# MURALI K. DARAPUNENI

Assistant Professor- Semi-Arid Cropping Systems
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<b>EDUCATION</b>

Texas A&M University, College Station, TX., USA
West Texas A&M University, Canyon, TX., USA
Acharya N. G. Ranga Agricultural University, Hyderabad, Andhra Pradesh, India August, 2005 Bachelor of Science (Horticulture)
WORK EXPERIENCE
New Mexico State University, ASC-Tucumcari, NM., USAJuly 2014-Current Assistant Professor of Semi-Arid Cropping Systems
West Texas A&M University, Canyon, Texas
University of Nebraska, PHREC, Scottsbluff, NE., USA
Texas A&M University, College Station, TX., USA
West Texas A&M University, Canyon, TX., USA

#### RESEARCH INTERESTS

Systems approach with an emphasis on efficient water saving strategies and sustainable crop production while maintaining the environmental quality in the semi-arid environments. Scope and applications of my research include modifying the existing cropping systems by introducing cover crops, leguminous, and biofuel crops to investigate the effects on water use efficiency, nutrient recycling, residue management, and soil quality.

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- 1. Zhang, J., G. Martinez, M.K. Darapuneni, A. Abdelraheem, J. McCarty, J. Jenkins. 2018. Evaluation of a multi-parent advanced generation inter-cross (MAGIC) introgressed line population for Verticillium wilt resistance in Upland cotton. Euphytica. 214: 197. https://doi.org/10.1007/s10681-018-2278-0
- **2.** Bohara, H., S. Dodla, J.J. Wang, **M.K. Darapuneni**, M. Kongchum, D.D. Fromme, and D. Harrell. 2018. Impacts of N-stabilizers and biochar on nitrogen losses, nitrogen phytoavailability, and cotton yield in poultry litter-fertilized soils. Agron. J. 0. doi:10.2134/agronj2018.01.0007.
- **3**. Hergert, G.W., R.A. Nielsen, J.A. Schild, R.L. Hawley, and **M.K. Darapuneni**. 2018. Rowapplied iron chelate for correcting iron deficiency chlorosis in dry bean. Agron. J. Accepted 08/13/2018. doi:10.2134/agronj2018.02.0079.
- **4. Darapuneni, M.K.**, S. Angadi, M.R. Umesh, F.E. Contreras-Govea, K.S. Annadurai, K., S.H. Begna, M.A. Marsalis, N.A. Cole, P.H. Gowda, G.R. Hagevoort, and L.M. Lauriault. 2018. Canopy development of annual legumes and forage sorghum intercrops and its relation to dry matter accumulation. Agron. J. 110:1–11
- **5**. Mello, S.C., D.D. Neto, **M.K. Darapuneni**, and K. Pavuluri. 2018. Response of tomato to polyhalite as multi nutrient fertilizer in south-east Brazil. J. Plant Nutr. Date Accepted: February 7, 2018.
- **6.** Wen, Y., **M.K. Darapuneni**, D. Chen, G. Piccinni, T. Cothren, D. Leskovar, K. Pavuluri, D. Rowland. 2018. The phenotypical responses of cotton and their relation to lint yield under traditional and regulated deficit irrigation schemes in semi-arid environments. Agron. J. 110:1339-1353.
- 7. Hergert, G.W., M.K. Darapuneni, A.M. Aqeel, R.G. Wilson, R.M. Harveson, J.D. Bradshaw, and R.A. Nielsen. 2017. Agronomic potential of using precipitated calcium carbonate on early plant growth and soil quality in the Intermountain West greenhouse studies. J. Sugar Beet Res. 54: 35-49.
- **8. Darapuneni, M. K.**, G.D. Morgan, B.L. McKay, S.K. Dodla, and L.M. Lauriault. 2017. Selecting cool-season forage grasses for their yield, seasonal yield distribution, and nutritive value in the Blacklands and Rolling Plains ecoregions of Texas. Crop Forage Turfgrass Manage. 3:2017-04-0031.
- **9. Darapuneni, M. K.**, S.V. Angadi, S. Begna, L.M. Lauriault, M.R. Umesh, R. Kirksey, and M. Marsalis. 2017. Grain sorghum water use efficiency and yield are impacted by tillage management systems, stubble height, and crop rotation. Crop Forage Turfgrass Manage. 3:2016-09-0062.

