

## CURRICULUM VITAE

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### EDUCATION

2001	Doctor of Philosophy	University of Manitoba, Winnipeg, MB, Canada 'Water Relations of Different Height Sunflower Cultivars'
1985	Master of Science in Agriculture	University of Agricultural Sciences, Bangalore, India 'Agronomic Management of Rainfed Hybrid Cotton'
1983	Bachelor of Science in Agriculture	University of Agricultural Sciences, Bangalore, India 'Agronomy Major'

### PROFESSIONAL EXPERIENCE

Associate Professor July 2011 - present	Department of Plant and Environmental Sciences New Mexico State University, Las Cruces, NM
Assistant Professor Sept 2005 - June 2011	Department of Plant and Environmental Sciences New Mexico State University, Las Cruces, NM
Statistician June 2005 - Aug 2005	Canadian Grain Commission, Government of Canada Winnipeg, Canada
Research Associate July 2003 - June 2005	Department of Soil Science, University of Manitoba Winnipeg, Canada
Scientist (contract) April 1998 - June 2003	Semiarid Prairie Agricultural Research Centre Agriculture and Agri-Food Canada, Swift Current, Canada
Research and Teaching Assistant Aug 1992 - Mar 1998	Department of Plant Science, University of Manitoba, Winnipeg, Canada
Assistant Professor Sep 1987 - July 1992	University of Agricultural Sciences, Dharwad, India

## PROFESSIONAL AFFILIATIONS

Crop Science Society of America	(1994- present)
American Society of Agronomy	(1994- present)
Soil Science Society of America	(2005- present)
Western Crop Science Society of America	(2005- present)
American Society for the Advancement of Science	(2007- present)
Soil and Water Conservation Society	(2012 - present)
High Plains Association of Crop Consultants	(2006-2008)
New Mexico Crop Production Association	(2006-2007, 2011)

## HONORS AND AWARDS

Team Award - 2007 Outstanding Integrated Program in Water Resources by USDA-CSREES-Water Program: to Rio Grande Basin Initiative research and extension project

Commonwealth Fellowship Aug 1992 - July 1997	Canadian Commonwealth Committee Ottawa, Canada
University Merit Scholarship 1984 - 1985	University of Agricultural Sciences Dharwad, India
Undergraduate Scholarship 1979 - 1983	Indian Council for Agriculture Research New Delhi, India

## PUBLICATIONS

### Refereed Journal Articles

1. Darapuneni, M.K., S.V. Angadi, M.R. Umesh, F. Contreras-Govea, K. Annadurai, 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. (In print)
2. Katuwal K.B., S.V. Angadi\*, S. Singh, Y. Cho, S. Begna and M.R. Umesh. 2018. Growth stage based irrigation management on biomass, yield and yield attributes of spring canola in the Southern Great Plains. (In Review; *Crop Science*).
3. Umesh M.R., Mallesha, B.M. Chittapur, and S. Angadi. 2017. Alternate wetting and drying (AWD) irrigation for rice to enhance water productivity and sustainable production: A review. *J. Farm Sci.*, 30:441-449.

4. Begna S., S. Angadi, M. Stamm, and A. Mesbah. 2017. Winter canola: a potential dual-purpose crop for the United States southern Great Plains. *Agronomy Journal* 109:1-13. doi:10.2134/agronj2017.02.0093.
5. Landau, C.A., B.J. Schutte, A.O. Mesbah and S.V. Angadi. 2017. Flixweed (*Descurainia sophia*) shade tolerance and possibilities for flixweed management using rapeseed seeding rate. *Weed Technology* 31:477-486.
6. Singh, S., K.J. Booty, S.V. Angadi and K.K. Grover. 2017. Estimating water balance, evapotranspiration and water use efficiency of spring safflower using the CROPGRO model. *Agricultural Water Management* 185:137-144.
7. 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, stubble height, and crop rotation. *Crop, Forage, & Turfgrass Management* 9 p. doi:10.2134/cftm2016.09.0062.
8. Singh, S., Angadi, S., Grover, K., St Hilaire, R., Begna, S. (2016). Effect of growth stage based irrigation on soil water extraction and water use efficiency of spring safflower cultivars. *Agric. Water Manage.* 177:432-439.
9. Umesh M.R., Y.M. Ramesh, M. Banuvally, M.Y. Ajaykumar, and S.V. Angadi, 2016. Modified planting geometry and fertilizer rate on productivity of corn (*Zea mays* L.) in vertisols. *J. Applied Natural Sci.*, 8: 2070-2076.
10. Singla, S., Grover, K., Angadi, S.V., Schutte, B. J., VanLeeuwen, D. 2016. Guar stand establishment, physiology, and yield responses to planting date in southern New Mexico. *Agron. J.*, 108:2289-2300.
11. Singla, S., Grover, K., Angadi, S.V., Begna, S., Schutte, B. J., VanLeeuwen, D. (2016). Growth and yield of guar (*Cyamopsis tetragonoloba* L.) genotypes under different planting dates in the semi-arid Southern High Plains. *American J.Pl.Sci.*, 7:1246-1258.
12. Singh, S., Angadi, S.V., St Hilaire, R., Grover, K., VanLeeuwen, D. 2016. Spring safflower performance under growth stage based irrigation in the Southern High Plains. *Crop Sci.*, 56:1-12.
13. **Angadi, S.V.**, Umesh, M.R., Annadurai, K., Begna, S.B., Marsalis, M.A., Cole, A., Contreras-Govea, F., Gowda, P. H., Lauriault, L. M., Hagevoort, G. R. (2016). In search of annual legumes to improve forage sorghum yield and nutritive value in the Southern High Plains. *Crop Forage & Turfgrass Management*. 2:1-5. DOI: 10.2134/cftm2015.0182.
14. **Angadi, S.V.**, P.H. Gowda, O.J. Idowu and H.W. Cutforth. 2016. Circles of live buffer strips in a center pivot irrigation to improve multiple ecosystem services and

