

# Population Fluctuations of ACP and Its Natural Enemies in Response to Various Management Practices in Florida

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Controlling populations of ACP across Florida when most trees are already HLB-affected is a challenge to citrus growers. This is complicated by the potential of ACP resistance to conventional insecticides. We compared the effects of organic management versus intermittent use of conventional insecticides on natural enemy populations and psyllid abundance. The most common natural enemies found

were lady beetles (Coccinellidae), lacewings (Chrysopidae), ants (Formicidae), parasitic wasps (Eulophidae), hoverflies (Syrphidae), long-legged flies (Dolichopodidae), and spiders (Arachnida). The results suggest that natural enemies contributed to regulation of ACP populations in organic groves more so than in the intermittently treated conventional groves. Our results suggest that intermittent spraying for ACP with

conventional insecticides could affect activity of natural enemies even though such practices did not entirely eliminate their populations. Although biological control is unlikely to impact ACP populations sufficiently to curtail pathogen transmission, it could impact yield indirectly by contributing to population suppression of ACP below a measurable action threshold when most or all trees are already infected.

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