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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 Liberibater 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 comparated 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. americanos, with positive contribution to growers and should be more detailed on further researches.

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