- sustainability of irrigated agriculture in the Southern Great Plains. *J. Soil Wat Cons.* 71(2):44-49. doi:10.2489/jswc.72.2.
15. Singh, S., S. V. Angadi, K. Grover, R. S. Hilaire and S. Begna (2016). Effect of growth stage based irrigation on soil water extraction and water use efficiency of spring safflower cultivars. *Agricultural Water Management.* 177: 432-439. doi.org/10.1016/j.agwat.2016.08.023.
  16. Singla S., K. Grover, S.V. Angadi, B. Schutte, D. VanLeeuwen. 2016. The effect of planting date on stand establishment, physiology, and yield guar genotypes (*Cyamopsis tetragonoloba* L.) in the southern New Mexico (Submitted April 11, 2016; *Agronomy Journal*).
  17. Begna, S.B., S.V. Angadi 2016. Effects of Planting Date on Winter Canola Growth and Yield in the Southwestern US. *American Journal of Plant Sciences.* 7:201-217. <http://dx.doi.org/10.4236/ajps.2016.71021>.
  18. Singh, S., S. V. Angadi, R. S. Hilaire, K. Grover and D. M. VanLeeuwen (2016). Spring safflower performance under growth stage based irrigation management practices. *Crop Science.* 56: 1878-1889. doi:10.2135/cropsci2015.08.0481.
  19. Gowda, P.H., P.V.V. Prasad, S.V. Angadi, U.M. Rangappa and P. Wagle. 2015. Finger Millet: An Alternative Crop for the Southern High Plains. 6:2686-2691. <http://dx.doi.org/10.4236/ajps.2015.616270>.
  20. Singh, S., S. V. Angadi, K. Grover, S. Begna and D. Auld (2016). Drought response and yield formation of spring safflower under different water regimes in the semiarid Southern High Plains. *Agric. Water Manage.* 163:354-362. Doi:10.1016/j.agwat.2015.10.010.
  21. Singh, S., K. J. Boote, S. V. Angadi, K. Grover, S. Begna and D. Auld (2016). Adapting the CROPGRO model to simulate growth and yield of spring safflower in semi-arid conditions. *Agronomy Journal.* 108(1): 64-72. doi:10.2134/agronj15.0272. <https://dl.sciencesocieties.org/publications/aj/pdfs/0/0/agronj15.0272>) (DSSAT 1)
  22. Sukhbir Singh, Kulbhushan Grover, Sultan Begna, Sangu Angadi, Manoj Shukla, Robert Steiner and Dick Auld (2014). Physiological Response of Diverse Origin Spring Safflower Genotypes to Salinity. *Journal of Arid Land Studies.* 24(1): 169-174.
  23. Begna, S.B., Angadi, S.V., Marsalis, M.A., Lauriault, L. M. 2015. Yield of Diverse Ultra Short to Early Season Crops grown under Limited Irrigation in the Southern Great Plains of the USA. *NMSU Research Bulletin* (accepted as a bulletin)
  24. Contreras-Govea, F., VanLeeuwen, D., Angadi, S.V., Marsalis, M. A. 2013. Nutritive Value and Fermentation of Corn and Forage Sorghum Silage with addition of Cowpea. *Plant Management Network forage and grazinglands.* (published online)

