

Natural Enemies of Brevipalpus Mites in South Florida

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Citrus leprosis (CiLV) is considered one of the most destructive diseases of citrus causing blemishing, fruit drop, and die back that can kill the tree if not controlled. The disease is spreading north from South America and has been reported in Mexico. The disease is caused by five distinct viruses that are vectored by *Brevipalpus* mites. *Brevipaplus yothersi* (syn. *phoenicis*) is associated with the most damaging virus (CiLV-C) in Brazil, Colombia, and Mexico. All regions recently infected with CiLV had non-virulent *B. yothersi* mites prior to disease emerging. *Brevipalpus yothersi* is present in Florida and recent surveys identified three phytoseiids (*Neoseiulus californicus*, *Neoseiulus longispinosus*, and *Amblyseius largoensis*) and one cheyletid (*Hemicheyletia bakeri*) mites as potential predators of *Brevipalpus* mites in Florida. The three phytoseiid species can feed on all *Brevipalpus* stages but prefer eggs and immatures stages whereas *H. bakeri* feeds only on motile stages, primarily on adults. More research is needed to assess the potential of these natural enemies and identify other alternatives for managing *Brevipalpus* mites should CiLV become established in the United States.

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