pre-sowing

- treatments with microwave radiation and salicylic acid in alleviating the drought-induced damage in wheat. *Journal of Plant Growth Regulation* 40: 48-66. <https://doi.org/10.1007/s00344-020-10079-3>
187. Allen LH, Boote KJ, Jones JW, Jones PH, Pickering NB, Baker JT, Vu JCV, Gesch RW, Thomas JMG, **Prasad PVV**. 2020. Sunlit, controlled-environment chambers are essential for comparing plant responses to various climates. *Agronomy Journal* 112: 4531-4549. <https://doi.org/10.1002/agj2.20428>
188. Bhandari K, Sita K, Sehgal A, Bhardwaj A, Gaur P, Kumar S, Singh S, Siddique KHM, **Prasad PVV**, Nayyar H. 2020. Differential heat sensitivity of two cool-season legumes, chickpea and lentil, at reproductive stage, is associated with response in pollen function, photosynthetic ability and oxidative damage. *Journal of Agronomy and Crop Science* 206: 734-758. <https://doi.org/10.1111/jac.12433>
189. Hebbar KB, Neethu P, Sukumar PA, Sujithra M, Santhosh A, Ramesh SV, Niral V, Hareesh GS, Nammer PO, **Prasad PVV**. 2020. Understanding physiology and impacts of high temperature stress on the progamic phase of coconut (*Cocos nucifera* L.). *Plants* 9: 1651. <https://doi.org/10.3390/plants9121651>
190. Pandian BA, Varanasi A, Vennapusa AR, Sathishraj R, Lin G, Zhao M, Tunnell M, Tesso T, Liu S, **Prasad PVV**, Jugulam M. 2020. Characterization, genetic analyses, and identification of QTLs conferring metabolic resistance to a 4-hydroxyphenylpyruvate dioxygenase-inhibitor in sorghum (*Sorghum bicolor*). *Frontiers in Plant Science* 11: 596581. <https://doi.org/10.3389/fpls.2020.596581>
191. Macak M, Candrakova E, Dalovic I, **Prasad PVV**, Farooq M, Korczyk-Szabo J, Kovacic P, Simansky V. 2020. Influence of different fertilization strategies on grain yield of field pea (*Pisum sativum* L.) under conventional and conservation tillage. *Agronomy* 10: 1728. <https://doi.org/10.3390/agronomy10111728>
192. Leite JM, Arachchige PSP, Ciampitti IA, Hettiarachchi GM, Maurmann, Trivelin PCO, **Prasad PVV**, Sunoj SVJ. 2020. Co-addition of humic substances and humic acids with urea enhances foliar nitrogen use efficiency in sugarcane (*Saccharum officinarum* L.). *Heliyon* 6: e05100.
193. Pandian BA, Friesen A, Lafrest M, Petersen DE, **Prasad PVV**, Jugulam M. 2020. Confirmation and characterization of the first case of acetolactate synthase (ALS) – inhibitor – resistant wild buckwheat (*Polygonum convolvulus*) in the United States. *Agronomy* 10: 1496. <https://doi.org/10.3390/agronomy10101496>
194. Paudel S, Sah LP, Devkota M, Poudyal V, **Prasad PVV**, Reyes MR. 2020. Conservation agriculture and integrated pest management practices improve yield and income while reducing labor, pests, diseases and chemical pesticide use in smallholder vegetable farms in Nepal. *Sustainability* 12: 6418. <https://doi.org/10.3390/su12166418>
195. Pretty J, Attwood S, Bawden R, van den Berg H, Pervez Z, Dixon J, Flora CB, Gallagher K, Genskow K, Hartley S, Ketelaar JW, Kiara J, Kumar V, Lu Y, MacMillan T, Marechal A, Morales-Abubkar AL, Nobel A, **Prasad PVV**, Rametsteiner E, Reganold J, Ricks JI, Rockstrom J, Saito O, Thorne P, Wang S, Wittman H, Winter M, Yang, P-Y. 2020. Assessment of the growth in social groups for sustainable agriculture and land management. *Global Sustainability* 3: e23. <https://doi.org/10.1017/sus.2020.19>
196. Sunoj VSJ, **Prasad PVV**, Ciampitti IA, Maswada HE. 2020. Narrowing diurnal temperature amplitude alters carbon tradeoff and reduces growth in C₄ crop sorghum. *Frontiers in Plant Sciences* 11: 1262. <https://doi.org/10.3389/fpls.2020.01262>
197. Perumal R, Tomar SS, Bandara A, Djanaguiraman M, Tesso TT, **Prasad PVV**, Upadhyaya HD, Little CR. 2020. Variation in stalk rot resistance and physiological traits of sorghum genotypes in the field under high temperature. *Journal of General Plant Pathology* 86: 350-359. <https://doi.org/10.1007/s10327-020-00940-4>
198. Belay SA, Assefa TT, **Prasad PVV**, Schmitter P, Worqlul AW, Steenhuis TS, Reyes MR, Tilahun SA. 2020. The response of water and nutrient dynamics and crop yield to conservation agriculture in Ethiopian high lands. *Sustainability* 12: 5989. <https://doi.org/10.3390/su12155989>
199. Demarco PA, Mayor L, Tamagmp S, Fernandez J, **Prasad PVV**, Rotundo JL, Messina CD, Ciampitti IA. 2020. Physiological changes across historical sorghum hybrids released during the last six decades. *Kansas Field Research* 6 (5): Article 9. <https://doi.org/10.4148/2378-5977.7925>
200. Veenstra R, Messina C, Haag L, **Prasad PVV**, Ciampitti IA. 2020. Tiller contributions to low-density corn biomass and yield. *Kansas Field Research* 6 (5): Article 3. <https://doi.org/10.4148/2378-5977.7919>
201. Djanaguiraman M, Narayanan S, Erdayani E, **Prasad PVV**. 2020. Effect of high temperature stress during anthesis and grain filling periods on photosynthesis, lipids and grain yield in wheat. *BMC Plant Biology* 20: 268. <https://doi.org/10.1186/s12870-020-02479-0>
202. Mahama GY, **Prasad PVV**, Roozeboom KL, Nippert JB, Rice CW. 2020. Reduction of nitrogen fertilizer requirements and nitrous oxide emissions using legume cover crops in a no-tillage sorghum production

- system. Sustainability 12: 4403. <https://doi.org/10.3390/su12114403>
203. Pandian BA, Satishraj R, Djanaguiraman M, **Prasad PVV**, Jugulam M. 2020. Role of cytochrome P450 enzymes in plant stress response. Antioxidants 9: 454. <https://doi.org/10.3390/antiox9050454>
204. Araya A, **Prasad PVV**, Zambreski Z, Gowda PH, Ciampitti IA, Assefa Y, Girma A. 2020. Spatial analysis of the impact of climate factors and adaptation strategies on productivity of wheat in Ethiopia. Science of Total Environment 731: 139094. <https://doi.org/10.1016/j.scitotenv.2020.139094>
205. Faye A, Stewart Z, Ndung'u-Magiroi K, Diouf M, Ndoye I, Diop T, Dalpé Y, **Prasad PVV**, Lesueur D. 2020. Testing commercial inoculants to enhance P uptake and grain yield of promiscuous soybean in Kenya. Sustainability 12: 3803. <https://doi.org/10.3390/su12093803>
206. Chen Y, Palta J, **Prasad PVV**, Siddique KHM. 2020. Phenotypic variability in bread wheat root systems at the early vegetative stage. BMC Plant Biology 20: 185. <https://doi.org/10.1186/s12870-020-02390-8>
207. Stamenković O, Siliveru KR, Veljković V, Banković-Ilić I, Tasić MB, Ciampitti IA, Djalović I, Mitrović P, Sikora V, **Prasad PVV**. 2020. Production of biofuels from sorghum. Renewable and Sustainable Energy Reviews 124: 109769. <https://doi.org/10.1016/j.rser.2020.109769>
208. Tamagno S, Moreno JA, Durrett T, **Prasad PVV**, Rotundo J, Ciampitti IA. 2020. Dynamics of oil and fatty acid accumulation during seed development in historical soybean varieties. Field Crops Research 248: 107719. <https://doi.org/10.1016/j.fcr.2020.107719>
209. Schwalbert RA, Amado T, Corassa G, Pott LP, **Prasad PVV**, Ciampitti IA. 2020. Satellite-based soybean yield forecast: integrating machine learning and weather data for improving crop yield prediction in southern Brazil. Agricultural Forest Meteorology 284: 107886. <https://doi.org/10.1016/j.agrformet.2019.107886>
210. Araya A, **Prasad PVV**, Gowda PH, Djanaguiraman M, Kassa AH. 2020. Potential impacts of climate change factors and agronomic adaptation strategies on wheat yields in central highlands of Ethiopia. Climatic Change 159: 461-479. <https://doi.org/10.1007/s10584-019-02627-y>
211. Traoré H, Barro A, Yonli D, Stewart ZP, **Prasad PVV**. 2020. Water conservation methods and cropping systems for increased productivity and economic resilience in Burkina Faso. Water 12: 976. <https://doi.org/10.3390/w12040976>
212. Bastos LM, Carciochi W, Lollato RP, Jaenisch BR, Rezende CR, Schwalbert R, **Prasad PVV**, Zhang G, Fritz AK, Foster C, Wright Y, Young S, Bradley P, Ciampitti IA. 2020. Winter wheat yield response to plant density as a function of yield environment and tillering potential: a review and field studies. Frontiers in Plant Sciences 11: 54. <https://doi.org/10.3389/fpls.2020.00054>
213. Hebbar KB, Apshara E, Chandran KP, **Prasad PVV**. 2020. Effect of elevated CO₂, high temperature, and water deficit on growth, photosynthesis, and whole plant water use efficiency of cocoa (*Theobroma cacao* L.). International Journal of Biometeorology 64: 47-57. <https://doi.org/10.1007/s00484-019-01792-0>
214. Sharma L, Priya M, Kaushal N, Bhandari K, Choudhary S, Dhankher OP, **Prasad PVV**, Siddique KHM, Nayyar H. 2020. Plant growth regulating molecules as thermoprotectants: functional relevance and prospects for improving heat tolerance in food crops. Journal of Experimental Botany 71: 569-594. <https://doi.org/10.1093/jxb/erz333>
215. Middendorf BJ, **Prasad PVV**, Pierzynski GM. 2020. Setting research priorities for tackling climate change. Journal of Experimental Botany 71: 480-489. <https://doi.org/10.1093/jxb/erz360>
216. Stewart ZP, Pierzynski GM, Middendorf BJ, **Prasad PVV**. 2020. Approaches to improve soil fertility in sub-Saharan Africa. Journal of Experimental Botany 71: 623-641. <https://doi.org/10.1093/jxb/erz446>
217. Yuan Z, Chen Y, Palta JA, **Prasad PVV**. 2019. Editorial: Adaptation of dryland plants to changing environments. Frontiers in Plant Sciences 10: 1228. <https://doi.org/10.3389/fpls.2019.01228>
218. Kanton RAL, **Prasad PVV**, Ansoba EY, Abdulai AL, Bidzakin JK, Asungre PA, Denwar NN, Mahama GY. 2019. Maize-legume rotation effects on growth and yield of maize in semi-arid agro-ecology in northern Ghana. International Journal of Plant and Soil Sciences 29: 1-16. <https://doi.org/10.9734/ijpss/2019/v29i630162>
219. Siébou P, Stephen CZCT, Djibril Y, Mason SC, **Prasad PVV**, Noufe T, Fofana S, Traore H, Stewart ZP. 2019. Typology of farms and farmers perceptions of the effects of soil and water conservation practices in Northern Burkina Faso. Journal of Agriculture and Crops 5: 251-265. <https://doi.org/10.32861/jac.512.251.265>
220. Stephen CZCT, Noufé T, Siébou P, Djibril Y, **Prasad PVV**, Stewart ZP, Mason SC, Traoré H, Fofana S.

2019. Economic performance of soil and water conservation practice in Burkina Faso. *Research in Agriculture* 4: 38-55. <https://doi.org/10.22158/ra.v4n1p38>
221. Ortez OA, Tamagno S, Salvagiotti F, **Prasad PVV**, Ciampitti IA. 2019. Soybean nitrogen sources and demand during the seed-filling period. *Agronomy Journal* 111: 1-9. <https://doi.org/10.2134/agronj2018.10.0656>
222. Djanaguiraman M, **Prasad PVV**, Kumari J, Rengel Z. 2019. Root length and root lipid composition contribute to drought tolerance of winter and spring wheat. *Plant and Soil* 439: 57-73. <https://doi.org/10.1007/s11104-018-3794-3>
223. Priya M, Dhanker OP, Siddique KHM, HumnathaRao B, Nair RM, Pandey S, Singh S, Varshney RK, **Prasad PVV**, Nayyar H. 2019. Drought and heat stress-related proteins: an update about their functional relevance in imparting stress tolerance in agricultural crops. *Theoretical and Applied Genetics* 132: 1607-1638. <https://doi.org/10.1007/s00122-019-03331-2>
224. Djanaguiraman M, **Prasad PVV**, Kumari J, Sehgal SK, Friebe B, Dalovick I, Chen Y, Siddique KHM, Gill BS. 2019. Alien chromosome segment from *Aegilops speltoides* and *Dasyphyrum villosum* increases drought tolerance in wheat via profuse and deep root system. *BMC Plant Biology* 19: 242. <https://doi.org/10.1186/s12870-019-1833-8>
225. Balboa G, Archontoulis S, Salvagiotti F, Francisco E, Garcia F, Stewart WM, **Prasad PVV**, Ciampitti IA. 2019. A systems-level yield gap assessment of maize-soybean rotation under high- and low-management inputs in the Western US corn belt using APSIM. *Agricultural Systems* 174: 145-154. <https://doi.org/10.1016/j.agsy.2019.04.008>
226. Hansel DSS, Shoup DE, **Prasad PVV**, Holshouser DL, Parvej R, Schwalbert RA, Ciampitti IA. 2019. A review of soybean yield when doubled-cropped after wheat. *Agronomy Journal* 111: 677-685. <https://doi.org/10.2134/agronj2018.06.0371>
227. Bheemanahalli R, Sunoj VS, Saripalli G, **Prasad PVV**, Balyan HS, Gupta PK, Grant V, Gill KS, Jagadish SVK. 2019. Quantifying the impact of heat stress on pollen germination, seed-set and grain filling in spring wheat. *Crop Science* 59: 684-696. <https://doi.org/10.2135/cropsci2018.05.0292>
228. Araya A, Gowda PH, Golden B, Foster AJ, Aguilar J, Currie R, Ciampitti IA, **Prasad PVV**. 2019. Economic value and water productivity of major irrigated crops in the Ogallala aquifer region. *Agricultural Water Management* 214: 55-63. <https://doi.org/10.1016/j.agwat.2018.11.015>
229. Araya A, **Prasad PVV**, Gowda PH, Afewerk A., Abadi B, Foster AJ. 2019. Modeling irrigation and nitrogen management of wheat in northern Ethiopia. *Agricultural Water Management* 216: 264-272. <https://doi.org/10.1016/j.agwat.2019.01.014>
230. Araya A, **Prasad PVV**, Gowda PH, Kisekka I, Foster AJ. 2019. Yield and water productivity of winter wheat under various irrigation capacities. *Journal of American Water Resources Association* 55: 24-37. <https://doi.org/10.1111/1752-1688.12721>
231. Perumal R, Tesso T, Kofoid KD, Aiken RM, **Prasad PVV**, Bean S, Wilson JD, Herald TJ, Little CR. 2019. Registration of six grain sorghum pollinator (R) lines. *Journal of Plant Registration* 13: 113-117. doi:10.3198/jpr2017.12.0087crp
232. Foyer CH, Siddique KHM, Tai APK, Anders S, Fodor N, Wong F-L, Ludidi N, Chapman MA, Fergusson BJ, Considine MJ, Zabel F, **Prasad PVV**, Varshney RK, Nguyen HT, Lam H-M. 2019. Modelling predicts that soybean is poised to dominate crop production across Africa. *Plant Cell and Environment* 42: 373-385. <https://doi.org/10.1111/pce.13466>
233. Djanaguiraman M, Schapaugh WT, Fritschi FB, Nguyen HT, **Prasad PVV**. 2019. Reproductive success of soybean (*Glycine max* L. Merrill) cultivars and exotic lines under high daytime temperature. *Plant Cell and Environment* 42: 321-336. <https://doi.org/10.1111/pce.13421>
234. Sehgal A, Sita K, Bhandari K, Kumar S, Kumar J, **Prasad PVV**, Siddique KHM, Nayyar H. 2019. Influence of drought and heat stress, applied independently or in combination during seed development on qualitative and quantitative aspects of seeds of lentil (*Lens culinaris* Medikus) genotypes, differing in drought sensitivity. *Plant Cell and Environment* 42: 198-211. <https://doi.org/10.1111/pce.13328>
235. Djanaguiraman M, Nair R, Giraldo JP, **Prasad PVV**. 2018. Cerium oxide nanoparticles decrease drought-induced oxidative damage in sorghum leading to higher photosynthesis and grain yield. *ACS Omega* 3: 14406-14416. <http://dx.doi.org/10.1021/acsomega.8b01894>
236. Nayyar H, Sehgal A, Sharma KS, Siddique KHM, Kumar R, Bhogireddy S, Varshney RK, HanumanthaRao B, Nair RM, **Prasad PVV**. 2018. Drought or/and heat-stress effects on seed filling in food crops: impacts on functional biochemistry, seed yield and nutritional quality. *Frontiers of Plant*

