

## **Naveen Puppala**

### **Degrees Received**

Ph.D. New Mexico State University, USA. Agronomy

M.S. Tamil Nadu Agricultural University, India. Agronomy

B.S. Andhra Pradesh Agricultural University, India. Agronomy

### **Present and Past Positions**

College Professor, 2017-present

College Associate Professor, New Mexico State University, 2009 – 2017

College Assistant Professor, New Mexico State University, 2003-2009

### **Professional Activities and Interests**

Research in Valencia Peanut Breeding and Varietal Development

Mentor to National Peanut Breeders from Bangladesh, Ghana, Malawi, Mozambique, Senegal, Uganda, and Zambia

An investigator on a Research Award from USAID – Peanut Innovation Lab., 2000 to 2017

Peanut Crop Germplasm committee, Chair, 2009-2011

American Peanut Research and Education Society, President-Elect, 2014 to 2015

New Mexico State University, Plant and Environmental Science (PES) Graduate Studies Committee member (2017 to 2018)

Plant and Environmental Science (PES) Awards Committee member (2017 to 2018)

Plant and Environmental Science (PES) Promotion and Tenure Committee member (2017-present)

Elected as an alternative member for Employee Council at New Mexico State University (2017-present)

Elected as a member of the Finance Committee at American Peanut Research and Education Society (2017-2present)

Elected as a member of the Site Selection Committee at the American Peanut Research and Education Society. (2017-2019)

CSSA Division C8 Reviewer for Outstanding Papers Award, 2015-2016

CSSA Divisions C3 Judge for Graduate Student Poster Competition, 2018

Grant Review Panels: USDA-AFRI

Manuscript reviewer for Agronomy, Crop Science, Genetics, Euphytica, Field Crops Research, Frontiers in Plant Science, Journal of Agronomy and Crop Science, Journal of Agricultural and Food Chemistry, Journal of Crop Improvement, Journal of Plant Registration, Nature Communications, Nature Genetics, Nature Biotechnology, Plant Physiology, Peanut Science, PLoS Genetics, PNAS, Theoretical and Applied Genetics and eight non-societal journals.

Released 5 Peanut cultivars (NuMex-01; Serenut 5R, Serenut 6T, TamValOL14, Schubert)

75 refereed publications, five book chapters, 171 abstracts and proceedings

Principal advisor, co-advisor, and served on a graduate student committee for 21 graduate students from NMSU, ENMU, Khon Kaen University -Thailand, and Makerere University - Uganda.

Associate Editor, BMC Plant Biology. 2011-2013

Associate Editor, American Peanut Research, and Education Society. 2011-2013

Associate Editor, Journal of Plant Registration (2018-present)

### **Publications (2015 to 2020)**

1. Ratan, C., G.B. Burow, A. Farmer, J. Mudge, C. Simpson, T.A. Wilkins, M.R. Baring, **N. Puppala**, K.D. Chamberlin, and M.D. Burow. 2015. Next-Generation Transcriptome Sequencing, SNP Discovery, and SNP Validation in Four Market Classes of Peanut, *Arachis hypogaea* L. Molecular Genetics and Genomics 290:1169-1180.
2. Mahakosee, S., S. Jogloy, N. Vorasoot, B. Suriharan, **N. Puppala**, and A. Patantoi. 2015. Genotypic Diversity of Traits Related to Nitrogen Fixation in Valencia Peanut Germplasm. SABRAO Journal of Breeding and Genetics 45:311-322.
3. Wambi, W., P. Tukamuhabwa, **N. Puppala**, S.V. Tirumalaraju, D. K. Okello, C.M. Deom and Boris Bravo-Ureta. 2015. Genetic Variability Studies of Valencia Groundnut Varieties for Late Leaf Spot (*Phaeosariopsis personata*) Resistance. African Journal of Plant Science. 46:305-312.

