



Position: Postdoctoral Research Associate

Location: Clemson University, Plant & Environmental Sciences Department

Coastal Research and Education Center

Charleston, SC 29414

<https://www.clemson.edu/cafls/research/coastal/>

Project description:

Start date: September 2023, PI: Dr. Sandra Branham, sebranh@clemson.edu)

Annual salary: \$50,000 - \$55,000 plus benefits

Regional freshwater scarcity, driven by climate and demographic changes, is a threat to sustainable agriculture. In many freshwater-scarce regions, there are saline water sources that could be used for irrigation of crops but increased soil salination constrains their use. The postdoctoral scholar will be responsible for salinity screening of a large diversity panel of mustard greens in a CEA system and variant calling in the panel using whole-genome resequencing data for use in a genome-wide association study. KASP markers will then be developed to initiate a marker-assisted breeding program for salt tolerant mustard greens.

Job Responsibilities:

The project will use genomics-assisted molecular breeding approaches to develop mustard cultivars with improved salinity tolerance. The postdoctoral scholar will be responsible for establishing, maintaining, and performing data collection for experiments performed in the greenhouse, field, growth chambers and laboratory. They will be expected to work on projects independently and collaboratively, including management/analysis of large genomic and phenotypic datasets. The incumbent will be responsible for optimization of salinity screening assays and protocols. They will also be responsible for organizing data, generating reports, preparing scientific manuscripts, and presenting data at scientific conferences and to collaborators. The scholar will be expected to participate in informal mentoring of graduate students, while promoting a safe, inclusive and positive work environment.

Qualifications:

A Ph.D. degree in breeding, genetics, genomics, plant physiology, or a related field. Prospective candidates should have a strong interest in conducting applied research in breeding and genomics to support cultivar development.

How to apply:

Send a single pdf of CV, cover letter, and contact details of three references to Dr. Sandra Branham at sebranh@clemson.edu. Screening of applicants will start immediately and will continue until the position is filled.