- Sciences 9: 1705. <https://doi.org/10.3389/fpls.2018.01705>
237. Sofi PA, Djanaguiraman M, Siddique KHM, **Prasad PVV**. 2018. Reproductive fitness in common bean (*Phaseolus vulgaris* L.) under drought stress is associated with root length and volume. *Indian Journal of Plant Physiology* 23: 796-809. <https://doi.org/10.1007/s40502-018-0429-x>
238. Priya M, Siddique KHM, Dhankher OP, **Prasad PVV**, Humnath Rao B, Nair RM, Nayyar H. 2018. Molecular breeding approaches involving physiological and reproductive traits for heat tolerance in food crops. *Indian Journal of Plant Physiology* 23: 697-720. <https://doi.org/10.1007/s40502-018-0427-z>
239. Maswada HF, Djanaguiraman M, **Prasad PVV**. 2018. Response of photosynthetic performance, water relations and osmotic adjustment to salinity acclimation in two wheat cultivars. *Acta Physiologiae Plantarum* 40: 105. <https://doi.org/10.1007/s11738-018-2684-x>
240. Boote KJ, **Prasad PVV**, Allen LH Jr, Singh P, Jones JW. 2018. Modeling sensitivity of grain yield to elevated temperature in the DSSAT crop models for peanut, soybean, dry bean, chickpea, sorghum and millet. *European Journal of Agronomy* 100: 99-109. <http://dx.doi.org/10.1016/j.eja.2017.09.002>
241. Maswada HF, Djanaguiraman M, **Prasad PVV**. 2018. Seed treatment with nano-iron (III) oxide enhances germination, seedling growth and salinity tolerance of grain sorghum. *Journal of Agronomy and Crop Science* 204: 577-587. <https://doi.org/10.1111/jac.12280>
242. Green A, Friebe B, **Prasad PVV**, Fritz AK. 2018. Evaluating heat tolerance of complete set of wheat-*Aegilops geniculata* chromosome addition lines. *Journal of Agronomy and Crop Science* 204: 588-593. <https://doi.org/10.1111/jac.12282>
243. Narayanan S, **Prasad PVV**, Welti R. 2018. Alterations in wheat pollen lipidome during high day and night temperature stress. *Plant Cell and Environment* 41: 1749-1761. <https://doi.org/10.1111/pce.13156>
244. Orteza OA, Salvagiotti F, Enrico JM, **Prasad PVV**, Armstrong P, Ciampitti IA. 2018. Exploring nitrogen limitation for historical and modern soybean genotypes. *Agronomy Journal* 110: 2080-2090. <https://doi.org/10.2134/agronj2018.04.0271>
245. Pretty J, Benton TG, Bharucha ZP, Dicks LV, Flora CB, Godfray HCJ, Goulson D, Hartley S, Lampkin N, Morris C, Pierzynski GM, **Prasad PVV**, Reganold J, Rockstrom J, Smith S, Thorne P, and Wratten S. 2018. Global assessment of agricultural system redesign for sustainable intensification. *Nature Sustainability* 1: 441-446. <https://doi.org/10.1038/s41893-018-0114-0>
246. Hebbar KR, Rose HM, Nair AR, Kannan S, Niral V, Arivalgan M, Gupta A, Samsudeen K, Chandran KP, Chowdappa P, **Prasad PVV**. 2018. Differences in in-vitro pollen germination and pollen tube growth of coconut (*Cocos nucifera* L.) cultivar in response to high temperature stress. *Environmental and Experimental Botany* 153: 35-44. <https://doi.org/10.1016/j.envexpbot.2018.04.014>
247. Godoy J, Gizaw S, Chao S, Blake N, Carter A, Cuthbert R, Dubcovsky J, Hucl P, Kephart K, Pozniak C, **Prasad PVV**, Pumphery M, Talbert L. 2018. Genome-wide association study (GWAS) of agronomic traits in spring-planted north American elite hard red spring wheat panel. *Crop Science* 58: 1838-1852. <https://doi.org/10.2135/cropsci2017.07.0423>
248. Opole RA, **Prasad PVV**, Djanaguiraman M, Vimala K, Kirkham MB, Upadhyaya HD. 2018. Thresholds, sensitive stages and genetic variability of finger millet to high temperature stress. *Journal of Agronomy and Crop Science* 204: 477-492. <https://doi.org/10.1111/jac.12279>
249. Schwalbert R, Amado TJC, Horbe TAN, Stefanello LO, Assefa Y, **Prasad PVV**, Rice CW, Ciampitti IA. 2018. Corn yield response to plant density and nitrogen: spatial models and yield distribution. *Agronomy Journal* 110: 970-982. <https://doi.org/10.2134/agronj2017.07.0425>
250. Varela S, Dhodda P, Hsu W, **Prasad PVV**, Assefa Y, Griffin T, Peralta N, Sharda A, Ferguson A, Ciampitti IA. 2018. Early-season stand count determination in corn via integration of imagery from unmanned aerial systems (UAS) and supervised learning techniques. *Remote Sensing* 10: 343. <https://doi.org/10.3390/rs10020343>
251. Araya A, Kisekka I, Gowda PH, **Prasad PVV**. 2018. Grain sorghum production functions under different irrigation capacities. *Agricultural Water Management* 203: 261-271. <https://doi.org/10.1016/j.agwat.2018.03.010>
252. Djanaguiraman M, Boyel D, Welti R, Jagadish SVK, **Prasad PVV**. 2018. Decreased photosynthetic rate under high temperature in wheat is due to lipid saturation, oxidation, acylation, and damage to cell organelles. *BMC Plant Biology* 18: 55. <https://doi.org/10.1186/s12870-018-1263-z>
253. Djanaguiraman M, Belliraj N, Bossmann S, **Prasad PVV**. 2018. High temperature stress alleviation by selenium nanoparticles treatment in grain sorghum. *ACS Omega* 3: 2479-2491. <https://doi.org/10.1021/acsomega.7b01934>

254. Djanaguiraman M, Perumal R, Jagadish SVK, Ciampitti IA, Welti R, **Prasad PVV**. 2018. Sensitivity of sorghum pollen and pistil to high temperature stress. *Plant Cell and Environment* 41: 1065-1082. <https://doi.org/10.1111/pce.13089>
255. Djanaguiraman M, Perumal R, Ciampitti IA, Gupta SK, **Prasad PVV**. 2018. Quantifying pearl millet response to high temperature stress: thresholds, sensitive stages, genetic variability and relative sensitivity of pollen and pistil. *Plant Cell and Environment* 41: 993-1007. <https://doi.org/10.1111/pce.12931>
256. Sun A, Somayananda I, Sunoj VSJ, Singh K, **Prasad PVV**, Gill K, Jagadish SVK. 2018. Heat stress during flowering affects time of day of flowering, seed-set and grain quality in spring wheat (*Triticum aestivum* L.). *Crop Science* 58: 380-392. <https://doi.org/10.2135/cropsci2017.04.0221>
257. Assefa Y, **Prasad PVV**, Foster C, Wright C, Young S, Bradley P, Stamm M, Ciampitti IA. 2018. Major management factors determining spring and winter canola yield in north America. *Crop Science* 58: 1-16. <https://doi.org/10.2135/cropsci2017.02.0079>
258. Guragain YN, **Prasad PVV**, Rao PS, Vadlani PV. 2017. Evaluation of brown midrib sorghum mutants as a potential feedstock for 2,3-butanediol biosynthesis. *Applied Biochemistry and Biotechnology* 183: 1093-1110. <https://doi.org/10.1007/s12010-017-2486-4>
259. Sita K, Sehgal A, HanumanthaRao B, Nair RM, **Prasad PVV**, Kumar S, Gaur PM, Farooq M, Siddique KHM, Varshney RK, Nayyar H. 2017. Food legumes and rising temperatures: effects, adaptive functional mechanisms specific to reproductive growth stage and strategies to improve heat tolerance. *Frontiers in Plant Sciences* 8: 1658. <https://doi.org/10.3389/fpls.2017.01658>
260. Araya A, Kisekka I, Lin X, **Prasad PVV**, Gowda PH, Rice CW, Andales A. 2017. Evaluating the impact of climate change on irrigated maize production in Kansas. *Climate Risk Management* 17: 139-154. <http://dx.doi.org/10.1016/j.crm.2017.08.001>
261. Varela S, Assefa Y, **Prasad PVV**, Peralta NR, Griffin TR, Sharda A, Ferguson A, Ciampitti IA. 2017. Spatio-temporal evaluation of plant height in corn via unmanned aerial systems (UAS). *Journal of Applied Remote Sensing* 11: 03603-1-12. <https://doi.org/10.1117/1.JRS.11.036013>
262. Assefa Y, **Prasad PVV**, Carter P, Hinds M, Bhalla G, Schon R, Jeschke M, Paszkiewicz S, Ciampitti IA. 2017. A new insight into corn yield: Trends from 1987 through 2015. *Crop Science* 57: 2799-2811. <https://doi.org/10.2135/cropsci2017.01.0066>
263. Naab JB, Mahama GY, Yahaya I, **Prasad PVV**. 2017. Conservation agriculture improves soil quality, crop yield and incomes of smallholder farmers in North Western Ghana. *Frontiers in Plant Sciences* 8: 996. <https://doi.org/10.3389/fpls.2017.00996>
264. Araya A, Kisekka I, **Prasad PVV**, Gowda PH. 2017. Evaluating optimum limited water management strategies for corn using crop simulation models. *ASCE Irrigation and Drainage Engineering* 143 (10): 04017041. [https://doi.org/10.1061/\(ASCE\)IR.1943-4774.0001228](https://doi.org/10.1061/(ASCE)IR.1943-4774.0001228)
265. Sunoj VSJ, Somayananda IM, Chiluwal A, Perumal R, **Prasad PVV**, Jagadish SVK. 2017. Resilience of pollen and post-flowering response in diverse sorghum genotypes exposed to heat stress under field conditions. *Crop Science* 57: 1658-1669. <https://doi.org/10.2135/cropsci2016.08.0706>
266. Arshad MS, Farooq M, Asch F, Jagadish SVK, **Prasad PVV**, Siddique KHM. 2017. Thermal stress impacts reproductive development and grain yield in rice. *Plant Physiology and Biochemistry* 115: 57-72. <http://dx.doi.org/10.1016/j.plaphy.2017.03.011>
267. Kisekka I, Schlegal A, Ma L, Gowda PH, **Prasad PVV**. 2017. Optimizing preplant irrigation for maize under limited water in the High Plains. *Agricultural Water Management* 187: 154-163. <https://doi.org/10.1016/j.agwat.2017.03.023>
268. Varanasi VK, Bayramov S, **Prasad PVV**, Jugulam M. 2017. Expression profiles of psbA, ALS, EPSPS and other chloroplastic genes in response to PSII-, ALS- and EPSPS-inhibitor treatments in *Kochia scoparia*. *American Journal of Plant Science* 8: 451-470. <https://doi.org/10.4236/ajps.2017.83031>
269. Min D, Guragain YN, **Prasad PVV**, Vadlani PV, Lee J. 2017. Effect of different genotypes of switchgrass as bioenergy crop on yield components and bioconversion potential. *Journal of Sustainable Bioenergy Systems* 7: 27-35. <https://doi.org/10.4236/jsbs.2017.71003>
270. Araya A, Kisekka I, **Prasad PVV**, Holman J, Foster AJ, Lollato R. 2017. Assessing wheat yield, biomass, and water productivity responses to growth stage based irrigation water allocation. *Transactions of the ASABE (American Society of Agricultural and Biological Engineers)* 60: 107-121. doi: 10.13031/trans.11883
271. Bandara YMAY, Weerasooriya DK, Tesso TT, **Prasad PVV**, Little CR. 2017. Stalk rot fungi affect grain

- sorghum yield components in an inoculation stage-specific manner. *Crop Protection* 94: 97-105. <http://dx.doi.org/10.1016/j.cropro.2016.12.018>
272. Araya A, Kisekka I, Gowda PH, **Prasad PVV**. 2017. Evaluation of water-limited cropping systems in a semi-arid climate using DSSAT-CSM. *Agricultural Systems* 150: 86-98. <http://dx.doi.org/10.1016/j.agsy.2016.10.007>
273. **Prasad PVV**, Bheemanahalli R, Jagadish SVK. 2017. Field crops and the fear of heat stress – opportunities, challenges and future directions. *Field Crops Research* 200: 114-121. <https://doi.org/10.1016/j.fcr.2016.09.024>
274. Nusslein K, Dhankher OP, Xian B, Smith-Doerr L, Sacco T, Maathuis F, Pareek A, **Prasad PVV**, Botha A-M, Foyer CH, Kunert K, Cullis C, Dumont MG, Chen B, Lu L. 2016. Project management: Food security needs social science input. *Nature* 535: 37. <https://doi.org/10.1038/535037d>
275. Liu B, Asseng S, Müller C, Ewert F, Elliott J, Lobell DB, Martre P, Ruane AC, Wallach D, Jones JW, Rosenzweig C, Aggarwal PK, Alderman PD, Anothai J, Basso B, Biernath C, Cammarano D, Challinor A, Deryng D, Sanctis GD, Doltra J, Fereres E, Folberth C, Garcia-Vila M, Gayler S, Hoogenboom G, Hunt LA, Izaurrealde RC, Jabloun M, Jones CD, Kersebaum KC, Kimball BA, Koehler A-K, Kumar SN, Nendel C, O'Leary GJ, Olesen JE, Ottman MJ, Palosuo T, **Prasad PVV**, Priesack E, Pugh TAM, Reynolds MP, Rezaei EE, Rötter RP, Schmid E, Semenov MA, Shcherbak I, Stehfest E, Stöckle CO, Startonovitch, Streck T, Supit I, Tao F, Thornburn P, Waha K, Wall GW, Wang E, White JW, Wolf J, Zhao Z, Zhu Y. 2016. Similar estimates of temperature impacts on global wheat yield by three independent methods. *Nature Climate Change* 6: 1130-1136. <https://doi.org/10.1038/nclimate3115>
276. Assefa Y, **Prasad PVV**, Carter P, Hinds M, Bhalla G, Schon R, Jeschke M, Paszkiewicz, Ciampitti IA. 2016. Yield responses to planting density for US modern corn hybrids: a synthesis – analysis. *Crop Science* 56: 2802-2817. <https://doi.org/10.2135/cropsci2016.04.0215>
277. Hebbar KB, Subramanian P, Sheena TL, Shwetha K, **Prasad PVV**. 2016. Chlorophyll and nitrogen determination in coconut using a non-destructive method. *Journal of Plant Nutrition* 39: 1610-1619. <https://doi.org/10.1080/01904167.2016.1161781>
278. Grogan SM, Anderson J, Baenziger P, Frels K, Guttieri M, Haley S, Kim, K, Liu S, McMaster G, Newell M, **Prasad PVV**, Reid S, Shroyer K, Zhang G, Akhunov E, Byrne P. 2016. Phenotypic plasticity of winter wheat heading date and grain yield across the U.S. Great Plains. *Crop Science* 56: 2223-2236. <https://doi.org/10.2135/cropsci2015.06.0357>
279. Jagadish SVK, Bahuguna RN, Djanaguiraman M, Gamuyao R, **Prasad PVV**, Craufurd PQ. 2016. Implications of high temperature and elevated CO₂ on flowering time in plants. *Frontiers in Plant Science* 7: 913. <https://doi.org/10.3389/fpls.2016.00913>
280. Sukumaran S, Li X, Zhu C, Bai G, Perumal R, Tuinstra MR, **Prasad PVV**, Mitchell S, Tesso T, Yu J. 2016. QTL mapping for grain yield, flowering time, and stay-green traits in sorghum using genotyping-by-sequencing markers. *Crop Science* 56: 1429-1442. <https://doi.org/10.2135/cropsci2015.02.0097>
281. Sunoj JVS, Shroyer KJ, Jagadish SVK, **Prasad PVV**. 2016. Diurnal temperature amplitude alters physiological and growth response of maize (*Zea mays* L.) during the vegetative stage. *Experimental and Environmental Botany* 130: 113-121. <http://dx.doi.org/10.1016/j.envexpbot.2016.04.007>
282. Narayanan S, Tamura P, Roth M, **Prasad PVV**, Welti R. 2016. Wheat leaf lipids during heat stress: I. high day and night temperatures result in major lipid alternations. *Plant Cell and Environment* 39: 787-803. <https://doi.org/10.1111/pce.12649>
283. Reynolds MP, Quilligan E, Aggarwal PK, Bansal KC, Cavalieri AJ, Chapman SC, Chapotin SM, Datta SK, Duveiller E, Gill KS, Jagadish SVK, Joshi AK, Koehler A-K, Kosina P, Krishnan S, Lafitte R, Mahala RS, Muthurajan R, Paterson AH, Prasanna BM, Rakshit S, Rosegrant MW, Sharma I, Singh RP, Sivasankar S, Vadez V, Valluru R, **Prasad PVV**, Yadav OP. 2016. An integrated approach to maintain cereal productivity under climate change. *Global Food Security* 8: 9-18. <http://dx.doi.org/10.1016/j.gfs.2016.02.002>
284. Ocheltree TW, Nippert JB, **Prasad PVV**. 2015. A safety vs. efficiency trade-off identified in the hydraulic pathway of grass leaves is decoupled from photosynthesis, stomatal conductance, and precipitation. *New Phytologist* 210: 97-107. <https://doi.org/10.1111/nph.13781>
285. Ciampitti I, **Prasad PVV**. 2016. Historical synthesis-analysis of changes in grain nitrogen dynamics in sorghum. *Frontiers in Plant Science* 7: 272. <https://doi.org/10.3389/fpls.2016.00275>
286. Kanton RAL, **Prasad PVV**, Mohammed AM, Bidzakin JK, Ansoba EY, Asungre AP, Lamini S, Mahama GY, Kusi F, Sugri I. 2016. Organic and inorganic fertilizer effect on growth and yield of maize in a dry

