5.16 Role of *Murraya* species in the spread of huanglongbing

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Huanglongbing (citrus greening) is a devastating disease responsible for the destruction of several citrus industries in Asia, Africa and recently in the Americas. In the USA the disease spreads naturally through psyllid vectors, *Diaphorina citri*. In an effort to understand the role of ornamental plants in the spread of HLB, psyllids from *Murraya* plants from several Florida venues were collected and analyzed. Psyllid adults and nymphs carrying HLB bacteria (*Candidatus Liberibacter asiaticus*) were found on *Murraya* plants from garden centers in several counties indicating movement of the disease through *Murraya*. About 17\% of the psyllid adult samples and 12\% of the nymph samples tested from *Murraya* were positive for HLB bacteria. Presence of HLB in symptomatic *Murraya* plants in field was confirmed by qPCR assay, followed by conventional PCR and sequencing. *Murraya* plants exhibit phenotypic variability. Samples of infected *Murraya* plants collected from Florida and Brazil were compared to healthy samples collected from California by analyzing sequences of selected nuclear and chloroplast genes. Preliminary phylogenetic analysis revealed the presence of two distinct clades of *Murraya* and that both groups are susceptible to HLB.