



UCR Researchers have developed a means to detect and identify multiple plant pathogens for disease diagnosis, including citrus greening disease. By developing a novel multiplex RNA assay, they discovered ten targets of nine citrus pathogens and a citrus control gene. In addition to the assays, target-specific probes were designed and implemented to improve the pathogen detection process. These assays were also coupled with high-throughput robotic extraction and purification procedures, optimized for citrus tissues. Furthermore, they also developed a 3-plex DNA assay system along with 3 targets for simultaneous detection, identification and quantification of plant pathogens.

**ADVANTAGES**

- ▶ Increases uniformity and cost effectiveness
- ▶ User-friendly assay procedures
- ▶ Simultaneous detection, identification and quantification for the ten targets

**APPLICATIONS**

- ▶ Detection of endemic and exotic plant pathogens
- ▶ Plant health monitoring services
- ▶ Citrus disease management

**University of California, Riverside**  
**Office of Technology Commercialization**  
200 University Office Building,  
Riverside,CA 92521  
[otc@ucr.edu](mailto:otc@ucr.edu)  
[research.ucr.edu/](http://research.ucr.edu/)