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Strategy of HLB management with insecticides in citrus groves in São Paulo, Brazil

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Huanglongbing (HLB), disease caused by bacteria *Candidatus Liberibacter asiaticus* and *Ca. L. americanus*, has as vector *Diaphorina citri*. Since 2004 has caused huge losses on citrus industry of São Paulo state, Brazil. This research evaluated, during three consecutive years, an insecticide spraying program (Bayer® program – T1) consisted of two imidacloprid drench applications during the rainy season and one trunk application (Winner®) in the autumn, preceded and followed by foliar sprays of insecticides (Decis® or Provado®) based on an psyllid action threshold, compared to standard program of the grower, that used several foliar sprayings (Standard program – T2). This trial was carried out in 34 commercial groves in different counties of São Paulo state with trees at different age, variety/rootstock combination and canopy size. In each grove there was one plot per treatment consisted by 1000 trees. The incidence of *D. citri* and the number of HLB-symptomatic plants was fortnightly evaluated. The data were subjected to analysis by the test F and the averages compared by Tukey (0,05). In average, after three years, it was observed in T1 a lower incidence of *D. citri* and consistent reduction of the number of HLB symptomatic plants (25,4) with 9 less insecticide applications. Even having been a consistent reduction of the vector population, added to the known effect of systemic acquired resistance (SAR) due to use of Imidacloprid in plants of citrus infected with *Xanthomonas citri* subsp. *citri*, this research shows an analogous process could be occurring on the pathosystem Citrus x *Candidatus L. asiaticus* e *C. L. americanus*, with positive contribution to growers and should be more detailed on further researches.