4. Kandala, C., R. Holsner, J. Sundaram, and **N. Puppala**. 2015. Nondestructive Determination of Moisture Content in Dry Fruits by Impedance and Phase Angle Measurements. *Journal of Sensor Technology* 5:73-80.
5. Okello, D., M. Deom, **N. Puppala**, E. Monyo, and Boris Bravo-Ureta. 2016. Registration of Serenut 5R. *Journal of Plant Registrations*. 10:115-118.
6. Lujan, P., Sanogo, **N. Puppala**, and J. Randall. 2016. Factors Affecting Mycelium Pigmentation and Pathogenicity of *Sclerotinia sclerotiorum* on Valencia Peanut. *Canadian Journal of Plant Pathology* 96:461-473.
7. Cresencia, A., B.E.Bravo-Ureta, C.M. Deom, N. Kidula, D.K. Okello, N. Okoko and **N. Puppala**. 2016. Productivity Gaps Among Groundnut Farmers in Kenya and Uganda: A Stochastic Production Frontier Analysis. *African Journal of Agricultural and Resource Economics* 11:85-100.
8. Dwivedi, S.L., **N. Puppala** and R. Ortiz. 2016. Microbiome, Prebiotics, and Human Health. Reference Module in Food Science. Elsevier 1-9. <http://dx.doi.org/10.1016/B978-0-08-100596-5.03154-1>.
9. Nalugo, R.G., W. Wilber, J.M. Ssebuliba, D.K. Okello, and **N. Puppala**. 2016. Heritability for Resistance to Rosette Disease in Exotic Valencia Groundnuts. *African Crop Science Journal*. 24:203-211.
10. Swati Chaudhury, Kanwar L. Sahrawat, K. Srinivasu, Suhas P. Wani and **Naveen Puppala**. 2016. Comparative Evaluation of Protein Contents in Groundnut Samples by Near Infrared – Reflectance Spectroscopy and Skalar Colorimetric methods. *Current Science*. 123(68):18-209.
11. Kandala, C., R. Holsner, V. Settaluri, and **N. Puppala**. 2016. Capacitance Sensing of Moisture Content in Bio-Fuel Materials: A Rapid and Nondestructive Method for Wood Chips. *IEEE Sensors Journal* 16(11):1-1
12. Inupakutika, M., A.R. Devireddy, D. Willmon, **N. Puppala** and Y.Cho. 2016. Genome-wide Comparative Analysis of Genes Encoding Core Components of ABA Signaling Pathway in Legume Family. *International Journal of Computational Bioinformatics and In Silico Modeling* Vol. 5, No. 4 (2016): 828-843.
13. Devireddy, A.R., Inupakutika, M, D. Willmon, P. Kakarla, **N. Puppala** and Y.Cho. 2016. Veterinary Antibiotics Influence Trigonelline Biosynthesis and Plant Growth in *Arachis hypogaea* L. *Acta Agriculturae Scandinavica, Section B - Soil & Plant Science* · November 2016. <http://dx.doi.org/10.1080/09064710.2016.1250941>
14. Aninbon, C., S. Jogloy, N. Vorasoot, S. Nuchadomrong, C. Holbrook, C. Kvien, **N.Puppala** and A. Patanothai. 2017. Variability of arginine content and yield components in Valencia peanut germplasm. *Breeding Science*: May 2017.

15. Willmon, D., A.R. Devireddy, M. Inupakutika, **N. Puppala** and C.Young. 2017. Stress Responses of Peanut (*Arachis hypogaea* L.) Genotypes as Measured by Trigonelline Content after Exposure to UV-B Radiation. *American Journal of Plant Science*. 8:5 998-1010.
16. Konijeti, R.K., P. K. Sarma, **N. Puppala**, K.V. Sharma and L.S.V. Prasad. 2017. A generalized correlation for the estimation of moisture removal in fruits and grains during hot air drying. *International Journal of Heat and Technology*. 35:2 426-432.
17. Achola, E., P. Tukamuhabwa, J. Adriko, R. Edema, S.E. Mwale, P. Gibson, **P. Naveen**, V. Okul, D. Michael and D.K. Okello. 2017. Composition and Variation of Fatty Acids among Groundnut Cultivars in Uganda. *African Crop Science Journal*. Vol. 25, No. 3, pp. 291 – 299.
18. Okello, D., M. Deom, **N. Puppala**, E. Monyo, and Boris Bravo-Ureta. 2017. Registration of Serenut 6T. *Journal of Plant Registrations*. November 16, 2017 online <https://dl.sciencesocieties.org/publications/jpr/abstracts/0/0/jpr2017.03.0016crc?access=0&view=article>
19. Manjonda, R.V., N. Vorasoot, **N. Puppala**, A. M. Muitia and S. Jogloy. 2018. Reproductive Efficiency and Yield Responses of Valencia Peanut Genotypes Under Terminal Drought Conditions. *Khon Kaen Ag. J.* 46(1)181-192.
20. Carvalho, M.J., N. Vorasoot, **N. Puppala**, A. Muitia and S. Jogloy. 2018. Effects of Terminal Drought on Growth, Yield and Yield Components in Valencia Peanut Genotypes. *SABRAO* 49(3) 270-279.
21. Chamberlin, K. D., and **N. Puppala**. 2018. Genotyping of the Valencia Peanut Core Collection with a Molecular Marker Associated with Sclerotinia blight Resistance. *Peanut Science* 45(1):12-18.
22. Zurweller, B.A., A. Xavier, B.L. Tillman, J.R. Mahan, P.R. Payton, **N. Puppala** and D.L. Rowland. 2018. Pod Yield Performance and Stability of Peanut Genotypes Under Differing Soil Water and Regional Conditions. *Journal of Crop Improvement*. 32(4)532-551.
23. Kavi Kishor, P.B., K. Venkatesh, P. Amareshwari, P. Hima Kumari, D.L. Punita, S. Anil Kumar, A. Roja Rani and **N. Puppala**. 2018. Genetic Engineering for Salt and Drought Stress Tolerance in Peanut (*Arachis hypogaea* L.). *Ind J. Plant Physiol.* 23(4):647-652.
24. Renee Arias., Victor S Sobolev., Alicia N Massa., Valerie A Orner., Travis E Walk., Linda L Ballard., Sheron A Simpson., **Naveen Puppala**., Brian E. Scheffler., Francisco de Blas and Guillermo J. Seijo. 2018. New tools to screen wild peanut species for aflatoxin accumulation and genetic fingerprinting. *BMC Plant Biology* 18:170.
25. Burow, M., M. R. Baring, J. Chagoya, C. Trostle, **N. Puppala**, C. E. Simpson, J. L. Ayers, J. Cason, A. M. Schubert†, A. Muitia, and Y. López. 2019. Registration of TamVal-OL14 Peanut. *Journal of Plant Registration*. 13:134-138

