

# 2017 APS Annual Meeting

AUGUST 5–9 • SAN ANTONIO, TEXAS

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## 385-P: Effector repertoire of the citrus fungal pathogen *Colletotrichum acutatum*

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Tuesday, August 08, 2017

04:00 PM - 05:00 PM

📍 Henry B. Gonzalez Convention Center - Exhibit Hall 1

Postbloom fruit drop caused by the fungal pathogen *Colletotrichum acutatum* is a damaging disease affecting citrus production in Florida mainly sweet oranges since 2014. Filamentous plant pathogens secrete molecules that manipulate host physiology to achieve colonization. We describe here the identification of *C. acutatum* secreted effector candidates from a recently generated reference PacBio genome assembly of 53.4 Mb for an isolate obtained from sweet orange Valencia in 2016. We also generated RNAseq libraries for 15 *C. acutatum* strains collected pre and post 2014 epidemics and from diverse locations that will serve as transcript evidence sequencing data for the annotated effectors. Identified effector candidates can be employed in high throughput functional genomics screens, commonly referred to as effectoromics, to test citrus germplasm for specific pathogen recognition by resistance *R* proteins.

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