25. Cutforth H., S.V. Angadi, B.G. McConkey, P.R. Miller, D. Ulrich, R.Gulden, K.M. Volkmar, M.H. Entz, and S.A. Brandt. 2013. Comparing rooting characteristics and soil water withdrawal patterns for wheat with alternative oilseed and pulse crops grown in the semiarid Canadian prairie. *Can. J. Soil Sci.* 93:147-160.
26. Nansen C., C. Trostle, S. Angadi, P. Porter and X. Martini. 2012. Abiotic Factors Affecting Canola Establishment and Insect Pest Dynamics. *International Journal of Agronomy*, 2012, 1-9. [www.hindawi.com/journals/ija/2012/838903/](http://www.hindawi.com/journals/ija/2012/838903/).
27. Cutforth H., B. McConkey, S. Angadi and Judiesch, D. 2011. Extra-tall stubble can increase crop yield in the semiarid. *Canadian Journal of Plant Science*, 91(4), 783-785. [pubs.aic.ca/doi/abs/10.4141/cjps10168](http://pubs.aic.ca/doi/abs/10.4141/cjps10168).
28. Contreras-Govea F., M. A. Marsalis, S. Angadi, G. R. Smith, L. M. Lauriault and D. L. VanLeeuwen. 2011. Fermentability and nutritive value of corn and forage sorghum silage when in mixture with lablab bean. *Crop Science*, 51:1307-1313.
29. Begna S. H., D. J. Fielding, T. Tsegaye, R. Van Veldhuizen, S.V. Angadi and D. L. Smith. 2011. Intercropping of oat and field pea in Alaska: An alternative approach to quality forage production and weed control. *Acta Agriculturae Scandinavica Section B - Soil and Plant Science*, 2011, 1-10. [dx.doi.org/10.1080/09064711003745508](http://dx.doi.org/10.1080/09064711003745508).
30. Lauriault L. M., M. A. Marsalis, and S. Angadi. 2011. Soil type affected cowpea forage nutritive value. *Forage and Grazinglands*. [www.plantmanagementnetwork.org/sub/fg/brief/2011/cowpea/](http://www.plantmanagementnetwork.org/sub/fg/brief/2011/cowpea/).
31. Marsalis M.A., S.V. Angadi, and F.E. Contreras-Govea. 2010. Dry matter yield and nutritive value of corn, forage sorghum, and BMR forage sorghum at different plant populations and nitrogen rates. *Field Crops Res.* 116(1-2): 52-57.
32. Annadurai K., N. Puppala, S.V. Angadi and C. Chinnusamy. 2010. Integrated Weed management in groundnut based intercropping System - A Review. *Agric. Rev.* 31(1):11-20 (post-doc).
33. Sanogo S., B.F. Etarock, S.V. Angadi and L.M. Lauriault. 2010. Head rot of sunflower, *Helianthus annuus*, caused by *Rhizopus oryzae* in New Mexico. *Plant Disease*. 94:638 (research note).
34. Annadurai K., N. Puppala, S.V. Angadi and P. Masilamani. 2009. Agronomic management technologies for peanut production: A Review. *Agric. Rev.* 30(4):235-261 (post-doc).
35. Angadi S.V., S. Begna, M. Marsalis, A. Cole, P.H. Gowda, L. Lauriault, and R. Hagevoort. 2009. Improving resource use efficiency of forage production system by

- intercropping systems. In Proceedings, Farming Systems Design Symposium. August 23-26, 2009. Monterey, CA. (Peer reviewed proceedings).
36. Contreras-Govea F.E., L.M. Lauriault, M. Marsalis, S.V. Angadi and N. Puppala. 2009. Performance of forage sorghum-legume mixtures in Southern High Plains, USA. Forage and Grazing lands. 10.1094/FG-2009-0401-01-RS.
  37. Cutforth H.W., S.V. Angadi, B.G. McConkey, M.H. Entz, D. Ulrich, K.M. Volkmar, P.R. Miller, and S.A. Brandt. 2009. Comparing plant water relations for wheat with alternative pulse and oilseed crops grown in the semiarid Canadian prairie. *Can. J. Plant Sci.* 89:823-835.
  38. Cutforth H.W., B.G. McConkey, S. Brandt, Y. Gan, G. Lafond, S.V. Angadi, and D. Judiesch. 2009. Fertilizer N response and canola yield in the semiarid Canadian Prairies. *Can. J. Plant Sci.* 89:501-503.
  39. Jarvis C.K., H.D. Saperstein, P.R. Bullock, H.A. Naeem, S.V. Angadi and A. Hussain. 2008. Models of growing season weather impacts on bread making quality of spring wheat from producer fields in western Canada. *J. Sci. Food & Ag.* 88:2357-2370 (student).
  40. Angadi S.V., B.G. McConkey, H.W. Cutforth, D. Ulrich, P.R. Miller, F. Selles, K.M. Volkmar, M.H. Entz, and S.A. Brandt. 2008. Adaptation of Alternative Pulse and Oilseed Crops to the Semiarid Canadian Prairies: Seed Yield and Water Use Efficiency. *Can. J. Plant Sci.* 88:425-438.
  41. Finlay G.J., P.R. Bullock, H.D. Sapirstein, H.A Naeem, A. Hussain, S.V. Angadi and R.M. DePauw. 2006. Genotype and Environmental Variation in Grain, Flour, Dough and Bread Making Characteristics of Canadian Hard Spring Wheat. *Can. J. Plant Sci.* 87:679-690 (student).
  42. Cutforth H.W., Angadi S.V. and McConkey B.G. 2006. Stubble management and microclimate, yield and water use efficiency of canola grown in the semiarid prairie. *Can. J. Plant Sci.* 86:99-107.
  43. Entz M.H., W.D. Bellotti, J.M. Powell, S.V. Angadi, W. Chen, K.M. Ominski and B. Boelt. 2005. Evolution of integrated crop-livestock production systems. *Proc. of International Grassland Cong., Ireland.* June 26- July 1, 05. pp. 137-148.
  44. Angadi S.V. Cutforth H.W. McConkey B.G. and Y. Gan. 2004. Early seeding improves the sustainability of canola and mustard production on the Canadian semiarid prairie. *Can. J. Plant Sci.* 84:705-711.
  45. Gan Y.T., Angadi S.V., Cutforth H.W., Potts D., Angadi V.V. and McDonald C.L. 2004. Canola and mustard response to short periods of temperature and water stress at different developmental stages. *Can. J. Plant Sci.* 84:697-704.