- agro-ecology in Norther Ghana. *Journal of Crop Improvement* 30: 1-16. <https://doi.org/10.1080/15427528.2015.1085939>
287. Narayanan S, **Prasad PVV**, Welti R. 2016. Wheat leaf lipids during heat stress: II. Lipid experiencing coordinated metabolism are detected by analysis of lipid co-occurrence. *Plant Cell and Environment* 39: 608-317. <https://doi.org/10.1111/pce.12648>
288. Varanasi A, **Prasad PVV**, Mithila J. 2016. Impact of climate change factors on weeds and herbicide efficacy. *Advances in Agronomy* 135: 107-138. <http://dx.doi.org/10.1016/bs.agron.2015.09.002>
289. Upadhyaya HD, Wang Y, Dintyala S, Sangam L, Dwivedi SL, **Prasad PVV**, Burrell A, Klein R, Morris G, Klein P. 2016. Association mapping of germinability and seedling vigor in sorghum under controlled low temperature conditions. *Genome* 59: 137-145. <https://doi.org/10.1139/gen-2015-0122>
290. McHenry B, Adee E, Kimball J, **Prasad PVV**, Ciampitti IA. 2016. Balanced nutrition and crop production practices for closing grain sorghum yield gaps. *Kansas Field Research* 2 (5): Article 2. <https://doi.org/10.4148/2378-5977.1219>
291. Christenson BS, Schapaugh WT, An N, Price KP, **Prasad PVV**, Fritz AK. 2017. Predicting soybean relative maturity and seed yield using canopy reflectance. *Crop Science* 56: 625-643. <https://doi.org/10.2135/cropsci2015.04.0237>
292. Keep NR, Schapaugh WT, **Prasad PVV**, Boyer JE. 2016. Changes in physiological traits in soybean with breeding advancements. *Crop Science* 56: 122-131. <https://doi.org/10.2135/cropsci2013.07.0499>
293. Mahama GY, **Prasad PVV**, Roozeboom KL, Nippert JB, Rice CW. 2016. Response of maize to cover crops, fertilizer, nitrogen rates, and economic return. *Agronomy Journal* 108: 17-36. <https://doi.org/10.2134/agronj15.0136>
294. Mahama GY, **Prasad PVV**, Roozeboom KL, Nippert JB, Rice CW. 2016. Cover crops, fertilizer, nitrogen rates, and economic return of grain sorghum. *Agronomy Journal* 108: 1-16. <https://doi.org/10.2134/agronj15.0135>
295. Hu Z, Mbacké B, Perumal R, Guèye MC, Sy O, Bouchet S, **Prasad PVV**, Morris GP. 2015. Population genomics of pearl millet (*Pennisetum glaucum* (L.) R. Br): comparative analysis of global accessions and Senegalese landraces. *BMC Genomics* 16: 1948. <https://doi.org/10.1186/s12864-015-2255-0>
296. Gowda PH, **Prasad PVV**, Angadi SV, Rangappa UM, Wagle P. 2015. Finger millet: an alternative crop for the southern high plains. *American Journal of Plant Sciences* 6: 2686-2691. <http://dx.doi.org/10.4236/ajps.2015.616270>
297. **Prasad PVV**, Djanaguiraman M, Perumal R, Ciampitti IA. 2015. Impact of high temperature stress on floret fertility and individual grain weight of grain sorghum: sensitive stages and thresholds for temperature and duration. *Frontiers in Plant Science* 6: 820. <https://doi.org/10.3389/fpls.2015.00820>
298. Zhang K, Johnson L, **Prasad PVV**, Pie Z, Wang D. 2015. Big bluestem as a bioenergy crop: a review. *Renewable and Sustainable Energy* 52: 740-756. <https://doi.org/10.1016/j.rser.2015.07.144>
299. Fu J, Bowden B, **Prasad PVV**, Ibrahim A. 2015. Genetic variation for heat tolerance in primitive cultivated subspecies of *Triticum turgidum* L. *Journal of Crop Improvement* 29: 565-580. <http://dx.doi.org/10.1080/15427528.2015.1060915>
300. Talukder SK, **Prasad PVV**, Todd T, Babar MA, Poland J, Bowden R, Fritz AK. 2015. Effect of cytoplasmic diversity on post anthesis heat tolerance in wheat. *Euphytica* 204: 383-394. <https://doi.org/10.1007/s10681-014-1350-7>
301. Perumal R, Tesso T, Kofoed KD, **Prasad PVV**, Aiken RM, Bean SR, Wilson JD, Herald TJ, Little CR. 2015. Registration of nine sorghum seed parents (A/B) lines. *Journal of Plant Registration* 9: 244-248. <https://doi.org/10.3198/jpr2014.09.0068crp>
302. Godar AS, Varanasi VK, Betha S, **Prasad PVV**, Thompson CR, Mithila J. 2015. Physiological and molecular mechanisms of differential sensitivity of palmer amaranth (*Amaranthus palmeri*) to mesotrione at varying growth temperatures. *PloS One* 10(5): e0126731. <https://doi.org/10.1371/journal.pone.0126731>
303. Zhang K, Johnson L, **Prasad PVV**, Pei Z, Wenqiao Y, Wang D. 2015. Comparison of big bluestem with other native grasses: chemical composition and biofuel yield. *Energy* 83: 358-365. <http://dx.doi.org/10.1016/j.energy.2015.02.033>
304. Narayanan S, **Prasad PVV**, Fritz AK, Boyle DL, Gill BS. 2015. Impact of high nighttime and high daytime temperature stress on winter wheat. *Journal of Agronomy and Crop Science* 201: 206-218. <https://doi.org/10.1111/jac.12101>

305. Riar MK, Sinclair TR, **Prasad PVV**. 2015. Persistence of limited-transpiration-rate trait in sorghum at high temperature. *Environmental and Experimental Botany* 115: 58-62. <http://dx.doi.org/10.1016/j.envexpbot.2015.02.007>
306. Pradhan GP, **Prasad PVV**. 2015. Evaluation of wheat chromosome translocation lines for high temperature stress tolerance at grain filling stage. *PLoS One* 10(2): e0116620. <https://doi.org/10.1371/journal.pone.0116620>
307. Singh RP, **Prasad PVV**, Reddy KR. 2015. Climate change: implications for stakeholders in genetic resources and seed sector. *Advances in Agronomy* 129: 117-180. <http://dx.doi.org/10.1016/bs.agron.2014.09.002>
308. Asseng S, Ewert F, Martre P, Rotter RP, Lobell DB, Cammarano D, Kimball BA, Ottman MJ, Wall GW, White JW, Reynolds MP, Alderman PD, **Prasad PVV**, Aggrawal PK, Anothai J, Basso B, Biernath C, Challinor AJ, DeSanctis G, Doltra E, Fereres E, Garcia-Vila M, Gayler S, Hoogenboom G, Hung LA, Izaurralde RC, Jabloun M, Jones CD, Kersebaum KC, Koehler A-K, Muller C, Naresh Kumar S, Nandel C, O'Leary G, Olesen JE, Palosuo T, Priesack E, Eyashi Rezaei E, Ruane AC, Semenov MA, Shcherbak I, Stockle C, Stratonovitch P, Streck T, Supit I, Tao F, Thorburn PJ, Waha K, Wang E, Wallach D, Wolf J, Zhao Z, Zhu Y. 2015. Rising temperatures reduce global wheat production. *Nature Climate Change* 5: 143-147. <https://doi.org/10.1038/nclimate2470>
309. McHenry B, **Prasad PVV**, Ciampitti IA. 2015. Balanced nutrition and crop production practices for closing grain sorghum yield gaps. *Kansas Field Research 2: Article 17*. <https://doi.org/10.4148/2378-5977.1042>
310. Kuykendall M, Roozeboom K, Kluitenberg GJ, **Prasad PVV**. 2015. Cover crop impacts on soil water status. *Kansas Field Research 1: Article 20*. <https://doi.org/10.4148/2378-5977.1046>
311. **Prasad PVV**, Djanaguiraman M. 2014. 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* 41: 1261-1269. <http://dx.doi.org/10.1071/FP14061>
312. Talukder SK, Babar AM, Vijayalakshmi K, Poland J, **Prasad PVV**, Bowden R, Fritz AK. 2014. Mapping QTLs for the traits associated with heat tolerance in wheat (*Triticum aestivum* L.). *BMC Genetics* 15: 97. <https://doi.org/10.1186/s12863-014-0097-4>
313. Mahama GY, **Prasad PVV**, Mengel DB, Tesso TT. 2014. Influence of nitrogen fertilizer on growth and yield of sorghum hybrids and inbred lines. *Agronomy Journal* 106: 1623-1630. <https://doi.org/10.2134/agronj14.0092>
314. Narayanan S, Mohan, A, Gill KS, **Prasad PVV**. 2014. Variability of root traits in spring wheat germplasm. *PLoS One* 9(6): e100317. <https://doi.org/10.1371/journal.pone.0100317>
315. Narayanan S, **Prasad PVV**. 2014. Characterization of a spring wheat association mapping panel for root traits. *Agronomy Journal* 106: 1593-1604. <https://doi.org/10.2134/agronj14.0015>
316. Kadam NN, Xiao G, Melgar RJ, Bahuguna RN, Quinones C, Tamilselvan A, **Prasad PVV**, Jagadish SVK. 2014. Agronomic and physiological response to high temperature, drought and elevated carbon dioxide interactions in cereals. *Advances in Agronomy* 127: 111-156. <http://dx.doi.org/10.1016/B978-0-12-800131-8.00003-0>
317. Hebbar KB, Rane J, Ramana S, Panwar NR, Ajay S, Subba Rao A, **Prasad PVV**. 2014. Natural variation in the regulation of leaf senescence and relation to N and root traits in wheat. *Plant & Soil* 378: 99-112. <https://doi.org/10.1007/s11104-013-2012-6>
318. Paul G, Gowda PH, **Prasad PVV**, Howell TA, Aiken RM, Neale MC. 2014. Investigating the influence of roughness length for heat transport (zoh) on performance of SEBAL in semi-arid irrigated and dryland agricultural systems. *Journal of Hydrology* 209: 231-234. <http://dx.doi.org/10.1016/j.jhydrol.2013.11.040>
319. Djanaguiraman M, **Prasad PVV**, Murugan M, Perumal R, Reddy UK. 2014. Physiological differences among sorghum (*Sorghum bicolor* L. Moench) genotypes under high temperature stress. *Environmental and Experimental Botany* 100: 43-54. <https://doi.org/10.1016/j.envexpbot.2013.11.013>
320. Singh P, Nedumaran S, Traore SP, Boote KJ, Rattunde HFW, **Prasad PVV**, Singh NP, Srinivas K, Bantilan C. 2014. Quantifying potential benefits of drought and heat tolerance in rainy season sorghum for adapting to climate change. *Agricultural and Forest Meteorology* 185: 231-234. <https://doi.org/10.1016/j.agrformet.2013.10.012>
321. Ocheltree TW, Nipper JB, **Prasad PVV**. 2014. Stomatal response to changes in vapor pressure deficit reflect tissue-specific differences in hydraulic conductance. *Plant Cell and Environment* 37: 132-139. <https://doi.org/10.1111/pce.12137>

322. Ocheltree TW, Nippert JB, Kirkham MB, **Prasad PVV**. 2014. Partitioning hydraulic resistance in *sorghum bicolor* leaves reveals unique correlations with stomatal conductance during drought. *Functional Plant Biology* 41: 25-36. <http://dx.doi.org/10.1071/FP12316>
323. Narayanan S, Aiken RM, **Prasad PVV**, Xin Z, Paul G, Yu J. 2014. A simple quantitative model to predict leaf area index in sorghum. *Agronomy Journal* 106: 219-226. <https://doi.org/10.2134/agronj2013.0311>
324. Kapanigowda M, Perumal R, Djanaguiraman M, Aiken RM, Tesso T, **Prasad PVV**, Little CR. 2013. Genotypic variation in sorghum (*Sorghum bicolor* L. Moench) exotic germplasm collections for drought and disease tolerance. *SpringerPlus* 2: 650. <https://doi.org/10.1186/2193-1801-2-650>
325. Paul G, Gowda PH, **Prasad PVV**, Howell TA, Staggenborg SA, Neale CMU. 2013. Lysimetric evaluation of SEBAL using high resolution airborne imagery from BEAREX08. *Advances in Water Resources* 59: 157-168. <http://dx.doi.org/10.1016/j.advwatres.2013.06.003>
326. Rao SS, Patil JV, **Prasad PVV**, Reddy DCS, Mishra JC, Umakanth AV, Reddy BVS, Kumar AA. 2013. Sweet sorghum planting effects on stalk yield and sugar quality in semi-arid tropical environment. *Agronomy Journal* 105: 1458-1465. <https://doi.org/10.2134/agronj2013.0156>
327. Choudhary S, Mutava RN, Shekoofa A, Sinclair TR, **Prasad PVV**. 2013. Is the stay-green trait in sorghum a result of transpiration sensitivity to either soil drying or vapor pressure deficit? *Crop Science* 53: 2129-2134. <https://doi.org/10.2135/cropsci2013.01.0043>
328. Choudhary S, Sinclair TR, **Prasad PVV**. 2013. Hydraulic conductance of intact plants of two contrasting sorghum lines SC15 and SC1205. *Functional Plant Biology* 40: 730-738. <http://dx.doi.org/10.1071/FP12338>
329. Djanaguiraman M, **Prasad PVV**, Schapaugh WT. 2013 High day and night temperature alters leaf assimilation, reproductive success and phosphatidic acid of pollen grain in soybean (*Glycine max* L. Merr.). *Crop Science* 53: 1594-1604. <https://doi.org/10.2135/cropsci2012.07.0441>
330. Djanaguiraman M, **Prasad PVV**, Boyle DL, Schapaugh WT. 2013. Soybean pollen anatomy, viability and pod set under high temperature stress. *Journal of Agronomy Crop Science* 199: 171-177. <https://doi.org/10.1111/jac.12005>
331. McMaster GS, Ascough II JC, Edmunds DA, Neilsen DC, **Prasad PVV**. 2013. Simulating crop phenological responses to water stress using the phenology MMS software program. *Applied Engineering in Agriculture* 29: 233-249. DOI: 10.13031/2013.42654
332. Narayanan S, Aiken RA, Xin Z, **Prasad PVV**, Yu J. 2013. Water use efficiencies in sorghum. *Agronomy Journal* 105: 649-656. <https://doi.org/10.2134/agronj2012.0377>
333. Singh RP, Reddy KR, **Prasad PVV**. 2013. Impact of changing climate and climate variability on seed production and seed industry. *Advances in Agronomy* 118: 49-110. <https://doi.org/10.1016/B978-0-12-405942-9.00002-5>
334. Craufurd PQ, Vadez V, Jagadish SVK, **Prasad PVV**, Zaman-Allah M. 2013. Crop science experiments designed to inform crop modeling. *Agricultural and Forest Meteorology* 170: 8-18. <https://doi.org/10.1016/j.agrformet.2011.09.003>
335. Gholipour M, Sinclair TR, **Prasad PVV**. 2012. Genotypic variation within sorghum for transpiration response to drying soil. *Plant Soil* 357: 35-40. <https://doi.org/10.1007/s11104-012-1140-8>
336. Kumar S, Sehgal SK, Kumar U, **Prasad PVV**, Joshi AK, Gill BS. 2012. Genomic characterization of drought tolerant related traits in spring wheat. *Euphytica* 186: 265-276. <https://doi.org/10.1007/s10681-012-0675-3>
337. Ocheltree TW, Nippert JB, **Prasad PVV**. 2012. Changes in stomatal conductance along grass blades reflect changes in leaf structure. *Plant Cell and Environment* 35: 1040-1049. <https://doi.org/10.1111/j.1365-3040.2011.02470.x>
338. Pradhan GP, **Prasad PVV**, Fritz AK, Kirkham MB, Gill BS. 2012. Effects of drought and high temperature stress on synthetic hexaploid wheat. *Functional Plant Biology* 39: 190-198. <https://doi.org/10.1071/FP11245>
339. Pradhan GP, **Prasad PVV**, Fritz AK, Kirkham MB, Gill BS. 2012. High temperature tolerance in *Aegilops* species and its potential transfer to wheat. *Crop Science* 52: 292-304. <https://doi.org/10.2135/cropsci2011.04.0186>
340. Pradhan GP, **Prasad PVV**, Fritz AK, Kirkham MB, Gill BS. 2012. Response of *Aegilops* species to drought stress during reproductive stages of development. *Functional Plant Biology* 39: 51-59. <https://doi.org/10.1071/FP11171>