- **10**. **Darapuneni, M. K.**, G.D. Morgan, O.J. Shaffer, and S. Dodla. 2016. Impact of planting date and seeding rate on forage and grain yields of dual-purpose wheat in central Texas. Crop Forage Turfgrass Manage. 2:2016-06-0045.
- **11**. **Darapuneni, M. K**., G. D. Morgan, and O. J. Shaffer. 2016. Effect of planting date on distribution of seasonal forage yields in dual-purpose wheat, oats, and ryegrass crops. Crop Forage Turfgrass Manage. 2:2015-0205.
- **12**. **Darapuneni**, **M. K**., G.D. Morgan, A. Ibrahim, and Duncan, R. 2015. Evaluation of flax genotypes for cold tolerance and yield in south-east Texas. J. Agron. Crop Sci. 201:128-137.
- **13. Darapuneni, M. K.**, G. Morgan, A. Ibrahim, R. Duncan, B. Bean, and J. Grichar. 2014. The evaluation of cool-season crops for yield and adaptation in Texas: An approach for Selection of efficient biofuel feedstock. Int. J. of Agron. Agric. Res. 5:62-74.
- **14**. **Darapuneni, M.K.,** G.D. Morgan, A.M.H. Ibrahim, and R.W. Duncan. 2014. Effect of vernalization and photoperiod on flax flowering time. Euphytica. 195: 279-285.
- **15**. **Murali K. Darapuneni.,** G.D. Morgan, A.M.H. Ibrahim, and R.W. Duncan. 2014. Association of flax seed yield and its components in Southeast Texas using path coefficient and biplot analyses. J. Crop Improv. 28:1–17.
- **16**. **M. Darapuneni.**, B. A. Stewart, D. B. Parker, C. A. Robinson, A. J. Megel, R. E. DeOtte, Jr. 2009. Agronomic evaluation of ashes produced from combusting beef cattle manure for an energy source at an ethanol production facility. Appl. Eng. Agric. 25: 895-904.

# In Review and Preparation

- 1. **Darapuneni, M.K.,** G.W. Hergert, A.M. Aqeel, R.G. Wilson, R.M. Harveson, J.D. Bradshaw, and R.A. Nielsen. 2018. Agronomic utilization of using precipitated calcium carbonate-effect of PCC on sugar beet root aphid control and herbicide response of kochia grown on PCC piles. Submitted to J. Sugar Beet Res.
- 2. Bohara, H., S. Dodla, M. Selim, **M.K. Darapuneni**, J.J. Wang, and B.S. Acharya. 2018. Influence of poultry litter and biochar on soil water dynamics and nutrient leaching. Submitted to Soil & Tillage Research.
- 3. **Darapuneni, M.K.**, O.J. Idowu, L.M. Lauriault, S. Dodla, K. Pavuluri, and S. Angadi. Tillage and nitrogen rate effects on corn production and residual soil characteristics. 2018. Submitted to Agron. J.
- 4. **Darapuneni, M.K.**, O.J. Idowu, L.M. Lauriault, S. Dodla, and S. Angadi. Temporal variations of plant and soil characteristics in dryland sorghum following single application of cattle manure under strip tillage management. To be submitted to Agron. J.