46. Angadi S.V., Cutforth H.W. and McConkey B.G. 2003. Determination of the Water Use and Water Use Response of Canola to Solar Radiation and Temperature by Using Heat Balance Stem Flow Gauges. *Can. J. Plant. Sci.* 83:31-38.
47. Angadi S.V., Cutforth H.W. McConkey B.G. and Y. Gan. 2003. Yield adjustment by canola under different plant populations in the semiarid prairie. *Crop Sci.* 43:1358-1366.
48. Miller P.R., Angadi S.V., Androsoff G.L., McConkey B.G., McDonald, C.L., Brandt S.A., Cutforth H.W., Entz and M.H., Volkmar K. M. 2003. Comparing Brassica oilseed crop productivity under contrasting N fertility regimes in the semiarid northern Great Plains. *Can. J. Plant Sci.* 83:489-497.
49. Angadi S.V. and Entz, M.H. 2002. Agronomic performance of different stature sunflower cultivars under different levels of interplant competition. *Can. J. Plant Sci.* 82:43-52.
50. Cutforth H.W., McConkey B., Ulrich D., Miller P.R. and Angadi S.V. 2002. Yield and water use efficiency of pulses seeded directly into the standing stubble in the semiarid Canadian prairie. *Can. J. Plant Sci.* 82:681-686.
51. Angadi S.V. and Entz, M.H. 2002. Root system and water use patterns of different height sunflower cultivars. *Agron. J.* 94:136-145.
52. Angadi S.V. and Entz, M.H. 2002. Water relations of different height sunflower cultivars. *Crop Sci.* 42:152-159.
53. Angadi S.V., Cutforth H.W., Miller P.R., McConkey B., Entz, M.H., Volkmar, K and Brandt, S. 2000. Response of three Brassica species to high temperature injury during reproductive growth. *Can. J. Plant Sci.* 80:693-701.
54. Angadi S.V., Prabhakar A.S. and Dixit L.A. 1989. Response of hybrid cotton to plant population and nitrogen under rainfed conditions. *Mysore. J. Agric. Sci.*, 23:292-295.
55. Bhat B.N., Khot R.S., Angadi S.V., Satyanarayana Rao and Shankaragouda Patil. 1989. Performance of bidi tobacco varieties under varying levels of nitrogen fertilization in Nipani tract of Karnataka. *Tob. Res.* 16:69-70.
56. Khot R.S., Bhat B.N., Angadi S.V., Satyanarayana Rao and Shankaragouda Patil. 1989. Study on possibility of taking early crop before planting bidi tobacco in Nipani tract. *Tob. Res.* 16:15-18.
57. Khot R.S., Bhat B.N. Angadi S.V. Satyanarayana Rao and Shankaragouda Patil. 1989. Effect of trap crops on the incidence of orobanche and yield of bidi tobacco. *J. Fmg. Systems.* 5:101-103.

58. Khot R.S., Bhat B.N., Kambar N.S. and Angadi S.V. 1989. Influence of time and number of irrigations on the yield of tobacco in Nipani area. *Tob. Res.* 16:70-75.

#### Book Chapter

1. Nouriddine A., S. Liyanage, D. Auld, R.K. Imel, L. Norman, K. Grover and S. Angadi. 2015. Challenges and Opportunities for Increasing Guar Production in the United States to Support Unconventional Oil and Gas Production. In *Hydraulic Fracturing Impacts and Technologies*. P 207-225. Eds. V. Uddameri, A. Morse and K.J. Tindle. CRC Press.