341. Fu J, Momcilovic I, **Prasad PVV**. 2012. Roles of protein synthesis elongation factor EF-Tu in heat tolerance in plants. *Journal of Botany*: Article ID 835836. <https://doi.org/10.1155/2012/835836>
342. **Prasad PVV**, Pisipati SR, Momčilović 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. <https://doi.org/10.1111/j.1439-037X.2011.00477.x>
343. **Prasad PVV**, Djanaguiraman M. 2011. High night temperature decreases leaf photosynthesis and pollen function in grain sorghum. *Functional Plant Biology* 38: 993-1003. <https://doi.org/10.1071/FP11035>
344. Djanaguiraman M, **Prasad PVV**, Boyle DL, Schapaugh WT. 2011. High-temperature stress and soybean leaves: leaf anatomy and photosynthesis. *Crop Science* 51: 2125-2131. <https://doi.org/10.2135/cropsci2010.10.0571>
345. Djanaguiraman M, **Prasad PVV**, Al-Khatib K. 2011. Ethylene perception inhibitor 1-MCP decreases oxidative damage of leaves through enhanced antioxidant defense mechanisms in soybean plants grown under high temperature stress. *Experimental and Environmental Botany* 70: 51-57. <https://doi.org/10.1016/j.envexpbot.2010.12.006>
346. Ananda N, Vadlani PV, **Prasad PVV**. 2011. Evaluation of drought and heat stressed grain sorghum (*Sorghum bicolor*) for biofuel production. *Industrial Crops and Products* 33: 779-782. <https://doi.org/10.1016/j.indcrop.2011.01.007>
347. McMaster G, Edmunds DA, Wilhelm WW, Nielsen DC, **Prasad PVV**, Aschogh JC. 2011. PhenologyMMS: A program to simulate crop phenological responses to water stress. *Computers and Electronics in Agriculture* 77: 118-125. <https://doi.org/10.1016/j.compag.2011.04.003>
348. Mutava RN, **Prasad PVV**, Tuinstra MR, Kofoid KD, Yu J. 2011. Characterization of sorghum genotypes for traits related to drought tolerance. *Field Crops Research* 123: 10-18. <https://doi.org/10.1016/j.fcr.2011.04.006>
349. **Prasad PVV**, Vu JCV, Boote KJ, Allen LH Jr. 2011. Longevity and temperature response of pollen as affected by elevated growth temperature and carbon dioxide in peanut and grain sorghum. *Experimental and Environmental Botany* 70: 51-57. <https://doi.org/10.1016/j.envexpbot.2010.08.004>
350. Djanaguiraman M, **Prasad PVV**. 2010. Ethylene production under high temperature stress causes premature leaf senescence in soybean. *Functional Plant Biology* 37: 1071-1084. <https://doi.org/10.1071/FP10089>
351. Gholipoor M, **Prasad PVV**, Mutava RN, Sinclair TR. 2010. Genetic variability of transpiration response to vapor pressure deficit among sorghum genotypes. *Field Crops Research* 119: 85-90. <https://doi.org/10.1016/j.fcr.2010.06.018>
352. Djanaguiraman M, **Prasad PVV**, Seppanen M. 2010. Selenium protects sorghum leaves from oxidative damage under high temperature stress by enhancing antioxidant defense system. *Plant Physiology and Biochemistry* 48: 999-1007. <https://doi.org/10.1016/j.plaphy.2010.09.009>
353. Djanaguiraman M, Sheeba JA, Devi DD, Bangarusamy U, **Prasad PVV**. 2010. Nitrophenolates spray can alter boll abscission rate in cotton through enhanced peroxidase activity and increased ascorbate and phenolics levels. *Journal of Plant Physiology* 37: 1-9. <https://doi.org/10.1016/j.jplph.2009.05.018>
354. Assefa Y, Staggenborg SA. **Prasad PVV**. 2010. Grain sorghum water requirement and response to drought. *Crop Management*. doi: 10.1094/CM-2010-1109-01-RV.
355. Naab JB, **Prasad PVV**, Boote KJ, Jones JW. 2009. Response on peanut to fungicides and phosphorus in on-station and farmers participatory on-farm tests in Ghana. *Peanut Science* 36: 157-164. <https://doi.org/10.3146/PS08-017.1>
356. Naab JB, Seini SS, Gyasi G, Mahama Y, **Prasad PVV**, Boote KJ, Jones JW. 2009. Groundnut yield response and economic benefits of fungicide and phosphorus application in farmer managed trials in northern Ghana. *Experimental Agriculture* 45: 385-399. <https://doi.org/10.1017/S0014479709990081>
357. Ristic Z, Momčilović U, Bukovnik U, **Prasad PVV**, Fu J, DeRidder BP, Elthon TE, Mladenov N. 2009. Rubisco activase and wheat productivity under heat stress conditions. *Journal of Experiment Botany* 60: 4003-4014. <https://doi.org/10.1093/jxb/erp241>
358. **Prasad PVV**, Vu JCV, Boote KJ, Allen LH Jr. 2009. Enhancement in leaf photosynthesis and upregulation of Rubisco in the C₄ sorghum plant at elevated growth carbon dioxide and temperature occur at early stages of leaf ontogeny. *Functional Plant Biology* 36: 761-769. <https://doi.org/10.1071/FP09043>

359. Naab JB, Boote KJ, **Prasad PVV**, Seini S. S. 2009. Influence of fungicide and sowing density on growth and yield of two groundnut cultivars. *Journal of Agricultural Science* 147: 179-191. <https://doi.org/10.1017/S0021859608008290>
360. Thomas JMG, **Prasad PVV**, Boote KJ, Allen LH Jr. 2009. Seed composition, seedling emergence and early seedling vigor of red kidney bean seed produced at elevated temperature and carbon dioxide. *Journal of Agronomy and Crop Science* 195: 148-156. <https://doi.org/10.1111/j.1439-037X.2008.00348.x>
361. Bukovnik U, Fu JM, Bennett M, **Prasad PVV**, Ristic Z. 2009. Heat tolerance and expression of protein synthesis elongation factors, EF-Tu and EF-1 alpha, in spring wheat. *Functional Plant Biology* 36: 234-241. <https://doi.org/10.1071/FP08266>
362. **Prasad PVV**, Pisipati SR, Ristic Z, Bukovnik U, Fritz A. 2008. Impact of nighttime temperature on physiology and growth of spring wheat. *Crop Science* 48: 2372-2380. <https://doi.org/10.2135/cropsci2007.12.0717>
363. **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. <https://doi.org/10.2135/cropsci2008.01.0036>
364. Ristic Z, Bukovnik U, **Prasad PVV**, West M. 2008. A model for prediction of heat stability of photosynthetic membranes. *Crop Science* 48: 1513-1522. <https://doi.org/10.2135/cropsci2007.11.0648>
365. Ristic Z, Bukovnik U, Momčilović I, Fu J, **Prasad PVV**. 2008. Heat induced accumulation of chloroplast protein elongation factor, EF-Tu in winter wheat. *Journal of Plant Physiology* 165: 192-202. <https://doi.org/10.1016/j.jplph.2007.03.003>
366. Ristic Z, Bukovnik U, **Prasad PVV**. 2007. Correlation between heat stability of thylakoid membrane and loss of chlorophyll in winter wheat under heat stress. *Crop Science* 47: 2067-2073. <https://doi.org/10.2135/cropsci2006.10.0674>
367. Singh RP, **Prasad PVV**, Sunita K, Giri SN, Reddy KR. 2007. Influence of high temperature and breeding for heat tolerance in cotton: a review. *Advances in Agronomy* 93: 313-385. [https://doi.org/10.1016/s0065-2113\(06\)93006-5](https://doi.org/10.1016/s0065-2113(06)93006-5)
368. Britz SJ, **Prasad PVV**, Moreau RA, Allen LH Jr, Kremer DK, Boote KJ. 2007. Influence of growth temperature on the amounts of tocopherols, tocotrienols, and γ -oryzanol in brown rice. *Journal of Agriculture and Food Chemistry* 55: 7559-7565. <https://doi.org/10.1021/jf0637729>
369. Jain M, **Prasad PVV**, Boote KJ, Allen LH Jr., Chourey P. 2007. Effects of season-long high temperature growth conditions on sugar-to-starch metabolism in developing microspores of grain sorghum (*Sorghum bicolor* L. Moench). *Planta* 227: 67-79. <https://doi.org/10.1007/s00425-007-0595-y>
370. **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 higher tissue temperatures. *Agricultural Forest Meteorology* 139: 237-251. <https://doi.org/10.1016/j.agrformet.2006.07.003>
371. **Prasad PVV**, Boote KJ, Allen LH Jr., Thomas JMG, Gorbet D.W. 2006. Influence of soil temperature on seedling emergence and early growth of peanut cultivars in field conditions. *Journal of Agronomy and Crop Science* 192: 167-177. <https://doi.org/10.1111/j.1439-037X.2006.00198.x>
372. Craufurd PQ, **Prasad PVV**, Waliyar F, Taheri A. 2006. Drought, pod yield, pre-harvest *Aspergillus* infection and Aflatoxin contamination on peanut in Niger. *Field Crops Research* 98: 20-29. <https://doi.org/10.1016/j.fcr.2005.12.001>
373. **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. <https://doi.org/10.1016/j.fcr.2005.04.008>
374. Adamou M, **Prasad PVV**, Boote KJ, Detongnon J. 2005. Disease assessment methods and their use in simulating growth and yield of peanut crops affected by foliar disease in Benin. *Annals of Applied Biology* 146: 469-479. <https://doi.org/10.1111/j.1744-7348.2005.040122.x>
375. Kakani VG, Reddy KR, Koti S, Wallace TP, **Prasad PVV**, Reddy VR, Zhao D. 2005. Differences in *in-vitro* pollen germination and pollen tube growth of cotton cultivars in response to high temperature. *Annals of Botany* 96: 59-67. <https://doi.org/10.1093/aob/mci149>
376. Boote KJ, Allen LH Jr, **Prasad PVV**, Baker JT, Gesch RW, Snyder AM, Pan D, Thomas JMG. 2005. Elevated temperature and CO₂ impacts on pollination, reproductive growth and yield of several globally important crops. *Journal of Agricultural Meteorology* 60: 469-474. <https://doi.org/10.2480/agrmet.469>

377. Naab JB, Tsigbey FK, **Prasad PVV**, Boote KJ, Bailey JE, Brandenburg RL. 2005. Effects of sowing date and fungicide application on yield of early and late maturing peanut cultivars grown under rainfed conditions in Ghana. *Crop Protection* 24: 325-332. <https://doi.org/10.1016/j.cropro.2004.09.002>
378. Murthy VRK, Mohammed S, **Prasad PVV**, Satyanarayana V. 2005. Resource capture mechanisms – an aid to promote growth and yield of winter rice. *Journal of Agrometeorology* 7: 417-421.
379. **Prasad PVV**, Boote KJ, Vu JCV, Allen LH Jr. 2004. The carbohydrate metabolism enzymes sucrose-P synthase and ADG-pyrophosphorylase in *Phaseolus* bean leaves are up-regulated at elevated growth carbon dioxide and temperature. *Plant Sciences* 166: 1565-1573. <https://doi.org/10.1016/j.plantsci.2004.02.009>
380. **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. <https://doi.org/10.1046/j.1365-2486.2003.00708.x>
381. Craufurd PQ, **Prasad PVV**, Kakani VG, Wheeler TR, Nigam SN. 2003. Heat tolerance in peanuts. *Field Crops Research* 80: 63-77. [https://doi.org/10.1016/S0378-4290\(02\)00155-7](https://doi.org/10.1016/S0378-4290(02)00155-7)
382. **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. <https://doi.org/10.1046/j.1365-2486.2002.00508.x>
383. Kakani VG, **Prasad PVV**, Craufurd PQ, Wheeler TR. 2002. Response of *in vitro* pollen germination and pollen tube growth of groundnut (*Arachis hypogaea* L.) genotypes to temperature. *Plant Cell Environment* 25: 1651-1661. <https://doi.org/10.1046/j.1365-3040.2002.00943.x>
384. **Prasad PVV**, Satyanarayana V, Murthy VRK, Boote KJ. 2002. Maximizing yields in rice-groundnut cropping system in India through integrated nutrient management. *Field Crops Research* 75: 9-21. [https://doi.org/10.1016/S0378-4290\(01\)00214-3](https://doi.org/10.1016/S0378-4290(01)00214-3)
385. Satyanarayana V, **Prasad PVV**, Murthy VRK, Boote KJ. 2002. Effect of integrated application of organic and inorganic fertilizer on yield of lowland rice. *Journal of Plant Nutrition* 25: 2081-2090. <https://doi.org/10.1081/PLN-12001>
386. Craufurd PQ, **Prasad PVV**, Summerfield RJ. 2002. Effect of temperature on the rate of change of harvest index in peanut. *Crop Science* 42: 146-151. <https://doi.org/10.2135/cropsci2002.1460>
387. **Prasad PVV**, Craufurd PQ, Summerfield RJ. 2001. Response of groundnuts dependent on symbiotic and inorganic nitrogen to high air and soil temperatures. *Journal of Plant Nutrition* 24: 623-637. <https://doi.org/10.1081/PLN-100103657>
388. **Prasad PVV**, Craufurd PQ, Kakani, VG, Wheeler TR, Boote KJ. 2001. Influence of high temperature during pre- and post-anthesis stages of floral development on fruit-set and pollen germination in peanut. *Australian Journal of Plant Physiology* 28: 233-240. <https://doi.org/10.1071/PP00127>
389. Craufurd PQ, Summerfield RJ, Asiedu R, **Prasad PVV**. 2001. Dormancy in yams. *Experimental Agriculture* 37: 147-181. <https://doi.org/10.1017/S001447970100206X>
390. **Prasad PVV**, Satyanarayana V, Potdar MV, Craufurd PQ. 2000. On-farm diagnosis and management of iron chlorosis in groundnut. *Journal of Plant Nutrition* 23: 1471-1783. <https://doi.org/10.1080/01904160009382115>
391. **Prasad PVV**, Craufurd PQ, Summerfield RJ. 2000. Effect of high air and soil temperature on dry matter production, pod yield and yield components of groundnut. *Plant and Soil* 222: 231-239. <https://doi.org/10.1023/A:1004793220787>
392. **Prasad PVV**, Craufurd PQ, Summerfield RJ, Wheeler TR. 2000. Effects of short episodes of heat stress on flower production and fruit-set of groundnut (*Arachis hypogaea* L.). *Journal of Experimental Botany* 51:777-784. <https://doi.org/10.1093/jexbot/51.345.777>
393. Craufurd PQ, Wheeler TR, Ellis RH, Summerfield RJ, **Prasad PVV**. 2000. Escape and tolerance to high temperature at flowering in groundnut (*Arachis hypogaea* L.). *Journal of Agricultural Sciences* 135: 371-378. <https://doi.org/10.1017/S0021859699008394>
394. Wheeler TR, Craufurd PQ, Ellis RH, Porter JR, **Prasad PVV**. 2000. Temperature variability and the yield of annual crops. *Agriculture Ecosystems and Environment* 82: 159-167. [https://doi.org/10.1016/S0167-8809\(00\)00224-3](https://doi.org/10.1016/S0167-8809(00)00224-3)
395. **Prasad PVV**, Craufurd PQ, Summerfield RJ. 1999. Sensitivity of peanut to timing of heat stress during reproductive development. *Crop Science* 39: 1352-1357. <https://doi.org/10.2135/cropsci1999.3951352x>
396. **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. <https://doi.org/10.1006/anbo.1999.0926>
397. Satyanarayana V, Latchanna A, **Prasad PVV**. 1997. Weed management in direct seeded upland paddy. *Annals of Agricultural Research* 18: 385-387.
398. Ravinder N, Satyanarayana V, Rao VP, **Prasad PVV**. 1996. Influence of irrigation and fertilisation on seed yield, nutrient uptake and fertiliser use efficiency of summer sesame (*Sesamum indicum* L.). *Journal of Oilseed Research* 13: 173-177.
399. Satyanarayana V, Ravinder N, Rao VP, **Prasad PVV**. 1996. Influence of irrigation, nitrogen and phosphorus on yields and its components in sesame (*Sesamum indicum* L.). *Annals of Agricultural Research* 17: 286-291.
400. Padmavathi P, Satyanarayana V, Rao PC, **Prasad PVV**. 1995. Integrated weed management systems in soybean (*Glycine max* L.). *Journal of Oilseed Research* 12: 282-285.
401. Basith MA, Satyanarayana V, Latchanna A, **Prasad PVV**. 1995. Response of groundnut genotypes to levels of potassium and plant stands in rainy season. *Journal of Potassium Research* 11: 385-388.

