



TEXAS TECH UNIVERSITY

College of Agricultural Sciences & Natural Resources

Ph.D. Assistantship available - Enhancing yield potential and abiotic stress tolerance in grain sorghum

The TeCSIS (<https://www.depts.ttu.edu/forageresearch/>) - TAWC (<https://www.depts.ttu.edu/tawc/>) program led by Dr. Jagadish, in the Department of Plant and Soil Science (<https://www.depts.ttu.edu/pss/>) at Texas Tech University, Lubbock, TX is seeking a Ph.D. student to begin in August 2022, although an earlier start date may be negotiated. The assistantship provides a 12-month stipend, tuition coverage, and health insurance for three years.

The student will participate in a multi-institutional and multi-disciplinary integrated research program to characterize grain sorghum accessions for target traits aimed at developing sorghum ideotypes suitable for highly stressful and limited irrigation conditions. The successful candidate is expected to work on a range of source-sink related traits in field-grown sorghum, contribute towards a multi-trait breeding program and use different phenotyping (ground and aerial-based sensors) systems to characterize promising breeding material developed by participating institutes in the program. The overall goal of the project is to develop new grain sorghum hybrids through trait-based breeding approaches that will enhance yield potential under limited irrigation and further increase drought and heat stress tolerance.

Applicants should have an M.S. degree in agronomy/crop physiology with working experience in grain sorghum. Candidates with hands-on experience on field-based sorghum physiology will be preferred. Applicants should be self-motivated and have excellent written and oral communication skills, management and organization skills, and the ability to work both individually and with a diverse team of fellow researchers. A valid U.S. driver license is required for travel to field sites for maintaining trials, testing technology and data collection. The student will be expected to work in field settings that may involve hot and dry conditions.

Interested students should send application materials and/or questions directly to Dr. Krishna Jagadish (kjagadish.sv@ttu.edu). Application materials must include a CV, a cover letter describing research experience, interests, and qualifications, unofficial transcripts, GRE and TOEFL scores if applicable, and the names and contact information for three references. Application materials should be submitted before May 30, 2022, to be given full consideration.