6.4 Distribution of Psyllids Positive for Candidatus Liberibacter asiaticus in Citrus Groves in Southwest Florida

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Florida Citrus Health Response Program inspectors collected psyllid samples from 4 trees at each of 7 points in 12 grove blocks in SW Florida between January and August 2009. Points included SE corner, mid-point of the eastern edge, NE corner, NW corner, SW corner, center point, and a floating point designated by the grower (center of the southern border if grower did not designate a point). Psyllids were counted and sent to Riverside, CA for real-time PCR analysis for detection of Candidatus Liberibacter asiaticus (Las). There was no clear difference in average numbers of insects in the samples from different points, but psyllids were most likely to be encountered on the eastern edges of the blocks, particularly the SE corners. Psyllids were most likely to be positive for Las on the eastern edges of the blocks. Several of the blocks were in adjacent organic and conventionally managed groves. Map plots showing the locations of positive psyllid samples indicated that the disease was spreading from the organic grove into the conventionally managed one.