Published Refereed Book Chapters (55)

1. Djanaguiraman M, Priyanka AS, Vaishnavi R, Perumal R, Ciampitti IA, **Prasad PVV**. 2024. Impact of drought and high temperature stresses on growth and developmental stages, physiological, reproductive, and yield traits of pearl millet. In: *Pearl Millet: A Resilient Cereal for Food, Nutrition, and Climate Security* (Eds. R. Perumal, P.V.V. Prasad, C.T. Satyavathi, M. Govindaraj, and A. Tenkouano). Wiley. (In Press).
2. Djanaguiraman M, Sofi PA, Shanker AK, Ciampitti IA, **Prasad PVV**. 2024. Growth and development of pearl millet. In: *Pearl Millet: A Resilient Cereal for Food, Nutrition, and Climate Security* (Eds. R. Perumal, P.V.V. Prasad, C.T. Satyavathi, M. Govindaraj, and A. Tenkouano). Wiley. (In Press).
3. Sofi PA, Zargar SM, Hamadani A, Shafi S, Zaffar A, Riyaz I, Bijrniya D, **Prasad PVV**. 2024. Decoding life: genetics, bioinformatics, and artificial intelligence. In: *Biologist Guide to Artificial Intelligence and Machine Learning for Achieving Advancements in Life Science* (Eds. A. Hamadani, N.A. Ganai, H. Hamdani, J. Bashir). Academic Press. pp. 47-66.
4. Bharadwaj A, Jha U, Siddique KHM, **Prasad PVV**, Kumar S, Nayyar H. 2024. Genomics for physiological traits in lentil under stressed environments. In: *The Lentil Genome: Genetics, Genomics and Breeding* (Eds. J. Kumar, D.S. Gupta, and S. Kumar). Academic Press. pp. 267-306.
5. Jha U, Nayyar H, Sharma KD, Jha R, Thudi M, Bakir M, Lone AA, Tripathi S, Beena R, Paul PJ, Dixit GP, **Prasad PVV**, Siddique KHM. 2023. Chickpea diseases: breeding and 'omics' approaches for designing next-generation disease-resistant chickpea cultivar. In: *Diseases in Legumes: Next Generation Breeding Approaches for Resistant Legume Crops* (Eds. U.C. Jha, H. Nayyar, K.D. Sharma, E.J.B. von Wettberg, P. Singh, K.H.M. Siddique). Springer Nature.
6. Devi P, Chaudhary S, Bhardwaj A, Priya M, Jha U, Pratap A, Kumar S, Bindumadhava H, Singh I, Singh S, **Prasad PVV**, Siddique KHM, Nayyar H. 2023. Harnessing genetic variation in physiological and molecular traits to improve heat tolerance in food legumes. In: *Legumes: Physiology and Molecular Biology of Abiotic Stress Tolerance* (Eds. P.M.A. Samy, A. Ramasamy, V. Chinnusamy, B.S. Kumar). Springer Nature. pp. 27-69.
7. Singh H, **Prasad PVV**, Northup BK, Ciampitti IA, Rice CW. 2023. Strategies for mitigating greenhouse gas emissions from agricultural ecosystems. Chapter 6. In: *Global Agricultural Production – Resilience to Climate Change* (Eds. M. Ahmad). Springer Nature. pp. 409-440.
8. Araya A, **Prasad PVV**, Jha PK, Singh H, Ciampitti IA, Min D. 2023. Modeling impacts of climate change and adaptation strategies for cereal crops in Ethiopia. Chapter 15. In: *Global Agricultural Production – Resilience to Climate Change* (Eds. M. Ahmad). Springer Nature. pp. 383-408.
9. Jha PK, **Prasad PVV**, Araya A, Ciampitti IA. 2023. Estimation of crop genetic coefficient to simulate growth and yield under changing climates. Chapter 10. In: *Global Agricultural Production – Resilience to Climate Change* (Eds. M. Ahmad). Springer Nature. pp. 283-309.
10. **Prasad PVV**, Gowsiga S, Djanaguiraman M. 2023. Influence of high temperature stress on grain crops. In: *Translating Physiological Tools to Augment Crop Breeding* (Eds. H.M. Mamrutha, K. Gopalareddy, R. Khobra, G. Singh, G.P. Singh). Springer Nature. pp. 371-389.

11. Chaudhary S, Priya M, Jha U, Pratap A, HunumanthaRao B, Singh I, **Prasad PVV**, Siddique KHM, Nayyar H. 2022. Approaches toward developing heat and drought tolerance in mungbean. Chapter 10. In: Developing Climate Resilient Grain and Forage Legumes (Eds. U.C. Jha, H. Nayyar, S.K. Agrarwal, K.H.M. Siddique). Springer Nature. pp. 205-234.
12. Araya A, **Prasad PVV**, Ciampitti IA, Rice, CW, Gowda PH. 2022. Using crop simulation model as a tool to quantify effects of crop management practices and climate change scenarios on wheat yields in northern Ethiopia. In: Enhancing Agricultural Research and Precision Management of Resources for Subsistence Farming in Developing Countries by Integrated Systems Models with Experiments (Eds. D. Timlin, S.S. Anapalli). ASA – CSSA, Madison, WI; John Wiley and Sons. Chapter 3: 29-47.
13. Aravind B, Nayak SN, Choudhary RS, Gandhaadmath SS, **Prasad PVV**, Pandey MK, Bhat RS, Puppala N, Latha P, Sudhakar P, Varshney RK. 2022. Integration of genomic approaches in abiotic stress tolerance in groundnut (*Arachis hypogaea* L.): an overview. In: Genomic Designing for Abiotic Stress Resistant Oilseeds (Eds. C. Kole). Springer Nature. pp. 149-197.
14. **Prasad PVV**, Djanaguiraman M, Rengel Z. 2021. Sustainable intensification: meaning, need, components and role of root systems. In: Root Systems in Sustainable Agricultural Intensification (Eds. Z. Rengel, I. Djalovic). John Wiley and Sons Inc. pp. 1-24.
15. Djanaguiraman M, **Prasad PVV**, Ciampitti IA, Talwar HS. 2021. Impact of abiotic stresses on sorghum physiology. In: Sorghum in the 21st Century: Food, Feed and Fuel for a Rapidly Changing World (Eds. V.A. Tanopi, H.S. Talwar, A.K. Are, B.V. Bhat, C.R. Reddy, T.J. Dalton). Springer Verlag. pp. 157-188.
16. Ciampitti IA, **Prasad PVV**, Kumar SR, Kubsad VS, Adam M, Eyre JX, Potgiester AB, Clarke SJ, Gambin B. 2021. Sorghum management system and production technology around the globe. In: Sorghum in the 21st Century: Food, Feed and Fuel for a Rapidly Changing World (Eds. V.A. Tanopi, H.S. Talwar, A.K. Are, B.V. Bhat, C.R. Reddy, T.J. Dalton). Springer Verlag. pp. 251-293.
17. Veljkovic VB, Dalovic IG, Siliveru K, Bankovic-Ilic IB, Stamenkovic OS, Mitrovic PM, Tasic MB, Ciampitti IA, Sikora VS, **Prasad PVV**. 2021. Pretreatment methods for biofuel production from sorghum. In: Sorghum in the 21st Century: Food, Feed and Fuel for a Rapidly Changing World (Eds. V.A. Tanopi, H.S. Talwar, A.K. Are, B.V. Bhat, C.R. Reddy, T.J. Dalton). Springer Verlag. pp. 755-788.
18. Djanaguiraman M, **Prasad PVV**, Stewart ZP, Perumal R, Min D, Djalovic I, Ciampitti IA. 2020. Agroclimatology of oats, barley, and minor millets. In: Agroclimatology: Linking Agriculture to Climate (Eds. J. Hatfield, M. Sivakumar, J. Prueger). American Society of Agronomy. Monograph 60, Madison, Wisconsin, USA. pp. 243-278. <https://doi.org/10.2134/agronmonogr60.2018.0020>
19. **Prasad PVV**, Djanaguiraman M, Stewart ZP, Ciampitti IA. 2020. Agroclimatology of maize, sorghum, and pearl millet. In: Agroclimatology: Linking Agriculture to Climate (Eds. J. Hatfield, M. Sivakumar, J. Prueger). American Society of Agronomy. Monograph 60, Madison, Wisconsin, USA. pp. 201-242. <https://doi.org/10.2134/agronmonogr60.2016.0005>
20. Ciampitti IA, **Prasad PVV**, Schlegel AJ, Haag L, Schnell RW, Arnall B, Lofton J. 2019. Genotype x environment x management interactions: US sorghum cropping systems. In: Sorghum: State of the Art and Future Perspective (Eds. I.A. Ciampitti and P.V.V. Prasad). American Society of Agronomy. Monograph 58, Madison, Wisconsin, US. pp. 277-296. <https://doi.org/10.2134/agronmonogr58.c13>
21. Roozeboom KL, **Prasad PVV**. 2019. Growth and development. In: Sorghum: State of the Art and Future Perspective (Eds. I.A. Ciampitti and P.V.V. Prasad). American Society of Agronomy. Monograph 58, Madison, Wisconsin, USA. pp. 155-172. <https://doi.org/10.2134/agronmonogr58.c8>
22. **Prasad PVV**, Djanaguiraman M, Jagadish SVK, Ciampitti IA. 2019. Drought and high temperature stress and traits associated with tolerance. In: Sorghum: State of the Art and Future Perspective (Eds. I.A. Ciampitti and P.V.V. Prasad). American Society of Agronomy. Monograph 58, Madison, Wisconsin, US. pp. 241-266. <https://doi.org/10.2134/agronmonogr58.c11>
23. Jugulam M, Varanasi A, Varanasi VK, **Prasad PVV**. 2018. Climate change influence on herbicide efficacy and weed management. In: Climate Change and Food Security in 21st Century (Eds. S.S. Yadav and R. Redden). Wiley – Blackwell International, USA. pp. 433-448. <https://doi.org/10.1002/9781119180661.ch18>
24. Djanaguiraman M, **Prasad PVV**, Ciampitti IA. 2018. Sorghum crop physiology and development. In: Achieving Sustainable Cultivation of Sorghum, Volume 2: Sorghum Utilization Around the World. (Ed. William Rooney). Burleigh Dodds Science Publishing, Swaston, Cambridge, UK. pp. 65-86.
25. Djanaguiraman M, **Prasad PVV**, Ciampitti IA. 2018. Improving sorghum crop management: overview. In: Achieving Sustainable Cultivation of Sorghum Volume 1: Genetics, Breeding and Production

- Techniques (Ed. William Rooney). Burleigh Dodds Science Publishing, Swaston, Cambridge, UK. pp. 285-302.
26. Pierzynski GM, Middendorf BJ, Stewart ZP, **Prasad PVV**. 2017. Sub-Saharan Africa soil fertility prioritization report. I. survey results. Feed the Future Innovation Lab for Collaborative Research on Sustainable Intensification, Kansas State University, Manhattan, Kansas, USA. https://www.k-state.edu/siil/documents/docs_soilfertility/SIIL%20Sub-Saharan%20Africa%20Soil%20Fertility%20Prioritization%20Report%20-%20I.%20Survey%20Results.pdf
 27. Middendorf BJ, Pierzynski GM, Stewart ZP, **Prasad PVV**. 2017. Sub-Saharan Africa soil fertility prioritization report. II. summit results. Feed the Future Innovation Lab for Collaborative Research on Sustainable Intensification, Kansas State University, Manhattan, Kansas, USA. https://www.k-state.edu/siil/documents/docs_soilfertility/SIIL%20Sub-Saharan%20Africa%20Soil%20Fertility%20Prioritization%20Report%20-%20II.Summit%20Results.pdf
 28. Stewart ZP, Pierzynski GM, Middendorf BJ, **Prasad PVV**. 2017. Sub-Saharan Africa soil fertility prioritization report. III. summary. Feed the Future Innovation Lab for Collaborative Research on Sustainable Intensification, Kansas State University, Manhattan, Kansas, USA. https://www.k-state.edu/siil/documents/docs_soilfertility/SIIL%20Sub-Saharan%20Africa%20Soil%20Fertility%20Prioritization%20Report%20-%20III.%20Combined%20Summary.pdf
 29. **Prasad PVV**, Djanaguiraman M. 2017. Iron chlorosis. In: *Encyclopaedia of Applied Plant Sciences Second Edition* (Eds. B. Thomas, B.G. Murray and D.J. Murphy). Academic Press. Vol 1: 246-255. <http://dx.doi.org/10.1016/B978-0-12-394807-6.00122-2>
 30. **Prasad PVV**, Kakani VG, Reddy KR. 2017. Ozone depletion. In: *Encyclopaedia of Applied Plant Sciences Second Edition* (Eds. B. Thomas, B.G. Murray and D.J. Murphy). Academic Press. Vol 3: 318-326. <http://dx.doi.org/10.1016/B978-0-12-394807-6.00015-0>
 31. **Prasad PVV**, Thomas JMG, Narayanan S. 2017. Global warming. In: *Encyclopaedia of Applied Plant Sciences, Second Edition* (Eds. B. Thomas, B.G. Murray and D.J. Murphy). Academic Press. Vol 3: 289-299. <http://dx.doi.org/10.1016/B978-0-12-394807-6.00013-7>
 32. Sunoj JVS, Hebbar KB, **Prasad PVV**. 2017. Phenotyping tools to understand effects of climate change. In: *Impact of Climate Change on Plantation Crops* (Eds. K.B. Hebbar, S. Naresh Kumar and P. Chowdappa). Daya Publishing House, New Delhi, India. pp. 169-188. ISBN 935124833X
 33. Boote KJ, Jones JW, Tollenaar M, Dzotsi KA, **Prasad PVV**, Lizaso JI. 2016. Testing approaches and components in physiologically based crop models for sensitivity to climate factors. In: *Improving Modeling Tools to Assess Climate Change Effects on Crop Response* (Eds. J.L. Hatfield and D. Fleisher). ASA – CSSA, Madison, WI. Advances in Agricultural Systems Modeling 7: 1-32. <https://doi.org/10.2134/advagricsystmodel7.2014.0019.5>
 34. **Prasad PVV**, Hijmans RJ, Pierzynski GM, Middendorf JB. 2015. Climate smart agriculture and sustainable intensification: assessment and priority setting for Rwanda. Feed the Future Innovation Lab for Collaborative Research on Sustainable Intensification, Kansas State University, Manhattan, Kansas. <https://hdl.handle.net/10568/87987>
 35. Redden RJ, Hatfield JL, **Prasad PVV**, Ebert AW, Yadav SS, O'Leary GJ. 2014. Temperature, climate change and global food security. In: *Temperature and Plant Development* (Eds. K. Franklin, P.A. Wigge). John Wiley and Sons Inc. pp. 181-202. <https://doi.org/10.1002/9781118308240.ch8>
 36. Djanaguiraman M, **Prasad PVV**. 2014. High temperature stress. In: *Plant Genetic Resources and Climate Change* (Eds. M. Jackson, B.V. Ford-Lloyd, M.L. Perry). CABI. pp. 201-220. ISBN 9781780641973
 37. Paul GP, Gowda PH, **Prasad PVV**, Howell TA, Aiken RM, Hutchinson SL. 2013. Role of hot and cold pixel concept in remote sensing based single source surface energy balance algorithms. In: *Proceedings of Seventh International Conference on Irrigation and Drainage - Using 21st Century Technology to Better Manage Irrigation Water Supplies* (Eds. B.T. Wahlin and S.S. Anderson). U.S Committee on Irrigation and Drainage. pp. 103-117.
 38. Djanaguiraman M, **Prasad PVV**. 2012. Effects of salinity on ion transport, water relations and oxidative damage. In: *Ecophysiology and Responses of Plant Under Salt Stress* (Eds. P. Ahmad, M.N.V. Prasad). Springer Science, U.S.A. pp. 89-114. https://doi.org/10.1007/978-1-4614-4747-4_3