#### Conference Abstracts/Presentations

1. Angadi S.V., M.R. Umesh, S.H. Begna, W. Ahmed and M.J. Stamm. 2016. Seasonal forage biomass production by winter canola and wheat under different irrigation levels in the Southern High Plains. ASA-CSSA-SSSA Annual Meeting, Phoenix, AZ, (November 6-8, 2016).
2. Begna S.H., S.V. Angadi, M.J. Stamm and A.O. Mesbah. 2016. Effect of Plant Density and Row Spacing on Seed Yield and Water Use Efficiency of Canola in the Southern Great Plains of USA: Hybrid Vs. Open Pollinated Variety. ASA-CSSA-SSSA Annual Meeting, Phoenix, AZ, (November 6-8, 2016).
3. Singh, S., K.J. Boote, S.V. Angadi and K.K. Grover. 2016. Using the CROPGRO model for predicting water balance, evapotranspiration and water use efficiency of spring safflower. ASA-CSSA-SSSA Annual Meeting, Phoenix, AZ, (November 6-8, 2016).
4. Ghimire, R., Angadi, S., Begna, S., Marsalis, M. A. (2016). *Alternative strategies for improving sustainability of dryland and limited-irrigated cropping systems in eastern New Mexico*.
5. Grover, K., Singla, S., Angadi, S., Schutte, B. J., VanLeeuwen, D. (2016). Growth and performance of guar genotypes under various planting dates in desert southwest (vol. 218-12). ASA-CSSA-SSSA Annual Meeting, Phoenix, AZ, (November 6-8, 2016).
6. Landau, C., Schutte, B. J., Angadi, S., Mesbah, A. (2016). *Integrated Weed Management for Conventional Canola (Brassica rapa) in Eastern New Mexico*. Proceedings of the 69th Annual Meeting of the Western Society of Weed Science.
7. Angadi S.V., S. Singh, K.K. Grover, S.H. Begna, D. Auld and K.J. Boote. 2016. Deep rooted crop options to sustain Ogallala aquifer in the Southern High Plains. UCOWR/NIWR Annual Water Resources Conference. Pensacola Beach, FL June 21-23, 2016.
8. Katuwal, K.B., Y. Cho, S.V. Angadi, S.H. Begna and S. Singh. 2016. Assessing spring canola adoptability to the Southern High Plains using critical stage based irrigation and



- crop modeling approaches. 2016 WSCS Annual Meeting, Albuquerque, NM July 12-13, 2016.
9. Angadi S.V. 2016. Circles of perennial grass buffer strips to improve sustainability of irrigated agriculture in the Southern Great Plains. 2016 Workshop of Ogallala Aquifer Program, March 9-10, 2016 Amarillo, TX.
  10. Angadi, S., Begna, S., Idowu, O. J., Ghimire, R. (2015). Strategies to Improve Resiliency of Semiarid Cropping Systems under Future Climate. *Climate Smart Agriculture: Lessons Learnt, Technological Advances Made and Research Priorities in SAT* (pp. 8). Raichur: University of Agriculture, Raichur.
  11. Patil, B. S., Jayaprakash, K. G., Singh, J., Angadi, S., Tonapi, V. (2015). Underutilized plant species to address nutritional insecurity: challenges and opportunities. 3rd international symposium on underutilized plant species. Madurai, Tamil Nadu: Krishi Vigyan Kendra, Tamil Nadu Agricultural University, India.
  12. Angadi S.V., Sukhbir Singh, S.B. Begna and K.K. Grover. 2015. Deep Rooted Crops under Center Pivot Irrigation: Managing Water Stress. 3<sup>rd</sup>. International Plant Physiology Conference. December 11-14, 2015. JNU, New Delhi.
  13. Sukhbir Singh, S.V. Angadi, K.K. Grover, R. St. Hilaire, and S.B. Begna. 2015. Seasonal Water Withdrawal Patterns of Spring Safflower Under Growth Stage Based Irrigation Managements. ASA-CSSA-SSSA Annual Meeting, Minneapolis, MN, (November 16, 2015).
  14. Sukhbir Singh, K.J. Boote, S.V. Angadi, K.K. Grover, S.B. Begna and. D.L. Auld. 2015. Field Scale Adaptation of the CROPGRO Model for Spring Safflower. ASA-CSSA-SSSA Annual Meeting, Minneapolis, MN, (November 16, 2015) (Grad Student Prize)
  15. Begna S.B. and S.V. Angadi. 2015. Winter Canola-Pea Mixed Cropping for Forage Production in the Southern High Plains. ASA-CSSA-SSSA Annual Meeting, Minneapolis, MN, (November 17, 2015).
  16. Angadi S.V., I. Lepcha, M.R. Umesh, Begna S.B. and J. Scholberg. 2015. Sorghum Stature and Mixing Ratio Effects on Sorghum-Legume Intercropping Forage Quality. ASA-CSSA-SSSA Annual Meeting, Minneapolis, MN, (November 17, 2015).
  17. Angadi S.V., I. Lepcha, M.R. Umesh, Begna S.B. and J. Scholberg. 2015. Sorghum Stature and Mixing Ratio Effects on Sorghum-Legume Intercropping Productivity. ASA-CSSA-SSSA Annual Meeting, Minneapolis, MN, (November 17, 2015).
  18. Sudhir Singla, Kulbhushan Grover, Sangu Angadi, Brian Schutte, Dawn Vanleeuwen and Dick Auld. 2015. Planting Date Effect on Growth and Yield of Promising Guar Genotypes in Desert Southwest. Association of Advancements of Industrial Crops Annual Meeting. Oct. 18-22. Lubbock, TX.

