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Study on the expression of an arabinogalactan gene like in Mexican lime during infection with *Candidatus* Phytoplasma aurantifolia

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In order to understand the molecular basis of compatibility and development of whiches brrom disease of Mexican lime caused by *Candidatus* Phytoplasma aurantifolia, a study on cDNA-AFLP analysis was carried out to identify Mexican lime and *Ca.* Phytoplasma aurantifolia genes associated with the infection process. The experiment of cDNA-AFLP analysis was performed at the symptoms appearance stage. Selective amplifications with E46 /MAA primer combination allowed the visualization of about 5 transcript-derived fragments (TDFs) in infected leaves, which were differentially expressed. These fragments were sequenced and were identified as Mexican lime transcripts after homology searching in NCBI databases. TDF541 were down regulated during infection. This TDF showed homology with genes of **a**rabinogalactan. **A**rabinogalactan gene make up a large family of proteoglycans that have been implicated in various processes associated with plant growth and development, and biotic and abiotic stress responses. According to **a**rabinogalactan role in cellular processes, it may be a new candidate gene for studying molecular basis of phytoplasma caused diseases.

Keywords: Arabinogalactan, Candidatus Phytoplasma aurantifolia, Mexican lime witches broom