39. **Prasad PVV**, Kannan K, Djanaguiraman M. 2012. Impact of climate change factors on growth and productivity of crop plants. In: *Water Management for Sustainable Agriculture: Indo – US Experience* (Eds. D.V. Singh, V.N. Sharda, V. Selvi, J. Bartholic and K. Maredia). Central Soil and Water Conservation Research and Training Institute, India; and Michigan State University. pp. 53-70.
40. Fu J, Momcilovic I, **Prasad PVV**. 2011. Molecular basis and improvement of heat tolerance in crop plants. In: *Heat Stress: Causes, Treatment and Prevention* (Eds. S. Joipovic and E. Ludwig). Nova Publishers, NY, U.S.A. pp. 185-213.
41. Paul G, Gowda PH, **Prasad PVV**, Howell T, Staggenborg SA. 2011. Evaluating surface energy balance systems (SEBS) using aircraft data collected during BEAREX07. In: *Proceedings of World Environmental and Water Resources Congress 2011* (Eds. R.E. Beighley and M.W. Killgore). pp. 2777-2786. [https://doi.org/10.1061/41173\(414\)289](https://doi.org/10.1061/41173(414)289)
42. Singh, RP, **Prasad PVV**, Sharma AK, Reddy KR. 2011. Impact of high temperature stress and potential opportunities for breeding. In: *Crop Adaptation to Climate Change* (Eds. S.S. Yadav, R.J. Redden, J.L. Hatfield, H.L. Campen and A.E. Hall). Wiley-Blackwell, Oxford, UK. pp. 166-185. <https://doi.org/10.1002/9780470960929.ch13>
43. **Prasad PVV**. 2010. High-temperature tolerance in sorghum - What do we know and what are the possibilities. In: *Proceedings of First Australian Summer Grains Conference*, Gold Coast, Australia 24-24 June 2010. Edited Paper (9 pages).
44. Boote KJ, Allen LH Jr., **Prasad PVV**, Jones JW. 2010. Testing effects of climate change in crop models. In: *Handbook of Climate Change and Agroecosystems* (Eds. D. Hillel and C. Rosenzweig). Imperial College Press, London. pp. 109-129. https://doi.org/10.1142/9781848166561_0007
45. **Prasad PVV**, Kakani VG, Upadhyaya HD. 2010. Growth and production of peanut. In: *Encyclopedia of Life Support Systems*. EOLSS Publishers, Oxford, U.K. <https://www.eolss.net/sample-chapters/C10/E1-05A-19-00.pdf>
46. **Prasad PVV**, Staggenborg SA. 2010. Growth and production of sorghum and millets. In: *Encyclopaedia of Life Support Systems*. EOLSS Publishers, Oxford, U.K. <https://www.eolss.net/Sample-Chapters/C10/E1-05A-14-00.pdf>
47. Reddy KR, **Prasad PVV**, Singh SK. 2010. Effects of ultraviolet-B radiation and its interaction with climate change factors on agricultural crop growth and yield. In: *UV Radiation and Global Change: Measurement, Modelling and Effects on Ecosystems* (Ed. W. Gao). Springer – Verlag, USA. pp. 395-437. https://doi.org/10.1007/978-3-642-03313-1_14
48. Andre RGB, Garcia A, Abreu JPM, Nieto R, **Prasad PVV**, White D. 2010. Climate and weather risk assessment for agricultural planning. In: *Guide to Agricultural Meteorological Practices (GAMP)* (Ed. K. Stigter). World Meteorological Organization, Geneva, Switzerland. WMO-No. 134: 1-1 to 7-33. https://www.wmo.int/pages/prog/wcp/agm/gamp/documents/WMO_No134_en.pdf
49. **Prasad PVV**, Staggenborg SA, Ristic Z. 2008. Impact of drought and heat stress on physiological, growth and yield processes. In: *Modeling Water Stress Effects on Plant Growth Processes* (Eds. L.H. Ahuja and S.A. Saseendran). ASA – CSSA, Madison, WI. *Advances in Agricultural Systems Modeling* 1: 301-355. <https://doi.org/10.2134/advagriscystmodel1.c11>
50. **Prasad PVV**, Allen LH Jr, Boote KJ. 2005. Crop responses to elevated carbon dioxide and interaction with temperature: Grain legumes. In: *Ecological Responses and Adaptations of Crops to Rising Carbon Dioxide* (Ed. Z. Tuba). Haworth Press, USA. pp. 113-155. https://doi.org/10.1300/J411v13n01_07
51. Reddy KR, **Prasad PVV**, Kakani VG. 2005. Crop responses to elevated carbon dioxide and interaction with temperature: Cotton. In: *Ecological Responses and Adaptations of Crops to Rising Carbon Dioxide* (Ed. Z. Tuba). Haworth Press, USA. pp. 157-191. https://doi.org/10.1300/J411v13n01_08
52. Allen LH Jr, **Prasad PVV**. 2004 Crop responses to elevated carbon dioxide. In: *Encyclopaedia of Plant and Crop Science* (Ed. R.M. Goodman). Marcel Dekker, New York, USA. pp. 346-348. doi: 10.1081/E-EPCS 120005566
53. **Prasad PVV**. 2003. Plant nutrition: iron chlorosis. In: *Encyclopaedia of Applied Plant Sciences* (Eds. B. Thomas, D.J. Murphy and B.G. Murray). Elsevier, London, UK. pp. 649-656. <https://doi.org/10.1016/B0-12-227050-9/00240-4>
54. **Prasad PVV**, Kakani VG, Reddy KR. 2003. Plants and environment: ozone depletion. In: *Encyclopaedia of Applied Plant Sciences* (Eds. B. Thomas, D. J. Murphy and B. G. Murray). pp. 749-756. Elsevier, London, UK.

55. Thomas JMG, **Prasad PVV**. 2003. Plants and environment: global warming. In: *Encyclopaedia of Applied Plant Sciences* (Eds. B. Thomas, and B.G. Murray). Elsevier, London, UK. pp. 786-794.

Published Theses and Edited Books / Collections / Special Issues of Journals / Special Reports

1. Perumal R, **Prasad PVV**, Satyavathi CT, Govindaraj M, Tenkouano A. 2024. Pearl Millet: A Resilient Cereal for Food, Nutrition, and Climate Security. Wiley (In Press).
2. Tiftonell P, **Prasad PVV**, Compton J, Echeverria R. 2023. Improving investment in research and innovation to transform agrifood systems in the Global South *Frontiers in Sustainable Food Systems*. ISBN 978-2-8325-3629-6. DOI 10.3389/978-2-8325-3829-6
3. Rao SS, Tanopi V, Nirmal SV, Olekar KB, Srividhya S, Kamble PS, Patroti PD, Sujatha K, Ashvatham VH, Bhat P, Sajjanar GM, Jadhav AS, More PR, Solunke VD, Kakate RM, Shinde MS, Ghorade RB, Sharma KK, Kusalkar D, Gadakh SR, Jirali DI, Pawar KN, ChannappaGoudar BB, Chimmad V, Umakanth AV, Elangovan M, **Prasad PVV**, Aruna CR, Hariprasanna K, Mishra JS, Talwar HS, Netyam K. 2020. Sorghum Physiology Research for Improving Abiotic Stress Adaptation. ISBN 81-89335-95-2. Indian Council of Agricultural Research – Indian Institute of Millets Research, Hyderabad, Telangana, India.
4. Yuan Z, Chen Y, Palta JA, **Prasad PVV**. 2019. Adaptation of dryland plants to changing environment. *Frontiers in Plant Sciences*. <https://doi.org/10.3389/fpls.2019.01228>
5. Ciampitti IA, **Prasad PVV**. 2019. Sorghum: State of the Art and Future Perspective, American Society of Agronomy. Monograph 58, Madison, Wisconsin, USA. <https://doi.org/10.2134/agronmonogr58>
6. Murthy VRK, Yakadri M, **Prasad PVV**. 2007. Terminology on agricultural meteorology and agronomy. ISBN: 81-7800-132-2. The Book Syndicate Publications, Hyderabad, India.
7. **Prasad PVV**. 1999. The effect of heat stress on fruit-set and fruit yield of groundnut (*Arachis hypogaea* L.). Ph.D. Thesis. The University of Reading, United Kingdom. (Advisor: P.Q. Craufurd). <http://hdl.handle.net/10068/374126>
8. **Prasad PVV**. 1993. On-farm studies on the diagnosis and management of iron chlorosis in groundnut in Kurnool district of Andhra Pradesh. M.S. Thesis. Andhra Pradesh Agricultural University, Rajendranagar, Hyderabad, Andhra Pradesh, India. (Advisors: V. Satyanarayana, Andhra Pradesh Agricultural University; and M.V. Potdar, International Crops Research Institute for the Semi-Arid Tropics, Hyderabad, India). <http://oar.icrisat.org/427/>

Published Theses and Dissertations of Graduate Students – as Major / Co-Major Professor

MS Theses of Graduate Students:

1. Adari MD. 2023. Investigation of herbicide resistance in Japanese brome (*Bromus japonicus*) and responses of grain sorghum (*Sorghum bicolor*), & corn (*Zea mays*) to multiple herbicides at high-temperature stress. M.S. Thesis. Kansas State University, Manhattan, Kansas. (**Co-Major Professors: M. Jugulam and P.V.V. Prasad**). <http://hdl.handle.net/2097/43646>
2. Kuykendall M. 2015. Biomass production and changes in soil water with cover crop species and mixtures following no-till winter wheat. M.S. Thesis. Kansas State University, Manhattan, Kansas. (**Co-Major Professors: K. Roozeboom and P.V.V. Prasad**). <http://hdl.handle.net/2097/19080>
3. Diallo S. 2012. Effect of genotypes and nitrogen on grain quality of sorghum. M.S. Thesis. Kansas State University, Manhattan, Kansas. (**Major Professor: P.V.V. Prasad**). <http://hdl.handle.net/2097/14628>
4. Mahama GY. 2012. Variation among grain sorghum genotypes in response to nitrogen fertilizer. M.S. Thesis. Kansas State University, Manhattan, Kansas. (**Major Professor: P.V.V. Prasad**). <http://hdl.handle.net/2097/13580>
5. Narayanan S. 2011. Canopy architecture and water productivity in sorghum. M.S. Thesis. Kansas State University, Manhattan, Kansas. (**Co-Major Professors: R.M. Aiken and P.V.V. Prasad**). <http://hdl.handle.net/2097/8760>
6. Mutava RN. 2009. Characterization of grain sorghum for physiological and yield traits associated with drought tolerance. M.S. Thesis. (**Major Professor: P.V.V. Prasad**). <http://hdl.handle.net/2097/1458>

7. Groene GA. 2008. Evaluation of sorghum and maize germplasm for post-anthesis drought tolerance. M.S. Thesis. Kansas State University, Manhattan, Kansas. (**Major Professor: P.V.V. Prasad**). <http://hdl.handle.net/2097/1117>
8. Pisipati SR. 2008. Pre-harvest sprouting tolerance in hard white winter wheat. M.S. Thesis. Kansas State University, Manhattan, Kansas. (**Major Professor: P.V.V. Prasad**). <http://hdl.handle.net/2097/1062>

PhD Dissertations of Graduate Students:

9. Balaji Pandian. 2020. Physiological, genetic and genomic analyses of herbicide resistance in grain sorghum (*Sorghum bicolor*). (**Co-Major Professors: M. Jugulam and P.V.V. Prasad**). <https://hdl.handle.net/2097/40916>
10. Regina Enningful. 2019. Physiological characterization of parents of sorghum mapping populations exposed to water-deficit stress. (**Co-Major Professors: S.V.K. Jagadish and P.V.V. Prasad**) <http://hdl.handle.net/2097/39553>
11. Wang H. 2017. Crop assessment and monitoring using optimal sensors. Ph.D. Thesis. Kansas State University, Manhattan, Kansas. (**Major Professor: P.V.V. Prasad**). <http://hdl.handle.net/2097/38224>
12. Waite J. 2016. Corn and forage sorghum yield and water use in western Kansas. Ph.D. Thesis. Kansas State University, Manhattan, Kansas. (**Major Professor: P.V.V. Prasad**). <http://hdl.handle.net/2097/34457>
13. Ehtaiwesh A. 2016. Effect of salinity and high temperature stress on winter wheat genotypes. Ph.D. Thesis. Kansas State University, Manhattan, Kansas. (**Major Professor: P.V.V. Prasad**). <http://hdl.handle.net/2097/34545>
14. Shroyer K. 2016. The effect of drought and high temperature stress on reproduction, physiology, and yield of spring and winter wheat. Ph.D. Thesis. Kansas State University, Manhattan, Kansas. (**Major Professor: P.V.V. Prasad**). <http://hdl.handle.net/2097/34542>
15. Narayanan S. 2015. Physiological, biochemical and genomic characterization of high temperature stress in wheat. Ph.D. Thesis. Kansas State University, Manhattan, Kansas. (**Major Professor: P.V.V. Prasad**). <http://hdl.handle.net/2097/32792>
16. Mahama GY. 2014. Impact of cover crops and nitrogen application on nitrous oxide fluxes and grain yield of sorghum and maize. Ph.D. Thesis. Kansas State University, Manhattan, Kansas. (**Major Professor: P.V.V. Prasad**). <http://hdl.handle.net/2097/18939>
17. Paul GP. 2013. Evaluation of surface energy balance models for mapping evapo-transpiration using very high resolution airborne remote sensing data. Ph.D. Thesis. Kansas State University, Manhattan, Kansas. (**Major Professor: P.V.V. Prasad**).
18. Opole RA. 2012. Effect of environmental stress and management on grain and biomass yield of finger millet (*Eleusine coracana* L. Gaertn.). Ph.D. Dissertation. Kansas State University, Manhattan, Kansas. (**Major Professor: P.V.V. Prasad**). <http://hdl.handle.net/2097/13964>
19. Mutava RN. 2012. Evaluation of sorghum genotypes for variation in canopy temperature and drought tolerance. Ph.D. Dissertation. Kansas State University, Manhattan, Kansas. (**Major Professor: P.V.V. Prasad**). <http://hdl.handle.net/2097/14506>
20. Subramanian S. 2012. Agronomical, physiological and biochemical approaches to characterize sweet sorghum genotypes for biofuel production. Ph.D. Dissertation. Kansas State University, Manhattan, Kansas. (**Major Professor: P.V.V. Prasad**). <http://hdl.handle.net/2097/15600>
21. Maiga A. 2012. Effects of planting practices and nitrogen management on grain sorghum production. Ph.D. Dissertation. Kansas State University, Manhattan, Kansas. (**Major Professor: P.V.V. Prasad**). <http://hdl.handle.net/2097/13945>
22. Ocheltree TW. 2012. Growth and survival during drought: the link between hydraulic architecture and drought tolerance in grasses. Ph.D. Dissertation. Kansas State University, Manhattan, Kansas. (**Major Professor: P.V.V. Prasad**). <http://hdl.handle.net/2097/13803>
23. Pradhan GP. 2011. Effects of drought and/or high temperature stress on wild wheat relatives (*Aegilops* sp.) and synthetic wheats. Ph.D. Dissertation. Kansas State University, Manhattan, Kansas. (**Major Professor: P.V.V. Prasad**). <http://hdl.handle.net/2097/11980>

Published Conference, Symposium or Workshop Presentations, Seminars and Abstracts

1. **Prasad PVV**. 2023. Integration of sustainable agricultural intensification and digital tools for smallholder farmers and commercial agriculture. "Keynote 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, Negros 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, Sugiura 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

- millet: 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 noval 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, Udhamandalam, 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 SILL “*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. Izaurralde 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 Telengana 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, Tamangno 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. Chilawal 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. Chilawal 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. Chilawal 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, Chiluwal 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, Adee 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 of Plant and Crop Science Seminar* 30 Mar, Stillwater, Oklahoma, USA.
235. **Prasad PVV**. 2015. Feed 9 billion+: information and imaging for innovation in next-generation agriculture. *American Association for the Advancement of Sciences Annual Meeting* 12 – 16 February, San Jose, California, USA.
236. **Prasad PVV**. 2015. Feed the Future Sustainable Intensification Innovation Lab. *Cereal System Initiative for South Asia (CSISA) Cross Learning Tour on Sustainable Intensification* 28 January – 04 February, New Delhi, India.
237. **Prasad PVV** and Jagadish SVK. 2015. Field crops and the fear of heat stress: opportunities, challenges and future directions. *Procedia Environmental Sciences* 29: 36-37.
238. **Prasad PVV**, Jagadish SVK, Reynolds MP, Cossani MR, Fritz AK. 2014. Integrated strategy to develop resilient wheat that can beat the heat. *HeDWIC (Heat and Drought Wheat International Consortium) Meeting 2* – 5 December, Frankfurt, Germany.
239. Jagadish SVK, **Prasad PVV**, Cossani MR, Reynolds MP, Fritz AK. 2014. Integrated strategy to develop resilient wheat that can beat the heat. *HeDWIC (Heat and Drought Wheat International Consortium) Meeting 2* – 5 December, Frankfurt, Germany.
240. Fritz AK, **Prasad PVV**, Trick HN. 2014. Impact of heat-stable soluble starch synthase on grain yield of wheat under high temperature stress. *HeDWIC (Heat and Drought Wheat International Consortium) Meeting 2* – 5 December, Frankfurt, Germany.

