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Mandarin and mandarin hybrid genetic transformation for resistance to *Candidatus* Liberibacter asiaticus

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Brazil is one of the largest producers and exporters of citrus. Currently, Huanglongbing disease (HLB) associated to *Candidatus* Liberibacter asiaticus (CLas) is the main threat to the citrus industry. The aim of this work is to study the genetic transformation of mandarin/mandarin hybrid 'Thomas' (*Citrus reticulata* Blanco) and 'Fremont' (*C. clementina* hort. ex Tanaka x *C. reticulata* Blanco) with the gene that encodes an attacin antibacterial peptide (*att*A) driven by phloem-specific promoters. The genetic transformation experiments were performed with epicotyl segments, via *Agrobacterium tumefaciens* (EHA 105), with the gene constructs pCAtSUC2/attA and pCAtPP2/attA, containing the *att*A gene controlled by AtSUC2 and AtPP2 promoters. The plants were identified by PCR analysis and acclimatized to greenhouse conditions. The plants will be propagated and evaluated for resistance to CLas.