19. Sukhbir Singh, Kenneth J. Boote, Sangamesh Angadi, Kulbhushan Grover, Sultan Begna and Dick Auld. 2015. Simulating growth and yield of spring safflower using CROPGRO model in semiarid New Mexico. Association of Advancements of Industrial Crops Annual Meeting. Oct. 18-22. Lubbock, TX. (Second Prize Presentation)
20. Sukhbir Singh, Kenneth J. Boote, Sangamesh Angadi, Kulbhushan Grover, Sultan Begna and Dick Auld. 2015. Simulating growth and yield of spring safflower using CROPGRO model in semiarid New Mexico. Western Society of Crop Science, 2015 annual Meeting. Jun. 16-17. Logan, Utah. (Second Prize Presentation)
21. Angadi, S.V., Ahmed, W., Begna, S., Stamm, M., 2014. Comparing Water Use Pattern of Winter Canola and Winter Wheat and Their Water Use and Yield Relationships. ASA-CSSA-SSSA Annual Meeting, Long Beach, CA, (November 5, 2014).
22. Grover, K., Singla, S., Angadi, S.V., 2014. Guar as a potential crop in New Mexico. ASA-CSSA-SSSA Annual Meeting, Long Beach, CA, (November 4, 2014).
23. Angadi, S.V., Begna, S., 2014. Seasonal Pattern of Forage Productivity and Quality of Dual Purpose Winter Canola and Wheat in the Southern High Plains. ASA-CSSA-SSSA Annual Meeting, Long Beach, CA, (November 4, 2014).
24. Singh, S., Begna, S., Grover, K., Angadi, S.V., Auld, D., 2014. Growth stage based irrigation management of spring safflower. ASA-CSSA-SSSA Annual Meeting, Longbeach, CA, (November 3, 2014).
25. Marsalis, M. A., Angadi, S.V., Niece, B., 2014. Comparison of Corn and Grain Sorghum for Dryland and Limited Irrigated Grain Production in the Southern High Plains. Annual Meeting of WSCS, Bozeman, MT, (July 8, 2014).
26. Angadi, S.V., 2014. Circular Perennial Grass Buffer Strips for Improving Water Efficiency and Ecosystem Services in Center Pivot Irrigation Systems. UCOWR-NIWR-CUAHSI Conference, Medford (Boston), (June 20, 2014). (Also Chaired the session)
27. Singh, S., Grover, K., Shukla, M. K., Angadi, S.V., Steiner, R. L., Auld, D., 2013. Physiological Response of Spring Safflower Genotypes of Diverse Origin to Range of Salinity Treatments. Desert Technologies International Conference, San Antonio, TX, (November 20, 2013).
28. Auld, D., Ritchie, G., Angadi, S.V., Malinowski, D., Rajan, N., Baltensperger, D., Imel, R., Hendon, B., Davis, L., Witt, T., 2013. A New Generation of Desert Crops for the Lower Great Plains. Desert Technology 2011, ICARDA & Norman Borlaug Institute, San Antonio, TX, (November 21, 2013).