241. Kuykendall M, **Prasad PVV**, Roozeboom KL, Kluitenberg GJ. 2014. Water use of cover crop species and mixes. *Annual Meeting of ASA-CSSA-SSSA*, 2 – 5 Nov., Long Beach, California, USA.
242. **Prasad PVV**, Djanaguiraman M. 2014. Advances in understanding of physiological, biochemical responses to crop plants to high temperature stress. *Annual Meeting of ASA-CSSA-SSSA*, 2 – 5 Nov., Long Beach, California, USA.
243. Ciampitti IA, **Prasad PVV**, Mahama GY. 2014. Nitrogen use efficiency and related plant mechanisms in corn and sorghum. *Annual Meeting of ASA-CSSA-SSSA*, 2 – 5 Nov., Long Beach, California, USA.
244. Narayanan S, **Prasad PVV**, Welti R. 2014. Membrane lipid composition under high temperature stress in wheat. *Annual Meeting of ASA-CSSA-SSSA*, 2 – 5 Nov., Long Beach, California, USA.
245. Kuykendall M, **Prasad PVV**, Roozeboom KL, Kluitenberg GJ. 2014. Water use of cover crop species and mixes. *Annual Meeting of ASA-CSSA-SSSA*, 2 – 5 Nov., Long Beach, California, USA.
246. Ciampitti IA, Balboa GR, **Prasad PVV**. 2014. Development of new tool for estimating sorghum yields at farm-scale. *Annual Meeting of ASA-CSSA-SSSA*, 2 – 5 Nov., Long Beach, California, USA.
247. Christenson B, Schapaugh WT, **Prasad PVV**, An N, Fritz AK. 2014. Characterizing soybean maturity and seed yield using optimized phenotyping with canopy reflectance. *Annual Meeting of ASA-CSSA-SSSA*, 2 – 5 Nov., Long Beach, California, USA.
248. Jennings J, Roozeboom KL, **Prasad PVV**, Shroyer JP, Rajashekar CB. 2014. Sorghum hybrid and wheat variety traits for planting winter wheat after grain sorghum in no-till. *Annual Meeting of ASA-CSSA-SSSA*, 2 – 5 Nov., Long Beach, California, USA.
249. Akley EK, Rice CW, Tomlinson PJ, **Prasad PVV**. 2014. Impacts of cover crops on soil health and soil microbial ecology. *Annual Meeting of ASA-CSSA-SSSA*, 2 – 5 Nov., Long Beach, California, USA.
250. Gill KS, Lakshmi S, Sharma A, Mohan A, Singh K, Saini JS, **Prasad PVV**, Jaiswal J, Dhugga KS, Gupta PK, Kumar R, Sareen S, Singh H, Balyan HS, Narayanan KK, Chinnusamy V, Singh RK. 2014. Improving heat tolerance of wheat by genomic, molecular and physiological approaches. *Annual Meeting of ASA-CSSA-SSSA*, 2 – 5 Nov., Long Beach, California, USA.
251. Godar AS, **Prasad PVV**, Betha S, Varanasi VK, Thompson CR, Mithila J. 2014. Physiological basis of reduced mesotrione efficacy under elevated growth temperature in Palmer amaranth. *Annual Meeting of Weed Science Society of America*, 3 – 6 Feb., Vancouver, British Columbia, Canada.
252. **Prasad PVV**, Venkateswarulu B. 2013. Impact of climate change factors on productivity of millets. *Global Consultation on Millets Promotion for Health and Nutritional Security*, 18 – 20 December, Hyderabad, India.
253. **Prasad PVV**, Naab JB, Kanton RL, Doumbia M. 2013. Sustainable intensification and conservation agricultural practices: Opportunities and challenges for small holding farmers in sub-saharan Africa. *The 4th International Conservation Agriculture in Southeast Asia Conference*, 9 – 15 December 2013, Battambang, Cambodia.
254. Naab JB, **Prasad PVV**, Vlek PLG. 2013. Sustainable intensification of smallholder agriculture for enhanced food security, climate change adaptation and mitigation. *Conference on "Climate Change, Sustainable Intensification and Food Security in Sub-Saharan Africa*, 13 – 15 November, Morogoro, Tanzania.
255. Kanton RL, Larbi A, Buah S, Kombiok JM, Ansoba E, Asungre AP, Lamini S, **Prasad PVV**. 2013. Effects of nitrogen fertilizer on growth and yield of maize varieties with different maturities in a dry agro-ecology of Northern Ghana. *Annual Meeting of ASA-CSSA-SSSA*, 3 – 6 Nov., Tampa, Florida, USA.
256. Kanton RAL, Ahiabor BDK, Ansoba E, Asungre AP, Lamini S, Mahama GY, **Prasad PVV**. 2013. Effect of contrasting sources of organic and inorganic fertilizers on growth and yield maize in dry agro-ecology in Northern Ghana. *Annual Meeting of ASA-CSSA-SSSA*, 3 – 6 Nov., Tampa, Florida, USA.
257. Paul G, Gowda PH, **Prasad PVV**, Howell TA, Basu S. 2013. Is scintillometer measurement accurate enough for evaluating remote sensing based energy balance ET models? *Annual Meeting of ASA-CSSA-SSSA*, 3 – 6 Nov., Tampa, Florida, USA.
258. Narayanan S, **Prasad PVV**, Shroyer K, Gill BS, Fritz AK. 2013. Characterization of spring wheat association mapping panel for root traits. *Annual Meeting of ASA-CSSA-SSSA*, 3 – 6 Nov., Tampa, Florida, USA.
259. Narayanan S, **Prasad PVV**, Welti R, Fritz AK. 2013. Comparative response of wheat to high day- and/or nighttime temperature stress during flowering. *Annual Meeting of ASA-CSSA-SSSA*, 3 – 6 Nov., Tampa, Florida, USA.

260. Djanaguiraman M, **Prasad PVV**, Mariamuthu M, Reddy UK. 2013. Differential response of sorghum genotypes to high temperature stress is mediated through oxidative damage in leaves and pollen grains. *Annual Meeting of ASA-CSSA-SSSA*, 3 – 6 Nov., Tampa, Florida, USA.
261. Mahama GY, Roozeboom KL, Mengel DB, **Prasad PVV**. 2013. Effect of double cropped soybean and sorghum on yield and biomass accumulation of cover crops in Kansas. *Annual Meeting of ASA-CSSA-SSSA*, 3 – 6 Nov., Tampa, Florida, USA.
262. **Prasad PVV**, Reddy KR, Djanaguiraman M. 2013. Response of soybean and cotton to climate change factors – carbon dioxide, temperature and water. *Annual Meeting of ASA-CSSA-SSSA*, 3 – 6 Nov., Tampa, Florida, USA.
263. **Prasad PVV**, Naab JB, Kanton RAL. 2013. Sustainable intensification and climate resilient dryland cropping systems for sub-Saharan Africa: Case study of Ghana. *Annual Meeting of ASA-CSSA-SSSA*, 3 – 6 Nov., Tampa, Florida, USA.
264. Shroyer K, Shroyer JP, **Prasad PVV**. 2013. Using low seeding rates to simulate thin wheat stands to make replanting decisions. *Annual Meeting of ASA-CSSA-SSSA*, 3 – 6 Nov., Tampa, Florida, USA.
265. Shroyer K, **Prasad PVV**. 2013. Estimation of yield and physiological status of spring and winter wheat using canopy spectral reflectance. *Annual Meeting of ASA-CSSA-SSSA*, 3 – 6 Nov., Tampa, Florida, USA.
266. Shroyer K, **Prasad PVV**. 2013. The effect of high temperature stress on the seed filling rate and duration of three winter wheat (*Triticum aestivum* L.) cultivars [Armour, Jagger and Karl 92]. *Annual Meeting of ASA-CSSA-SSSA*, 3 – 6 Nov., Tampa, Florida, USA.
267. Senthold A, Ewert F,.....**Prasad PVV** et al. 2013. AgMIP wheat multi-model comparison with hot serial cereal experiment. *Annual Meeting of ASA-CSSA-SSSA*, 3 – 6 Nov., Tampa, Florida, USA.
268. **Prasad PVV**, Djanaguiraman M. 2013. Impact of season-long and short-episodes of high temperature stress on growth and development of wheat. *Proceedings of the Workshop "Modeling Wheat Response to High Temperature"*, 19-21 June, CIMMYT, El Batan, Mexico.
269. **Prasad PVV**, Naab JB, Doumbia MD, Seyni S, Traore H, Barro A. 2012. Effects of soil and water management practices on crop productivity in West Africa. *Annual Meeting of ASA-CSSA-SSSA*, 21 – 24 Oct., Cincinnati, Ohio, USA.
270. **Prasad PVV**, Naab JB, Doumbia MD. 2012. Improving soil quality and crop productivity through conservation agriculture in West Africa. *Annual Meeting of ASA-CSSA-SSSA*, 21 – 24 Oct., Cincinnati, Ohio, USA.
271. Doumbia MD, Kone M, Traore S, Samake O, **Prasad PVV**, Dalton T, Naab JB. 2012. Improving soil quality and crop productivity through conservation agriculture in Mali, West Africa. *Annual Meeting of ASA-CSSA-SSSA*, 21 – 24 Oct., Cincinnati, Ohio, USA.
272. Talukdar S, Adeyanju A, Poland J, **Prasad PVV**, Fritz AK 2012. Cytoplasmic effect of wheat for high temperature tolerance. *Annual Meeting of ASA-CSSA-SSSA*, 21 – 24 Oct., Cincinnati, Ohio, USA.
273. Narayanan S, **Prasad PVV**, Gill K, Gill BS. 2012. Genetic variability in root traits among spring wheat genotypes. *Annual Meeting of ASA-CSSA-SSSA*, 21 – 24 Oct., Cincinnati, Ohio, USA.
274. Paul G, Gowda P, **Prasad PVV**, Howell T, Staggenborg SA, Colaizzi P, Hutchinson S, Aiken R. 2012. Testing of two-source energy balance model under irrigated and dryland conditions using high resolution airborne imagery. *Annual Meeting of ASA-CSSA-SSSA*, 21 – 24 Oct., Cincinnati, Ohio, USA.
275. Paul G, Gowda P, **Prasad PVV**, Howell T, Staggenborg SA, Colaizzi P, Hutchinson S. 2012. An intercomparison study of TSM, SEBS and SEBALS using high-resolution imagery and lysimetric data. *Annual Meeting of ASA-CSSA-SSSA*, 21 – 24 Oct., Cincinnati, Ohio, USA.
276. Mahama G, **Prasad PVV**, Mengel DB, Tesso T. 2012. Genotypic differences in yield and nitrogen use efficiency of sorghum. *Annual Meeting of ASA-CSSA-SSSA*, 21 – 24 Oct., Cincinnati, Ohio, USA.
277. Keep N, Schapaugh WT, **Prasad PVV**, Boyer JE. 2012. Characterization of physiological parameters in soybean with genetic improvement in seed yield. *Annual Meeting of ASA-CSSA-SSSA*, 21 – 24 Oct., Cincinnati, Ohio, USA.
278. Pradhan G, **Prasad PVV**, Gill BS. 2012. Evaluation of wheat chromosome translocation lines for high temperature stress tolerance at grain filling stage. *Annual Meeting of ASA-CSSA-SSSA*, 21 – 24 Oct., Cincinnati, Ohio, USA.
279. **Prasad PVV**, Djanaguiraman M. 2011. Effect of high temperature stress on pollen viability: role of reactive oxygen species and phospholipids. *Annual Meeting of ASA-CSSA-SSSA*, 16 – 19 Oct., San

- Antonio, Texas, USA.
280. **Prasad PVV**, Naab JB, Doumbia MD, Dalton TD. 2011. Conservation agricultural practices in West Africa: challenges and opportunities. *International Conference on Sustainable Agriculture and Food Security: Challenges and Opportunities*, 27 – 28 Sep., Bandung, Indonesia.
 281. **Prasad PVV**. 2011. Impact of climate change and climate variability on productivity of food grain crops. *Asian Crop Science Association Conference*, 27 – 30 Sep., Bogor, Indonesia.
 282. **Prasad PVV**, Djanaguiraman M. 2011. Effects of salinity stress and 1-MCP on photosynthesis, shoot and root growth of rice. *Plant Growth Regulation Society of America Conference*, 24 – 28 July, Chicago, Illinois, USA.
 283. **Prasad PVV**, Djanaguiraman M. 2011. Effect of high temperature stress on pollen viability: role phospholipids. *Functional Genomics Consortium Spring Symposium*, 9 – 10 Mar., Manhattan, Kansas, USA.
 284. Naab JB, **Prasad PVV**. 2011. Influence of conservation agricultural practices on maize and soybean yield in Upper West region of Ghana. *Proceedings of Second International Conservation Agriculture Workshop and Conference in Southeast Asia*, 4 – 7 July 2011, Phnom Penh, Cambodia.
 285. Yahaya I, Hashim I, Naab JB, **Prasad PVV**, Dalton TD. 2011. Knowledge of households, cropping systems, perceptions on conservation agricultural practices in Upper West region of Ghana. *Proceedings of Second International Conservation Agriculture Workshop and Conference in Southeast Asia*, 4 – 7 July 2011, Phnom Penh, Cambodia.
 286. Narayanan S, Aiken RM, **Prasad PVV**, Xin Z, Kofoid KD, Yu J. 2011. Allometric model to quantify sorghum canopy formation. *Annual Meeting of ASA-CSSA-SSSA*, 16 – 19 Oct., San Antonio, Texas, USA.
 287. Narayanan S, Aiken RM, Xin Z, **Prasad PVV**, Kofoid KD, Yu J. 2011. Canopy architecture and transpiration efficiency in sorghum. *Keystone Symposium: Plant Abiotic Stress Tolerance Mechanisms, Water and Global Agriculture*, 17 – 22 Jan., Keystone, CO, USA.
 288. Paul G, **Prasad PVV**, Staggenborg SA, Gowda PH. 2011. Assessing impact of climate change and crop production in Ogallala region using regional climate data. *Third NARCCAP Users Meeting*, 7 – April, Boulder, Colorado, USA.
 289. Paul G, Gowda PH, **Prasad PVV**, Howell TA, Staggenborg SA. 2011. Evaluating surface energy balance system (SEBS) using aircraft data collected during BEARX07. *Proceedings of World Environmental and Water Resources Congress*, 22 – 26 May, Palm Spring, California, USA.
 290. Paul G, Gowda PH, **Prasad PVV**, Howell TA, Staggenborg SA. 2011. Automated methodology for selecting hot and cold pixel for remote sensing based evapotranspiration mapping. *Annual Meeting of ASA-CSSA-SSSA*, 16 – 19 Oct., San Antonio, Texas, USA.
 291. Paul G, Gowda PH, **Prasad PVV**, Howell TA, Staggenborg SA, Colaizzi PD. 2011. METRICTM evaluation with high resolution airborne sensor data from BEAREX08. *American Water Resource Association Annual Water Resource Conference*, 7 – 10 Nov., Albuquerque, New Mexico, USA.
 292. Pradhan GP, **Prasad PVV**, Fritz AK, Kirkham MB, Gill BS. 2011. Response of Aegilops species to drought stress during reproductive stages of development. *Annual Meeting of ASA-CSSA-SSSA*, 16 – 19 Oct., San Antonio, Texas, USA.
 293. Pradhan GP, **Prasad PVV**, Fritz AK, Kirkham MB, Gill BS. 2011. High temperature tolerance in Aegilops species and its potential transfer to wheat. *Annual Meeting of ASA-CSSA-SSSA*, 16 – 19 Oct., San Antonio, Texas, USA.
 294. Mahama G, **Prasad PVV**, Mengel DB, Staggenborg SA, Tesso T. 2011. Nitrogen use efficiency in grain sorghum genotypes. *Annual Meeting of ASA-CSSA-SSSA*, 16 – 19 Oct., San Antonio, Texas, USA.
 295. Maiga A, Roozeboom K, **Prasad PVV**. 2011. Effect of planting practices on light interception, growth and yield of grain sorghum. *Annual Meeting of ASA-CSSA-SSSA*, 16 – 19 Oct., San Antonio, TX, USA.
 296. Mutava RN, **Prasad PVV**. 2011. Screening sorghum genotypes for canopy temperature using field based infra-red sensors. *Annual Meeting of ASA-CSSA-SSSA*, 16 – 19 Oct., San Antonio, Texas, USA.
 297. Mutava RN, **Prasad PVV**, Staggenborg SA, Yu J, Roozeboom KL. 2011. Evaluating variability in water use efficiency of some selected genotypes. *Annual Meeting of ASA-CSSA-SSSA*, 16 – 19 Oct., San Antonio, Texas, USA.
 298. Mutava RN, **Prasad PVV**, Staggenborg SA, Yu J, Roozeboom KL. 2011. Influence of drought stress on root growth and development of sorghum genotypes. *Sorghum Improvement Conference of North*