26. Lujan, P., B. Dungan., O. Holguin, J. Randall., **N. Puppala** and S. Sanogo. 2019. The role of carbon sources in relation to pathogenicity of *Sclerotinia sclerotiorum* on Valencia peanut. Canadian J. Plant Science. 99:824-833
27. Wunna Htoon, Wanwipa Kaewpradit, Nimitr Vorasoot, Banyong Toomsan, Chutipong Akkasaeng, **Naveen Puppala**, Sopone Wongkaew and Sanun Jogloy. 2019. Relationships between Nutrient Uptake and Nitrogen Fixation with Aflatoxin Contamination in Peanut under Terminal Drought. 9:419
28. **Mulindwa J, Kaaya NA, Tumuhimbise G and Naveen Puppala. 2019. Production and Characterization of Nutritious Peanut Butter Enhanced with Orange Fleshed Sweet Potato. Novel Techniques in Nutrition and Food Science 4:356-365.**
29. Abhishek Dasorea, Ramakrishna Konijeti, **Naveen Puppala**. 2019. Experimental Investigation and Mathematical Modeling of Convective Drying Kinetics of White Radish. Frontiers in Heat and Mass Transfer 13:21.
30. Gurleen Kaur, Phillip Lujan, Soum Sanogo, Robert Steiner and **Naveen Puppala**. 2019. Assessing in vitro efficacy of certain fungicides to control *Sclerotinia sclerotiorum* in peanut, Archives of Phytopathology and Plant Protection. 52:184-199. DOI:10.1080/03235408.2019.1603350.
31. Sailaja Bhogireddy; Abishek Xavier; Vanika Garg; Nancy Layland; Renee Arias; Paxton Payton; Spurthi N Nayak; Manish K Pandey; **Naveen Puppala**; Rajeev Varshney. 2020. Genome-wide transcriptome and physiological analysis provide new insights into peanut drought mechanisms. Scientific Reports.
32. Shi Meng, Yuqing Tan, Sam Chang,, Jiaxu Li, Soheila Maleki, **Naveen Puppala**. 2020. Peanut allergen reduction and functional property improvement by means of enzymatic hydrolysis and transglutaminase crosslinking. Food Chemistry 302(1)
33. Dura S., P. Lujan, S. Sanogo, **N. Puppala** and R. Steiner. 2020. Screening U.S. Peanut Mini-Core Accessions for Resistance against Sclerotinia Blight caused by *Sclerotinia sclerotiorum*. Canadian J. of Plant Science.
34. Okello, D., M. Deom and **N. Puppala** 2020. Registration of Naronut 2T. Journal of Plant Registrations. 14(3).
35. Lauriault, L., and **N. Puppala**. 2020. Late-season forage harvest on pod and forage components of Valencia market type peanut. 2020. Peanut Science. 47(2).
36. Brandon Tonnis, Ming Li Wang, Xianran Li, Jianping Wang, **Naveen Puppala**, Shyam Tallury and Jianming Yu. 2020. Peanut FAD2 Genotype and Growing Location Interactions Significantly Affect the Level of Oleic Acid in Seeds. J. Am. Oil Chem Soc. 97(9) 1001-1010.