29. Angadi, S., Gowda, P., 2013. Circular Buffer Strips in Center Pivot Irrigation for Multiple Benefits In The Southern Great Plains. ASA-CSSA-SSSA Annual Meeting, Tampa, FL, (November 6, 2013). (Invited)
30. Grover, K., Singla, S., Angadi, S., 2013. Evaluating Adaptability of Guar in New Mexico. ASA-CSSA-SSSA Annual Meeting, Tampa, FL, (November 6, 2013).
31. Singh, S., Angadi, S., Begna, S., Grover, K., 2013. Spring safflower water extraction patterns under different irrigation management strategies in the Southern High Plains ASA-CSSA-SSSA Annual Meeting, Tampa, FL, (November 6, 2013).
32. Angadi, S.V., Begna, S., Stamm, M., 2013. Winter Canola Response to Simulated Grazing in the Southern High Plains. ASA-CSSA-SSSA Annual Meeting, Tampa, FL, (November 6, 2013).
33. Singh, S., Grover, K., Begna, S., Angadi, S., 2013. Effects of Pre-Irrigation and Irrigation Levels on Physiology and Yield of Spring Safflower in the Semi-Arid Southern High Plains. ASA-CSSA-SSSA Annual Meeting, Tampa, FL, (November 5, 2013).
34. Angadi, S., Auld, D., 2013. Multiple Approaches to Sustain Irrigated Agriculture in the Southern Great Plains. UCOWR/NIWR Conference: Sustaining Water Resources, Universities Council on Water Resources and The National Institutes for Water Resources, Lake Tahoe, CA, (June 11, 2013).
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134. Angadi S.V., McConkey B., Cutforth H.W., Ulrich D., Brandt S., Miller P.R., Volkmar K. and Entz M.H.1999. Field peas use water sparingly but wisely. Poster presented at Agri-future Farm Technology Expo, Alberta Conservation Tillage Society, Red Deer, Alberta, 3-5 February, 1999.
135. Brandt S., Ulrich D., McConkey B., Angadi S.V. and Miller P.R., 1999, Matching growth to moisture: The field pea strategy. Poster presented at the Agri-future Farm Technology Expo, Alberta Conservation Tillage Society, Red Deer, Alberta, 3-5 February, 1999.
136. Angadi S.V., McConkey B., Ulrich D., Miller P.R., Cutforth H.W., Volkmar K., Entz M.H. and Brandt S. 1998. Root system, water use and water relations of pulse crops in semiarid prairie. p. 27-30. In Proc. Pulse Crops Research Workshop, Saskatoon, 27-28 November, 1998, University of Saskatchewan, Saskatchewan, SK, Canada.
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139. Angadi S.V. and Entz M.H. 1996. Root system and water extraction by different sunflower genotypes. Paper presented at National Sunflower Association Annual Meeting, Fargo, North Dakota, 11-12, January, 1996
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142. Angadi S.V. and Entz M.H. 1994. Drought physiology and water use efficiency of Different stature sunflower cultivars. Poster presented at American Society of Agronomy Annual Meeting held at Seattle, Washington state, 13-18, November, 1994.
143. Angadi S.V. and Entz M.H. 1994. Growth, water relations and drought tolerance of commercial sunflower cultivars. Paper presented at Canadian Society of Agronomy Annual Meeting, Regina, Saskatchewan, 11-14, July 1994.

## **RESEARCH FUNDING**

### **Summary of Funding Activity:**

**Total Involvement (Funded):** **\$2,352,315**

**Sangu Angadi's Share:** **\$897,000**

USDA-NIFA-Foundational Program, \$145,205 (\$145,205) (2016-17) (PI). Circles of Live Buffer Strips in Center Pivot Irrigation for Multiple Ecosystem Services in the Southern Great Plains.

USDA-NIFA-Water Cap (through CSU), \$10,000,000 (\$10,000,000) (2016-20). Sustaining agriculture through adaptive management to preserve the Ogallala Aquifer under a changing climate.

USDA-NIFA-Alternate Crops, 2015-16, \$38,000 (Total: \$210,000) (Co-PI). Development and Management of Canola for the Great Plains.

Rubisco Seed Company, 2015-16, \$4,500 (\$4,500), Evaluating Winter Canola Hybrids and Open Pollinated Breeding Material. Sponsoring agency

USDA-NIFA-Alternate Crops, 2014-15, \$38,000 (Total: \$210,000) (Co-PI). Development and Management of Canola for the Great Plains.

Risk Management Agency, 2014-15, \$1,100 (\$1,100) (Co-PI), Providing Risk Management Education to Winter Canola Producers in Oklahoma, Texas and New Mexico.

USDA-NIFA-Alternate Crops, 2013-14, \$33,000 (Total: \$210,000) (Co-PI). Development and Management of Canola for the Great Plains.

NMSU-ASC-Clovis Research Grants, 2013-16, \$00 (\$13,748), Chemical and Cultural Techniques for Improved Weed Management in Winter Canola Production in New Mexico.

NMSU-ACES (AES Graduate Research Awards), 2014-16, \$00 (\$58,000) (Co-PI), Chemical and Cultural Techniques for Improved Weed Management in Winter Canola Production in New Mexico.

NMSU-VPR-GREG award (partial student salary: S. Singla), 2013-15, \$00 (\$23,000), Developing Guar as a Water Efficient Alternative Crop for New Mexico.

New Mexico Department of Agriculture, 2013-15, \$00 (\$43,452), Evaluating Guar for its adaptability in New Mexico.

USDA-NIFA-Alternate Crops, 2012-13, \$33,000 (\$210,000) (Co-PI). Development and Management of Canola for the Great Plains.

USDA-DOE- SouthCentral SunGrants, 2012-14, \$40,000 (\$196,258) (Co-PI). Development of Winter Safflower as a New Biomass Energy Crop for the Lower Great Plains of North America.

NMSU-Graduate Research Enhancement Grant (GREG) Award, 2013-2016, ≈ \$42,000. Safflower Water Relations (Principle Investigator) (Graduate Student Award).

