2.3 Texas Steps Up Surveys for Huanglongbing and the Asian Citrus Psyllid

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The Asian citrus psyllid, *Diaphorina citri* Kuwayama, the vector of Huanglongbing (HLB), was first detected on orange jasmine and citrus in the Lower Rio Grande Valley (LRGV) of Texas in 2001 (French et al., 2001). When HLB was confirmed in Florida in 2005 (Halbert, 2005), surveys funded by USDA-APHIS-PPQ were initiated to determine the distribution of *D. citri* and whether HLB was present. In 2006, *D. citri* was recorded on citrus in 32 counties in southern Texas, extending from Valverde County in the southwest to Matagorda County on the Gulf coast, as well as in Harris County (including Houston) (da Graça et al., 2008). Over 300 leaf samples were analyzed for *Ca. Liberibacter asiaticus* by real-time PCR, but the bacterium was not detected in any. In addition, 50 *D. citri* samples were also analyzed, and one sample from Corpus Christi produced a borderline result for HLB, but not confirmed. A delimiting survey was nevertheless conducted in early 2007 in the Corpus Christi area, but no confirmation of *Ca. L. asiaticus* was obtained. In 2007, surveys continued, with a concentrated effort in Corpus Christi and Houston. No HLB was detected in any of the leaf and psyllid samples. Psyllids were found in one new county in 2007, Fort Bend, southwest of Houston. In 2008, two survey programs are being run. In one, surveys in the commercial orchards and counties outside the LRGV continue, led by the Citrus Center. In addition, an intensive survey of residential sites in the cities of the LRGV is being conducted by a 30-member team led by USDA-APHIS in which 72 trees/square mile are being selected as sentinel trees in 93 1-square mile blocks. The Citrus Center is now a certified HLB diagnostic laboratory, and suspect leaf and psyllid samples are being analyzed there. Thus far, psyllids have been found in nine new counties; of significance are Jefferson County in east Texas and Brazos County northwest of Houston, the most northerly psyllid find thus far. The other counties are all in southwest Texas. During the surveys up to October 2008, citrus has been recorded in 108 counties, and psyllids on trees in 56 of them (Fig. 1). Not all Texas counties have been surveyed.

Citations

Fig 1. Map of Texas showing distribution of citrus and the Asian citrus psyllid during surveys (2006-08) by counties.