

### 10.15 Use of Horticultural Practices in Citriculture to Survive Huanglongbing

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Huanglongbing (HLB) was first reported in Brazil in 2004 and had caused severe losses in the main producing regions, threatening the sustainability of the whole citrus chain. Current control strategies are based on the use of healthy nursery trees, inspection and systematic eradication of symptomatic plants, and chemical control of the insect vector. Research is being carried out to achieve HLB resistance, including genetic engineering. Horticultural practices for immediate use in citriculture can be evaluated to mitigate HLB effects. The following practices are discussed: selection of naturally occurring tolerant materials, new regions for citrus production in Brazil, unusual concepts for screened nursery trees' production, use of repellent and attractive plants, low-input production systems, use of resistance elicitors, protected cultivation, intercropping, and ultra high density (UHD) plantings. Alternative production systems of screened nursery trees include seed-derived trees of scion varieties, intensive production systems, and the use of larger nursery trees. The main objective of UHD practice is to anticipate fruit bearing in order to get high yields until the tenth harvest. The use of UHD plantings depends on the availability of small-sized scion varieties, dwarfing rootstocks, viroid inoculation, and conditioning of nursery trees before planting. HLB threat limits the feasibility of current citriculture practices and demonstrates the need to join different strategies for confronting this disease: genetic advances, pathogen and vector control, and improved horticultural practices. No isolated strategy will provide a satisfactory solution.

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