

EXTENSION PLANT PATHOLOGY & MICROBIOLOGY 2021 ACTIVITIES & IMPACT HIGHLIGHTS

PERSONNEL

- 8 Extension Specialists
- 2 Extension Program Specialist
- Total FTEs =6.95

- Rapid response to growers on *Sclerotinia* blight issue on peanuts to help prevent potential 80% crop loss (\$144M industry)
- Delivery of pesticide efficacy trial results to > 200 stakeholders.
- Obtain funding and leads the SCARLET (Student Career in Agricultural Research, Learning, and Extension Training) project to extend our ability to train the next generation of scientists/extensionists \$750,000



MONCLOVA



ISAKEIT



OBASA

- Responsible to state-wide response for HEMP health supporting Extension efforts.
- Active applied research addressing use of biocontrol agents to reduce risks due to mycotoxins.
- Various applied research with FOV4 for Texas growers to better manage disease: fungicide trials, variety trails, seed treatment, etc...

- Head Diagnostician, TPDDL-CS
- TPDDL-CS processed 2437 samples in 2021
- Co-hosted & taught the ISAT Tree Clinic workshop

- Tactical Science team lead: manages federal pest/pathogen survey projects.
- Discovery of Plum Leaf Scald (PLS): new disease in Texas stone fruit orchards.

- Improved diagnostics of *Xylella fastidiosa* and leaf dieback, and introduced fungicide resistance management for pecan scab, impacting a \$200 million pecan industry.
- Led monitoring effort for rice diseases during growing season to prevent crop loss in a \$150 million rice industry.
- Led a program to remediate take-all root rot disease in warm-season turfgrasses, impacting a \$6 billion turfgrass industry

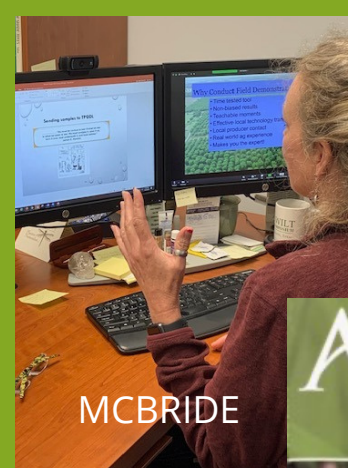
- ToBRFV regulation response - support USDA and ASTA for phytosanitary protocol development and execution, subject matter expert on NAPPO detection harmonization WG impacting \$1.4 billion US seed industry.
- Obtain funding to improve the professional development of Texas Dept. of Agriculture inspectors in interactions with subject-matter specialists and proficiency in recognition of plant health related symptoms: \$250,000.



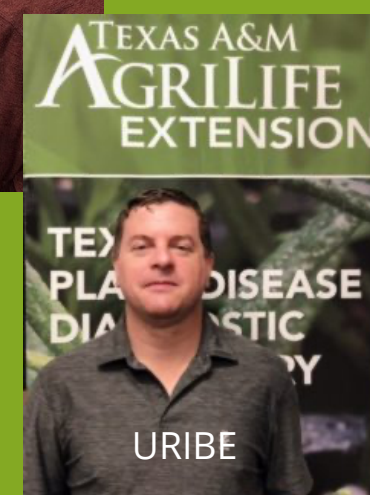
COCHRAN



QNG



MCBRIDE



URIBE

- Successfully organizing the International Sesame Conference (virtual) in 2021.
- Developing and establishing field test site for the (national) IR-4 project.
- Refined best management practices to reduce anthracnose in spinach (\$24 million TX industry production).



ALABI



APPEL



JO

- Collaborative applied research and result demonstration on novel citrus planting design saves TX citrus growers \$30-\$36/ac./yr in irrigation costs and \$200-\$240/ac./yr in weed control costs.
- Leads the efforts of the new TX Plant Virus Diagnostic Lab

- Recipient of the Southern Division American Phytopathological Society meeting highest honor: Outstanding Plant Pathologist.
- Robust outreach activities to train professionals: Eg. arboriculture diagnostic training .

MISSION

Develop and deliver innovative solutions for the diagnosis and management of plant diseases to support & promote sustainability, health, and economic viability for the citizens of Texas

notable 2021 #ExtPLPM unit accomplishments

- Grants: \$1,639,429 & Gifts:\$101,300
- Plant health diagnostic support for HEMP (TPDDL-CS and THPPDDL)
- Increase diagnostic capabilities through the addition of a third National Plant Diagnostic Network lab (TX Plant Virus Diagnostic Lab) in Weslaco (January 2021)