USDA-NIFA-Alternate Crops, 2011-12, \$25,929 (Total: \$165,000). Development and Management of Canola for the Great Plains (Co-Principle Investigator).

USDA-NIFA-Alternate Crops, 2010-11, \$30,500 (Total: \$210,000). Development and Management of Canola for the Great Plains (Co-Principle Investigator).

USDA-DOE- SouthCentral SunGrants, 2009-12, \$41,270 (Total: \$225,000). Development of Winter Safflower as a New Biomass Energy Crop for the Lower Great Plains of North America (Co-Principle Investigator).

USDA-NIFA (formerly USDA-CSREES-NRI), 2007-11. \$398,109. Water Conservation in Forage Production Systems by Sorghum-Legume Intercropping in the Southern High Plains (Principle Investigator).

NRCS-CIG-NM, 2008-11, \$74,811 (Total: \$74,811). Strip Tillage, No-Till and Stubble Management Practices for Improving Water Use Efficiency (Principle Investigator).

USDA-NIFA-Alternate Crops, 2009-10, \$30,500 (Total: \$210,000). Development and Management of Canola for the Great Plains (Co-Principle Investigator).

Allens Inc., 2007-11. \$17,500. Heat and Water Stress Responses of Green Bean Varieties (Principle Investigator).

USDA-NRCS-NM, 2006-09, \$75,000. Subsurface Drip Irrigation and GIS/GPS Technology for Water Conservation in the Southern High Plains (Co-Principle Investigator).

Curry Soil & Water Conservation Society, 2006-09, \$10,000. Subsurface Drip Irrigation and GIS/GPS Technology for Water Conservation in the Southern High Plains (Co-Principle Investigator).

New Mexico Wheat Producer's Association, 2008-10, \$20,000. Wheat Straw as a Feedstock for Ethanol Production in New Mexico (Co-Principle Investigator).

National Sunflower Association, 2007-09, \$12,000 (\$24,000). Water Use Efficiency & Irrigation Timing for Southern High Plains Sunflower (TX & NM) (Co-Principle Investigator).

USDA-NIFA-Alternate Crops, 2007-09, \$54,610 (Total: \$173,327). Canola Adaptation and Production in the Southern High Plains (Co-Principle Investigator).

Sustainable Oils, 2008-09, \$ 4,000 (Total: \$8,000). Camelina Variety Evaluation for New Mexico (Co-Principle Investigator).



USDA-Rio Grande Basin Initiative, 2008-11, \$0 (Total:143,660). Oilseed Production using Camelina under varying water availability (Co-Principle Investigator).

USDA-NIFA-Alternate Crops, 2007-09, \$24,725 (Total: \$81,575). Improving Canola Adaptation using Deficit Irrigation & Cropping Management in the Southern High Plains (Co-Principle Investigator).

Interdisciplinary Research Grant-NMSU. 2007-08. \$47,795. Weeds: A guide to identify Water Efficient Biofuel Crops for the Southern Great Plains (Principle Investigator).

USDA-Rio Grande Basin Initiative. 2005-07. \$20,280. Diversity in Crop Root System and Their Role in Water Conservation (Principle Investigator).

## STUDENT/YOUNG SCIENTIST TRAINING

### Students

Name of Student	Degree	Short Thesis Title	Institution	Year	My Role
Magan Taylor	MSc	Sorghum heat units	West Texas A&M, Canyon, TX	2010	Member
Isaac Lepcha	MSc	Sorghum intercropping	Wageningen Univ., Netherlands	2011	Co-supervisor
Yasemin Celik	MSc	Shade physiology	West Texas A&M, Canyon, TX	.....	Member
Sukhbir Singh	MSc	Safflower Stress Physiology	New Mexico State Physiology	2013	Co-supervisor
Sudhir Singla	MSc	Guar Adaptability & Product	New Mexico State Physiology	2013	Co-supervisor
Sukhbir Singh	Ph.D.	Safflower Stress Physiology & Crop Modeling	New Mexico State Physiology	2013	Co-supervisor
Chris Landau	MSc	Weed management in Canola	New Mexico State Physiology	2014	Member

### Postdocs/Research Specialists/Visiting Scientists

Name	Program	Research Area	Year	My Role	Current position
Johny Maruthavanan	Postdoc	Amaranthus Physiology		Co-supervisor	
Wahby Ahmed	Visiting Scientist	Sunflower Water Management	2008-08	Supervisor	Desert Research Institute, Egypt
Annadurai	Postdoc	Sorghum intercropping	2008-09	Supervisor	Tamilnadu Agri University, India
Wahby Ahmed	Postdoc	Sorghum intercropping	2009-09	Supervisor	Desert Research Institute, Egypt
Umesh M.R.	Postdoc	Sorghum physiology & intercropping	2009-11	Supervisor	Univ. Agri. Sci., Raichur, India
Begna S.B.	Research Specialist	Multiple projects in physiology and agronomy	2008-	Supervisor	continuing