- 5. Umesh, M.R., S. Angadi, S. Begna, L.M. Lauriault, **M. Darapuneni**, M. Marsalis, and P. Gowda. 2018. Dry matter accumulation, radiation use efficiency and canopy characters of forage sorghum, corn and annual legumes intercropping. Submitted to Crop Sci.
- 6. Montgomery, R., L. Grant, **M.K. Darapuneni**, and R.C. Pratt. Identification of salinity tolerant southwestern maize for use in forage cultivar breeding. To be submitted to Crop Sci.
- 7. **Darapuneni, M.K.** and L.M. Lauriault. Effect of herbicide application and tillage for termination of alflafa on subsequent crop yield and quality. To be submitted to Crop, Forage, and Turfgrass Manage.
- 8. Sultana, S., J. Idowu, **M.K. Darapuneni**, L. Beck, and R. Steiner. Reduced tillage for two cropping systems in the arid and semi-arid desert southwest. To be submitted to J. Cotton. Sci.
- 9. **Darapuneni, M.K.,** B. Sarihan, J. Idowu, D. DuBois, K. Grover, and S. Sonogo. Impacts of summer cover crops on wind erosion control. Journal yet to be determined.
- 10. **Darapuneni, M.K.,** B. Sarihan, J. Idowu, D. DuBois, K. Grover, and S. Sonogo. Impacts of winter cover crops on wind erosion control. Journal yet to be determined.
- 11. Crookston, B., B. Blaser, M. Rhodes, and **M.K. Darapuneni**. Pearl millet forage production and water use in the Texas High Plains. To be submitted to Agron. J.
- 12. Machicek, J., B. Blaser, M. Rhodes, and **M.K. Darapuneni**. Evaluating forage sorghum and pearl millet for forage production and quality in the Texas High Plains. To be submitted to Agron. J.
- 13. Acharya, B.S., S. Dodla, H. Bohara, and **M.K. Darapuneni**. Fall cover crops effect on selected soil properties and soybean yield under different tillage systems. To be submitted to Agrosystems, Geosciences & Environment.

#### EXTENSION AND CONFERENCE PROCEEDING PUBLICATIONS

- 1. Sultana, S\*., J. Idowu, J., **M.K. Darapuneni**, J. Zhang, and M. Omer. 2018. Reduced tillage effects on cotton growth and yield in New Mexico. Beltwide Cotton Conferences Proceedings, San Antonio, TX, January 3-5, 2018. Date Accepted January 15, 2018.
- 2. Idowu, O.J., S. Angadi, M.K. Darapuneni, and R. Ghimire. 2017. Reducing Tillage in Arid and Semi-arid Cropping Systems: An Overview. NMSU Extension Publication. (vol. Guide A-52, pp. 1-8). http://aces.nmsu.edu/pubs/\_a/A152.pdf.

- 3. Hergert, G.W., K.H. Jenkins, J. Margheim, A. Pavlista, R. Nielsen, **M. Darapuneni**. 2014. Effect of Irrigation Allocation on Perennial Grass Production and Quality. Nebraska beef report MP 99:53-55.
- 4. Hergert, G.W, M. K. Darapuneni, R. H. Wilson, R. M. Harveson, J. D. Bradshaw and R. A. Nielsen. 2013. Agronomic potential and limitations of using precipitated calcium carbonate. American Society of Sugar Beet Technologists Journal proceedings publication. DOI: 10.5274/ASSBT.2013.7
- 5. Robert E DeOtte., B. A. Stewart, Anthony J Megel, **Murali Darapuneni**, Clay A Robinson, and David B Parker. 2010. Investigations into the Beneficial Uses of Ash from the Combustion of Manure from Beef Cattle Feedlots. International Symposium on Air Quality and Manure Management for Agriculture Proceedings, 13-16 September 2010, Dallas, Texas. ASABE Pub#711P0510cd.
- 6. R. E. DeOtte, Jr., B. A. Stewart, A. J. Megel, **M. Darapuneni**, C. A. Robinson, and D. B. Parker. 2009. Investigations into the Beneficial Uses of Ash from the Combustion of Manure from Beef Cattle Feedlots. West Texas A&M University, Canyon. Texas Animal Manure Management Issues 2009 Conference, Round Rock, Texas.