- America, 13 – 14 Sep., Stillwater, Oklahoma, USA.
299. Keep NR, Schapaugh WT, **Prasad PVV**, Boyer JE. 2011. Characterization of physiological parameters in soybean with genetic improvement in seed yield. *Annual Meeting of ASA – CSSA-SSSA*, 16 – 19 Oct., San Antonio, Texas, USA.
 300. **Prasad PVV**, Boote KJ, Sinclair TR, Kirkham MB. 2010. Role of crop physiology in understanding mechanisms of yield formation under water and heat stress conditions. *Annual Meeting of American Society of Agronomy*, 31 Oct. – 03 Nov., Long Beach, California, USA.
 301. **Prasad PVV**. 2010. High temperature in sorghum – what are the possibilities, what do we know? *Australian Summer Grains Conference*, 21 – 24 June, Gold Coast, Queensland, Australia.
 302. **Prasad PVV**, Djanaguiraman M. 2010. High temperature tolerance in sorghum. *27th Sorghum Research and Utilization Conference and the Great Plains Sorghum Research Conference*, 11 – 12 August, University of Nebraska-Lincoln Agricultural Research and Development Center, Mead, Nebraska, USA.
 303. Mutava RN, **Prasad PVV**, Yu J, Kofoed KD, Tuinstra MR. 2010. Characterization of diverse sorghum genotypes for traits related to drought tolerance. *Annual Meeting of American Society of Agronomy*, 31 Oct. – 03 Nov., Long Beach, California, USA.
 304. Mutava RN, **Prasad PVV**, Roozeboom KL, Yu J, Staggenborg SA, Nippert J. 2010. Evaluating the effects of water stress on growth and development of grain sorghum roots. *Annual Meeting of American Society of Agronomy*, 31 Oct. – 03 Nov., Long Beach, California, USA.
 305. Mutava RN, **Prasad PVV**, Yu J. 2010. Response of sorghum roots to pre-flowering drought stress. *27th Sorghum Research and Utilization Conference and the Great Plains Sorghum Research Conference*, 11 – 12 August, University of Nebraska-Lincoln Agricultural Research and Development Center, Mead, Nebraska, USA.
 306. Pradhan GP, **Prasad PVV**, Gill BS, Fritz AK, Kirkham MB. 2010. The independent and combined effects of drought and high temperature stress on physiological, growth and yield traits of synthetic wheat. *Annual Meeting of American Society of Agronomy*, 31 Oct. – 03 Nov., Long Beach, California, USA.
 307. Djanaguiraman M, **Prasad PVV**, Al-Khatib. 2010. Effect of selenium on leaf senescence and yield of sorghum grown under high temperature stress. *27th Sorghum Research and Utilization Conference and the Great Plains Sorghum Research Conference*, 11 – 12 August, University of Nebraska-Lincoln Agricultural Research and Development Center, Mead, Nebraska, USA.
 308. Djanaguiraman M, **Prasad PVV**, Boyle DL, Schapaugh WT. 2010. Effects of heat stress during flowering on physiological and ultra-structural changes in soybean leaves and pollen grains. *Annual Meeting of American Society of Agronomy*, 31 Oct. – 03 Nov., Long Beach, California, USA.
 309. Djanaguiraman M, **Prasad PVV**, Boyle DL. 2010. Role of high nighttime temperatures and ethylene production on oxidative damage, lipid and sugar profiles in soybean pollen. *Annual Meeting of American Society of Agronomy*, 31 Oct. – 03 Nov., Long Beach, California, USA.
 310. Opole R, **Prasad PVV**, Staggenborg SA, Roozeboom KL. 2010. Effect of seeding rate and nitrogen fertilizer application rate on field performance of finger millet. *Annual Meeting of American Society of Agronomy*, 31 Oct. – 03 Nov., Long Beach, California, USA.
 311. Opole R, **Prasad PVV**, Staggenborg SA, Roozeboom KL, Kirkham MB. 2010. Growth and management of finger millet in Kansas. *27th Sorghum Research and Utilization Conference and the Great Plains Sorghum Research Conference*, 11 – 12 August, University of Nebraska-Lincoln Agricultural Research and Development Center, Mead, Nebraska, USA.
 312. Paul G, **Prasad PVV**, Staggenborg SA, Gowda PH. 2010. Climate change impact assessment and mitigation strategies: crop modeling using regional climate model data. *Kansas NSF EPSCoR State wide Conference; Energy, Climate, and the Future: The Role of Kansas*, Oct. 4, University of Kansas, Lawrence, Kansas, USA.
 313. Paul G, Gowda PH, **Prasad PVV**, Howell TA, Staggenborg SA. 2010. An evaluation of SEBAL algorithm using high resolution aircraft data acquired during BEAREX07. *American Geophysical Union Fall Meeting*, 13 – 17 December, San Francisco, California, USA.
 314. Subramanian SK, **Prasad PVV**, Staggenborg SA, Yu J, Vadlani PV. 2010. Effect of different harvest time on sugar and juice yield of sweet sorghum. *Center for Sustainable Energy Annual Meeting*, 6 May, Kansas State University, Manhattan, Kansas, USA.
 315. Subramanian SK, **Prasad PVV**, Staggenborg SA, Yu J, Vadlani PV. 2010. Effect of different harvest time on sugar and juice yield of sweet sorghum. *27th Sorghum Research and Utilization Conference and the Great Plains Sorghum Research Conference*, 11 – 12 August, University of Nebraska-Lincoln

- Agricultural Research and Development Center, Mead, Nebraska, USA.
316. Narayanan S, Aiken RM, Xin Z, **Prasad PVV**, Kofoid KD, Yu J. 2010. Canopy architecture and transpiration efficiency in grain sorghum. *27th Sorghum Research and Utilization Conference and the Great Plains Sorghum Research Conference*, 11 – 12 August, University of Nebraska-Lincoln Agricultural Research and Development Center, Mead, Nebraska, USA.
 317. Narayanan S, Aiken RM, Xin Z, **Prasad PVV**, Kofoid KD, Yu J. 2010. Canopy architecture and transpiration efficiency in grain sorghum. *Annual Meeting of American Society of Agronomy*, 31 Oct. – 03 Nov., Long Beach, California, USA.
 318. **Prasad PVV**, Pisipati SR, Momcilovic I, Ristic Z. 2009. Interaction of high temperature and drought stress on physiology and plant yield of spring wheat. *Annual Meeting of American Society of Plant Biology*, 18 – 22 July, Honolulu, Hawaii, USA.
 319. Djanaguiraman M, **Prasad PVV**, Al-Khatib K. 2009. Effect of selenium on leaf senescence of sorghum grown under high temperature stress. *Annual Meeting of American Society of Agronomy*, 1 – 5 November, Pittsburgh, Pennsylvania, USA.
 320. Djanaguiraman M, **Prasad PVV**, Al-Khatib K. 2009. Effect of 1-Methyl-cyclopropene on soybean flower and pod abortion under heat Stress. *International Symposium on Plant Hormone Ethylene*, June 21 – 25, 2009. Ithaca, New York, USA.
 321. Mutava RN, **Prasad PVV**, Kofoid KD, Tuinstra MR, Yu J. 2009. Evaluating of genetic resources for drought tolerance in grain sorghum. *Great Plains Sorghum Conference*, August 11 – 12, 2009, Amarillo, Texas, USA.
 322. Subramanian S, **Prasad PVV**, Staggenborg SA, Yu J, Vadlani PV. 2009. Effect of water stress during early seed-filling (milking) on sugar and juice volume of sweet sorghum genotypes in controlled environments. *Great Plains Sorghum Conference*, August 11 – 12, 2009, Amarillo, Texas, USA.
 323. Subramanian S, **Prasad PVV**, Staggenborg SA, Yu J, Vadlani PV. 2009. Evaluation of sweet sorghum germplasm for traits associated with improved sugar yield. *Center for Sustainability Energy Annual Conference*, May 05, 2009, Manhattan, Kansas, USA.
 324. Sukumaran S, Wu Y, Mutava RN, **Prasad PVV**, Bai G, Tuinstra MR, Tesso T, Yu J. 2009. Genomic mapping for drought tolerance in sorghum. *Annual Meeting of American Society of Agronomy*, 1 – 5 November, Pittsburgh, Pennsylvania, USA.
 325. Boote KJ, Allen LH Jr, **Prasad PVV**. 2009. Testing effects of climate change in crop models. *Annual Meeting of American Society of Agronomy*, 1 – 5 November, Pittsburgh, Pennsylvania, USA.
 326. **Prasad PVV**, Vadlani PV, Najundswamy AK, Madl RL. 2008. Carbohydrate and ethanol production efficiency of grain sorghum. *Annual Meeting of American Society of Agronomy*, 3 – 9 October, Houston, Texas, USA.
 327. **Prasad PVV**, Stamm M, Godsey C. 2008. Impact of high temperature and drought stress on physiology and re-growth of winter canola. *Annual Meeting of American Society of Agronomy*, 3 – 9 October, Houston, Texas, USA.
 328. Gowda PH, Howell TA, **Prasad PVV**. 2008. Finger millet: An alternative forage crop for Southern High Plains. *Annual Meeting of American Society of Agronomy*, 3 – 9 October, Houston, Texas, USA.
 329. Allen LH Jr., Boote KJ, **Prasad PVV**. 2008. Impact of a 4.5-degree C increase of temperature and elevated carbon dioxide on MG II, III and IV cultivars of soybean. *Annual Meeting of American Society of Agronomy*, 3 – 9 October, Houston, Texas, USA.
 330. **Prasad PVV**, Pisipati S, Nagiseti G, Kirkham MB, Reddi LN. 2007. Application of metal oxide nanoparticles for phytostabilization of heavy metals in soil. Abstracts. *Annual Meeting of American Society of Agronomy*, 4 – 8 November, New Orleans, Louisiana, USA.
 331. **Prasad PVV**, Mutava R, Pisipati S, Tuinstra MR. 2007. Sensitivity of grain sorghum to short episodes of drought and/or high temperature stress. Abstracts. *Annual Meeting of American Society of Agronomy*, 4 – 8 November, New Orleans, Louisiana, USA.
 332. Mutava R, **Prasad PVV**, Tuinstra MR. 2007. Feasibility of using a chlorophyll fluorescence assay as a tool for screening the stay green trait in sorghum. Abstracts. *Annual Meeting of American Society of Agronomy*, 4 – 8 November, New Orleans, Louisiana, USA.
 333. Mutava R, **Prasad PVV**, Vos RJ. 2007. Genetic variation in germination rates and percentages of grain amaranth in response to temperature. Abstracts. *Annual Meeting of American Society of Agronomy*, 4 – 8 November, New Orleans, Louisiana, USA.

334. Pisipati S, **Prasad PVV**, Kirkham MB, Rice CW. 2007. Influence of metal oxide nanoparticles on physiology, growth and yield of wheat. Abstracts. *Annual Meeting of American Society of Agronomy*, 4 – 8 November, New Orleans, Louisiana, USA.
335. Pisipati S, **Prasad PVV**, Fritz AK, Ristic Z. 2007. Responses of spring wheat to high nighttime temperature during reproductive development. Abstracts. *Annual Meeting of American Society of Agronomy*, 4 – 8 November, New Orleans, Louisiana, USA.
336. Subramanian S, **Prasad PVV**, Jeannotte R, Tuinstra MR. 2007. Physiological and biochemical responses of grain sorghum to foliar application of Glycine betaine under drought stress. Abstracts. *Annual Meeting of American Society of Agronomy*, 4 – 8 November, New Orleans, Louisiana, USA.
337. Walker L, Schapaugh W, **Prasad PVV**. 2007. Genetic variability in heat tolerance of pollen germination in soybean. Abstracts. *Annual Meeting of American Society of Agronomy*, 4 – 8 November, New Orleans, Louisiana, USA.
338. White P, Burton C, **Prasad PVV**, Rice CW. 2007. Effects of MgO and CuO nanoparticles on soil microbes and N cycling. Abstracts. *Annual Meeting of American Society of Agronomy*, 4 – 8 November, New Orleans, Louisiana, USA.
339. Indraratne SP, Pierzynski GM, Baker L, **Prasad PVV**. 2007. Stabilization of heavy metals using nanoscale Fe-, Al- and Ti-Oxides. Abstracts. *Annual Meeting of American Society of Agronomy*, 4 – 8 November, New Orleans, Louisiana, USA.
340. Aiken RM, Xin Z, Kofoed KD, Kirkham MB, **Prasad PVV**. 2007. Parsing components of transpiration efficiency in sorghum. Abstracts. *Annual Meeting of American Society of Agronomy*, 4 – 8 November, New Orleans, Louisiana, USA.
341. White J, Hoogenboom G, Huda AKS, Kimball BA, Ottman M, **Prasad PVV**, Rosenthal W, Sanon M, Staggenborg SA, Traore S, Vaksman M, Vanderlip RL. 2007. Recent advances in CMS-CERES Sorghum model. Abstracts. *Annual Meeting of American Society of Agronomy*, 4 – 8 November, New Orleans, Louisiana, USA.
342. **Prasad PVV**, Pisipati S, Nagiseti G, Kirkham MB, Reddi LN, Mulukutla R. 2007. Use of nanoparticles for phytoremediation of heavy metal contaminated soils. *International Conference on Nanotechnology: Science and Application – Nano Tech Insight*, 10 – 17 March 2007, Luxor, Egypt.
343. **Prasad PVV**, Boote KJ, Allen LH Jr., Thomas, JMG. 2006. Screening rice cultivars for high temperature tolerance. *Annual Meeting of American Society of Agronomy*, 12 – 16 Nov., Indianapolis, Indiana, USA.
344. Jain M, Funk A, **Prasad PVV**, Allen LH Jr, Boote KJ, Chourey PS. 2006. Impact of high temperature stress on carbohydrate metabolism in developing microspores of grain sorghum. *Annual Meeting of American Society of Agronomy*, 12 – 16 November, Indianapolis, Indiana, USA.
345. Naab JB, Boote KJ, **Prasad PVV**, Jones JW. 2006. Influence of fungicide and sowing density on growth and yield of two peanut cultivars. *Annual Meeting of American Peanut Research and Education Society*, 11 – 14 July, Savannah, Georgia, USA.
346. Allen LH Jr., Boote KJ, **Prasad PVV**, Thomas JMG. 2006. Searching for seed yield tolerance of soybean cultivars to high temperatures. *Annual Meeting of American Society of Agronomy*, 12 – 16 November, Indianapolis, Indiana, USA.
347. Kakani VG, Boote KJ, **Prasad PVV**, Craufurd PQ, Wheeler TR, Rao RCN. 2006. Using CROPGRO to simulate impact of high temperature stress on peanut. *Annual Meeting of American Society of Agronomy*, 12 – 16 November, Indianapolis, Indiana, USA.
348. Rozenboom C, Fritz AK, Ristic Z, **Prasad PVV**. 2006. Transferring heat tolerance in common bread wheat: characterizing the response of heat stress among contrasting RILs. *Annual Meeting of American Society of Agronomy*, 12 – 16 November, Indianapolis, Indiana, USA.
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.