



TEXAS TECH UNIVERSITY

## College of Agricultural Sciences & Natural Resources

### **Ph.D. Assistantship available – Crop modelling**

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 January 2023, 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 utilize crop modeling as a tool to design field-based experiments and breeding efforts for sorghum improvement. This position requires understanding of crop physiology, as it deals with identifying key trait combinations that will help increase yield potential and tolerance to abiotic stresses in grain crops, with a primary focus on grain sorghum. The selected candidate will be responsible for assembling extensive soil and climatic information from a wide range of publicly available sources (including satellite-based images) and develop tools to integrate crop traits that would allow for increased yield and stress tolerance in sorghum depending on target locations. Successful candidate is expected to carry out field experiments for refining the modelling outcomes.

Applicants should have an M.S. degree in agronomy/crop physiology with working experience in crop models, either DSSAT or APSIM. 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](mailto: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 Aug 30, 2022, to be given full consideration.