#### **GRANTS**

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## Funded projects since 2014

- 1. **Darapuneni, M. K.** (**PI**), and L.M. Lauriault. 2018. Alfalfa response to polyhalite in New Mexico. Sirius Minerals Plc. Award amount: \$34,500. November 25, 2017 October 31, 2019.
- 2. Idowu, J. (Co-PI), and **M.K. Darapuneni** (**Co-PI**). 2016. Reduced tillage effects on cotton and corn growth and yield in New Mexico. AES Graduate Research Award. AES-NMSU. Award amount: \$40,000.00. December 2016- December 2018.
- 3. **Darapuneni, M. K.** (**PI**), and B. Sarihan. 2016. Impacts of selected summer cover crops on wind erosion control cover crops. Turkish Government Graduate Support Funding. Award equivalent amount: \$35,000 (based on NMSU Employment & Compensation Services). January 2016- December 2018.
- 4. **Darapuneni, M. K.** (**PI).** 2017. Innovative cropping systems and management solutions to improve the water and nutrient use efficiency in the semi-arid environments of New Mexico. NIFA-USDA Hatch Funding. Award equivalent amount: \$15,000. January 2017- December 2022.

# Pending project funding

1. **Darapuneni, M.K. (PI).** 2018. Profiling summer annual crops for water use- crop selection decision for improving water use efficiency and productivity in the semi-arid wheat based cropping systems. Western SARE Professional+ Producer Grant. Total amount requested: \$49,560. May, 2019-Dec., 2020.

### Proposals written but not funded since 2014

- 1. **Darapuneni, M.K.** (**PI**), S. Angadi, O.J. Idowu, R.N. Acharya, and L.M. Lauriault. 2017. Water use profiles of winter and summer rotation/cover/opportune crops in semi-arid environments. IMPACT Mini Grant. Total amount requested: \$40,000. October 2017- October 2018.
- 2. **Darapuneni, M.K.** (**PI**), R. Ghimire, S. Angadi, O.J. Idowu, R.N. Acharya, L.M. Lauriault. P. Kirchar, and J. Lamb. 2017. Diversity in dryland winter wheat cropping systems to enhance productivity and sustainability. Western SARE Professional+ Producer Grant. Amount requested: \$100,000. September 2017-June 2019.
- 3. **Darapuneni, M.K.** (**PI**), S. Angadi, L.M. Lauriault. 2016. Water use efficiency, nitrogen dynamics, and yield potential of edible dry beans in a traditional winter wheat cropping system. USDA Specialty Crop Block Grant (through NMDA). Amount requested: \$82,500. May 2016- September 2017.
- 4. Shukla, M. K. (PI), **M.K. Darapuneni** (**Co-PI**), H. Wang, R. Ghimire, P. Xu, O.J. Idowu, B. Stringam, and F. Ward. 2016. Managing the salt to achieve local and transregional sustainability in water and food systems. National Science Foundation Track II. Research credit for Murali Darapuneni: 188,876. Total amount requested \$1,888,761. August 2016 July 2020.
- 5. Shukla, M. K. (PI), **M.K. Darapuneni** (**Co-PI**), K.C. Carroll, P. Xu, B.J. Schutte, G.K. Sims, O.J. Idowu, K. Grover, and S. Angadi, 2015. RII Track-2 FEC: Infrastructure development for enhancing arid and semi-arid systems (IDEAS) for food and water security. National Science Foundation. Amount requested \$5,946,223. September 2015 August 2019.
- 6. **Darapuneni, M. K. (PI),** S. Angadi, and L.M. Lauriault. 2014. Water use efficiency and nitrogen dynamics of various grain legume crops under semi-arid environments. CGIAR Consortium Office, France. Amount requested: \$101,371. October 2014 June 2015.

