

Dr. Francisco Ochoa Corona

Department of Entomology and Plant Pathology

Dr. Francisco M. Ochoa Corona is an assistant professor at the National Institute for Microbial Forensics & Food and Agricultural Biosecurity (NIMFFAB) in the department of entomology and plant pathology at Oklahoma State University. He has held that position since August 2008. Ochoa Corona joined OSU from the Investigation and Diagnostic Centre at Biosecurity New Zealand, Ministry of Agriculture and Forestry, where he was Principal Adviser Virology.

Ochoa Corona is a forensic plant pathologist who specializes in developing and delivering reference diagnostics for exotic, naturalized, and indigenous plant viruses, other phytopathogens and insects of relevance to agricultural biosecurity and microbial forensics. His work is applicable to plant pathogens that can be intercepted at borders or detected by general surveillance of field settings or within transitional facilities.

Ochoa Corona's research in plant pathology contributes scientific input to regulatory officials regarding plant health emergencies, and focuses on targeted aspects of forensic plant pathology that are relevant to agricultural biosecurity in Oklahoma, the southern plains, the United States and other regions of the world, such as the South Pacific and Central and South America. The research work at Ochoa Corona's laboratory includes development and adaptation of novel technologies for sampling, identification of molecular genomic landmarks and signatures of value for detection and discrimination, and the implication of this genetic data on taxonomical relationships, host-pathogen associations, required when monitoring the dynamics of the plant pathogens, and tracking their global dispersal routes and biogeographic distribution. More recently his group has engaged in the development of bioinformatic decision support tools for prioritization, emergency management, prediction of threats, such as Massive Parallel Systems and Self Organizing Maps.



Room 130F, HBRC
Oklahoma State University
Stillwater, OK 74078
405.744.9946 (p)
francisco.ochoa_corona@
okstate.edu