#### REPORTS AND NEWS PAPER ARTICLES

• Newspaper interview, NMSU Press, Tucumcari, NM, Kristie Garcia, 575-646-3007, pio@nmda.nmsu.edu.."*NMSU professor sets his sights on determining best dryland cropping system*". June 12, 2017. <a href="https://newscenter.nmsu.edu/Articles/view/12555/nmsu-professor-sets-his-sights-on-determining-best-dryland-cropping-system https://www.youtube.com/watch?v=SGi6uOJpOjg</a>

- Newspaper article, Darapuneni, M. K., Hansen, S. 2014. "Semi-arid cropping specialist joins Ag center staff". Quay county, New Mexico: Quay County Sun (September 24, 2014).
- Hergert, G.W., J. Margheim, A. Pavlista, K.H. Jenkins, R. Nielsen, G. Stone and M.K. Darapuneni. 2014. Water use and crop productivity of perennial grasses under limited to full irrigation in a semi-arid climate. High Plains Ag Lab Meeting-Report. 02/13/2014.

- Hergert, G.W., M.K. Darapuneni, R. Wilson, R. Harveson, J. Bradshaw, and R. Nielsen.
   2014. Agronomic potential and limitations of using precipitated calcium carbonate in the High Plains. Report to Western Sugar Cooperative. 01/14.
- Hergert, G.W., M.K. Darapuneni, R. Wilson, R. Harveson, J. Bradshaw and R. Nielsen. Agronomic potential and limitations of using precipitated calcium carbonate in the Western Sugar production region. Newspaper article in Farm and Ranch- Star Herald 12/15/2013.
- Hergert, G.W., M.K. Darapuneni, R. Wilson, R. Harveson, J. Bradshaw, and R. Nielsen.
   2013. Agronomic potential and limitations of using precipitated calcium carbonate in the High Plains. Report on project update to Western Sugar Cooperative. 01/13.

# RECENT ABSTRACTS, POSTERS, CONFRENCE, AND EXTENSION PRESENTATIONS

- 1. Bilgi, S., M.K. **Darapuneni, O.J.** Idowu, D. DuBois, and K. Grover. 2018. Impacts of selected summer cover crops on wind erosion control. In Culture, Climate, and Conservation.73rd SWCS International Annual Conference, Albuquerque, NM. Jul. 29- Aug. 1. #10.
- 2. Bilgi, S., M.K. **Darapuneni, O.J.** Idowu, D. DuBois, and K. Grover. 2018. Impacts of selected summer cover crops on wind erosion control. 2018 Western Society of Crop Science Annual Meeting, Laramie, WY June 19-20, 2018 (June 20, 2018).
- 3. Sultana, S\*., J. Idowu, J., **M.K. Darapuneni**, J. Zhang, and M. Omer. 2018. Effects of tillage methods on cotton growth and yield in New Mexico. 2018 Western Society of Crop Science Annual Meeting, Laramie, WY June 19-20, 2018 (June 20, 2018).
- 4. Sultana, S\*., J. Idowu, J., **M.K. Darapuneni,** J. Zhang, and M. Omer. 2018. Reduced tillage effects on cotton growth and yield in New Mexico. 2018 Beltwide Cotton Conference, San Antonio, TX, January 3-5, 2018 (January 4, 2018).
- 5. **Darapuneni, M. K.**, A. Cunningham, and L.M. Lauriault. 2017. Water use and yield potential of winter and summer alternate/cover crops. In SSSA Division-Soil and Water Management and Conservation: Managing Soils and Crops with Cover Crops. ASA, CSSA, SSSA International Annual Conference, Tampa, FL. Nov. 22-25. 105267- 605 (October 25, 2017).
- 6. Dodla, S.K., H. Bohara, J.J. Wang, and **M. K. Darapuneni**. 2017. Evaluation of nitrogen stabilizers on nitrogen use efficiency of poultry litter. In SSSA Division-Soil Fertility and Plant Nutrition: Nitrogen- Soil Fertility and Plant Nutrition. ASA, CSSA, SSSA International Annual Conference, Tampa, FL. Nov. 22-25. 34- 8 (October 23, 2017).
- 7. **Darapuneni, M. K.**, A. Cunningham, and L.M. Lauriault. 2017. Manure application in strip tillage: effects on grain sorghum yield, water use efficiency, and nutrient uptake under

- dryland cropping systems. In SSSA Division-Soil and Water Management and Conservation: Soil and Water Management and Conservation Oral. ASA, CSSA, SSSA International Annual Conference, Tampa, FL. Nov. 22-25. 128-1 (October 23, 2017).
- 8. Machicek, J., B. Blaser, M. Rhodes, and **M.K. Darapuneni.** 2017. Evaluating forage sorghum and pearl millet for forage production and quality in the Texas High Plains. C03 Crop Ecology, Management and Quality. ASA, CSSA, SSSA International Annual Conference, Tampa, FL. Nov. 22-25. 106901- 405 (October 24, 2017).
- 9. Crookston, B., B. Blaser, J. Machicek, M. Rhodes, and **M.K. Darapuneni**. 2017. Water use of pearl millet forage in response to cultural practice in the semiarid Southern Great Plains. C03 Crop Ecology, Management and Quality. ASA, CSSA, SSSA International Annual Conference, Tampa, FL. Nov. 22-25. 106960- 412 (October 24, 2017).
- 10. **Darapuneni, M. K.**, A. Cunningham, and L.M. Lauriault. 2016. Diversity in dryland winter wheat cropping systems. In ASA Section-Agronomic Production Systems: Semiarid Cropping Systems. ASA, CSSA, SSSA International Annual Conference, Phoenix, AZ. Nov. 6-9. 99915- 320-732 (November 8, 2016).
- 11. **Darapuneni, M. K.**, A. Cunningham, and L.M. Lauriault. 2016. Manure application in strip tillage to improve resource use efficiency under dryland cropping systems. In SSSA Division-Soil and Water Management and Conservation: Soil and Water Management Conservation Oral III. ASA, CSSA, SSSA International Annual Conference, Phoenix, AZ. Nov. 6-9. 117- 12 (November 7, 2016).
- 12. **Darapuneni, M. K.** and L.M. Lauriault. 2016. Crop diversity in winter wheat cropping systems. 2016 Western Society of Crop Science Annual Meetings, Albuquerque, NM. July 12-13. (July 13, 2016).
- 13. Wen, Y., **M.K. Darapuneni**, and D. Chen. 2015. Split-plot design with subplot replications: a case study. In ASA Section- Biometry and Statistical Computing: Biometry and Statistical Computing: II. ASA, CSSA, SSSA International Annual Conference, Minneapolis, MN. Nov. 15-18. 294-1- 223 (November 17, 2015).
- 14. **Darapuneni, M. K.**, A. Cunningham, and L.M. Lauriault. 2015. Crop diversity in semi-arid cropping systems. In ASA Section-Agronomic Production Systems: Semiarid Cropping Systems II. ASA, CSSA, SSSA International Annual Conference, Minneapolis, MN. Nov. 15-18. 293-6- 219 (November 17, 2015).
- 15. **Darapuneni, M. K.,** G. Hergert, R. Harveson, R. Wilson, and J. Bradshaw. 2014. Effect of precipitated calcium carbonate on soil characteristics and sugarbeet yield and quality. In SSSA Division- Soil Fertility & Plant Nutrition: Amendments and Byproducts. ASA, CSSA, SSSA International Annual Conference, Long Beach, CA. Nov. 2-5. 322- 12-1257 (November 4, 2014).
- 16. **Darapuneni, M.K.,** G.W. Hergert, R. Wilson, R. Harveson, J. Bradshaw and R. Nielsen. 2013. Effect of precipitated calcium carbonate on soil characteristics and sugar beet yield and

- quality -322-12. Abstracts, Annual Meetings, Amer. Soc. Agronomy International Conference, Long Beach, CA. November 2-5, 2014.
- 17. **Darapuneni, M.K.,** G.W. Hergert, R. Wilson, R. Harveson, J. Bradshaw and R. Nielsen. 2014. Effect of precipitated calcium carbonate on soil characteristics and sugar beet yield and quality. 74<sup>th</sup> IIRB Congress International Conference, Dresden, Germany. July 1-3, 2014.
- 18. **Darapuneni, M.K.** and G.W. Hergert. 2014. Precipitated Calcium Carbonate In the High Plains. Western Sugar Cooperative Meetings. Loveland, CO- 01/20/2014.
- 19. **Darapuneni, M.K.,** G.W. Hergert, R. Wilson, R. Harveson, J. Bradshaw and R. Nielsen. 2014. Agronomic potential and limitations of using precipitated calcium carbonate in the High Plains. Extension-Western Sugar Grower Meeting, Gering, NE-01/29/2014.
- **20. Darapuneni, M.K.,** G.W. Hergert, R. Wilson, R. Harveson, J. Bradshaw and R. Nielsen. 2014. Agronomic potential and limitations of using precipitated calcium carbonate in the High Plains. Extension-Western Sugar Grower Meeting, Fort Morgan, CO-01/30/2014.
- 21. **Darapuneni, M.K.** and G.W. Hergert. 2013. Agronomic potential and limitations of using precipitated calcium carbonate in the High Plains. <u>Byproducts and Soil Amendments</u> -284-1. Abstracts, Annual Meetings, Amer. Soc. Agronomy International Conference, Tampa, FL. November 3-6, 2013.
- 22. Hergert, G.W., **M.K. Darapuneni**, R. Wilson, R. Harveson, J. Bradshaw and R. Nielsen. 2013. Effect of precipitated calcium carbonate on soil quality, plant and peed growth in the greenhouse -284-8. Abstracts, Annual Meetings, Amer. Soc. Agronomy International Conference, Tampa, FL. November 3-6, 2013.
- 23. **Darapuneni M.K.**, G.D. Morgan, A. Ibrahim, R.W. Duncan, and D.B. Hays. 2011. Evaluation of cool-season oil seed crops for Texas. Texas Plant Protection Conference, College Station, TX. December 6-7, 2011.
- 24. **Darapuneni M.K.**, G.D. Morgan, A. Ibrahim, R.W. Duncan, and D.B. Hays. 2011. Evaluation of cool-season oilseed crops for biodiesel industry in Texas. Agronomic Production Systems, Bioenergy Systems Community-I 57-15. Abstracts, Annual Meetings, Amer. Soc. Agronomy International Conference, San Antonio, TX. October 16-19, 2011.
- 25. Duncan. R., **M.K. Darapuneni**, D. Hathcoat, G.D. Morgan, M. Baring, D. Auld, C. Trostle, P.Baumann, T. Janak, T. Miller, W. Thompson, and J. Blumenthal. 2011. Continuing the development of alternative crop production in Texas.
- 26. Darapuneni M.K., G. D. Morgan, A. Ibrahim, R.W. Duncan, and D.B. Hays. 2010. Flax- A Potential Biofuel Crop for Texas. A10 Bioenergy and Agroindustrial Systems 179-4. Abstracts, Annual Meetings, Amer. Soc. Agronomy International Conference, Long Beach, CA. October 31-November 4, 2010.
- 27. Darapuneni M.K., G. D. Morgan, A. Ibrahim, R.W. Duncan, and D.B. Hays. 2010.

Evaluation of cool-season oilseed crops for biodiesel industry in Texas. A10 Bioenergy and Agroindustrial Systems 56-27. Abstracts, Annual Meetings, Amer. Soc. Agronomy International Conference, Long Beach, CA. October 31-November 4, 2010.

- 28. Morgan, G.D., A.D. Hathcoat, **M.K. Darapuneni**, and A.L. Turner. 2008. FLAX: A new, old crop for Texas. Association of Agriculture and Industrial Crops. College Station, TX.
- 29. Turner, A.L., G.D. Morgan, A.D. Hathcoat, and **M.K. Darapuneni.** 2008. Identifying the yield potential for cool-season oil-seed crops for South Central Texas. Association of Agriculture and Industrial Crops. College Station, TX.

#### **GRADUATE STUDENTADVISING**

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### **Graduate Student Advisees**

#### Master's committee chair/co-chair

Sifat Sultana-Completed

"Reduced tillage for two cropping systems in the arid and semi-arid desert Southwest"

### Bilgi Sarihan- Completed

"Impacts of selected cover crops on wind erosion control"

# Gasper Martinez Jr.- Completed

"Evaluation and confirmation of multi-parent advanced generation inter-cross (MAGIC) introgressed line population for verticilliun wilt resistance in Upland cotton"

#### Doctoral committee member

Randall Montgomery, 2016-present

"Blue corn evaluations under salt stress conditions"

#### Master's thesis external committee member

Brad Crookston, 2016-2017 (completed)

"Pearl millet forage production and water use in the Texas High Plains"

Josh Machicek, 2016-2017 (completed)

"Evaluating forage sorghum and pearl millet for forage production and quality in the Texas High Plains"

### Theses Published

#### Committee chair/co-chair

- 1 Sultana, S. 2018. Reduced tillage for two cropping systems in the arid and semi-arid desert southwest. MS Thesis. New Mexico State University, Las Cruces, NM.
- 2. Sarihan, B. 2018 Impacts of selected cover crops on wind erosion control. MS Thesis. New Mexico State University, Las Cruces, NM.

3. Martinez Jr., G. 2017. Evaluation and confirmation of multi-parent advanced generation intercross (MAGIC) introgressed line population for verticilliun wilt resistance in Upland cotton. MS Thesis. New Mexico State University, Las Cruces, NM.

#### Committee member

- 1. Crookston, B. 2018. Pearl millet forage production and water use in the Texas High Plains. MS Thesis.West Texas A&M University, Canyon, TX.
- 2. Machicek, J. 2018. Evaluating forage sorghum and pearl millet for forage production and quality in the Texas High Plains. MS Thesis. West Texas A&M University, Canyon, TX.

#### PROFESSIONAL SERVICE

- American Society of Agronomy, Associate Editor, Madison, WI, USA. 2016-present. Made decisions on 14 manuscripts.
- American Society of Agronomy, Reviewer, Madison, WI, USA. 2015-present. Made recommendation over 25 manuscripts
- Journal of Environmental Quality, Reviewer. 2016-present. Made recommendation on 2 manuscripts.
- Crop, Forage, and Turfgrass Mangament, Reviewer, WI, USA. 2015-present. Made recommendations on 7 manuscripts.
- Field Crops Research, Reviewer. 2016-present. Made recommendations on 3 manuscripts.
- Vadose Zone Journal, Reviewer. 2015-current. . Made recommendations on 2 manuscripts.
- Grant reviewer and panelist, NIFA-SBIR, NIFA-MSP, and USAID.
- Acting judge for "Soil Carbon and Greenhouse Gas Emission Community" of the American Society
  of Agronomy is hosting a graduate student poster contest at the annual meeting in Minneapolis, MN.
  November 16-17, 2015.
- Judge, ASA CSSA SSSA Conference, Minneapolis, Minnesota, USA. Judged 3 posters for a graduate poster competition. November 16, 2015.
- Judge, ASA CSSA SSSA Conference, Minneapolis, Minnesota, USA. Judged a oral competition for soil fertility and nutrition competition. November 16, 2015.
- Mentor, ASA CSSA SSSA Conference, Minneapolis, Minnesota, USA. Educating the graduate students in various technical and non-technical related issues to enhance their ability to excel in the field of Agriculture. November 15, 2015.

### PROFESSIONAL ASSOCIATIONS

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- American Chemical Society (2016 present)
- Sigma Xi- The Scientific Research Society, Invited Member (2016 present)
- Association of Agricultural Scientists of Indian Origin, Life Member
- Member of American Society of Agronomy (Since 2009)
- Member of Soil Science Society of America (Since 2009)
- Member of Crop Science Society of America (Since 2009)
- Western Crop Science Society (Since 2009)
- Soil and Water Conservation Society (2015-current)

# **CERTIFICATIONS**

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- SAS® Certified Base **Programmer**®9
- SAS® Certified Advanced Programmer®9